SENATE—*Tuesday, June 12, 1973*

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

PRAYER

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

Eternal Father, look upon us in mercy at this hour of our history when life is torn by strife, blighted by the misuse of power, tarnished by human failure, and the holy vision of Thy kingdom has been dimmed. Pardon us for imputing sin in others unless we have been cleansed. Forgive us if by small vision and little concepts we have failed to do Thy complete will.

O God, heal the brokenness of the Nation. Erase the cynicism. Replace fear with faith in Thee and in one another. Keep out of our lives the rancor, the hate, the vindictiveness, the selfishness which lays waste to life, and thwarts the doing of Thy will.

Grant Thy grace this day to the President and all our leaders. Impart to them that deeper insight and that loftier courage which enables them to act not alone for today, but for the new and better day which is yet to be.

Through Him, who is our Leader and Redeemer. Amen.

MESSAGES FROM THE PRESIDENT

Messages in writing from the President of the United States, submitting nominations, were communicated to the Senate by Mr. Marks, one of his secretaries.

EXECUTIVE MESSAGES REFERRED

As in executive session, the President pro tempore laid before the Senate messages from the President of the United States submitting sundry nominations, which were referred to the Committee on Armed Services.

(The nominations received today are printed at the end of Senate proceedings.)

MESSAGE FROM THE HOUSE

A message from the House of Representatives by Mr. Hackney, one of its reading clerks, announced that the House had passed the following bills, in which it requested the concurrence of the Senate:

H.R. 4083. An act to improve the laws relating to the regulation of insurance in the District of Columbia, and for other purposes;

H.R. 4771. An act to authorize the District of Columbia Council to regulate and stabilize rents in the District of Columbia;

H.R. 6713. An act to amend the District of Columbia Election Act regarding the times for filing certain petitions, regulating the primary election for Delegate from the District of Columbia, and for other purposes; and

H.R. 8250. An act to authorize certain programs and activities of the government of the District of Columbia, and for other purposes.

HOUSE BILLS REFERRED

The following bills were severally read twice by their titles and referred to the Committee on the District of Columbia:

H.R. 4083. An act to improve the laws relating to the regulation of insurance in the District of Columbia, and for other purposes;

H.R. 4771. An act to authorize the District of Columbia Council to regulate and stabilize rents in the District of Columbia;

H.R. 6713. An act to amend the District of Columbia Election Act regarding the times for filing certain petitions, regulating the primary election for Delegate from the District of Columbia, and for other purposes; and

H.R. 8250. An act to authorize certain programs and activities of the government of the District of Columbia, and for other purposes.

THE JOURNAL

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the reading of the Journal of the proceedings of Monday, June 11, 1973, be dispensed with.

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

COMMITTEE MEETINGS DURING SENATE SESSION

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

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

EXTENSION OF TIME FOR CONDUCTING REFERENDUM WITH RESPECT TO NATIONAL MARKETING QUOTA FOR WHEAT

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the Senate proceed to the consideration of Calendar No. 189, S. 1938.

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

The assistant legislative clerk read as follows:

S. 1938 to extend the time for conducting the referendum with respect to the national marketing quota for wheat for the marketing year beginning July 1, 1974.

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

There being no objection, the Senate proceeded to consider the bill, which was ordered to be engrossed for a third reading, read the third time, and passed, as follows:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 336 of the Agricultural Adjustment Act of 1938, as amended, is amended by adding at the end thereof the following: "Notwithstanding any other provision hereof the referendum with respect to the national marketing quota for wheat for the marketing year beginning July 1, 1974, may be conducted not later than the earlier of the following: (1) thirty days after adjournment sine die of the first session of the Ninety-third Congress; or (2) October 15, 1973.".

CAMBODIA

Mr. MANSFIELD. Mr. President, this is the 99th day, I believe, of the continuous bombing of Cambodia. It has been 99 days too long.

I note in this afternoon's newspaper that Prince Norodom Sihanouk, who was deposed as a result of a coup almost 3 years ago, has offered to negotiate a peace agreement with the United States for Cambodia. However, the United States has turned down this offer—and the bombing continues. People are killed and wounded and shattered, the number of refugees is increased—and the bombing continues.

Mr. President, the legal ruler of Cambodia is Prince Norodom Sihanouk. He was so recognized in that capacity by President Nixon 3 years ago. He is the only man, in my opinion, who can bring peace and stability and neutrality to Cambodia. In my further opinion, he has the support of the overwhelming majority of the people of that unhappy, that sad nation.

I understand that Prince Sihanouk, not once but several times, has indicated that he would be prepared to negotiate with the United States, but that we have told him he has to negotiate with the government at Phnom Penh under the leadership—and I use the word advisedly—of Lon Nol.

Prince Sihanouk, if this information is correct—and I think it is—called for the establishment of diplomatic relations between the United States and his Royal Government of National Union of Cambodia.

Mr. President, this unhappy and unnecessary chapter of the war in Southeast Asia should, and must, be brought to an end. The Cambodians are a peaceful people. All they want to do is determine their own destiny and to plan their own future.

I would hope that this offer which has been turned down by the United States would be reconsidered. I would hope that Prince Norodom Sihanouk would be returned as the Chief of State of Cambodia. I would hope that we would be aware of the fact that of all the political leaders in Southeast Asia, Prince Sihanouk was in many respects the most outstanding. He had to walk a tightrope to keep his country neutral, to keep his country out of war. I know that he has been laveled many things, because he happens to be interested in music, because he is a composer, because he is an actor, and because, it is said, that he has been a playboy.

What overlooked in this labeling is the important thing, which is that he has been an outstanding leader, good for his people.

If we want peace in Cambodia, the answer, in my opinion, is the return of Prince Sihanouk to control. The answer can be achieved, I believe, if this country will consider the offers made voluntarily, not once but several times, by Prince Sihanouk to achieve peace in that unhappy land and, at the same time, to

bring about a reestablishment of diplomatic negotiations.

The time is long overdue. Ninety-nine days of continuous bombing are 99 days too many. The costs have been too heavy on the Cambodian people, and the costs are too heavy on the people of the United States.

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

Mr. SCOTT of Pennsylvania. Mr. President, other than to speak briefly on the subject, I cannot profitably continue to make a defense of the bombing of Cambodia. But I do caution that the last time we tried to supplant a government in power was in South Vietnam, with the regime of President Diem; and look where we got. So I do not think we ought to be a party to the planting of any other regime in Cambodia or any where else. I think that is a matter for the people of Cambodia, who are being slaughtered by other Cambodians and by the North Vietnamese.

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

Mr. SCOTT of Pennsylvania. I yield.

Mr. MANSFIELD. I understand the concern of the distinguished minority leader. I, too, would like that the people of Cambodia have an opportunity to determine whom they would wish to rule their country. If they were given that opportunity, Prince Norodom Sihanouk would be their choice.

I may say, also, that I was one of the very few who found fault—great fault, to put it mildly—with the assassination of Ngo Dinh Diem, because he sought to be a good ruler of his country. He had been elected by the overwhelming majority of his people. I think the tragedy in Vietnam can be related directly to the fact that Ngo Dinh Diem was assassinated in 1963, because with his assassination the war began in earnest, and our costs and involvement both deepened.

Frankly, I do not think that Lon Nol represents the people of Cambodia; and I think he is being propped up only by this government and only by the use of B–52's and fighter bombers.

Mr. SCOTT of Pennsylvania. Mr. President, I really want to talk on another subject, if I can get the time.

I pretty generally agree with what the distinguished majority leader has said about Ngo Dinh Diem, but I still do not see how we can supplant a government in Cambodia. We can stop what we are doing; but when we stop that, there still remains the question of the right of self-determination by the people of the Khmer Republic. To decide that, I think no one knows at this point who supports whom or how many people support one contender as against another.

I think we both can agree, however, that we ought to stay the hell out of these countries altogether, so far as interference with their internal affairs is concerned, and I have felt that way for a considerable time.

THE BREZHNEV VISIT

Mr. SCOTT of Pennsylvania. Mr. President, I am distressed and disappointed in the proposal put forward by some that we suspend the coming Brezhnev visit because of the supposed unsuitability of the timing.

I am distressed at this theme because it falls prey to the temptation to seek partisan advantage from the current Watergate affair at the expense of a considered judgment of true national interest.

This criticism demonstrates also a fundamental misunderstanding of summit doplomacy as conducted by the President, the Secretary of State, and Dr. Kissinger. If one had only memberies of the ill-prepared and ill-fated summits of Vieunna or Glassboro, then hesitation would be understandable. But this administration has made of summitry not a practice of theatrics and atmospherics, but a meeting at the highest level to consummate exhaustive preparation and negotiation on specific and detailed matters of the highest international importance. I need not recite to this body the historic accomplishments that were brought to fruition in the meetings of President Nixon with the leaders of the world's great powers.

The coming Brezhnev visit is intended to be the epitome of more than a year's arduous preparation. Its product will almost certainly be solid progress in improving U.S. relations with the Soviet Union and a strengthened détente. While we cannot expect the breathtaking announcements flowing from earlier summits, the coming meeting may be of greater historic importance.

It is naive to suggest, as this criticism does, that such historic developments are to be subject to the ebb and flow of domestic political tempests.

It is not only naive but unfortunately partisan to think that our Chief Executive has been disabled in his power and responsibility to conduct the foreign relations of the United States because of the allegations against some who have held office in his administration.

Mr. President, there are great opportunities in the coming summit, opportunities to improve the lot of Soviet Jewry, to increase the flow of information and of people between our great countries, to make progress toward greater trade to our mutual advantage, and most important, opportunities to take further steps along the road of strategic detente and arms control—the only realistic road to real peace.

Let history show that the Senate of the United States was a source of creative support for this historic new era in United States-Soviet relations.

Great events require wise cooperation in the processes of negotiation and agreement.

The meeting should proceed. The meeting will proceed. The time to improve relations is now, not in the vague future.

WHY THE BREZHNEV VISIT SHOULD TAKE PLACE ON SCHEDULE

The time is right—

The return visit is taking place on schedule, which is indicative of our mutual determination to continue the positive trends in United States-Soviet relations over the past year.

It was always envisaged that the visit would take place in 1973. The visit was announced after it became clear from the advance planning that the time was ripe and it would be productive.

We can be confident of our relative strength—

There is nothing in the Soviet reaction to our domestic political situation that would indicate Brezhnev believes he is in a better position to extract concessions—the Soviet press has virtually ignored Watergate.

We have strong and reliable allies, who support the policy of détente as we do.

U.S. trade and credits, which serve our own economic interests, are important to Soviet economic development.

A visit now can have positive benefits—

It can give the SALT talks needed momentum.

It can stimulate progress toward additional mutually beneficial cooperation.

It can reinforce our mutual commitment to improve relations.

Our approach is realistic—

The President is committed to carefully prepared summits and to negotiating agreements on their merits.

His method is to build our new relationship with the U.S.S.R. on "objective" factors reflected in a pattern of concrete achievements, not on superficial summit atmospheres.

He recognizes that agreements must be in our mutual interest to be lasting.

Postponement would be counterproductive—

To postpone the visit would suggest a weakness in the U.S. international position which does not in fact exist.

It could needlessly destroy international confidence in our ability to carry out an active foreign policy.

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

Mr. SCOTT of Pennsylvania. I yield.

Mr. MANSFIELD. Mr. President, I am in wholehearted accord with what the distinguished minority leader has said. An invitation was extended almost a year ago. That invitation was accepted many months ago.

So far as President Nixon being taken in by the General Secretary is concerned, I certainly place no credence in such a thought. I do not believe that either will be taken in, because they will be negotiating on a realistic basis.

I hope that out of this meeting will come something good in the way of better trade relations, something good in the bettering of the conditions of Soviet Jewry, and something good in the bettering of mutual relations between the two nations, each of which holds the power within its scope to annihilate the rest of the world.

It is too late to withdraw an invitation accepted in good faith. I wholeheartedly support what the distinguished minority leader has said on this occasion relative to the coming visit of Brezhnev.

Mr. SCOTT of Pennsylvania. I am most grateful to the distinguished majority leader for those remarks.

ORDER OF BUSINESS

The PRESIDING OFFICER (Mr. BIDEN). Under the previous order, there will now be a period for the transaction of routine morning business, for not to exceed 15 minutes, with statements therein limited to 3 minutes.

IN DEFENSE OF THE SENATE SELECT COMMITTEE

Mr. ROBERT C. BYRD. Mr. President, yesterday, in St. Louis, Vice President AGNEW expressed criticism regarding the televised hearings currently being conducted by the Senate Select Committee, chaired by Senator SAM ERVIN.

The Vice President listed seven procedural safeguards which, in his words, are critically lacking in the committee hearings. They are as follows:

First. No right of cross-examination by persons accused or named by witnesses.

Second. No representation by counsel of persons accused or named in testimony.

Third. No guarantee for persons accused or named in testimony to rebut such testimony.

Fourth. No opportunity for persons accused to introduce evidence to impeach an accuser's credibility.

Fifth. Hearsay evidence is admissible.

Sixth. Testimony as to inferences, impressions, and speculations is permitted.

Seventh. Cameras are not prohibited.

With all due respect to the Vice President, while he makes a distinction between the Watergate hearings and a judicial trial, he, nevertheless, proceeds to treat both as one and the same and, in so doing, applies the same procedural tests to the legislative hearings as are required in a judicial trial.

The impression to be conveyed is that the Ervin committee should be guided by the same rules of judicial procedure as would a court of law, and that the televised hearings will jeopardize the achievement of truth and justice.

As one of the unanimous body of Senators who voted to establish the Ervin Select Committee To Investigate the Watergate, I am constrained to take issue with the Vice President in this instance, and I do so notwithstanding my great personal respect and esteem for him.

In the first place, no committee in the history of the Senate has ever conducted hearings—public or private—in accordance with the same rules that govern all of the procedures of a court of law. They are not required—it not being the function of a congressional committee to determine innocence or guilt—and to require that the procedural rules of a law court be followed would be to so restrict the committee as to prevent it from performing its proper legislative function of freely eliciting the information necessary to form a basis for appropriate legislation.

Moreover, the committee is bipartisan, and it has conducted its duly authorized business thus far in a judicious, dignified, impartial, and fair manner.

I do not entertain the slightest doubt that any person accused or named by a witness in the hearings would himself be accorded the opportunity to appear before the committee to testify and supply evidence in his own behalf if he were to so request of the chairman.

A heavy responsibility rests upon the Congress, as the elected representatives of the people, to inform the people regarding matters affecting them. In fact, as that eminent student and exponent of constitutional government, Woodrow Wilson, correctly stated:

> The informing function of Congress should be preferred even to its legislative function.

It is vital to the proper functioning of a government of and by and for the people that those who are governed be as fully informed as possible regarding the actions of those who have been chosen to govern, especially when certain actions have been brought into serious question. The "rule of law," referred to by the Vice President, can only be preserved and nurtured in the protective soil of knowledge and in the clear sunlight of truth.

The great English statesman, Edmund Burke, said, in 1784—

> The people never give up their liberties but under some delusion.

An informed public opinion is the best safeguard against the public's self-deception and delusion, and the committee, by conducting televised public hearings, is performing one of the great functions of constitutional government. For an informed people will always be a free people.

The Vice President expresses the fear that television's incandescent presence tends to impede the search for justice by creating "a swelling flood of prejudicial publicity that could make it virtually impossible to select an impartial jury when and if new indictments are returned in the Watergate case." Methinks, the Vice President doth protest too much. If Jack Ruby, after shooting Lee Harvey Oswald in full view of scores of millions of television viewers, could get a fair trial by an impartial jury; if Sirhan Sirhan, physically overcome by Rosie Greer in full view of shocked millions following the shooting of Senator Robert Kennedy, could get a fair trial before an impartial jury; surely it will not be impossible to select an impartial jury in a far less dramatic and less emotional case involving Watergate offenders.

The Vice President expresses his "earnest personal belief" that the Senate hearings "can hardly fail to injure" the court proceedings, and he proceeds in the same breath to state, as though it were a fact, that "every American citizen should understand that." The truth of the matter is that a frustrated, but courageous trial judge—Judge Sirica—expressed the fervent hope that a congressional committee would uncover all the facts and the whole truth of Watergate—something the court had been unable to do. Where was the Vice President when Judge Sirica publicly expressed himself thusly? Did the Vice President speak out on behalf of justice at that juncture? If he did, I failed to note it in the press.

The Vice President speaks of the "Senate's trial of the Nixon administration before the court of public opinion," and he says that, in the Watergate hearings, "the American people have been cast as the ultimate jury by Senator Ervin and his colleagues." Mr. President, it ill behooves the Presiding Officer of this body to seek to characterize the work of the Senate select committee—made up of both Republicans and Democrats—as a "Senate trial of the Nixon administration." This is a distortion on its face. It is not to be denied that the Nixon administration is, indeed, on trial; but it is not by the Senate so much, as it is by the American people. Perhaps it is this fact that is at the bottom of the Vice President's speech and that most troubles him.

Mr. President, the American people are "the ultimate jury." But this would be true even if there were no Ervin committee. The public can no more escape the scandal than can the Government officials who fear it. Watergate is inescapable. What is involved is a violation of public trust, and a deep and pervasive misuse of power. The verdict of the jury of the people is ultimately unavoidable.

The sooner the Vice President and the rest of us understand that Watergate will not be papered over, and the sooner those who know the truth come forward and tell the truth, the sooner the verdict will be reached and Watergate put behind us.

In the meantime, the Ervin committee and the courts should continue their work. The rest of us—Democrats and Republicans alike, regardless of our station in life—can best aid in the search for truth by restraining the impulse to criticize legally constituted and duly authorized bodies that are conscientiously endeavoring to carry out their constitutional duties.

If they fail, there will still be time in which to criticize them. But let not such failure be because we threw obstacles in their paths.

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

Mr. ROBERT C. BYRD. Yes, I yield.

Mr. MANSFIELD. Mr. President, I commend the distinguished assistant majority leader for the statement he just made. In effect, he has pointed out in answer to the speech yesterday of the Vice President, the Presiding Officer of this body, that there is an inherent responsibility in this matter insofar as the Senate is concerned. He has pointed out that there is a division between the judiciary, the executive, and the legislative branches of Government—a division that in my own judgment must be preserved and augmented.

This Senate unanimously created the Ervin select committee and this Senate fully supports that committee in its endeavors. In fact, the committee is constituted under, serves and functions by the mandate overwhelmingly approved by this body.

May I say I was pleased to note that Judge Sirica, just this morning, indicated with his ruling that the Senate does, indeed, have responsibility in this matter. His ruling was handed down in the face of a contrary position urged by the prosecutor in the case who, in my

judgment, would deny to the Senate rights and responsibilities essential to the investigation now underway.

Mr. President, may I say further that the members of the Senate committee, Democrats and Republicans alike, have conducted themselves with integrity, with impartiality, and on an entirely nonpartisan basis. The American people are entitled to the truth and the American people will obtain the truth. They will get it not only through the courts and the grand juries, but also through the proceedings being undertaken by the Senate committee.

There is one interesting historical footnote that is applicable. In the early 1920's there was the so-called Teapot Dome scandal. There were two prosecutors then, Owen J. Roberts, a Philadelphia lawyer who later became a Justice of the Supreme Court, and former Senator Atlee W. Pomerene, of Ohio. There was also a Senate committee that investigated the Teapot Dome situation, chaired by one of the most distinguished Senators ever to have served this Republic in the person of Senator Thomas J. Walsh, of Montana. It was not the prosecutors who presented the evidence which sent Mr. Fall to jail and brought indictments against others, but it was Thomas J. Walsh and a Senate committee. I would expect Senator SAM ERVIN, of North Carolina, a worthy successor to Thomas J. Walsh, to achieve the same success in this instance, insofar as laying out the facts and informing the people are concerned to the end that the people then will be able to render the final judgment.

I think this is a superb, nonpartisan committee, peopled by men of great integrity and men trying to do a good, fair, impartial job. They bring credit to the Senate.

Mr. ROBERT C. BYRD. I thank the majority leader.

Mr. SCOTT of Pennsylvania. Mr. President, will the assistant majority leader yield?

Mr. ROBERT C. BYRD. Perhaps the able Senator will seek recognition in his own right. My time has expired.

The PRESIDING OFFICER. The Senator from Pennsylvania is recognized.

Mr. SCOTT of Pennsylvania. Mr. President, I have no criticism of the Ervin committee to perform a fair, unbiased, and nonpartisan job. My only concern is to be absolutely sure that we are all being totally fair to everyone who expresses an opinion in these matters.

I noted in the Vice President's speech that he raises an interesting question which we should always bear in mind, and which I am sure the Ervin committee is bearing in mind, and that is that in the search for truth and justice, that this search is interdependent, that in seeking for the truth, justice must be done, and in doing justice only the truth will serve.

That was reflective reasoning offered by the Vice President. I think it was quite wrong to have headlines that the Vice President had blasted the Ervin committee. I appeal again simply for simple justice—probably the rarest commodity in Washington, just simple justice.

If anyone reads the Vice President's statement, he did not blast the Ervin committee. He pointed out problems involved in the search for truth and justice. I hope that I will not be characterized in some report of what I have said, if I am lucky enough to have it reported, as having blasted anybody.

I think the Ervin committee is doing an excellent job. I have the highest regard for all of them. They have my assurance that I will in no way interfere with the processes of their investigation. I think the country has confidence in them and I am most anxious to be sure that when anyone makes fair comment in this country on a subject greatly in the public mind, that it should not be derrogated to the point where it is presumably beyond belief by having the headlines state that the Vice President said thus and so.

This tends to cause people not to read the speech. The speech was carefully constructed. It was logical, it was reasonable. He was entitled to his point of view. There may be a number of Senators who do not agree with his point of view, but all I urge is that people read speeches if they are going to criticize them, and that people make judgment on the basis of what is said rather than what is expected.

Of course, I do not make this speech in any sense in criticism of the assistant majority leader. He did not do that. I am referring to the way the speech was reported. The distinguished assistant majority leader is pointing out the right of the Ervin committee to proceed. I am pointing out that they are doing a good job and I am not urging them to follow a different course. But I think a careful reading will indicate that the Vice President's speech was fair, reasoned, logical, and he expressed a point of view, and the distinguished Senator from West Virginia noted, he has a different point of view. Let us let these points of view compete with each other in the marketplace of public opinion without having the essential integrity of the statement impugned by the way it is carried.

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

Mr. ROBERT C. BYRD. I yield.

Mr. MANSFIELD. I agree. I read the speech; I read it several times. It was reasonable, it was logical, it did raise a point of view with which I differ; but certainly I find no fault with the Vice President for expressing his personal view.

I only think in rebuttal that those of us who differ in this respect have the same right to express our views, and to once again express our full confidence in the committee which the Senate created and which I think is doing such an outstanding job. But the speech was logical and reasonable. I find no fault with the speech itself; I just have a different point of view.

Mr. SCOTT of Pennsylvania. I am just making the point because in some quarters if the Vice President were heard to be saying, "Hand me a towel," there would be articles written to the effect that he is now trying to aid the textile industry.

Mr. ROBERT C. BYRD. Mr. President, I share the viewpoint of the disinguished majority leader and the distinguished minority leader. I think the speech of the Vice President was a very well reasoned speech, and I appreciate his point of view. I do think, however, that it is wrong to contend that the Ervin Select Committee is bound, or ought to be bound, by any procedural rules that govern the actions of courts of law or that by utilizing such rules the committee could perform its proper legislative function. The Senate commissioned the committee to do the work that it is doing, and I think it is doing an excellent job, as I have indicated. Senators on both sides of the aisle are represented on that committee.

They are acting in a fair, judicious, and impartial manner. I just think that the record ought to be straight with respect to the use of rules that govern the proceedings of a court of law and any attempt—well intentioned though it is—to convey the suggestion that, because the committee does not follow such rules, it is going about its business in the wrong way.

The Senate commissioned the committee to act, and I think it behooves the Senate to stand up and defend the actions of the creature that it created as long as that committee is doing its job in a conscientious, sincere, dedicated, and effective manner.

Mr. President, I ask unanimous consent that the speech of the Vice President, in its entirety, be included at this point in the RECORD.

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

ADDRESS BY THE VICE PRESIDENT OF THE UNITED STATES

The Scripture tells us, "To every thing there is a season." The season of summer, in television, usually brings little but reruns and unknowns in place of regular stars. But this summer it's *different*. Somewhere on your TV dial, morning, noon, and night for the next several weeks or even months, you will be able to find a gripping drama—the Senate investigation of that web of crimes and controversies that has come to be known as Watergate.

Let me say at the outset that as entertainment these hearings have undeniable audience appeal. And I do not doubt that they are sincerely motivated as to legislative fact-finding and public education. But the point which many people have now begun to question is whether this is the right time for the Senate hearings to be going forward.

One of the Senate's most respected elder statesmen, Sam Ervin of North Carolina, the eminent constitutionalist and civil libertarian who heads the Watergate Committee, was asked not long ago if the hearings might not jeopardize the judicial proceedings—a point that Special Prosecutor Cox himself has now publicly raised.

The Senator answered, and I quote, "It is much more important for the American people to find out the truth about the Watergate case than to send one or two people to jail."

This statement brings us to the heart of the current concern over whether prosecutors and juries or Senators and network TV crews should be in the lead on this Watergate investigation. Let's probe a little further into

the implications of the thinking of my esteemed friend, Chairman Ervin.

Getting the truth out into the open, he says, is more important than just jailing people. I could not agree more. Jailing the convicted criminal is only one part of what justice is all about. Justice in its deepest meaning involves the assurance that we live in a society where the individual is truly free; the confidence that we are ruled by a government of laws, not of men; and the demonstrated proof that innocence and guilt alike are rewarded or punished as they deserve.

There can be no justice without public trust, and there can be no trust without a systematic and thorough airing of the whole truth about affairs that concern us all.

I cannot agree, however, with the suggestion that determining the truth and convicting the guilty are two entirely separate processes, one for the Congress to pursue and the other for the courts. The truth itself is what a court relies upon in deciding whether to convict or acquit a defendant. And because human freedom, fortune, reputation, and in some cases life itself hang in the balance with the making of that decision, our judicial system has developed the most careful procedures that exist anywhere in our whole society for testing and verifying checking and double-checking, the truth about what men did or did not do and why.

Justice Felix Frankfurter once wrote, ". . . the history of liberty has largely been the history of the observance of procedural safeguards."

How very pertinent his observation is to us as the Watergate story unfolds. What is critically lacking, as the Senate Select Committee does its best to ferret out the truth, is a rigorous set of procedural safeguards.

Lacking such safeguards, the Committee, I am sad to say, can hardly hope to find the truth can hardly fail to muddy the waters of justice beyond redemption.

Some people have argued that rules of evidence and guarantees of due process don't matter so much in the Ervin hearings because nobody is really on trial up there. The mission of the hearings, this argument runs, is purely one of information gathering. But Chairman Ervin himself has suggested otherwise. "My colleagues and I are determined," he said on the day the hearings began, "to uncover all the relevant facts . . . and to spare no one, whatever his station in life may be."

To me, ladies and gentlemen, the phrase "spare no one" sounds very much like an adversary process, a trial situation. There is no escaping the fact that hearings have a Perry Masonish impact. The indefatigable camera will paint both heroes and villains in lurid and indelible colors before the public's very eyes in the course of these proceedings. This is essentially what is known in politics as a "beauty contest" and the attractiveness and presence of the participants may be more important than the content of the testimony. Particularly disturbing are the compliments to some witnesses and the stony silence accorded others at the close of their testimony.

There is no question whatever that some men despite their innocence will be ruined by all this, even though I am sure that the Senate intended nothing of the kind when it commissioned this investigation.

That is why it ought to concern all of us that in at least seven basic ways, the orderly procedures by which facts are elicited and verified in a court of law are lacking each morning when Senator Ervin's gavel comes down and the Senate's trial of the Nixon Administration before the court of public opinion resumes. These departures from the rules of fair play—rules fundamental in Anglo-American jurisprudence—occur not by the malice of any individual or the design of any faction, but simply by the nature of a legislative hearing as compared to a courtroom proceeding. But they are no less troubling to fair-minded observers for that reason.

Let's examine these seven missing safeguards:

1. *In the Senate hearing, there is no absolute right of cross examination afforded the persons accused or named by a witness.*

Thus there is no opportunity to test the accuracy and veracity of a hostile witness. The right of cross examination is a basic right in a judicial trial. This right is particularly important when a witness himself stands accused or already convicted and hence has a motive to implicate others to mitigate his own offense or to exonerate himself. To get at the truth, it is vitally important that each individual not only have an opportunity to present his own version of the facts, but that he also submit to vigorous cross examination by those opposite him in the adversary proceedings.

2. *In the Senate hearing, the right of persons accused or named in testimony before the Committee to be represented by counsel is severely abridged.*

The defendants' right to representation by counsel in a criminal trial is guaranteed by the Constitution itself. At the Senate hearings, in contrast, witnesses may have counsel at their side for advice only; their lawyers can take no active part in the colloquy among Committee, staff and witnesses.

3. *In the Senate hearing, there is no firm guarantee of an opportunity for persons accused or named by a witness to rebut that testimony by calling other witnesses or introducing other evidence; there is not even a formal assurance that the accused person himself will have a chance to testify.*

The right to rebut testimony is fundamental to a fair trial, and yet is being observed in only the most casual way in the Watergate hearings. James McCord, for instance, made a number of charges against his former attorney, Gerald Alch. Mr. Alch had not been scheduled as a witness, and it is unclear whether the Committee ever would have called him had he not happened to be immediately available and demanded a chance to speak. Thus we might never have heard Mr. Alch contradict Mr. McCord—and the public might never have known that James McCord has possibly perjured himself before the Committee.

4. *In the Senate hearings, there is no guarantee of an opportunity for persons accused or named by a witness to introduce evidence which tends to impeach the accuser's credibility by establishing bias or interest on the part of the person making the accusation.*

Such an opportunity is available in every judicial trial and should also be guaranteed in the Watergate hearings, especially when we are dealing with people whose jail sentences may depend in large measure on what they tell the Committee.

5. *In the Senate hearing, unlike a trial, the witness is permitted to introduce hearsay evidence.*

Even though the Chairman has in good faith repeatedly emphasized that hearsay testimony is not receivable as truth, it is difficult for tens of millions of viewers to disregard what they have just heard.

As Justice Jackson said in an opinion on the 1949 case of *Krulewitch v. U.S.*, "The naive assumption that prejudicial effects can be overcome by instructions to the jury . . . all practicing lawyers know to be unmitigated fiction . . ."

In the Watergate hearings, the witness is not only permitted to give hearsay but positively encouraged to do so. When a witness testifies to what some third party told him, he frequently is then asked to elaborate on details of the hearsay statement and pressed to say whether his informant mentioned still other persons. The effect of such lines of questioning is to strengthen the public's erroneous impression that the rumor and hearsay can be considered as reliable evidence.

6. *In the Watergate hearings, the witness is permitted to testify as to his inferences, his impressions, even his speculations.*

In a judicial trial, such so-called opinion testimony is totally inadmissible as evidence. Guilt or innocence, truth or falsehood, are determined in a court by facts, not guesswork.

In contrast, who can forget the May 23rd dialogue between Senator Montoya and witness John Caulfield on the alleged offer of Executive clemency to James McCord:

Q. "Now, you mentioned that Mr. Dean had instructed you to say that it comes from way up at the top."

A. "Yes, sir."

Q. "What did you conceive that to be at the time?"

A. "Well, sir, in my mind I believed that he was talking about the President."

Later in the same appearance, Mr. Caulfield said that he had never had any conversations with the President with regard to Executive clemency and that Mr. Dean had never specifically said the alleged offer came from the President.

Thus we were left only with Mr. Caulfield's personal opinion—an opinion that would never have been permitted in a court of law because its truth can't be tested.

The stark differences between the Watergate hearings and our basic concepts of justice came screaming out that night when the Washington Star's banner headline announced; "Felt Nixon Knew, Caulfield Says."

The next day, The New York Times carried a similar banner on an inside page: "Caulfield Asserts He Believes President Authorized Clemency Offer to McCord."

By any standard, this kind of thing can only be termed a gross perversion of justice.

7. *The last among the missing procedural safeguards is the prohibition against cameras.*

The reason that cameras are banned from most judicial trials is that they introduce an emotional and dramatic factor which gets in the way of a deliberate, dispassionate pursuit of truth. The court can too easily become a theater.

In a judicial trial, the public are only spectators. In the Watergate hearings, however, the American people have been cast as the ultimate jury by Senator Ervin and his colleagues; and television for better or worse thus becomes an indispensable vehicle for interjecting the people into the process of judgment. Moreover, the audible sighs, snickers or groans of the people in the hearing room are dramatically relayed to the millions of TV viewers, thus potentially affecting the way they receive the information.

Television's incandescent presence in the hearing room has additional damaging effects. It tends to complicate the search for truth by making both witnesses and Committee players on a spotlighted national stage, and it tends to impede the search for justice by creating a swelling flood of prejudicial publicity that could make it virtually impossible to select an impartial jury when and if new indictments are returned in the Watergate case.

Thus even if the Senate hearings succeed in reliably establishing the guilt of some individuals in the Watergate case, they will probably do so at the expense of ultimate conviction of those persons in court. And this is bound to leave the American people with an ugly resentment at the spectacle of wrongdoers going scotfree.

For those who have done no wrong—and experience would lead us to assume that they far outnumber any who have—the prospect of justice is bleaker still. Irreparable harm may well be done to the good name of the innocent by accusations leveled in

televised hearings and never conclusively refuted in a court of law, the only institution in our system whose exoneration of an accused person is definitive and final.

In listing these seven deficiencies in the procedures of the Senate Watergate hearings, I do not mean to imply that the Ervin committee is proceeding in a haphazard or disorderly fashion. Far from it. They have a carefully drawn and published set of rules to guide their investigation. Even where those rules may seem to approximate judicial fairness, however, a closer reading reveals that they are not ironclad guarantees of due process after all for their application is left to the committee's discretion.

It is easy to understand the urgency which many attach to seeing the Ervin hearings go forward, since the judicial process was at first stalemated by the silence of many key figures, and then later shadowed by the lingering concern that the Administration was essentially investigating itself, without an independent figure leading the prosecution.

But now those conditions no longer prevail. One major witness after another is coming forward to tell what he knows, and a Special Prosecutor of impeccable integrity has taken command.

There is no denying that a judicial trial sometimes falls well short of airing all the circumstances and ramifications surrounding a crime or controversy, particularly when guilty pleas are entered as they were in the first Watergate trial last January. The courts can't do it all. What a court can do, however, with far greater precision and fairness than any legislative committee, is to establish the central facts of individual culpability—the task that now stands first on the Nation's Watergate agenda.

Instead, one is now left with the feeling that hearings which began on the premise that it is more important to bring out the truth than to jail people may wind up blocking the imprisonment of some who are guilty, smearing the reputation of many who are innocent, and leaving the truth itself very much in doubt.

Many have therefore suggested that it would be helpful if this unavoidably loose process—so harmful to so many and potentially so injurious to our country in ways even reaching far beyond our shores—could at least be deferred until the Special Prosecutor has a chance to develop his case, as Mr. Cox himself has urged.

In all likelihood, however, the hearings will proceed despite the reservations I have voiced. The Senate has every right to exercise its constitutional prerogatives, and appears intent on doing so. On that presumption, there are several points I hope the Nation will bear in mind over the weeks to come.

First, let's all understand that a great deal of what we see and hear in these hearings would be indignantly ruled out of any court of law in the United States.

Second, let's be conscious as we watch and listen that probably a considerable number of very fine people, entirely innocent of any wrongdoing whatever, could come out of this un-judicial proceeding tragically besmirched, terribly humiliated, and irretrievably injured—and therefore let us strive to suspend our judgments until all the facts are in; and let us remember the ancient injunction that every man among us is deemed innocent until proven guilty beyond reasonable doubt.

Third, I would hope that my good friends and old sparring mates in the Nation's press will consider that circumstances have changed dramatically in the last several months. From a situation where the news media—to their great credit—were one of the principal forces pushing for full disclosure, we have now moved into a situation where excessive haste to print the spectacular may actually frustrate the processes of truth and justice.

The journalism profession never tires of telling us that it is a public service institution, not merely a profit-making enterprise. The weeks and months ahead will put that contention to an acid test by challenging reporters and editors to think twice about those sensational leaked-source stories that might boost circulation but which could also malign the innocent and help to acquit the guilty.

Finally, let everyone understand that as I have here extolled the virtues of our court system, I no less subscribe to the immense value of the Congressional investigative process—a process which I regard as one of the essential pillars of sound government in our system. What I have said here is not directed in anyway to the weakening of that essential feature of the legislative process. Nor is it meant to impugn in the slightest the sincerity or objectivity of any member of the investigating committee, for each of whom I have only the highest respect.

I have simply endeavored to express my earnest personal belief that in this particular circumstance, as the court proceedings struggle toward justice and as the Senate hearings reach in their way toward truth, it does appear that the latter can hardly fail to injure the former—and I feel that every American citizen should understand that.

Justice Benjamin Cardozo, one of the greatest American jurists of this century, left us a wise reminder when he wrote, "Justice is not to be taken by storm. She is to be wooed by slow advances."

The storm of public indignation aroused by this sordid Watergate affair is an understandable reaction, and a healthy one. But the raw and undisciplined forces of such a storm cannot by themselves achieve justice, as Cardozo warned. Those forces must be harnessed by the instincts of fair play that are so basic to our society, and they must be channeled through the established institutions best equipped for the difficult dual task of protecting the rights of the individual and enforcing the law of the land.

This will not be the shortest or easiest way for America to untangle the tragedy of Watergate and repair the damage done—but beyond a doubt it is the safest and wisest way. I ask all of you, as dedicated servants of the rule of law, to join with me in working for this goal.

Mr. SCOTT of Pennsylvania. Mr. President, if the distinguished majority leader will further yield, he will remember the Vice President said.

The Senate has every right to exercise its constitutional prerogatives and appears intent on doing so.

Then he goes on that, on that presumption, he simply wants the Nation to bear in mind that it is not a judicial proceeding, as indeed the Senator from North Carolina (Mr. ERVIN) has constantly cautioned.

Still I have discovered, in talking to people who have listened to the hearing, that many of them still confuse committee judicial procedures.

I am rising here not because I criticize the speech of the distinguished Senator——

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

Mr. ROBERT C. BYRD. Mr. President, I yield half a minute to the distinguished minority leader.

Mr. SCOTT of Pennsylvania. But simply for the purpose of once more emphasizing that not all one hears and sees on television is a proceeding in a court of law, but it is consonant with the Senate's function, its authority, and its constitutional right, but, again, that innocent people should not be detained, nor the guilty, even, deprived of the opportunity of a fair trial and the opportunity to bring in evidence for the purpose of any mitigation of an offense. I simply say that as a lawyer pleading one more time for fairness, justice, and truth.

Mr. ROBERT C. BYRD. I hope the Vice President will read the remarks of the distinguished minority leader and others of us who are likewise pleading for fairness and justice.

CONGRATULATIONS TO FORMER SENATOR MARGARET CHASE SMITH—JOINT RESOLUTION OF MAINE LEGISLATURE

Mr. AIKEN. Mr. President, Margaret Chase Smith of Maine is the only woman who has ever served in both Houses of Congress. She gave her services for 33 years to her people, to her State, and to her country. She performed outstanding services during all those years when she was a Member of this Congress.

In 1964 it was my privilege, and I considered it an honor, to nominate her for the presidency at the Republican Convention held in San Francisco. Although she did not get the nomination, she did receive the largest round of applause of any of those who were nominated at that convention.

It will be a long time before anyone can equal the public service given so generously and so wholeheartedly by Margaret Chase Smith.

The Maine Legislature has recognized the service which she gave to her State and to her country, and both Houses approved a resolution which I now ask unanimous consent to have printed in the RECORD.

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

JOINT RESOLUTION TO THE HONORABLE MARGARET CHASE SMITH FOR DISTINGUISHED SERVICE TO THE STATE OF MAINE

Whereas, the State of Maine was faithfully served in Washington by Margaret Chase Smith of Skowhegan for thirty-three years in the United States House of Representatives and in the United States Senate; and

Whereas, Senator Smith is the only woman to serve in both houses of Congress, the only woman to be elected to four full Senate terms, and the first woman to have her name placed in nomination for President at a national convention of a major political party; and

Whereas, Margaret Chase Smith has worked tirelessly to serve her fellow citizens in this State and has faithfully devoted herself to the representation of her constituents and her nation by careful deliberation, by her record attendance, and by the sponsorship and support of wise legislation; and

Whereas, she rose to leadership positions on the Senate Aeronautical and Space Sciences, Appropriations, and Armed Services Committees and as chairman of the Republican Senators' Conference; and

Whereas, Senator Smith has brought credit to herself and honor to her State through her Declaration of Conscience speeches in 1950 and 1970 and by her independent and forthright stands on the issues of the day; and

Whereas, this daughter of Maine has won the respect of the people and the leaders of the Nation and of the world and has won a

special measure of devotion in the hearts of the citizens of her native State; now, therefore, be it

Resolved: That in order to express its pride and appreciation, the 106th Legislature of the State of Maine extends to Margaret Chase Smith congratulations on her unparalleled record of service and best wishes for the future; and be it further

Resolved: That a copy of this Resolution, properly attested, be sent by the Secretary of State to Margaret Chase Smith in Washington, D.C.

House of Representatives: Read and Adopted. Sent up for Concurrence, March 27, 1973. E. Louise Lincoln, Clerk.

In Senate Chamber: Read and Adopted. In Concurrence, March 28, 1973. Harry N. Starbranch, Secretary.

EXTENSION OF PERIOD FOR TRANSACTION OF ROUTINE MORNING BUSINESS

Mr. ROBERT C. BYRD. Mr. President, how much time remains for the transaction of routine morning business?

The PRESIDING OFFICER. Eleven minutes.

Mr. ROBERT C. BYRD. I ask unanimous consent that there be an extension of the period for the transaction of routine morning business, with statements therein limited to 5 minutes.

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

The Chair recognizes the Senator from Oklahoma (Mr. BARTLETT).

Mr. BARTLETT. I thank the distinguished Senator from West Virginia.

THE ENERGY CRISIS

Mr. BARTLETT. Mr. President, the energy crisis in America will not be resolved in the near future. For the next 15 years, and possibly longer, the people of the United States must work together with a new awareness of the gravity of this crisis.

The time has come for political considerations, regional preferences and personal antagonisms to be set aside. The valuable time and effort being wasted trying to find a scapegoat must cease and must be directed toward an all encompassing effort to improve our domestic energy posture.

Natural gas produced in Oklahoma in new long-term contracts costs Oklahomans 60 cents per 1,000 cubic feet at the wellhead. Yet the same gas sold out of State would cost the out-of-State consumer only 20 cents per 1,000 cubic feet at the wellhead. Oklahomans pay three times more for Oklahoma gas than do out-of-State buyers. The reason for this is that the Federal Power Commission regulates the price of interstate gas, but intrastate prices in the free marketplace have been bid up in Oklahoma to a price that is competitive with other fuels. Oklahoma wants to share its gas resources, but it also wishes to share its price based on thousands of transactions in the marketplace.

The Oklahoma intrastate gas buyers have an advantage over out-of-State buyers because they can bid higher for gas for Oklahoma consumers.

Yet, when I inquired of Mr. C. C. Ingram, the chairman of the board of Oklahoma Natural Gas Co., as to the effects of interstate deregulation of prices upon this wholly intrastate company, he said:

We are well aware that decontrol of the wellhead price for natural gas that will be sold into interstate commerce will reduce our competitive edge in acquiring new gas supplies. However, we are even more aware of the need to increase the price for gas at the wellhead in order to stimulate the exploration activities that will be required to develop the gas reserves that are needed to offset the energy shortage. Although decontrol will increase our competition's effectiveness, we believe we will have no great difficulty in obtaining gas supplies to serve our customers through both our continued aggressiveness in gas purchase activities and our significant expansion in our own exploration efforts.

This is the kind of unselfish attitude that must continue to spread across the Nation. Mr. Ingram knows that our country needs price decontrol and looks forward to the increased competition because it will also mean increased reserves of natural gas, oil, coal, and atomic energy. He knows the United States needs a stronger domestic energy industry.

Consumer States must assume a new role. States that heretofore have refused to site refineries, and to explore for oil and gas on their outer continental shelves and to locate deepwater ports must reconsider and move forward with determination to help solve this national crisis.

Consumer States must work with producer States and industry to plan for the onslaught of imports that is inevitable. They must establish facilities to refine these crude imports.

We must start constructing a pipeline to market domestic oil from Alaska in the 48 States.

We must deregulate the price of gas in order to increase the supply of gas, oil, coal, and atomic energy.

We are all in this together. Our outlook must be constructive and objective. We cannot afford to waste time casting the blame. We must roll up our sleeves—there is a job to be done—in the best interest of the United States. We need a strong domestic energy industry.

The PRESIDING OFFICER (Mr. BIDEN). Is there further morning business?

ENROLLED BILLS SIGNED

The PRESIDENT pro tempore today signed the enrolled bill (H.R. 4443) for the relief of Ronald K. Downie, 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. ALLEN, from the Committee on Agriculture and Forestry, without amendment:

S. 1585. A bill to prevent the unauthorized manufacture and use of the character "Woodsy Owl," and for other purposes (Rept. No. 93-205).

By Mr. BURDICK, from the Committee on the Judiciary, without amendment:

S. 271. A bill to improve judicial machinery by amending the requirement for a three-judge court in certain cases, and for other purposes (Rept. No. 93-206).

EXECUTIVE REPORTS OF COMMITTEE

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

By Mr. MAGNUSON, from the Committee on Commerce:

Glen O. Thompson, Julian E. Johansen, Abe H. Siemens, John B. Hayes, and Robert H. Scarborough, Coast Guard officers, for promotion to the grade of rear admiral;

Harold James Barneson, Jr., of the U.S. Coast Guard Reserve, for promotion to the grade of rear admiral;

Tilton H. Dobbin, of Maryland, to be an Assistant Secretary of Commerce; and

John K. Tabor, of Pennsylvania, to be Under Secretary of Commerce.

The above nominations were reported with the recommendation that they be confirmed, subject to the nominee's commitment to respond to requests to appear and testify before any duly constituted committees of the Senate.

INTRODUCTION OF BILLS AND JOINT RESOLUTIONS

The following bills and joint resolutions were introduced, read the first time and, by unanimous consent, the second time, and referred as indicated:

By Mr. BEALL:

S. 1978. A bill to amend laws relating to the Federal National Mortgage Association. Referred to the Committee on Banking, Housing and Urban Affairs.

By Mr. MUSKIE:

S. 1979. A bill to make the unemployment compensation benefits provided for Federal employees applicable to U.S. citizen employees of the Roosevelt Campobello International Park Commission. Referred to the Committee on Post Office and Civil Service.

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

S. 1980. A bill to amend the Defense Production Act of 1950, as amended. Referred to the Committee on Banking, Housing and Urban Affairs.

By Mr. TOWER:

S. 1981. A bill to authorize the establishment of the Big Thicket National Biological Reserve in the State of Texas, and for other purposes. Referred to the Committee on Interior and Insular Affairs.

By Mr. TOWER (for himself and Mr. DOMINICK):

S. 1982. A bill to amend title II of the Social Security Act to increase to $3,000 the annual amount which individuals may earn without suffering deductions from benefits on account of excess earnings, and to lower from 72 to 70 the age after which deductions on account of excess earnings are no longer made. Referred to the Committee on Finance.

By Mr. WILLIAMS:

S. 1983. A bill to provide for the conservation, protection, and propagation of species or subspecies of fish and wildlife that are threatened with extinction or likely within the foreseeable future to become threatened with extinction, and for other purposes. Referred to the Committee on Commerce.

By Mr. HATHAWAY:

S. 1984. A bill to direct that grants for research and demonstration projects and other federally funded projects of this nature be allocated to economically depressed areas, insofar as is possible, and to assist and promote the development of those areas of the

country which are economically depressed. Referred to the Committee on Labor and Public Welfare.

By Mr. CRANSTON (for himself, Mr. KENNEDY, Mr. MONDALE, and Mr. PELL):

S. 1985. A bill to extend for 1 fiscal year the authorization of appropriations for title VIII of the Economic Opportunity Act of 1964. Referred to the Committee on Labor and Public Welfare.

STATEMENTS ON INTRODUCED BILLS AND JOINT RESOLUTIONS

By Mr. MUSKIE:

S. 1979. A bill to make the unemployment compensation benefits provided for Federal employees applicable to U.S. citizen employees of the Roosevelt Campobello International Park Commission. Referred to the Committee on Post Office and Civil Service.

UNEMPLOYMENT COMPENSATION FOR EMPLOYEES OF ROOSEVELT CAMPOBELLO INTERNATIONAL PARK

Mr. MUSKIE. Mr. President, the Roosevelt Campobello International Park, commemorating and preserving the summer home of President Franklin Delano Roosevelt, and its surroundings, in New Brunswick, Canada, just off the eastern tip of the State of Maine, was created by a Canadian-American treaty approved by the Senate in 1964. Under the terms of that agreement, the park employs both Canadian and U.S. citizens. But the latter, because of their peculiar status as resident U.S. citizens, consistently have had difficulty securing the employment benefits they might reasonably expect.

The U.S. citizens employed by the park, who now number 13, are subject to U.S. social security taxes and are eligible for old age. survivors, and disability insurance benefits. These employees were made eligible for workmen's compensation, through administrative regulation by the State of Maine, in which they reside. Workmen's compensation has a statutory base similar to unemployment compensation, but present statutes exclude U.S. residents who are employed by international organizations outside the country from unemployment insurance. As a result, these employees are not now eligible for unemployment insurance under U.S. law. Theoretically they are eligible for Canadian unemployment insurance, but for practical reasons they are not able to take advantage of that protection.

This exclusion is especially hard because the Roosevelt Campobello International Park has a policy of equal opportunity in employment, compensation and fringe benefits, as required in the 1964 treaty in the statutes which established the park and the Commission. I propose to rectify this problem by introducing a bill to amend the Roosevelt Campobello International Park Commission Act—16 U.S.C. 1106—to give employees of the park who are U.S. residents the benefits of Federal unemployment insurance. This bill is identical to S. 3763, which I introduced last Congress.

This approach has been endorsed by the Roosevelt Campobello International Park Commission. It is a necessary measure, I believe, because Canada's obligations under the treaty will not satisfy the needs of these employees.

The Roosevelt-Campobello Treaty states that Canada is obliged "to take such measures as may be necessary to permit U.S. citizens to accept employment with the Commission on a similar basis to Canadian citizens." Canada has met its obligations under the treaty by making U.S. citizens eligible for employment in the park without discrimination, and eligible—in theory—for the Canadian unemployment insurance program. But there are serious obstacles which prevent the U.S. citizen-employees from taking advantage of Canadian unemployment benefits.

To be eligible for Canadian unemployment benefits, a U.S. resident must prove himself available for employment in the Canadian labor force, as must his Canadian counterpart. This requires a Canadian work permit and the appropriate immigration papers, which are similar to those required of Canadian residents seeking employment in the United States. Such permits and papers are not required for employment with the Roosevelt Campobello International Park Commission.

Even if such permits for private employment in Canada could be obtained, the U.S. resident could not prove himself available for employment in Canada. The employees live in Lubec, Maine, which is 300 yards from Campobello Island. The Canadian mainland is about 50 miles away by road. Thus, the U.S. residents would be unlikely to find employment in Canada within reasonable commuting distance of home. And for such a U.S. resident to prove his availability for employment in the United States would not establish eligibility for Canadian unemployment insurance benefits.

Therefore, even with the legally guaranteed opportunity to "accept employment on a similar basis to Canadian citizens," the U.S. resident has no realistic chance to qualify for unemployment insurance in Canada. To require the Canadian Government to make that possible would be to ask the Canadians to discriminate against their own citizens in their own unemployment insurance program. Therefore, the simplest and most appropriate solution to this problem would be to place these employees under the Federal Unemployment Insurance provisions of the United States.

The legislation I introduce today to achieve this end is quite simple. It would make employees of the park who are U.S. residents eligible for U.S. unemployment insurance benefits by deeming them to be in the employ of the United States for purposes of this act. I hope this easy remedy to a vexing problem will be speedily adopted by Congress.

Mr. President, I ask unanimous consent that the bill I introduce be printed in the RECORD at this point.

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

S. 1979

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section 7 of the Roosevelt Campobello International Park Act (16 U.S.C. 1106) is amended by—

(1) inserting "(a)" before "The Commission", and

(2) adding at the end thereof the following new subsection:

"(b) Employees of the Commission who are United States citizens shall, for purposes of subchapter I of chapter 85 of title 5, United States Code, be considered to be in the employ of the United States."

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

S. 1980. A bill to amend the Defense Production Act of 1950, as amended. Referred to the Committee on Banking, Housing and Urban Affairs.

Mr. SPARKMAN. Mr. President, for myself and Senator TOWER I introduce a bill to amend the Defense Production Act of 1950, as amended.

This legislation has been recommended to us by the Acting Administrator of the General Services Administration. I ask unanimous consent that the communication transmitting this proposal to the Congress be printed at this point in the RECORD.

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

GENERAL SERVICES ADMINISTRATION,
Washington, D.C., May 31, 1973.

Hon. SPIRO T. AGNEW,
President of the Senate,
Washington, D.C.

DEAR MR. PRESIDENT: There is forwarded herewith a draft bill "To amend the Defense Production Act of 1950, as amended."

This proposed bill will not affect any of the substantive authorities of the Defense Production Act of 1950. The bill is intended, however, to permanently correct the financing problem which has existed under the Act for a number of years. It will in no way have any effect on private obligations to the Government.

Section 1 of the proposed bill would authorize that the bill, when enacted, be cited as the "Defense Production Act Amendments of 1973."

Section 2 of the proposed bill would repeal section 304(b) of the Defense Production Act of 1950, as amended (50 U.S.C. App. 2094(b)). The repeal of this subsection would eliminate the borrowing authority financing mechanism presently under the Act.

Section 2 would also amend section 304 of the Defense Production Act by adding new subsections (c) and (d). Subsection (c) would authorize and direct the Secretary of the Treasury to cancel the outstanding balance of all unpaid notes issued by authorized Government agencies to the Secretary pursuant to the borrowing authority, together with any unpaid interest on such notes. Subsection (d) would direct that any cash balances remaining on June 30, 1974, in the borrowing authority and any funds received by Government agencies under transactions entered into pursuant to sections 302 and 303 of the Act, be covered into the Treasury as miscellaneous receipts.

Section 3 of the proposed bill would amend section 711 of the Defense Production Act of 1950 (50 U.S.C. App. 2161), to provide authority for obtaining appropriations to carry out the purposes of sections 302 and 303 of the Act. A provision has been included in this section for the future charging of interest on any program expenditures which may be made under the new appropriation authority except for storage, maintenance, and other operating and administrative expenses.

The Defense Production Act of 1950 was originally enacted at the beginning of the Korean War in order to provide additional

emergency-type authorities. It included matters such as priorities and allocations, price controls, guaranteed loan authorizations, direct Government loan authorizations, and the means for expanding defense production. The latter authority was intended to encourage expansion of facilities for defense production, the output of which would enter the commercial market as well as supply direct Government needs, including the national stockpile of strategic and critical materials. Initially, the funding for purposes of the Act was by an authorization for cash appropriation ($1,400,000,000), and by borrowing authority ($600,000,000).

Since it was contemplated that most of the funds originally provided would be returned to the Treasury by revenue from resale of materials to be acquired, or that large commitments might be made which would not require direct expenditure of funds (e.g., put-type contracts), the Act was amended in 1951 to provide for a net accounting concept under which contracts entered into pursuant to sections 302 and 303 of the Act would be considered obligations only to the extent of the "probable ultimate net cost" to the Government. The reasons for the amendment are explained in the Report of House Committee on Banking and Currency on H.R. 3871, 82d Congress (House Report No. 639, June 23, 1951):

"Borrowing authority.—The original act provided, in subsection 304(b), for borrowing from the Treasury for the purposes of expanding productive capacity and supply under sections 302 and 303, in an amount not exceeding $600,000,000 outstanding at any one time.

It also provided, in subsection 304(c), an authorization for appropriation not in excess of $1,400,000,000 for the same purpose.

"No action has ever been taken under the authorization to appropriate cash for the purposes of sections 302 and 303. However, the Third Supplemental Appropriation Act, 1951, increased to $1,600,000,000 the amount authorized to be borrowed from the Treasury. This action was, in effect, in lieu of the cash appropriation originally authorized and was taken in order to avoid commingling of borrowing authority and cash appropriations for the same operations.

"The bill proposes that the authorization for cash appropriations be repealed and that the borrowing authority be raised from the $1,600,000,000 presently authorized to $2,100,000,000. The additional $500,000,000 should be adequate to meet the cash requirements of the program for expanding productive capacity and supply during the fiscal year 1952. The proposed increase in borrowing authority will not, however, provide a sufficient amount to meet all of the contingent liabilities which the Government necessarily will assume in connection with these programs. Guaranties, loans, purchase and sale arrangements, and commitments to purchase upon the happening of contingencies, result in technical obligations of amounts far in excess of the amounts which the Government actually will be required to pay.

"The committee feels that no useful purpose is served by providing either cash appropriations or borrowed funds to cover contingencies which will never require actual cash payments by the United States. Accordingly, the bill contains language which will permit these programs to be carried on on the basis of the net obligations incurred by the Government against the borrowing authority to be provided. The President would be required to report not less often than once each quarter on the total amount of contingent liabilities assumed by the United States in connection with these programs, together with information as to the basis used for determining the net cost which would operate as an actual charge against the borrowing authority." [pages 25 thru 26]

* * * * *

"Section 103(c).—This subsection provides that the revolving fund of $600,000,000 obtained by borrowing from the Treasury and made available for the purposes of sections 302 and 303 of the act (loan, procurement, subsidy, and production authorities), be increased to $2,100,000,000. Provision is also made that contingent liability upon the United States, resulting from any transaction heretofore or hereafter made pursuant to sections 302 or 303 of the act shall, for the purposes of the obligation restricting provisions of sections 3679 and 3732 of the Revised Statutes, as amended, be limited to the probable net cost to the United States under such transaction. The President is required to submit a quarterly report to the Congress setting forth the gross amount of each such transaction entered into under this authority, together with the basis used in determining the ultimate net cost of the United States.

"Section 103(d).—In view of the increase in the revolving fund as above noted, this subsection strikes out the present subsection 304(c) of the act which authorized additional appropriations not in excess of $1,400,000,000 for purposes of sections 302 and 303 of the act." [page 38]

The borrowings by authorized Government agencies from the Treasury which are authorized by section 304(b) of the Act, are subject to the payment of interest to the Treasury on the outstanding amounts, the interest rate to be established by Treasury for comparable types of marketable securities. This modified revolving fund mechanism permitted a much larger volume of transactions to be carried out under the Act than was possible previously. It was contemplated that proceeds from the sale of materials either to the commercial market or the national stockpile would keep the fund liquid.

However, after the cessation of the Korean War in 1953, soft markets developed for many of the materials resulting in greater deliveries to the Government than anticipated under previously made expansion contracts. Sales of such materials as could be marketed frequently resulted in substantial losses either because their cost included premium prices or because the quality of the materials from marginal sources brought into production was below commercially acceptable levels. Transfers to the national stockpile previously reimbursed to the Defense Production Act Revolving Fund were cut off at the behest of the House Appropriations Committee. A number of materials purchased were almost totally unsalable under then current conditions, while other materials were held for credit against stockpile objectives even though reimbursement to the fund could not be effected.

Under these circumstances, financial problems accumulated and eventually became chronic. The declining ability to produce revenue for the fund, the mounting losses, and the continuing obligation to pay to Treasury interest on outstanding borrowings compounded the financing problems. At one critical point in 1959, an appropriation of $108,000,000 was granted by Congress to provide some improvement in the liquidity of the revolving fund.

The report of the House Committee on Banking and Currency on the proposed Defense Production Act amendments of 1962 (House Report No. 1839) on H.R. 11500, 87th Congress, 2d session, June 19, 1962) contains this statement:

"Section 303 of the act relates to the so-called expansion programs. Moneys borrowed under this authority were used for the most part to pay premium prices and subsidies for metals, minerals, and materials needed in the defense effort. In many cases large amounts of low-grade materials which have no commercial markets, but which may be used in circumstances of all-out war, were purchased under these programs. Losses were anticipated on these programs * * *."

On a number of occasions, legislation has been proposed to permanently correct this financial problem. The latest such proposal was introduced in the 92d Congress, 1st Session as S. 669. None of these bills were enacted in the form presented. Typically, these bills attempted to restore liquidity to the fund by the cancellation of the obligation to pay to Treasury interest accrued on past obligations and to be accrued in the future. Also, losses realized in connection with past programs on which no possibility of recovery existed were to be written off. The complexity of the financing problem made it difficult to satisfy congressional committees as to the necessity for these actions and they were viewed as undesirable extensions of backdoor financing. None of these measures were approved and generally simple extensions of the substantive authorities of the act were passed, usually on a two-year basis. The current expiration of the act on June 30, 1974, was the result of such a simple extension in place of the more complex provisions proposed in S. 669.

It is important, of course, that the substantive authorities of the act continue. Future requirements for funding of any new programs are indefinite because at this time no such new programs are contemplated. The need exists, however, for standby authority in the event of a future emergency. In the meantime, funding is required only to carry costs related to programs incurred in prior years. These resulted in a current inventory of unsold materials costing approximately $600 million and valued at approximately $300 million. These assets must be stored, protected, and preserved, pending disposal pursuant to an active sales program. Such final disposal may entail an indefinite period of years. The cost of such maintenance is less than $2 million per year.

If interest must be paid to the Treasury on current outstanding borrowings of $1,877,500,000 for GSA, the fund will be unable to meet the FY 1974 portion ($272,050,000) of the total projected interest obligation ($593,590,625) from FY 1974 through FY 1978. The point at which funds will be totally exhausted under these conditions is approximately March 1974. Failing corrective action at this point, the fund will be bankrupt.

In summary, the proposed bill would:

Retain all substantive authorities now provided by the Defense Production Act.

Terminate at a time certain, that is, upon enactment of the bill, the present borrowing authority, without requiring any net budgetary outlay effect.

Provide for the retention of cash balances in the fund for only a sufficient period, that is through June 30, 1974, as to permit covering the necessary expenses of maintaining and disposing of residual inventories until fiscal year 1975. By this time it would be expected that provision for such expenses would be adopted in the normal budgetary cycle by appropriations which would be justified on an annual basis. The selection of this date would avoid the need for amending or supplementing fiscal year 1974 appropriations which have already been transmitted to the Congress.

Thus provide for an orderly transition to the normal appropriation process under full Congressional control from the borrowing authority mechanism.

In the absence of legislation, the fund faces the inevitable prospect of open bankruptcy in mid-fiscal year 1974 due to exhaustion of cash for the payment of ever-increasing interest obligations to the Treasury for which no adequate prospects of revenue can be expected. In the interest of orderly administration of the Government's finances, this should not be permitted to happen.

GSA recommends prompt and favorable consideration of this draft bill.

The enactment of the bill would not require the expenditure of additional Federal funds.

The Office of Management and Budget has advised that there is no objection to the submission of this legislative proposal to the Congress and that its enactment would be in accord with the program of the President.

Sincerely,

ARTHUR F. SAMPSON,
Acting Administrator.

By Mr. TOWER:

S. 1981. A bill to authorize the establishment of the Big Thicket National Biological Reserve in the State of Texas, and for other purposes. Referred to the Committee on Interior and Insular Affairs.

Mr. TOWER. Mr. President, today I introduce a bill to authorize the establishment of a Big Thicket National Biological Reserve in the State of Texas. This is not the first time I have introduced legislation to preserve the Big Thicket nor am I the only Member of Congress to do so. I do hope that, at the end of this Congress, I will be able to say that this is the first time that the Texas delegation has reached a consensus; that the different groups involved in this issue have accepted a proposal to preserve the area; and that the Congress has passed such a bill. Efforts to preserve portions of the Big Thicket have spanned 30 years. The time has come for the Congress to act. I encourage it to do so.

Once the Big Thicket stretched westward from the Sabine River almost to the banks of the Brazos, an area as large as many of our smaller States. Once wildlife and forms of vegetation existed in this area in incredible abundance and variety. Although this legendary wilderness no longer exists in its original state, the Big Thicket remains and is worthy of preservation.

Mr. Thomas Eisner, of the Division of Biological Sciences of Cornell University, in an editorial published in the February 9 issue of Science, stated the issue well. He said:

> Texas, to the unknowing, conjures up an image of monotony—cattle, sagebrush, and mesquite in a setting of unvarying vastness. But to the resident and traveler, Texas is a land of contrasts and splendor, and to the biologically alert, it is a land of many resources worth preserving.
>
> One of the most interesting areas of the state is the sprawling semiwilderness north of Houston and Beaumont that goes by the name of Big Thicket. A region of extraordinary botanical exuberance, the Thicket is ecologically unique not only to Texas, but to the entire North American expanse as well. Located at the crossroads between the forests of the South and East and the vegetation of the West, the Thicket includes in its pine-hardwood stands elements from all convergent zones. A wet climate and a water-storing soil combines to nurture the mixture to lushness. Fully 15 of the trees designated by the United States as "national champions" are from the Thicket, including longleaf pine, bay magnolia, Rugel sugar maple, and water tupelo. The fauna is no less impressive. Vertebrates, and particularly birds, abound in number and kind, and the diversity of arthropods is second to few that I have encountered in field work in 45 states and three other continents.
>
> But sheer abundance or record sizes is not what matters about the Thicket. It is the way in which diversity of kind is combined with diversity of association that gives this area its special mark. Plant communities of very different types exist in contiguity or near-contiguity in the Thicket—upland communities, savannahs, beech-magnolia communities, bogs, palmetto-bald cypress-hardwood communities, floodplain forests, and several others have been recognized. Seen in worldwide ecologicial perspective, the Big Thicket may well be one of the most richly substructured regions in existence. For this reason alone, if not also for its magnificence, the Thicket is worth saving. It is an invaluable and irreplaceable natural resource.

My bill establishing the Big Thicket National Biologicial Reserve calls for not more than 100,000 acres in Tyler, Hardin, Jasper, Polk, Liberty, Jefferson, and Orange Counties, Tex. Included would be a Big Sandy unit; a Hickory Creek Savannah unit; a Turkey Creek unit; a Beach Creek unit; a Joe's Lake unit; a Neches Bottom and Jack Gore Baygall unit; a Beaumont unit; a Lance Rosier unit; an Upper Neches corridor; a lower Neches corridor; and a Little Pine Island Bayou corridor.

I have included in the legislation a provision to protect homeowners in the area. It would allow the homeowner to retain for himself and his spouse a right of use and occupancy of his property for residential purposes for a term of 25 years, or until his, or his spouse's death. I have attempted in my bill to draw the boundaries of the reserve so as to affect as few homeowners as possible. I have also included a section clarifying the homeowner's right to court review concerning decisions regarding his property.

Because of the possible loss of tax revenues in the counties in which the reserve would be located, there is included a proposal in which the Secretary of the Interior could return portions of the tax base lost by these counties. This is a proposal which will require careful consideration. I am not thoroughly satisfied that it is fiscally sound, or, for that matter, feasible. However, I do think that the idea should be studied and, for this reason, I have proposed it.

A number of individuals have expressed an interest that any bill establishing a Big Thicket Biological Reserve include protection for the area prior to acquisition. Thus, I have included what I consider to be a deterrent to anyone who would damage lands or take action inimical to the reserve by having the Secretary of the Interior purchase land in an order of preference commensurate with the threat of such actions.

Finally, I would like to speak to the matter of recreation and hunting, fishing, and trapping within the reserve. Because of the very nature of a biological reserve I do not think that recreational facilities, per se, should be developed within the reserve. My bill would permit hunting, fishing, and trapping in the reserve pursuant to the control of the Department of the Interior and according to Federal and State statutes. I am also assured that such things as wilderness trails, and other forms of recreation that do not affect the ecosystems of the reserve, will be developed. However, because I have not provided for the development of recreation within the reserve, I have tried to encourage the creation of recreational facilities in the areas surrounding it. The Department of Agriculture has informed me that the Forest Service, Bureau of Outdoor Recreation, Texas Parks and Wildlife Department, Sabine River Authority, and Deep East Texas Development Association have recently completed a study of the "Recreation Situation and Outlook—East Texas." The report contains such suggestions as:

First. The Texas Parks and Wildlife Department, with the aid of matching moneys from the land and water conservation fund, will concentrate their immediate efforts on State lands adjacent to Lake Livingston and other reservoirs outside the national forests and within the east Texas area.

Second. To best utilize the very limited Federal funds available, the Forest Service will continue their efforts in areas within the national forests such as on Toledo Bend on the Sabine National Forest and Lake Conroe on the Sam Houston National Forest.

Third. The Corps of Engineers and the Forest Service have cooperated in the development of Sam Rayburn Reservoir on the Angelina National Forest and will continue to improve it as needed.

Fourth. The Sabine River Authority has an outstanding commitment in its FPC license to construct extensive recreation developments on Toledo Bend.

I will make every effort to assist these agencies in developing these needed proposals for the development of recreation in this area.

In summation, let me emphasize that legislators, lumbermen, conservationists, and area residents must be willing to discuss and work together on this issue or there will be no Big Thicket Biological Reserve. I believe that now is the time for action to preserve this unique area. I urge the House to take early action on its proposals and urge my colleagues in the Senate to give every support to this legislation so that future generations can experience this area of history and legend—the Big Thicket.

Mr. President, I ask unanimous consent that the full text of my bill be printed at this point in the RECORD.

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

S. 1981

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That in order to preserve for scientific study and for the education and benefit of present and future generations certain unique areas in Tyler, Hardin, Jasper, Polk, Liberty, Jefferson, and Orange Counties, Texas, which contain vegetational types and associations of national significance, there is hereby authorized to be established the Big Thicket National Biological Reserve.

ACQUISITION OF PROPERTY BY SECRETARY OF THE INTERIOR

SEC. 2. (a) In order to effectuate the purpose of this Act, the Secretary of the Interior (hereinafter referred to as the "Secretary") is authorized to acquire by donation, purchase, transfer from any other Federal agency or exchange, lands, waters, and interests therein, within the areas generally de-

picted on the map entitled "Big Thicket National Biological Reserve, Texas", numbered NBR–BT–91,019, and dated February 1973, which shall be on file and available for public inspection in the Office of the National Park Service, Department of the Interior. The Secretary may from time to time make minor revisions in the boundaries of the area by publication of a revised map or other boundary description in the Federal Register, and he may acquire property within the revised boundaries in accordance with the provisions of this section: *Provided*, That the boundaries of the area may not encompass more than one hundred thousand acres of land. Property owned by the State of Texas or any political subdivision thereof may be acquired only by donation. Notwithstanding any other provision of law, Federal property within the boundaries of the area may, with the concurrence of the head of the administering agency, be transferred to the administrative jurisdiction of the Secretary for the purposes of this Act, without a transfer of funds.

(b) The Secretary shall take such steps as he deems necessary in order to preserve the ecological and recreational interests and fish and wildlife resources of the lands described in subsection (a) of this section. For purposes of this Act, the term "waste" means any action inimical to such interests and resources. In such connection he shall purchase land in an order of preference commensurate with the threat of waste of such lands respecting such interests and resources giving first consideration to the prevention of any clearcutting or of any waste having the effect of despoiling the lands described in subsection (a) of this section prior to the acquisition for the reserve. In all offers of purchase and in all condemnation proceedings, the Secretary shall take due account of the diminution of the value of the land occasioned by such waste as described herein.

RIGHTS OF OWNERS OF IMPROVED PROPERTY

SEC. 3. (a) The owner of improved property on the date of its acquisition by the Secretary may, as a condition of such acquisition, retain a right of use and occupancy of the improved property for noncommercial residential purposes for a definite term of not more than twenty-five years or, in lieu thereof, for a term ending at the death of the owner or the death of his spouse, whichever is later. The owner shall elect the term to be reserved. Unless this property is wholly or partially donated to the United States, the Secretary shall pay the owner the fair market value of the property on the date of such acquisition, less the fair market value retained pursuant to this section. Any such right so retained shall be subject to termination by the Secretary upon his determination that it is being exercised in a manner inconsistent with the purposes of this Act. Upon the Secretary's notifying the holder of any such right of such a determination and tendering to him an amount equal to the fair market value of that portion of the right which remains unexpired, such right shall be deemed terminated.

(b) As used in this Act, the term "improved property" means a detached, one-family dwelling, construction of which was begun before June 1, 1973, which is used for noncommercial residential purposes, together with not to exceed three acres of the land on which the dwelling is situated, such land being in the same ownership as the dwelling, together with any structures accessory to the dwelling which are situated on such land.

ADMINISTRATION BY THE SECRETARY

SEC. 4. (a) The area within the boundaries depicted on the map referred to in section 2, or as such boundaries may be revised, shall be known as the "Big Thicket National Biological Reserve", and shall be administered by the Secretary in accordance with the laws applicable to the National Park System, and in a manner consistent with the purposes of this Act.

(b) The Secretary shall permit hunting, fishing, and trapping on lands and waters under his jurisdiction within the reserve in accordance with the applicable laws of the United States and the State of Texas, except that he may designate zones where and periods when no hunting, fishing, or trapping may be permitted for reasons of public safety, administration, fish or wildlife management, or public use and enjoyment. Except in emergencies, any regulations prescribing such restrictions shall be put into effect only after consultation with the appropriate State agency having jurisdiction over hunting, fishing, and trapping activities.

COURT REVIEW

SEC. 5 (a) Any owner of any right terminated on the basis of a determination by the Secretary under section 3(a) may obtain review of such termination in the District Court of the Eastern District of Texas, or in the United States district court for the district in which he resides, by filing in such court within ninety days following the receipt of the notification of termination a written petition praying that the determination of the Secretary be set aside. If the determination by the Secretary is not in accordance with this Act or if he has acted upon factual determinations which are not supported by substantial evidence, the court shall set aside the termination.

(b) The commencement of proceedings under this subsection shall operate as a stay of the termination of such right. Upon a showing that irreparable harm may be done to the reserve pending the final judicial determination, the court having jurisdiction of the principal case shall have jurisdiction to grant such injunctive relief as may be appropriate.

COMPENSATION FOR TAX LOSSES

SEC. 6. (a) In order to provide compensation for tax losses to taxing jurisdictions sustained as a result of any acquisition by the United States, on and after the date of the enactment of this Act, of privately owned real property for the reserve, the Secretary shall make payment to an officer designated for such purpose by the Governor of the State of Texas for distribution to the local body which assessed taxes on the property immediately prior to its acquisition by the United States, in accordance with the following schedule:

(1) For the fiscal year in which the real property is acquired and the next following five fiscal years, there shall be paid an amount equal to the full amount of annual taxes last assessed and levied on the property by public taxing bodies, less any amount, to be determined by the Secretary, which may have been paid on account of taxes during such period; and

(2) For each of the four succeeding fiscal years following such six-fiscal-year period referred to in paragraph (1) of this section, there shall be paid an amount equal to the full amount of taxes referred to in paragraph (1), less 20, 40, 60, and 80 percent, respectively, of such full amount for each fiscal year, including the year for which the payment is to be made.

(b) For purposes of paying such compensation under this section, the assessed value of such real property shall be that so determined as of June 1, 1973.

AUTHORIZATIONS

SEC. 7. There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act.

By Mr. TOWER (for himself and Mr. DOMINICK):

S. 1982. A bill to amend title II of the Social Security Act to increase to $3,000 the annual amount which individuals may earn without suffering deductions from benefits on account of excess earnings, and to lower from 72 to 70 the age after which deductions on account of excess earnings are no longer made. Referred to the Committee on Finance.

Mr. TOWER. Mr. President, I am today introducing legislation to liberalize the retirement test under social security. The distinguished senior Senator from Colorado, Mr. DOMINICK, joins me in introducing this bill.

My proposal is similar to legislation which I have introduced in previous Congresses and is similar to the Senate passed amendment to H.R. 1 that was approved last year. When H.R. 1 was debated in the 92d Congress, more than three-quarters of the Senate sponsored an amendment to increase the retirement test under social security from $1,680 to $3,000. Additionally, the bill as passed by the Senate provided that for every $2 earned above $3,000 only $1 in social security benefits would be deducted. Furthermore, the retirement test annual exempt amount and monthly test would be increased automatically in the future according to the rise in general earnings levels.

Unfortunately, the House of Representatives disagreed with the Senate passed amendment and the conference committee cut it back from $3,000 to $2,100. The remaining provisions just alluded to remained intact and, therefore, became law when the President signed H.R. 1.

The legislation I am introducing today is a modified version of the Senate passed amendment. The bill will increase the retirement test or the earnings ceiling, as it is sometimes called, from $2,100 to $3,000. Additionally, the bill will reduce the age where the retirement test is not applied from age 72 to age 70.

Mr. President, the retirement test has been applied to the social security program almost from the program's outset. Whether the retirement test was justifiable when it was established in the 1930's is something that I cannot answer. Nevertheless, I believe that its validity is certainly called into question because of the economic and social conditions of the 1970's. The changes in it made last year represent a positive first step toward possible removal of the test. The legislation I offer today represents a further step. It is a practical proposal that I believe the Congress can realistically consider. While I am very much concerned about the rising cost of the social security payroll tax on the lower and middle income American taxpayers that contribute to the trust fund and this concern moved me to oppose some attractive expansions in social security and medicare coverage last year, I am convinced that the additional cost of this bill is justified.

Mr. President, the 1965 Advisory Council on Social Security stated the reasoning behind the retirement test:

The purpose of Social Security benefits is to furnish a partial replacement of earnings which are lost to a family because of death, disability, or retirement in old age. In line with this purpose, the law provides that, generally speaking, the benefits for which a

worker, his dependents, and his survivors are otherwise eligible are to be withheld if they earn substantial amounts.

While this theoretical basis for social security as a social insurance program may seem valid on a first observation, practical considerations seem to negate its credibility. An American worker pays into the social security trust fund and I believe to a great extent he or she should feel secure as a matter of right that upon retirement he will receive benefits in relation to his contribution—and not in relation to whether he is still actively employed.

There is yet another factor to consider in this matter. It has been the policy of the Federal Government to encourage our senior citizens to stay in the work force. I support this policy because I think that, unlike the depression years of the 1930's, our expanding economy can certainly afford the active participation of senior citizens. Moreover, we are convincingly told by gerontologists and others that working is one of the most healthy activities for senior citizens to do.

It seems hypocritical that Congress considers and has approved categorical grant programs to employ senior citizens but at the same time will not allow them to retain their social security benefits that they are rightfully entitled to.

Mr. President, there are millions of Americans that are adversely affected by the retirement test. The test affects social security recipients who have part or all of their benefits deducted and those who purposely work shorter hours to limit those deductions. Naturally, dependents are also adversely affected.

Passage of this proposal will measurably improve the economic position of many Americans. While it does not totally eliminate the retirement test, it would insure many senior citizens of living in a more secure economic environment. The provision reducing the age when the retirement test will not apply from age 72 to age 70 is not a novel suggestion. The cutoff age used to be 75 until the Congress lowered it to 72 in 1954. I think it is time for the Congress to again consider reducing this age cutoff.

Mr. President, I urge the Senate to give this bill its careful consideration, and at this time ask unanimous consent that the text of the bill be printed in the RECORD.

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

S. 1982

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) paragraphs (1), (3), and (4)(B) of section 203(f), and paragraph (1)(A) of section 203(h), of the Social Security Act are each amended by striking out "$175" and inserting in lieu thereof "$250".

(b)(1) Subsections (c)(1), (d)(1), (f)(1), and (j) of section 203 of the Social Security Act are each amended by striking out "seventy-two" and inserting in lieu thereof "seventy".

(2) Subsection (h)(1)(A) of such section 203 is amended by striking out "the age of 72" and "age 72" and inserting in lieu thereof in each instance "age 70".

(3) The heading of subsection (j) of such section 203 is amended by striking out "Seventy-two" and inserting in lieu thereof "Seventy".

(c) The amendments made by the preceding provisions of this Act shall apply only with respect to taxable years ending after December 1973.

By Mr. WILLIAMS:

S. 1983. A bill to provide for the conservation, protection and propagation of species or subspecies of fish and wildlife that are threatened with extinction or likely within the foreseeable future to become threatened with extinction, and for other purposes. Referred to the Committee on Commerce.

ENDANGERED SPECIES CONSERVATION ACT OF 1973

Mr. WILLIAMS. Mr. President, the Endangered Species Act of 1969 gives no enforcement powers to the Federal Government with regard to prohibiting the killing of animals on the endangered list. The only legal authority provided by this act is that animals listed on the foreign endangered list may not be imported without a permit. The individual States now have jurisdiction over the animals which reside within their boundaries. Unless specifically protected by Federal or State law, threatened or endangered species of animals, birds and fish are completely vulnerable to the activities of man.

Therefore, I am today introducing a bill which is designed to correct the deficiencies in the present law and empower the Federal Government to prohibit the taking of endangered wildlife.

In the United States alone, 101 species of wildlife are now threatened with extinction. These include such, formerly common animals as the black-footed ferret, the whooping crane, and at least two species of wolf. Still others, which are not included on the endangered species list are either declining and in danger of extinction or classified as rare.

There are various and complicated reasons for the serious decline in wildlife populations. One of the primary causes is the destruction of their natural habitat. As civilization spreads and more and more open spaces are cleared to make way for urbanization, the areas available for wildlife propagation dwindle accordingly. Undoubtedly, however, the principal reason is the direct killing or capture of these animals by man, whether it be for food, clothing or commercial use, the protection of livestock or purely for sport.

Man's capacity for completely annihilating a species is seemingly limitless and has never been more glaringly illustrated than by the fate of the passenger pigeon. According to some experts, these birds once numbered in the thousands of millions; yet not one single passenger pigeon exists today. Over a period of a few years, they were systematically destroyed. The last survivor of the species died in a Cincinnati zoo in 1914 and is now on public display at the Smithsonian Institution, a constant reminder of man's thoughtlessness and greed.

Loss of food supply can also contribute to the demise of a species and is an even more serious threat when the species involved is already endangered. A case in point involves the brant goose, whose wintering area is located in my home State of New Jersey. According to a recent article in the New York Times, the total number of brant geese has dropped from 265,000 in 1961 to approximately 21,900 in 1972. Experts attribute this alarming decline in numbers to a shortage of their favorite food, sea cabbage, in addition to failure in nesting on the Arctic tundra. Mr. President, at this point in my remarks, I ask unanimous consent to include the full text of the New York Times article of January 7, 1973, "Sea Geese Found Declining in the East."

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

SEA GEESE FOUND DECLINING IN EAST

Fewer brant than ever before have returned to winter quarters along the Eastern Coast, a state-by-state survey shows.

Brant, little sea geese once a favorite of hunters but now protected because of their scarcity, have been plagued by a shortage of their favorite food, sea cabbage, and two successive failures in nesting on the Arctic tundra.

In 1961, 265,000 were counted along the Atlantic Flyway—the bird's north-south route. Last year, aerial surveys by the United States Fish and Wildlife Service and individual state units from Long Island to Virginia found only 21,900 of the geese. The count, in late October reported 1,705 on Long Island, 18,450 in New Jersey, none in Delaware, 114 in Maryland and 1,641 in Virginia. It was prepared by C. E. Addy, Federal coordinator of the Atlantic Flyway.

But the figures on the ratio of young to adults—also the worst in recorded history—caused the most concern.

RATIO CALLED "MISERABLE"

In the customary wintering area of Ocean, Atlantic and Cape May Counties on the southern tip of New Jersey, this ratio was a "miserable" .0007, according to Fred Ferrigno, head of wetland ecology in the New Jersey Department of Environmental Protection in Tuckerton.

In a two-seated plane, Mr. Ferrigno sought out the brant in their offshore habitats. With his pilot flying low, he nudged them toward a point of land on a barrier island where Mr. Addy viewed the flock through a powerful monocular spotting scope and recorded the number of young and adults.

Birds hatched last spring were clearly distinguishable from the mature geese by their white-edged covert feathers. In adults, this mantle is dark gray.

The prediction of the Canadian Wildlife Service in mid-summer that the production of brant in 1972 would turn out to be a "bust" has been "all too true," Mr. Ferrigno said.

The hope is that they will weather out their crisis until they have a good nesting season. Brant are noted for their boom-or-bust production cycles, a result of their requiring special conditions to reproduce.

BIRDS FOUND HEALTHY

This year, Mr. Ferrigno said, the brant that are wintering in South Jersey are not suffering from a shortage of sea cabbage. A study by a graduate student at Rutgers University, Joseph Penkala of South Amboy shows that a number of the geese are plump, healthy birds.

Biologists plan to keep a close watch on the brant over the winter and to monitor their food supply.

Last winter it was found that as in the great famine years of the early thirties, the little geese pulled out the roots of various marsh grasses for food when the staple of

their diet eel-grasses, suffered blight. Now perhaps the brant will be sustained by a resurging crop of sea cabbage.

Brant, scarcely larger than a mallard, have been well-known habitues of the Middle Atlantic States for centuries. Audubon painted them. Alexander Wilson in 1814 described them as "floating in the bays in long lines, particularly in calm weather." Hunters prized them as game, and a mounting number of bird enthusiasts have been glad to get them in their sights, riding the swells of the open sea or sitting in pods in some quiet estuary.

Mr. WILLIAMS. The bill which I am introducing today would also provide for the protection of endangered species of plants. Very little information is available at the present time concerning the total number of plants which are endangered, the reasons for this problem and what can be done about it. However, the limited distribution of certain species of plants, mishandling by man and overharvesting, as well as loss of suitable habitat, are contributing factors. It is estimated that in the United States alone, over 200 species of plants are endangered.

The International Union for the Conservation of Nature and Natural Resources began in late 1971 to take a more active part in monitoring endangered and declining species of plants and biotic communities. They are presently maintaining files and surveying literature on endangered plants. The Smithsonian Institution's Office of Environmental Sciences is presently conducting an extensive study in order to determine which plants are endangered, the causes and what measures can be taken to save them. Definitive information is expected to be available in the near future. The very fact that so little is known about the subject of endangered plants makes it even more imperative that a program of protection be instituted.

Every living thing has its own unique role in the ecosystem and whenever the delicate balance of nature is disturbed, for whatever reason and in whatever way, the entire fragile system begins to disintegrate. It may not be perceptible immediately, but eventually we begin to see the consequences of our shortsightedness and lack of concern for our environment. In the last year or so, major legislative programs have been enacted to combat the effects of the pollution of our air and water and to restore them to their once pure state. Fortunately, there is also still time to save our wildlife and plants, but the time is growing short.

The bill I am introducing will, I believe, provide the necessary tools with which to accomplish this. It enlarges the definition of endangered species to include those animals and plants which are presently endangered and those likely to become endangered because of foreseeable actions, as well as those animals and plants whose status is unknown. This bill would also make the taking of an endangered species a Federal offense by prohibiting the import, export, taking, and interstate transportation of any species listed as threatened with extinction. It would, however, permit the importation, taking, and transportation of endangered wildlife or plants for scientific purposes and for the propagation in captivity for preservation purposes.

This legislation also authorizes the Secretary to acquire lands for the purpose of protecting and restoring those species of wildlife that have been listed as endangered species and provides that funds made available under the Land and Water Conservation Fund Act may be used for the purpose of acquiring lands, waters, or interests therein which are needed for the purpose of protecting those species listed as endangered.

Mr. President, at this point in my remarks, I ask unanimous consent to include the full text of the bill.

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

S. 1983

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Endangered Species Conservation Act of 1973".

FINDINGS AND POLICY

SEC. 2. (a) The Congress finds and declares that one of the unfortunate consequences of growth and development in the United States and elsewhere has been the extermination of some species or subspecies of fish and wildlife and flora; that serious losses in other species of wild animals with educational, historical, recreational, and scientific value have occurred and are occurring; that the United States has pledged itself, pursuant to migratory bird treaties with Canada and Mexico, the migratory and endangered bird treaty with Japan, the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere, the International Convention for the Northwest Atlantic Fisheries, the International Convention for the High Seas Fisheries of the North Pacific Ocean, and other international agreements, to conserve and protect, where practicable, the various species of fish and wildlife and flora that are threatened with extinction; and that the conservation, protection, restoration, or propagation of such species will inure to the benefit of all citizens. The purposes of this Act are to provide a program for the conservation, protection, restoration, or propagation of species and subspecies of fish and wildlife and flora that are threatened with extinction, or are likely within the foreseeable future to become threatened with extinction.

(b) It is further declared to be the policy of Congress that all Federal departments and agencies shall seek to protect species or subspecies of fish and wildlife, and flora that are threatened with extinction or are likely within the foreseeable future to become threatened with extinction, and, wherever practicable, shall utilize their authorities in furtherance of the purpose of this Act.

DEFINITIONS

SEC. 3. For the purposes of this Act:

(1) The term "Federal lands" means all lands or interests therein over which Congress has legislative authority under article IV, section 3, clause 2 of the United States Constitution, including, without limitation, lands enumerated in section 1400 of title 43, United States Code.

(2) The term "fish" means any fish or any part, products, egg, or offspring thereof, or the dead body or parts thereof.

(3) The term "import" means to bring into the territorial limits of the United States and includes, without limitation, entry into a foreign trade zone, and transshipment through any portion of the United States without customs entry.

(4) The term "person" means (A) any private person or entity, and (B) any officer, employee, agent, department, or instrumentality of the Federal Government, of any State or political subdivision thereof, or of any foreign government.

(5) The term "Secretary" means the Secretary of the Interior with respect to functions and responsibilities under this Act relating to fish and wildlife, and the Secretary of Agriculture with respect to functions and responsibilities under this Act relating to flora.

(6) The term "take" means (A) with respect to fish or wildlife, to threaten, harass, hunt, capture, or kill, or attempt to threaten, harass, hunt, capture, or kill; or the destruction, modification, or curtailment of its habitat or range; and (B) with respect to flora, to collect, sever, remove, or otherwise damage in any manner, or to attempt to collect, sever, remove, or otherwise damage in any manner.

(7) The term "United States" includes the several States, the District of Columbia, and the Commonwealth of Puerto Rico, the Canal Zone, the possessions of the United States, and the Trust Territory of the Pacific Islands.

(8) The term "wildlife" means any wild mammal, game or nongame migratory bird, wild bird, amphibian, reptile, mollusk or crustacean, or other animal, or any part, products, egg, or offspring thereof, or the dead body or parts thereof, including migratory, nonmigratory, and endangered birds for which protection is also afforded by treaty or other international agreement.

DETERMINATION OF ENDANGERED SPECIES

SEC. 4. (a) A species or subspecies of fish or wildlife or flora shall be regarded as an endangered species, whenever—

(1) The appropriate Secretary by regulation determines, based on the best scientific and commercial data available to him and after consultation, as appropriate, with the affected States, and, in cooperation with the Secretary of State, the country or countries in which such fish and wildlife are normally found or whose citizens harvest the same on the high seas, and with interested persons and organizations, and other interested Federal agencies, that the continued existence of such species or subspecies of fish or wildlife or flora, throughout all or a significant portion of its habitat or range, is either presently threatened with extinction or will likely within the foreseeable future become threatened with extinction, due to any of the following factors:

(A) the present or threatened destruction, modification, or curtailment of its habitat or range;

(B) overutilization for commercial, sporting, scientific, or educational purposes;

(C) disease or predation;

(D) the inadequacy of existing regulatory mechanisms; or

(E) other natural or manmade factors affecting its continued existence; or

(2) The status of such species or subspecies is unknown.

(b) The appropriate Secretary shall publish in the Federal Register, not less than annually, a list, by scientific and common name or names, of species or subspecies determined, pursuant to this section, to be endangered, indicating as to each species or subspecies so listed whether such species or subspecies is threatened with extinction or is likely within the foreseeable future to become threatened with extinction or whether its status is unknown and, in either case, over what portion of the range of such species or subspecies this condition exists. The appropriate Secretary may, from time to tome, by regulation revise any such list. The endangered species lists which are effective as of the date of enactment of this Act shall be republished to conform to the provisions of this Act: *Provided, however,* That until such

republication nothing herein shall be deemed to invalidate such endangered species lists. The provisions of section 553 of title 5, United States Code, shall apply to any regulation issued under this subsection. The Secretary shall, upon the petition of an interested person under subsection 553(e) of title 5, United States Code, also conduct a review, on the record, after opportunity for agency hearing of any listed or unlisted species or subspecies of fish or wildlife proposed to be removed from or added to the list, but only if he finds and publishes his finding that such person has presented substantial evidence to warrant such a review.

LAND ACQUISITION AND AGENCY COMPLIANCE

SEC. 5. (a) The Secretary shall utilize the land acquisition and other authorities of the Migratory Bird Conservation Act, as amended, the Fish and Wildlife Act of 1956, as amended, and the Fish and Wildlife Coordination Act, as appropriate, to carry out a program in the United States of conserving, protecting, restoring, or propagating those species and subspecies of fish and wildlife that he lists as endangered species pursuant to section 2 of this Act.

(b) In addition to the land acquisition authorities otherwise available to him, the appropriate Secretary is hereby authorized to acquire by purchase, donation, or otherwise, lands or interests therein needed to carry out the purpose of this Act relating to the conservation, protection, restoration, and propagation of those species or subspecies of fish and wildlife and flora that he lists as endangered species pursuant to section 4 of this Act.

(c) Funds made available pursuant to the Land and Water Conservation Fund Act of 1965, as amended, may be used for the purpose of acquiring lands, waters, or interests therein pursuant to this section that are needed for the purpose of conserving, protecting, restoring, or propagating those species or subspecies of fish and wildlife and flora that he lists as endangered species pursuant to section 4 of this Act.

(d) The appropriate Secretary shall review other programs administered by him and, to the extent practicable utilize such programs in furtherance of the purpose of this Act. All other Federal departments and agencies shall, in consultation with and with the assistance of the Secretary, utilize, wherever practicable, their authorities in furtherance of the purpose of this Act by carrying out programs for the protection of endangered species of fish or wildlife or flora and by taking such actions as may be necessary to insure that actions authorized, funded, regulated, or administered by them do not jeopardize the continued existence of endangered species or result in destruction or modification of critical habitat of such species.

(f) In carrying out the provisions of this Act, the Secretary, through the Secretary of State, shall encourage foreign countries to provide protection to species or subspecies of fish or wildlife threatened with extinction, to take measures to prevent any fish or wildlife from becoming threatened with extinction, and he shall, through the Secretary of State, encourage bilateral and multilateral agreements with such countries for the conservation and propagation of fish and wildlife. The Secretary is authorized to assign or otherwise make available any officer or employee of his department for the purpose of cooperating with foreign countries and international organizations in developing personnel resources and programs which promote conservation of fish or wildlife, including (1) educational training of United States and foreign personnel, here or abroad, in the subjects of fish and wildlife management, research, and law enforcement; and (2) rendering professional assistance abroad in such matters. The Secretary is also authorized to conduct or cause to be conducted such law enforcement investigations and research abroad as he deems necessary to carry out the obligations imposed upon him by this Act.

COOPERATION WITH THE STATES

SEC. 6. (a) In carrying out the program authorized by this Act, the appropriate Secretary shall cooperate to the maximum extent practicable with the several States. Such cooperation shall include consultation before the acquisition of any land for the purpose of conserving, protecting, restoring, or propagating any endangered species.

(b) The Secretary may enter into agreements with the States for the administration and management of any area established for the conservation, protection, restoration, or propagation of endangered species. Any revenues derived from the administration of such areas under these agreements shall be subject to the provisions of section 401 of the Act of June 15, 1935 (49 Stat. 383), as amended (16 U.S.C. 715s).

(c) The Secretary may delegate to a State the authority to regulate the taking by any person of endangered species or subspecies of resident fish and wildlife when he determines that such State maintains an adequate and active program, consistent with the policies and purposes of this Act, to manage and protect such endangered species in accordance with criteria issued by the Secretary.

(d) Any action taken by the Secretary under this section shall be subject to his periodic and continual review at no greater than annual intervals. Such review shall include the consideration of comment received from interested persons.

(e) Nothing in this Act, or any amendment made by this Act, shall be construed as superseding or limiting the power of any State to enact legislation more restrictive than the provisions of this Act for the protection and conservation of wildlife, including the regulation or prohibition of the retail sale of specimens or of products processed or manufactured from the specimens of wildlife, whether such specimens are alive or dead.

(f) The Secretary of the Interior shall promptly undertake an investigation and study regarding the functions and responsibilities which the States should have with respect to the management and protection of endangered speices of fish and wildlife. The Secretary shall report the results of the investigation and study to Congress within one year after the date of the enactment of this Act, and such report may include such recommendations as the Secretary may have regarding the extent to, and manner in, which the Federal Government should assist the States in establishing and implementing management and protection programs for endangered species.

PROHIBITED ACTS

SEC. 7. (a) Notwithstanding any other Act of Congress or regulation issued pursuant thereto, and except as hereinafter provided, any person who—

(A) imports into or exports from the United States, receives, or causes to be so imported, received, or exported; or

(B) takes or causes to be taken within the United States, the territorial sea of the United States, Federal lands, or upon the high seas; or

(C) ships, carries, or receives by any means in interstate commerce

any species or subspecies of fish or wildlife or flora which the Secretary has listed as an endangered species threatened with extinction pursuant to section 4 of this Act, shall be punished in accordance with the provisions of section 9 of this Act.

(b) Whenever the Secretary, pursuant to section 4 of this Act, lists a species or subspecies as an endangered species which is likely within the foreseeable future to become threatened with extinction, he shall issue such regulations as he deems necessary or advisable to provide for the conservation, protection, restoration, or propagation of such species or subspecies, including regulations subjecting to punishment in accordance with section 9 of this Act any person who—

(1) imports into or exports from the United States, receives, or causes to be so imported, received, or exported; or

(2) takes or causes to be taken within the United States, the territorial sea of the United States, Federal lands or upon the high seas; or

(3) ships, carries, or receives by any means in interstate commerce any such species or subspecies of fish or wildlife or flora likely within the foreseeable future to become threatened with extinction.

(c) The Secretary shall allow taking of an endangered species which is likely within the foreseeable future to become threatened only (1) when it can clearly be shown that such taking will not damage the population, or (2) in emergency cases involving human health and safety.

(d) For the purpose of facilitating enforcement of this Act the Secretary may from time to time, by regulation, extend the protection of this section, to the extent he deems it advisable, to any species or subspecies of fish or wildlife or flora which is which so closely resembles in appearance, at that point in question, a species or subspecies of fish or wildlife or flora which has been listed as endangered, that substantial difficulty is posed to enforcement personnel in attempting to differentiate between the endangered and nonendangered species or subspecies of fish or wildlife or flora, and this difficulty poses an additional threat to the endangered species or subspecies.

EXCEPTIONS

SEC. 8. The Secretary may permit, under such terms and conditions as he may prescribe, the importation, taking, or the transportation in interstate commerce of any species or subspecies of fish or wildlife or flora listed as an endangered species threatened with extinction for scientific purposes, and for the propagation of such fish and wildlife in captivity for preservation purposes, but only if he finds that such importation, taking, or transportation in interstate commerce, or projected use will not adversely affect the regenerative capacity of such specimen or of such species or subspecies in a significant portion of its range or habitat or otherwise affect the survival of the wild population of such species.

(b) In order to minimize undue economic hardship to any person importing, exporting, taking, or transporting in interstate commerce any species or subspecies of fish or wildlife or flora which is listed as an endangered species pursuant to section 4 of this Act under any contract entered into prior to the date of original publication of such listing in the Federal Register, the Secretary, upon such person filing an application with him and upon filing such information as the Secretary may require showing, to his satisfaction, such hardship, may permit such person to import, export, take, or transport such species or subspecies in such quantities and for a period not to exceed one year, as he determines to be appropriate.

PENALTIES AND ENFORCEMENT

SEC. 9. (a) (1) Any person who violates any provision of this Act or any regulation or permit issued thereunder, other than a person who commits a violation the penalty for which is prescribed by subsection (b) of this section, shall be assessed a civil penalty by the appropriate Secretary of not more than $10,000 for each such violation. No penalty shall be assessed unless such person is given notice and opportunity for a hearing with respect to such violation. Each vio-

lation shall be a separate offense. Any such civil penalty may be compromised by the appropriate Secretary. Upon any failure to pay the penalty assessed under this paragraph, the appropriate Secretary may request the Attorney General to institute a civil action in a district court of the United States for any district in which such person is found or resides or transacts business to collect the penalty, and such court shall have jurisdiction to hear and decide any such action. In the case of Guam such actions may be brought in the District Court of Guam; in the case of the Virgin Islands such actions may be brought in the District Court of the Virgin Islands; and in the case of American Samoa such actions may be brought in the District Court of the United States for the district of Hawaii and such courts shall have jurisdiction of such actions. In hearing such action, the court shall sustain the Secretary's action if such action is supported by substantial evidence.

(2) Whenever any property is seized pursuant to subsection (c) of this section, the appropriate Secretary shall move to dispose of the civil penalty proceedings pursuant to paragraph (1) of this subsection as expeditiously as possible. Upon the assessment and collection of a civil penalty pursuant to paragraph (1) of this subsection, any property so seized may be proceeded against in any court of competent jurisdiction and forfeited. Fish or wildlife or flora so forfeited shall be conveyed to the appropriate Secretary for disposition by him in such a manner as he deems appropriate. If, with respect to any such property so seized, no compromise forfeiture has been achieved or no action is commenced to obtain the forfeiture of such fish, wildlife, flora property, or item within thirty days following the completion of proceedings involving an assessment and collection of a civil penalty, such property shall be immediately returned to the owner or the consignee in accordance with regulations promulgated by the Secretary.

(3) Proceedings for the assessment of civil penalties pursuant to paragraph (1) of this subsection shall be conducted in accordance with section 554 of title 5. The appropriate Secretary may issue subpenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and administer oaths. Witnesses summoned shall be paid the same fees and mileage that are paid witnesses in the courts of the United States. In case of contumacy or refusal to obey a subpena served upon any person pursuant to this paragraph, the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the appropriate Secretary or to appear and produce documents before the Secretary, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(b) Any person who knowingly violates any provision of this Act, or any regulation or permit issued thereunder, shall, upon conviction, be fined not more than $20,000 or imprisoned for not more than one year, or both, and any Federal hunting or fishing licenses, permits, or stamps may be revoked or withheld for a period of up to five years. Upon conviction, (1) any fish or wildlife or flora seized shall be forfeited to the Secretary for disposal by him in such manner as he deems appropriate, and (2) any other property seized pursuant to subsection (c) of this section may, in the discretion of the court, commissioner, or magistrate, be forfeited to the United States or otherwise disposed of. If no conviction results from any such alleged violation, such property so seized in connection therewith shall be immediately returned to the owner or consignee in accordance with regulations promulgated by the appropriate Secretary, unless the Secretary, within thirty days following the final disposition of the case involving such violation, commences proceedings under subsection (a) of this section.

(c) (1) The provisions of sections 7 and 8 of this Act and any regulations or permits issued pursuant thereto, or pursuant to subsection (d) or (e) of this section, shall be enforced by the appropriate Secretary, the Secretary of the Treasury, or the Secretary of the Department in which the Coast Guard is operating, or all such Secretaries. Each such Secretary may utilize, by agreement, with or without reimbursement, the personnel, services, and facilities of any other Federal agency or any State agency.

(2) Any authorized agent of the Departments of the Interior, of Commerce, of Agriculture, or of the Treasury may, with or without a warrant, arrest any person who such agent has probable cause to believe is knowingly violating this Act, in his presence or view, or any regulation or permit issued thereunder, the penalty for which is provided under subsection (b) of this section. An agent who has made an arrest of a person in connection with any such willful violation may search such person at the time of his arrest and seize any property taken, used, or possessed in connection with any such violation.

(3) An authorized agent of the Department of the Interior, of Commerce, of Agriculture, or of the Treasury shall have authority to search and seize with or without a warrant, as provided by the customs laws and by the law relating to search and seizure. Any such officer or agent is authorized to execute warrants to search for and seize any property, including, for the purposes of this section, any fish, wildlife, flora, aircraft, boat, or other conveyance, weapon, business records, shipping documents, or other items which have been taken, used, or possessed in connection with the violation of any section, regulation, or permit with respect to which a civil or criminal penalty may be assessed, pursuant to subsection (a) or (b) of this section. Any property seized pursuant to this section shall be held by any agent authorized by the Secretary or the Secretary of the Treasury, or by a United States marshal, pending disposition of proceedings under subsection (a) or (b) of this section; except that either Secretary may, in lieu of holding such property, either (1) permit a bond or other satisfactory surety to be posted, or (2) place the fish or wildlife or flora in the custody of such person as he shall designate. Upon the imposition of a civil or criminal penalty, or a forfeiture, the costs to the Government of transfer, board, and handling, including the cost of investigations at a nondesigated port of entry, shall be payable to the account of the Secretary. The owner or consignee of any property so seized shall, as soon as practicable following such seizure, be notified of the fact in accordance with regulations established by the Secretary.

(d) The Secretary may request the Attorney General to bring appropriate action to prevent threatened violations of this Act, or of any regulations or orders promulgated pursuant thereto.

(e) For the purposes of facilitating enforcement of this Act and reducing the costs thereof, the Secretary, with the approval of the Secretary of the Treasury, shall, after notice and an opportunity for a public hearing, from time to time designate, by regulation, any port or ports in the United States for the importation of fish and wildlife (other than shellfish and fishery products) or flora into the United States. The importation of such fish or wildlife or flora into any port in the United States, except those so designated, shall be prohibited after the effective date of such designations; except that the Secretary, under such terms and conditions as he may prescribe, may permit importation at nondesignated ports in the interest of the health or safety of the fish or wildlife. Such regulations may provide other exceptions to such prohibition if the Secretary, in his discretion, deems it appropriate and consistent with the purposes of this subsection.

(f) The Secretary is authorized to promulgate such regulations as may be appropriate to carry out the purposes of this Act, and the Secretaries of the Treasury and the Department in which the Coast Guard is operating are authorized to promulgate such regulations as may be appropriate to the exercise of responsibilities under subsection (c) (1) of this section.

(g) (1) Any person who engages to any extent in business as an importer of fish and wildlife must register with the Secretary of the Treasury his name and the address of each place of business at which, and all trade names under which, he conducts such business.

(2) Any person required to register with the Secretary of the Treasury under paragraph (1) of this subsection shall—

(A) keep such records as will fully and correctly disclose each importation of fish and wildlife made by him and the subsequent disposition made by him with respect to such fish and wildlife; and

(B) at all reasonable times upon notice by a duly authorized representative of the Secretary, afford such representative access to his places of business an opportunity to examine his inventory of imported fish and wildlife and the records required to be kept under subparagraph (A) of this paragraph, and to copy such records.

(3) The Secretary of the Treasury shall prescribe such regulations as are necessary and appropriate to carry out the purposes of this subsection.

INTERNATIONAL AND INTERGOVERNMENTAL COOPERATION

SEC. 10. (a) (1) In carrying out the provisions of this Act, the Secretary, through the Secretary of State, shall encourage foreign countries to provide protection to species or subspecies of fish and wildlife or flora threatened with extinction, to take measures to prevent any fish or wildlife from becoming threatened with extinction, and shall cooperate with such countries in providing technical assistance in developing and carrying out programs to provide such protection, and shall, through the Secretary of State, encourage bilateral and multilateral agreements with such countries for the protection, conservation, or propagation of fish and wildlife or flora. The Secretary shall also encourage persons, taking directly or indirectly fish or wildlife or flora in foreign countries or on the high seas for importation into the United States for commercial or other purposes, to develop and carry out, with such assistance as he may provide under any authority available to him, conservation practices designed to enhance such fish or wildlife or flora and their habitat or range. The Secretary of State, in consultation with the Secretary, shall take appropriate measures to encourage the development of adequate measures, including, if appropriate, international agreements, to prevent such fish or wildlife or flora from becoming threatened with extinction.

(2) To assure the worldwide conservation of endangered species and to avoid unnecessary harm to affected United States industries, the Secretary, through the Secretary of State, shall seek the convening of an international ministerial meeting on fish and wildlife prior to November 1, 1973, and included in the business of that meeting shall be the signing of a binding international convention on the conservation of endangered species.

(b) The Secretary of Agriculture and the Secretary shall provide for appropriate coordination of the administration of this Act and amendments made by this Act, with the administration of the animal quarantine

laws (19 U.S.C. 1306; 21 U.S.C. 101–105, 111–135b, and 612–614). Nothing in this Act, or any amendment made by this Act, shall be construed as superseding or limiting in any manner the functions of the Secretary of Agriculture under any other law relating to prohibited or restricted importations of animals and other articles and no proceeding or determination under this Act shall preclude any proceeding or be considered determinative of any issue of fact or law in any proceeding under any Act administered by the Secretary of Agriculture.

(c) Whenever the Secretary determines pursuant to this Act or any other authority vested in him, that a species of fish or wildlife is an endangered species and publishes regulations pertaining to the protection, control, management, or enhancement of such endangered species, the Secretary of Agriculture may use all authorities available to him with respect to research, investigations, conservation, development, protection, management, and enhancement of fish and wildlife, including, but not limited to, the conservation operations program, watershed protection and flood prevention programs, rural environmental assistance program, Great Plains conservation program, resource conservation and development program, forestry programs, and water bank program, in the protection, control, management, or enhancement of such endangered species. Recognizing the national and international interest in the protection and enhancement of such endangered species, the Secretary of Agriculture is authorized, notwithstanding the provisions of any other law, to bear the full cost, or any lesser amount that he, in consultation with the Secretary may determine desirable to accomplish the objectives of the Act, of the cost of installing any practice, measure, work of improvement, facility, or other developmental, protective, or management systems on private land, the primary purpose of which is for the purpose of enabling the landowner to comply with the regulations, or other recommendations, of the Secretary pertaining to the protection, control, management, or enhancement of such endangered species. The Secretary of Agriculture, in carrying out the purposes of this section, shall utilize his authorities to conduct research and investigations into vegetative and structural methods and other methods and practices, measures, works of improvement, and facilities most appropriate or effective in the protection, control, management, or enhancement of such endangered species. If determined desirable, the Secretary and the Secretary of Agriculture shall be authorized to jointly carry out research, surveys, and investigations. The Secretary is authorized to transfer to the Secretary of Agriculture such funds as may be necessary to carry out the purposes of this subsection.

(d) Nothing in this Act, or any amendment made by this Act, shall be constructed as superseding or limiting in any manner the functions and responsibilities of the Secretary of the Treasury under the Tariff Act of 1930, as amended, including, without limitation, section 527 of such Act relating to the importation of wildlife taken, killed, possessed, or export to the United States in violation of the laws or regulations of a foreign country.

CONFORMING AMENDMENTS

SEC. 11. (a) Subsection 4(c) of the Act of October 15, 1966 (80 Stat. 928), as amended (16 U.S.C. 668dd(c)), is further amended by revising the second sentence thereof to read as follows: "With the exception of endangered species listed by the Secretary pursuant to section 4 of the Endangered Species Conservation Act of 1973, nothing in this Act shall be constructed to authorize the Secretary to control or regulate hunting or fishing of resident fish and wildlife on lands not within the system."

(b) Subsection 10(a) of the Migratory Bird Conservation Act (45 Stat. 1224), as amended (16 U.S.C. 715i(a)), is further amended by inserting "or likely within the foreseeable future to become threatened with" between the words "with" and "extinction".

(c) Subsection 401(a) of the Act of June 15, 1935 (49 Stat. 383), as amended (16 U.S.C. 715s(a)), is further amended by inserting "or likely within the foreseeable future to become threatened with" between the words "with" and "extinction" in the last sentence thereof.

(d) Subsection 6(a)(1) of the Land and Water Conservation Fund Act of 1965 (78 Stat. 903), as amended (16 U.S.C. 46019(a)(1)), is further amended by inserting "or likely within the foreseeable future to become threatened with" between the words "with" and "extinction".

REPEALS

SEC. 12. (a) Sections 1 through 3 of the Act of October 15, 1966 (80 Stat. 926, 927), as amended (16 U.S.C. 668aa–668cc), are hereby repealed in their entirety.

(b) Sections 1 through 6 of the Act of December 5, 1969 (83 Stat. 275–279; 16 U.S.C. 668cc–1 through 668c–6) are hereby repealed in their entirety.

By Mr. HATHAWAY:

S. 1984. A bill to direct that grants for research and demonstration projects and other federally funded projects of this nature be allocated to economically depressed areas, insofar as is possible, and to assist and promote the development of those areas of the country which are economically depressed. Referred to the Committee on Labor and Public Welfare.

Mr. HATHAWAY. Mr. President, I am introducing today a bill to direct that large sums of Federal money, in the form of grants for research and demonstration projects, pilot programs, and similar federally funded projects, be allocated to economically depressed areas, insofar as is possible.

One of my principal concerns, as a Member of the Senate, lies in promoting Federal Government to aid areas which are economically depressed. There are large regions of our country, regions which include substantial rural areas and declining urban centers, which suffer from lagging economic growth and a lack of opportunities for development. The problem is even more acute in particular areas, and among certain groups in the population. A number of areas of the country show high rates of unemployment, low per capita income, inferior public services, and a whole range of socio-economic problems.

All too often, these are also areas which are badly served by the Federal Government. They do not receive even their proportionate share of funds distributed by the Federal Government, much less a larger share that would indicate some Federal commitment to alleviate their problems. Take my own State of Maine, for instance. Per capita income in Maine for 1972 was $3,571, only about 80 percent of the national average, which was $4,478. The unemployment rate in 1972 ran well above the national average. It was over 7 percent, reaching a high of 8.8 percent at one period of time. For some areas of the State, the unemployment rate approached 12 percent. Compare this with the national average of 5.6 percent. And yet, according to the survey of Federal outlays in Maine for 1972, Maine ranked 39th in total population, 38th in number of poor people in the population, and a very low 46th in total Federal funds received.

I feel it is high time that the Federal Government take strong and positive action to aid economically depressed areas. It should be a primary goal of public policy that Government programs and grants go first and foremost to help areas and people which display the greatest need for these resources. I have already sponsored legislation to accomplish this goal, and I intend to continue doing so, now and in the future.

The bill I am introducing today, the "Research and Demonstration Grant Policy Act," recognizes that large amounts of Federal money go into research and demonstration projects of many different sorts. It recognizes, as well, that areas which receive money for these projects are greatly benefited thereby—in terms of employment, of training and experience for people in the area, and in terms of the lasting effect of the project itself, be it an education or health program which the community can continue, or perhaps the construction of some new technology, which will remain to help the people in the area after it is built. For instance, the Federal Water Pollution Control Act, passed by Congress last year, contained authorization for $150 million in research and development funds. Surely any community would benefit from receiving funds to develop and construct a new type of water pollution control project, which would then remain for continuing public use.

Because such projects are of tangible benefit to the communities which receive them, I believe strongly that there should be a definite Federal policy of allocating such projects to communities which have the greatest economic need. This is a necessary part of an overall Government policy to promote economic development in these areas.

My bill states that it is the declared policy of the Congress that the Government should aid, assist and promote the development of those areas of the country which are economically depressed, in order to maintain and strengthen the overall economy of the Nation. Accordingly, it is directed that, insofar as is possible, grant agreements and contracts involving research and demonstration projects and other similar programs shall be entered into with agencies of State or local government, or with persons who are located in or will employ a substantial number of persons located in economically depressed areas. A depressed area is defined as one with a high rate of unemployment, as measured by specific criteria.

Furthermore, the legislation states that a comprehensive study sha be made of all programs of this type operated by the Federal Government, including information on Federal expenditures and geographical distribution, to determine how the Government is presently allocating and administering these programs

and to provide information on which a change in policy can be based, to achieve the objectives of this legislation. The initial report is due no later than 1 year following the date of enactment. Subsequently, comprehensive and detailed annual reports are required, to indicate how faithfully the Government is carrying out the policy goals in the legislation.

Mr. President, we all know that the Federal Government, by its spending decisions alone, has a tremendous impact on the development and growth of our country. Decisions of great economic and social importance must not be made in a policy vacuum. Instead, the Congress must lay down specific policy objectives to guide decision-makers in the executive branch. I believe that one of our most fundamental policy concerns must be to aid those areas of our country which are economically depressed, and to give new hope to people living in these areas. Bills to set policy goals of this type, such as the bill I am introducing today, are essential to achieve this purpose.

Mr. President, I ask unanimous consent that the text of the Research and Demonstration Grant Policy Act be printed in the RECORD at this point.

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

S. 1984

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled.

SEC. 1—This Act may be cited as the "Research and Demonstration Grant Policy Act."

SEC. 2—It is the declared policy of the Congress that the Government should aid, assist and promote the development of those areas of the country which are economically depressed in order to maintain and strengthen the overall economy of the Nation. Accordingly, insofar as is possible, grant agreements and contracts involving research and demonstration projects, feasibility studies, pilot programs and other federally funded projects of this nature shall be entered into with agencies of state or local government, or with persons who are located in, or who employ (or will under the grant or contract employ) a substantial number of persons located in economically depressed areas.

SEC. 3—For the purposes of this Act, an economically depressed area shall be defined as any area—

(a) where the Secretary of Labor finds that the current rate of unemployment, as determined by appropriate annual statistics for the most recent available calendar year, is 6 per centum or more; or

(b) where the Secretary of Labor finds that the annual average rate of unemployment has been at least—

(1) 50 per centum above the national average for three of the preceding four calendar years, or

(2) 75 per centum above the national average for two of the preceding three calendar years, or

(3) 100 per centum above the national average for one of the preceding two calendar years.

The Secretary of Labor shall find the facts and provide the data to be used by the Secretary in making the determinations required by this section.

SEC. 4—For the purposes of this Act, the Director of the Office of Management and Budget is authorized to provide the following—

(a) A comprehensive study and examination of the programs referred to in Sec. 1, including information on federal expenditures and geographical distribution of these programs; to be submitted to the Congress no later than 1 year following the date of enactment.

(b) Subsequent to this, comprehensive and detailed annual reports on programs referred to in Sec. 2 and actions taken to comply with the intent of this Act.

By Mr. CRANSTON (for himself, Mr. KENNEDY, Mr. MONDALE, and Mr. PELL):

S. 1985. A bill to extend for 1 fiscal year the authorization of appropriations for title VIII of the Economic Opportunity Act of 1964. Referred to the Committee on Labor and Public Welfare.

EXTENSION OF TITLE VIII OF THE ECONOMIC OPPORTUNITY ACT OF 1964

Mr. CRANSTON. Mr. President, I introduce today, for appropriate reference, a bill to provide for a simple 1-year extension for fiscal year 1974 at fiscal 1973 levels of the authorization of appropriations for title VIII—Domestic Volunteer Service Programs—of the Economic Opportunity Act of 1974 by amendment to Public Law 92–424, which contains the fiscal year 1973 appropriations authorization, and earmarked amounts thereunder, for title VIII. I submit this bill for myself and my distinguished colleagues from Massachusetts (Mr. KENNEDY), Minnesota (Mr. MONDALE), and Rhode Island (Mr. PELL).

Mr. President, the authorization of appropriations for title VIII of the Economic Opportunity Act of 1964, as amended, expires on June 30, 1973. This is the basic authority under which the ACTION Agency carries out the VISTA and UYA programs, as well as other experimental antipoverty volunteer programs.

Although the Senate Committee on Labor and Public Welfare has ordered reported my bill, S. 1148, which would consolidate into one law all domestic volunteer program authorities for programs under the ACTION Agency as well as provide for continuation and expansion of these programs, it does not seem likely at this point in time that that rather sweeping bill will be enacted prior to June 30, 1973.

The bill I introduce today for myself and most of the cosponsors of S. 1148 is intended as a stopgap, interim measure until more comprehensive legislation, such as S. 1148, can be moved through the congressional process and enacted. It also can serve as a realistic alternative—at least for the next year—for such a comprehensive approach if it turns out that we cannot quickly and amicably resolve differences as to that approach in a way that is consistent with the philosophy of the committee in terms of continuation of a strong, viable, undiluted antipoverty mission for the VISTA program and a maintenance of at least the current level of expenditures—about $30 million—for the full-time VISTA and UYA programs.

Mr. President, I am aware that the House Committee on Education and Labor through its Subcommittee on Equal Opportunities, chaired by my good friend from California (Mr. HAWKINS), begins hearings tomorrow on H.R. 7265—the House companion bill to S. 1148. I am delighted with this prompt action in the other body and look forward to our working together to produce a first-rate measure to authorize ACTION Agency domestic volunteer programs as a replacement for the authorities now contained in title VIII of the Economic Opportunity Act of 1964 and title VI of the Older Americans Act of 1965. However, if that should not prove possible, I know the other body will want to give serious consideration to a simple title VIII extension of the kind I am offering today.

In this connection, Mr. President, the Older Americans Comprehensive Services Amendments of 1972, recently enacted as Public Law 93–29, included a 3-year extension of the title VI authorizations of appropriations for the older American volunteer programs carried out thereunder—RSVP and foster grandparents.

Mr. President, I ask unanimous consent that the text of the bill I am introducing be printed at this point in the RECORD.

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

S. 1985

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) paragraph (1) of section 3(d) of the Economic Opportunity Amendments of 1972 (Public Law 92–424) is amended by—

(1) striking out "for the fiscal year ending June 30, 1973," and inserting in lieu thereof "annually for the fiscal year ending June 30, 1973, and for the succeeding fiscal year".

(2) inserting "in each such year" after "which"; and

(b) Paragraph (2) of such section 3(d) is amended by—

(1) inserting "for each such fiscal year" after "full"; and

(2) inserting "each" after "for" the first time it appears.

ADDITIONAL COSPONSORS OF BILLS

S. 1109

At the request of Mr. MONDALE, the Senator from New Mexico (Mr. MONTOYA) was added as a cosponsor of S. 1109, to amend the Internal Revenue Code of 1954 to provide that the designation of payments to the Presidential Election Campaign Fund be made on the front of the taxpayer's income tax return form.

S. 1326

At the request of Mr. WILLIAMS, the Senator from New Hampshire (Mr. MCINTYRE) was added as a cosponsor of S. 1326, the Hemophilia Act of 1973.

S. 1769

At the request of Mr. MANSFIELD (for Mr. MAGNUSON) the Senator from New Hampshire (Mr. MCINTYRE) and the Senator from Minnesota (Mr. HUMPHREY) were added as cosponsors of S. 1769, to establish a U.S. Fire Administration and a National Fire Academy in the Department of Housing and Urban Development, to assist State and local governments in reducing the incidence of death, personal injury, and property damage from fire, to increase the effectiveness and coordination of fire preven-

tion and control agencies at all levels of government, and for other purposes.

AUTHORIZATION OF APPROPRIATIONS FOR THE DEPARTMENT OF STATE—AMENDMENTS

AMENDMENT NO. 219

(Ordered to be printed, and to lie on the table.)

Mr. BROOKE submitted amendments, intended to be proposed by him, to the bill (S. 1248) to authorize appropriations for the Department of State, and for other purposes.

AMENDMENT NO. 220

(Ordered to be printed, and to lie on the table.)

Mr. McGOVERN submitted an amendment, intended to be proposed by him to the amendment No. 218, to Senate bill 1248, supra.

ADDITIONAL COSPONSOR OF AN AMENDMENT

AMENDMENT NO. 218, TO S. 1248

At the request of Mr. PROXMIRE, the Senator from Delaware (Mr. BIDEN) was added as a cosponsor of amendment No. 218, to the bill (S. 1248) to authorize appropriations for the Department of State, and for other purposes.

NOTICE CONCERNING NOMINATION BEFORE THE COMMITTEE ON THE JUDICIARY

Mr. EASTLAND. Mr. President, the following nomination has been referred to and is now pending before the Committee on the Judiciary:

Mitchell A. Newberger, of Florida, to be U.S. marshal for the middle district of Florida for the term of 4 years, vice Andrew J. F. Peoples, retired.

On behalf of the Committee on the Judiciary, notice is hereby given to all persons interested in this nomination to file with the committee, in writing, on or before Tuesday, June 19, 1973, any representations or objections they may wish to present concerning the above nomination, with a further statement whether it is their intention to appear at any hearing which may be scheduled.

ANNOUNCEMENT OF HEARINGS—TRAINING NEEDS IN GERONTOLOGY

Mr. CHURCH. Mr. President, the Senate Special Committee on Aging will conduct hearings on "Training Needs in Gerontology" on June 19 and 21, beginning each day at 10 a.m. in room 1318, Dirksen Office Building.

These hearings have been called, at the suggestion of Senator CHILES, in order to explore: first, existing training programs and the consequences of possible wholesale curtailment; second, estimates for trained personnel in gerontology or gerontology-related programs or other activities; and third, recommendations for actions that will encourage the orderly and sustained development of adequate training resources in gerontology.

NOTICE OF HEARINGS ON THE DROUGHT AND FAMINE IN AFRICA

Mr. HUMPHREY. Mr. President, this Friday, June 15, the African Affairs Subcommittee of the Senate Foreign Relations Committee will hold hearings on the drought in the region of Africa known as the Sahel—a drought which has already devastated the economies of six countries and is now threatening the lives of millions. The hearings will be held at 10 a.m. in room 4221, Dirksen Office Building. As chairman of the subcommittee, I have invited Mr. David Newsom, Assistant Secretary of State for Africa, and Mr. Donald S. Brown, Deputy Assistant Administrator for Africa in AID, and other experts to testify before the subcommittee.

Malnutrition, starvation, disease caused by a drought may not be as dramatic as the destruction caused by an earthquake or a civil war. But they are just as tragic and just as deadly. The African Affairs Subcommittee wants to make sure that this "quiet" crisis is not overlooked.

The New York Times reported that 2 million people could face starvation in the next few months, and 5 to 10 million could starve before the crisis is over. We ought to make sure everything possible is being done to save the lives of these people.

There are indications that the past 4 years of drought have not been a temporary phenomenon—that the Sahara Desert is moving southward, claiming the grazing land that provided the only livelihood for thousands of nomads. It will take thought and planning and money to push the desert back—to hold it back with wells and irrigation and ground cover. We want to find out how usefully the United States and other nations are contributing to the long-term international effort to save these six economies and if these contributions should be increased.

This drought has been going on for 4 years. For 4 years, crops have not been growing and cattle have been dying. Yet the international community did not start giving relief assistance to these countries until February 1, 1973. We want to find out why.

The countries hardest hit by the drought—Upper Volta, Chad, Niger, Mali, Mauritania, and Senegal—are some of the poorest countries in the world. Some of them have per capita GNP's of $60. The drought wiped out from 30 to 80 percent of their cattle and most of their export and staple crops.

These countries could not be expected to feed their starving thousands out of government revenues that were diminishing yearly, foreign exchange reserves that were depleted, and food reserves that were totally exhausted. Yet they did not ask for help from the international community until it was almost too late. We want to find out why.

We need to determine what it is about the aid policies of donor countries that kept these stricken countries from asking for assistance until they were literally starving to death. We want to make sure they are getting all the assistance they need now—without humiliating strings attached. There is no shame in being hungry. But there is shame if the United States, the EEC, or the Soviet Union do not care enough to help those who are starving.

It is my hope that the Africa Subcommittee will examine this problem in the larger context of the critical world food shortage as well. We must determine if the United States and other surplus-producing countries should produce only what we can sell, cut back on the food-for-peace program because it is costly, let famines run their course while our fields lie fallow. I believe and have proposed that we should maintain reserves of grain stockpiled for emergencies—reserves that would make up part of a world food reserve proposed by the FAO.

Finally, our own aid policies have been blamed for aggravating crises such as this. They allegedly have been geared excessively toward capital-intensive projects in the cities of richer States, with too little done for the farmers—the poorest majority in less developed countries. The rural people make up 90 percent of the population in Africa.

If we had encouraged the digging of wells or the diversification of crops in this area earlier, if we had cared more about increasing the productivity of small farmers and bringing nomads into the development process—the drought would still have occurred, but the crops and livestock and people of this area might better have survived it.

Congressman DONALD FRASER and the House Foreign Affairs Committee have proposed a major change in U.S. aid policy. They want to focus our efforts on aiding the poorest people in the world—the "marginal men"—the subsistence farmers, the unemployed, the nomads. They are proposing that our aid be concentrated on bringing these people into the development process—providing them with education, nutrition, health care, ways to improve their crops and their herds.

If we are to pursue this new policy, we must understand how we have failed in areas like the Sahel to enable people to feed themselves, to avert this crisis and to prevent starvation. And we must begin now to explore ways of preventing such crises in the future, in West Africa and throughout the world.

I ask unanimous consent that the most recent New York Times article on the drought, indicating the increasing severity of this problem, be printed at this point in the RECORD.

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

PARCHED AFRICA SEES RAIN BEGIN—BUT DROUGHT-AREA WORKERS DOUBT THAT IT CAN HELP

(By Thomas A. Johnson)

OUAGADOUGOU, UPPER VOLTA, June 7.—Many farmers rejoiced in this drought-stricken nation when a cloudburst this week signaled the start of the rainy season in sub-Saharan Africa, the time for planting.

But the downpour, which halted all traffic

and turned roadbeds into rivers, brought additional worries to agricultural and relief experts who are concerned with the effects of the five-year drought afflicting six countries—Upper Volta, Mauritania, Senegal, Mali, Niger and Chad.

The rains are considered little more than a partial blessing by the African and foreign relief workers, their efforts hampered as they are by poor roads and communications and the absence of reliable information. With the rain, the roads will be worse.

"In this region farmers should plant their sorghum and millet seeds in the next three weeks," said a foreign agricultural worker. "But many of the farmers from these nations have left their farms and fled south looking for food. Many of those who stayed have long since eaten their seed crops."

A number of interviews here, where relief efforts for the six countries most affected are beginning to be coordinated, indicated that the full social disruption of the drought is not known. "Are the farmers coming back to plant?" an official said. "I don't know. I don't know who went where."

Quite often, the information that is available is conflicting or uncertain. When asked recently by a United Nations team to name the amount of sorghum and millet seed grain that would be needed for this year's planting, the countries involved requested 30,000 to 36,000 tons.

TIME WAS TOO BRIEF

The grain was located in Port Sudan, in the Sudan, and the United States Agency for International Development looked into the possibility of flying the grain from that Red Sea port into this region. This was never done because, according to reliable sources, there was not enough time to transport and distribute the grain in the brief planting season.

But a number of agricultural workers insist that sufficient seed grain is on hand, either hoarded by speculators or in the hands of farmers.

Merchants in the central markets of this city and in Bobo-Dioulasso, 200 miles west-southwest of Ouagadougou, were selling sorghum and millet this week for about 25 cents a kilo—2.2 pounds—compared with the normal price, about 10 cents.

A farmer near the village of Noingou said that it was traditional that "the farmer never sells his last grain but holds it for planting."

At present the bulk of the relief supplies, mostly grains and powdered milk, brought in by the United Nations from Europe and America, is taken to the remote, Sahara-border villages by truck and then to smaller communities by Land Rover and car. But the rains make many roads impassable.

"You must wait at least a day after a hard rain," a transportation worker said. "Otherwise you ruin these dirt roads with large trucks. And when it rains for a few days straight and then you try to drive, it is like trying to drive in a stew."

The American Ambassador to Upper Volta, Donald B. Easum, says that he has alerted Washington that "a massive airlift" of relief supplies to the six countries may be necessary.

The rains will benefit the region in helping to provide forage to cattle, sheep and goats. Benno Haffner, the controller for the European Economic Community's fund for economic development, said that the fund, with the help of the French Air Force, was flying in 250 tons of cotton seed for herds of cattle gathered at an oasis, near the northern tip of Upper Volta.

ANNOUNCEMENT OF HEARINGS

Mr. CRANSTON. Mr. President, I announce for the information of Senators and the public that the Subcommittee on Employment, Poverty, and Migratory Labor and the Special Subcommittee on Human Resources of the Senate Labor and Public Welfare Committee will hold joint hearings in San Francisco, Calif., on June 15, 1973, and in Los Angeles, Calif., on June 16, 1973. These hearings will be of an oversight and investigatory nature and will deal with the effects of the proposed fiscal year 1974 budget regarding child care, OEO, and manpower programs. Additionally, at the Los Angeles hearing, the subcommittees will receive testimony on the problem of child abuse.

As chairman of the Special Subcommittee and as a member of the Poverty Subcommittee, I will chair these hearings, which will be held at the Burnett School from 9 a.m. to 11:45 a.m. and 2 p.m. to 4 p.m. in San Francisco, and at Santa Monica City Hall from 9:30 a.m. to 12 noon and 2 p.m. to 4 p.m. in Los Angeles.

ANNOUNCEMENT OF HEARINGS ON S. 794

Mr. WILLIAMS. Mr. President, the Subcommittee on Labor of the Committee on Labor and Public Welfare will begin public hearings on S. 794, a bill to extend the protection of the National Labor Relations Act to employees of nonprofit hospitals, on Wednesday, June 27 and Thursday, June 28 at 9:30 a.m., in room 4332, DSOB.

I am pleased to announce that the sponsor of the bill, Senator ALAN CRANSTON, has agreed to chair these hearings of the subcommittee. Persons or organizations desiring to appear before the subcommittee or to submit statements should contact the staff of the Labor Subcommittee, room G-237, DSOB or telephone (202) 225-3674.

NOTICE OF HEARINGS ON INDIAN PROBLEMS

Mr. JACKSON. Mr. President, I want to announce to the Senate that the Subcommittee on Indian Affairs will conduct a 2-day open hearing on the Pine Ridge Reservation, S. Dak., June 16 and 17, 1973, to look into the issues and problems which resulted in the occupation of the Wounded Knee community on that reservation.

It is the intent of the subcommittee to utilize the hearing as a means of looking beyond the occupation and subsequent destruction to the real issues and problems which contributed to this unfortunate episode. Although this situation appeared to many observers to be an intratribal dispute, it is the committee's firm belief that the underlying causes are to be found on many Indian reservations and communities throughout the United States, and, until such time as these issues and problems are identified and steps taken to solve them, there exists a real possibility that other "Wounded Knee" types of eruptions may occur elsewhere in the Indian field.

The subcommittee will confine the witness list primarily to Indian spokesmen representing various organizations on the Pine Ridge Reservation.

The first day of hearings will be conducted at the reservation tribal headquarters in Pine Ridge and the second day of hearings will be conducted in the Kyle community on the reservation.

ADDITIONAL STATEMENTS

COAL MINE RECLAMATION LEGISLATION

Mr. MANSFIELD. Mr. President, within the relatively near future the Senate will be considering mine reclamation legislation, now being discussed in executive session by the Senate Interior Committee. This is one of the most important pieces of legislation that we will have before this Congress. My view may be somewhat parochial in view of the fact that the coal strip mining activities in eastern Montana can have a great influence on the future of Montana and our neighboring States. Extensive development of these coal deposits is questionable and in order to prevent unnecessary damage, it is going to require strict preplanning for reclamation. To achieve planned development in the area, Federal, State, and local authorities must cooperate.

Prior to the debate on this legislation, I think that my colleagues here in the Senate might find of interest, a student research project on coal strip mining and effects, which was developed at Eastern Montana College in Billings, Mont.

Mr. President, I ask unanimous consent that the brief of this extensive report be printed in the RECORD.

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

COAL STRIP MINING AND EFFECTS: A STUDENT RESEARCH PROJECT FOR THE MONTANA STATE LEGISLATURE

(Michael C. Olson, Chairman; Charles W. Klimper; Kenneth Penn; Douglas Kelvig; Ellen Bloedel. Daniel H. Henning, Ph.D. (Faculty Research Supervisor), Associate Professor, Political Science, Eastern Montana College, Billings, Mont.)

On January 4, 1973, a student coal task force was formed of the above individuals as a part of a seminar (PS 440, Environmental Policy and Administration) at Eastern Montana College. Under the supervision of Dr. Daniel H. Henning, the students studied the ramifications of coal strip mining and power plants in eastern Montana.

Although little is currently known of the short and long range consequences and impacts of coal development and power plants in Montana, the report was oriented toward a factual and informational approach to this presently dominant political issue in the state. It is the hope of those involved in the preparation of this study that it will be of value to the Montana State Legislature and Government, as well as to other involved individuals, organizations, and agencies. The study, which consisted of 35 single spaced pages with over 150 footnotes and documents, and with numerous interviews with public and private officials, was divided into the following areas: (a) reclamation, (b) water pollution or possible depletion, (c) power plants, (d) population, and (e) energy alternatives.

When the study was released in late February, 1973, it was circulated throughout the Montana State Legislature by Representative Barbara Bennetts of the Natural Resources Committee. Lt. Governor Bill Chris-

tensen, who is in charge of the coal situation in Montana, had the study circulated throughout State Government. Also, numerous federal agencies, energy companies, and environmental organizations, including the Environmental Quality Council, have obtained copies of it. Overall, the responses have been quite favorable; many have indicated that the study met a definite need.

Recently, Senator Mike Mansfield made a request to have a summary of the study for publication in the Congressional Record. The following represents the sub-conclusions of the various areas listed above which, in turn, is followed by general conclusions.

(a) *Reclamation*

The extent of reclamation done to date indicates that in many areas of Montana where stripping has occurred, it is impossible to establish an adequate plant community. Dr. Richard Hodder, of the Animal and Range Sciences Department of Montana State University, has been conducting reclamation research for several years at Colstrip and Decker. He states: "In three to five years, depending on location, soil materials, and the amount of annual precipitation, it is possible to develop a sustaining soil." He also says that a topsoil cover can be developed on spoil material in less than ten years through mulching and continued plowing under of cover crops. Soil micro and macro-organisms can be encouraged with the liberal use of fertilizer. Proper selection of plant species, coupled with the quick soil development, can eliminate the long cycle, Hodder feels, which extended over thousands of years under the natural process, and resulted in the present vegetation.

It is virtually impossible, according to Dr. Wilson Clark, Chairman of the Division of Science and Mathematics, Eastern Montana College, to faithfully replicate the condition of the area before it was disturbed. What can be done is to create an "artificial plant community," a real enough ecosystem in its own right, and potentially productive, but one that would never have existed without the intervention of man. Clark concludes, "there is nothing wrong with this if it meets the standards set for reclamation."

RECLAMATION PROBLEMS

"The strip mine spoils of eastern Montana may not have the same problems we associate with the Eastern and Appalachian coal fields, but that is not to say they are without problems."

These are the words of T. Stuart Burns, of the United States Forest Service. Some experts have expressed doubt as to the ultimate success of current reclamation techniques, i.e., they feel in many areas of Montana it is not possible to reclaim land to the point where it is self-perpetuating and productive. Burns, a specialist in vegetation, soils, and groundwater, stated in testimony to the House Natural Resources Committee: "You will have heard all manner of good that reclamation can do. Hear what it cannot do before you decide that reclamation, as it is being talked, is a respectable answer to the state's soil base. The overburden and spoils of strip mining are only the raw and partial material from which soil is made. Real soil was built up over years that measure into the thousands, and it has the unique ability of perpetuating a usable crop . . . Soil is a structure, much as your home is, and it has been a long time building. You cannot expect to bulldoze soil around and have it function, no more than you could bulldoze your house and expect to live in its rubble." He notes further that the more successful reclamation work is in the Pleistocene glaciation area, a region of deeper soils and freer of silt and clay than the bulk of eastern Montana.

Sub-conclusion

Problems are either present or potential in the following areas: long-term productivity and continued ecological stability of the land; replanting of trees; resistance of reclaimed areas to drought and erosion; continued functioning of aquifers; reduction of a well-balanced, complex ecosystem to a relatively simple one of dubious durability.

In the past few years, research has made available certain reclamation techniques which have met with varying degrees of success in the field. However, no areas of land can, at this time, be described as adequately and fully reclaimed, under the definition of reclamation postulated in this paper. More time and research are essential for the satisfactory answers to the problems discussed above. What works in theory and in controlled experiments does not always work on a mass scale. It has not been proven by demonstration that large areas of disturbed land in Montana can be made self-perpetuating and productive.

One hears of the great achievements made in science; one does not often hear of the limitations and failure of science. There exist serious, well-founded doubts of the ability of our present technology to cope with the problems of reclamation in an integrated, not piecemeal, fashion. Montana and its people have too much to lose if current reclamation techniques prove inadequate in the long run. To allow mining operations to proceed in the face of a considerable number of unknowns is folly. There is a reasonable measure of doubt as to the ultimate success of reclamation, which warrants a much closer investigation of the entire process.

Therefore, I would like to make the following recommendations:

1. that a moratorium be imposed on all surface mining in Montana for a minimum of two years and a maximum of four;

2. that an interdisciplinary research team be organized to study extensively all aspects of reclamation of Montana lands;

3. that sufficient state or federal funds be made available for use in extensive reclamation research;

4. that no state or federal lands be leased for surface mining operations until the moratorium is removed under definite proof of quality reclamation on a long-term basis.

(B) WATER POLLUTION OR POSSIBLE DEPLETION

At the present time, the Montana Power Company is constructing two 350 megawatt generating plants outside of the town of Colstrip. In order to produce this electricity, it is necessary to burn vast amounts of coal. At the same time, it is equally necessary to provide some means of cooling the machinery of the plant. This, quite obviously, involves using vast amounts of water. The controversy surrounding this issue involves numerous points. Among these are (1) how much water is really used? (2) what becomes of water after its cooling usefulness has been utilized? and (3) how much water loss can the rivers and streams take?

Sub-conclusion

Montanans are faced with a dilemma—save our rivers and streams and areas such as Paradise Valley near Livingston or drain our rivers to the point that many areas will not be either recognizable or productive. The decisions will rest with the state legislature and the people of Montana, for they must decide whether to preserve Montana land and water for its people or sacrifice the state to the energy companies and out-of-state power needs. The decision is ours, the people's, who will have to live with it, rather than the energy companies. Relative to this, the people of Montana must now demand:

1. Forbid construction of the Allenspur Dam and seriously investigate any other proposals to dam the Yellowstone River;

2. Require dry cooling towers to be utilized at the Colstrip generating plant rather than the currently proposed wet cooling towers;

3. Limit the number of pipelines at Colstrip to one, and require that pipeline to be no larger than 24 inches in diameter;

4. Require that it be proven that the ground water at Colstrip will not be affected. This must be established before the plant begins operation;

5. Determine the probable effects upon the fish and other aquatic life in the Yellowstone River before drainage of this river occurs. The facts must be learned before irreparable damage is done.

(C) POWER PLANTS

Most of the data available at this time is that which has been released by the Department of Health and Environmental Sciences in the *Environmental Impact Statement on the Proposed Montana Power Company Electrical Generating Plant at Colstrip, Montana.* A section of research for the *Impact Statement* was completed by Montana Power and presented to the Department of Health and Environmental Sciences for the purpose of completing the statement. The proper formulation of an impact statement requires total co-operation between the building and the state. When asked if Montana Power worked closely with them, an official for the Department of Health stated, "They (Montana Power) don't work nearly as closely with us as we would like." An official for Montana Power, when asked the same question, replied, "We try to work very closely with them (Department of Health)."

The *Impact Statement*, relative to proposed generating plants, is extremely inconclusive and incomplete in many aspects. The venturi scrubbers for the Colstrip plants are still in the developmental stage. If the venturi scrubbers are not as efficient as expected, the pollution problem would be greater than proposed levels. Due to inadequate laws, if efficiency were less, it is doubtful that the power plants would be closed until pollution control capabilities could be increased.

Full development of all 21 North Central Power Study sites in eastern Montana would result in an instate steam-generating capacity of about 69,000 megawatts.

If this development were to take place, particulate emissions would be increased to approximately 300 tons daily. Proportionately, yearly emissions would be 109,500 tons. The amount of particulate released in a thirty year period would be 3,285,000 tons.

Sub-conclusion

In addition to the recommendations made by the Coal Task Force, the following recommendations should also be made.

1. A comprehensive study to determine the possible effects of nitrogen oxides on the environment.

2. More research to find the effects of nitrogen oxides on the environment when they are mixed with other pollutants.

3. Further study to determine specific effects of mercury on living organisms.

4. A comprehensive study to determine the effects of fluorides to the environment of eastern Montana.

5. Studies to find the total impact of power lines upon the values of state inhabitants.

6. A study of implications involved with the emission of particulates.

The major objective of this aspect of the report was to find where further research is needed. The only conclusion that can be obtained is the following:

All data analyzed was incomplete and a large portion was based on assumptions. Until complete, factual information can be obtained, no power plants should be built within the state boundaries. If the proposed plants conform to state air standards and can still be expected to harm the environ-

ment, the state air standards should be changed for the purpose of eliminating any negative effects to the environment.

The construction of any power plant should be restricted to those plants needed to satisfy the immediate demands of Montanans.

To this research, it seems that throughout all data gathered and interviews conducted, the personal views of individual citizens were ignored. The following idea was presented, in this respect: the need for energy should not suppress the social values of a majority of state inhabitants.

(D) POPULATION

Eastern Montanans have developed a frontier attitude as a direct result of sparse populace and an economy based upon agriculture. The predominant values that have resulted are: an intense individualism derived from a wilderness atmosphere, a land and agriculture value orientation, and a common tradition relative to the frontier way of thought. In this sense the majority of Montanans are unique and unified to a degree much different from inhabitants of industrialized states.

Between 1960 and 1970, the Montana populace increased approximately 3%. This figure represents one of the slowest population growths in the nation. One can assume the agricultural orientation and lack of big business to be somewhat responsible for this. Relative to this, industry on a large scale has been discouraged rather than promoted as evidenced by Governor Tom Judge's plea for small and clean industry.

The stereotype of Montana is certainly one of which state inhabitants can be proud. The beauty of dense green forests, clear mountain lakes and streams, domineering mountain peaks, the plains and open space, and an uncommonly friendly human attitude are Montana's greatest assets. However, a new Montana asset has been rediscovered, namely coal. According to the North Central Power Study, the strip mining of coal will bring a multitude of social, economic, psychological, political, physical, and environmental changes in Montana. In this regard, the most conservative population increase expectancy is 300,000 as a direct result of coal strip mining. The ramifications of such a tremendous population influx must be studied now, not only for present, but for future generations of native Montanans.

With a migratory element as large as expected, social disorganization will occur to a degree formerly unexperienced in Montana. In this regard, sociologists Thomas and Zanniecki stated that roles and expectations are established to promote a harmonious society. If a redefinition of the roles or names should occur, social deviance can be expected. The contradictory social demands of the new migratory populace will assuredly violate former established institutions and values of native Montanans. Accordingly, mutual expectations will disintegrate rapidly, and cognitive level of class appreciation and conflict will possibly develop between the migrants and native inhabitants. Furthermore, Ogburn's Cultural Lag Theory of societal change may develop. Ogburn states that society will always change as growth and survival are primary, but all social functions must not change at the same rate. Montana's social functions, however, will parallel each other in growth as migrant industry and populace demand. Governmental and economic structure will most certainly revise former norms, whereas family structure will alter itself to a more urban-oriented way of life. The religious aspect would undoubtedly be highly specualative.

(E) ENERGY

The problem of providing a future energy source is complex. One alternative is to cut energy use as explained by a report of ROMCOE:

In the long run, or perhaps in the not-so-long run, one alternative must predominate: control of energy consumption. Spaceship earth is finite, and its ability to absorb pollution and thermal change is finite.

Also, it is important that steps be taken to develop new sources of electricity. Federal funds must be allocated, priorities changed, and work begun on developing new sources of power. The North Central Power Study recognized the need for more research:

One of the main conclusions to be drawn from the North Central Power Study is that much greater effort must be initiated immediately to develop technologies for the production and delivery of electric energy that will have less adverse impact on the environment, and at the same time make more efficient use of our finite resources.

Relative to this, the following is recommended:

1. Advertising by power companies must be stopped. Advertising tends to create demand for electricity which can be supplied only by damaging the environment.

2. The government must rearrange its priorities. Money wasted on defense could be made available for more research on new energy sources.

3. Consumers must be made aware of the environmental degradation that is a result of electrical production.

4. More research funds must be allocated to researching new and different sources of energy. The AEC should not be allowed to consume the greatest portion of research funds available for research of energy alternatives.

5. Electricity must be made a valuable commodity, not something cheap and inexpensive that can be wasted by the consumer, but rather must be used efficiently and wisely.

6. Policies of industry, government, and the consumers must be changed to curtail energy consumption.

CONCLUSION

In August, 1972, Governor Forrest H. Anderson appointed a State Coal Task Force to review the "broad environmental, social and economic impacts that coal development portends for the eastern part of our State." On February 12, 1973, the situation report was submitted to Governor Thomas Judge for review and distribution.

Although the situation report is currently the most informative data pertaining to the overall aspects of eastern Montana coal strip mining, it is acknowledged to be incomplete in many respects. Furthermore, it is inconclusive in the sense that Montana values, concepts and basic life styles are grossly ignored throughout the entire context. The social norms of native inhabitants must be of primary concern to State, Federal, and elected officials whereas temporary economic gains should retain a secondary position. According to Dr. Beal Mossman, Assistant Professor of Psychology at Eastern Montana College, the "frontiersman" of Montana would experience a cultural loss if subjected to a complete modernization of values, i.e., industrialized Montana.

A series of recommendations by the Coal Task Force study group are:

1. A comprehensive study of effective reclamation practices.

2. A detailed analysis of Montana coal to determine the amount of trace elements and heavy metals present.

3. More work on the effects of SO_2 and other emissions on the rangeland ecology.

4. A study of the problems associated with burial of fly ash in spoilbanks.

5. An in-depth study of government and industry research priorities. It would be important to know how much is being spent on the search for more efficient and less degradatory means of electrical generation and transmission as well as for new generation techniques.

6. A comprehensive regional meteorological survey of the eastern one-third of the state.

7. Specific knowledge of the environmental problems involved in moving coal by slurry pipeline.

Above all, if the planning efforts of Montana and other coal reserve states are to have any hope of success, *the most imperative needs are for state self-determination in resource use and for a national energy policy and a national program to moderate energy consumption by encouraging conservative rather than maximum energy use.*

In addition, the necessity of an intense research would also be required in the following areas:

1. A comprehensive study of suspended particulate matter relative to ecosystems surrounding proposed power plants.

2. The possible formation of photo chemical oxidants relative to nitrogen oxides and its effects upon living organisms in the immediate vicinity.

3. The ecological degradation associated with transmission lines.

4. A comprehensive study of water, pollution, and possible local depletion.

5. The impact of strip mining aspects relative to the established social norms of state inhabitants.

6. New sources of energy.

Also, the Montana populace must now demand:

1. Federal funding of further research relative to all aspects of coal strip mining in eastern Montana.

2. An effective increase in coal related state bureaucracy.

3. A $5,000 bond forfeited by strip mining companies for each stripped acre.

4. Coal tax increase.

5. Elimination of contour stripping.

6. Elimination of energy companies' right of Eminent Domain.

7. Total coal removal in all mined areas to prevent further mining for future generations.

8. Program of conservation rather than maximum energy consumption.

9. A recommendation for the approval of House Bill 492, or,

10. A moratorium on coal strip mining for at least two years for sufficient time to complex effects of coal strip mining as well as reclamation proofs.

ELECTION CAMPAIGN REFORM

Mr. SCOTT of Pennsylvania. Mr. President, on Wednesday of this week, my Senate Rules Committee will begin to mark up several bills relating to election campaign reform. At that time, I intend to offer and support a number of proposals to strengthen the current law.

A recent letter to the editor of the State College, Pa., Mirror expressed support for this effort. I ask unanimous consent to have it printed in the RECORD.

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

ELECTION REFORMS IN SENATE NEED SUPPORT

Engrossed as we are in the sessions of the Senate Select Committee on Presidential Campaign Activities it may steady one's nerves and confidence in Congressional responses to notice proposed amendments to the 1971 Federal Election Campaign Act.

S. 1094, a bill to improve the regulation of Federal election campaign activities, introduced March 6, 1973 by Senators Scott, Mathias and Stevenson (and since with several additional cosponsors) was referred to the Senate Committee on Rules and Admin-

istration (Chairman-Senator Howard W. Cannon).

Pages 6447-6454 of The Congressional Record for March 6 carry the details of S. 1094 and three other Senate bills 1095, 1096 and 1097, all intended to correct some of the deficiencies in the existing campaign laws. Senator Scott explains that S. 1094 is intended to offset the greatest present deficiency—"the absence of a Federal Election Commission." This is proposed in S. 1094 to supersede the three-way responsibility among G.A.O., Secretary of the Senate and the Clerk of the House and the enforcers of the law (the Justice Department).

Senator Scott's statement continued.

"We propose to create a six-member Federal Election Commission (with staggered terms), appointed by the President and confirmed by the Senate. Each member would serve a 6-year term. The Commission would have full legal powers, including subpoena of witnesses and evidence. Furthermore, it would be empowered to initiate, prosecute, defend, or appeal any court action . . . through its own legal representative."

Senator Irvin's statement of responsibility for the Senate Select Committee now in session includes . . . "to recommend any remedial legislation necessary." With the reminder that the House of Representatives did not go along in conference on the original proposals for reform in 1971, as proposed by the Senate, this seems a proper time to write to Senators Scott of Rules and Administration Committee and to Chairman Cannon in support of S. 1094 and to ask for early favorable report of S. 1094. Favorable consideration should then be asked of members of the House to avoid weakening of the bill in conference this time.

MERWIN W. HUMPHREY.

STATE COLLEGE.

TESTIMONY BEFORE OIL POLICY COMMITTEE

Mr. BIBLE. Mr. President, today, the Oil Policy Committee opened hearings in Washington on the effectiveness of the voluntary guidelines announced by the administration last month.

The Members of this body are well aware of the critical fuel situation in this Nation. For months, various Members of the Senate have been warning the administration that we faced a major fuel shortage this summer and outlined a number of realistic and hard-hitting proposals to deal with this situation.

Indeed, I think it is fair to say the Senate has provided the only leadership in developing the programs necessary to see our Nation through this critical period. And I think there is no question that the Senate's contributions on the energy issue are due in large measure to the splendid leadership of my distinguished colleague, Senator JACKSON.

In my judgment, no elected official in America possesses more knowledge and expertise on this critical problem than Senator JACKSON. Had the administration listened to Senator JACKSON months ago, our country would not today face the prospect of a serious and widespread fuel shortage.

As we all know, Senator JACKSON was the author of the Emergency Fuel Allocation Act. I am pleased to have had the opportunity to work with him on this bill in the Interior Committee and to have supported it on the Senate floor. In my judgment, his legislation provides a rational, equitable and workable plan to meet the fuel needs of our Nation during the present situation. For this reason, I have urged the Oil Policy Committee to recommend to the President that a mandatory fuel allocation program similar to that contained in the Emergency Allocation Act be implemented immediately, and I ask unanimous consent that my testimony prepared for the committee's hearings be printed in the RECORD.

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

STATEMENT OF POSITION BY SENATOR ALAN BIBLE BEFORE THE OIL POLICY COMMITTEE, JUNE 11, 1973

I appreciate this opportunity to express my view on the fuel shortage confronting our Nation.

During the past two months, I have been receiving daily complaints from those directly affected by fuel shortages. These complaints are coming from every area in my own State of Nevada and from many other areas of the Nation as well. Farmers, ranchers, independent oil dealers and service station operators, taxi operators, to name only a few, are reporting first hand the hardships caused by fuel shortages.

It is clear that we are no longer dealing with the isolated, spot shortages predicted by some earlier this year. Instead, we are confronted by the prospect of a serious, prolonged and widespread shortage which is already having an adverse impact on our economy.

When independent gas stations are closing by the hundreds; when cities cannot get bids on fuel contracts for public services; when major oil companies start rationing supplies to their own outlets; when vital agricultural activities are disrupted; there can be no doubt that our national fuel distribution system has stopped functioning effectively.

In the one month since the Voluntary Allocation Guidelines were announced, the situation has not improved. Many of the complaints that I have received from Nevada constituents and have forwarded to the Office of Oil and Gas have gone unanswered. Informal discussions by my staff with employees in both the home and field offices of Oil and Gas indicate that a number of major oil companies are refusing to comply with either the letter or spirit of the voluntary guidelines. Additionally, these discussions reveal that the Office of Oil and Gas lacks the staff to properly investigate, and then take the necessary steps to resolve these complaints. This situation is intolerable.

Farmers and ranchers throughout Nevada, and indeed, throughout the Nation, are not getting the fuel they need. Planting and harvesting seasons cannot be altered. Time and weather do not wait on voluntary guidelines.

The situation confronting the agricultural producers of my State was eloquently stated by the President of the Nevada Hay Growers Association in a letter to me complaining about the fuel situation in Nevada:

"It is imperative that some action be taken immediately to set forth definite guidelines for the distribution of gasoline to agriculture. If this is not done, and not done swiftly, it will not be a case of the consumers complaining about the price of food, but of the fact that food is unavailable to them at any price."

The priority allocation schedules announced on May 10 have not prevented these shortages. Indeed, it is my understanding that no attempt has been made to allocate the 10 percent reserve mentioned in the guidelines.

Despite the voluntary guidelines, independent oil dealers and service station operators in Nevada are being forced out of business. Already a number of stations are closed and others are faced with the prospect of closure in the very near future.

A related aspect of the present situation is the rapidly increasing cost of gasoline. One taxi company in Las Vegas informed that within the past month, its supplier has increased the per gallon price by nearly 25 percent.

Another major failure of the voluntary program which I want to call to your attention is the exclusion of taxi cab companies from priority consideration for fuel. This decision is threatening to sharply curtail taxi service in many areas of the Nation, including Nevada, at the very time when such service is most vital. Cabs provide emergency transportation for the sick and the elderly. They transport medical supplies and other essential products from the store to the consumer. And they provide effective mass transit for commuters and travelers who might otherwise use their personal cars and thereby aggravate the fuel situation.

Nearly two months ago, Congress gave the President the necessary authority to invoke mandatory allocation, but he chose instead to announce the voluntary guidelines. It is now clear that the voluntary program is not working. For this reason, I urge you to immediately impose a mandatory allocation program patterned after the Emergency Fuel Allocation Act passed by the Senate on June 5.

This legislation is the product of careful and deliberate consideration by the Senate and contains a rational, equitable and workable plan to help see us through the present fuel crisis. It provides for the needs of independent dealers and service stations, and it establishes a realistic schedule for priority allocations to those segments of our economy and to governmental agencies which are vital to the Nation.

In my judgment, it is essential that such a program be implemented as quickly as possible. Continued delay on the part of the Administration can only serve to aggravate an already critical situation.

AEC UNDER PRESSURE

Mr. BEALL. Mr. President, I think it is becoming evident that the Nation and the world are reaching the twilight of the fossil fuel age. More and more, we are being forced to turn to other forms of energy, with nuclear energy promising to be the fuel of the future. As evidence of this increase in nuclear power, by the end of 1972 this Nation had 27 nuclear electric generating units operating, 55 in various stages of construction or in the review process for operating licenses, and 34 units now awaiting clearance for construction permits.

However, as all of my colleagues know, this tremendous expansion in nuclear generating capacities carries enormous responsibilities, which are borne by the dedicated and highly competent personnel of the Atomic Energy Commission. It is these public servants who are charting our country's course toward the safe use of nuclear energy.

One official whom I believe deserves special recognition is L. Manning Muntzing, Director of Regulation for the Atomic Energy Commission. It falls upon him and his division to protect the public health and safety to preserve our environmental quality and to maintain the national security of our Nation. Obviously, there are few more important challenges in Government.

Recently, the June issue of Government Executive carried an article dealing with the work of Mr. Muntzing and his division, which I found most interesting and enlightening. I ask unanimous consent that the article entitled "AEC Under Pressure" be printed in the RECORD so that others might have the opportunity to examine this.

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

AEC UNDER PRESSURE

Barely a decade ago, if the Atomic Energy Commission's (AEC) regulatory staff issued one decision on a nuclear power plant construction application per year and had one or two more pending, that was a big activity. Not any more.

Just since 1966, when only some 20 nuclear power plants were licensed to operate and/or be built, AEC's regulatory function has literally exploded in scope and volume. At year-end 1972, for instance, 27 nuclear electric generating units were AEC-licensed to operate at full or partial power; 55 were in various stages of construction or in the review process for operating licenses; and 34 other proposed units were under review for construction permits. Projecting, among other things, the more-than-40 nuclear reactor-generators currently on order by public utilities but not yet under AEC licensing review, the regulatory staff anticipates its "unit workload" to climb from that 116 to 171 or possibly more by the end of Fiscal Year 1974.

Thus, in budget hearings this Spring, AEC Director of Regulation, L. Manning Muntzing asked the Joint Committee on Atomic Energy for $54.5 million in FY 74, a jump of $15.2 million or 39% over his FY 73 budget. His request calls for an increase to 1393 (compared to 879 in FY 72) in full-time regulatory staff employees. Though three key functions, *viz.* Development of Regulatory, Standards, Inspection and Enforcement, and Management Support, all seek more funding, the fourth, Licensing, will require nearly half ($25.6 million) the funds requested—a jump of 39% over the licensing budget for FY 73 and more than twice the licensing expenditures ($12.6 million) for FY 72.

But numbers hardly begin to describe the growth in complexity and controversy of AEC's regulatory responsibility for the public and private use of nuclear materials and facilities. It is hard to think of another Government agency that sits so clearly caught in a crossfire between public worry over economics—in this case, of an energy crisis—on the one hand and public fears over environmental protection on the other.

Typically, in one recent exchange, it was hit:

By Ralph Nader and a self-styled Union of Concerned Scientists that it had "vetoed the AEC's own safety experts and sided with the industry by proposing (new) safety standards with glaring inadequacies (but) which will not interfere with reactor licensing." The charge, Muntzing told *Government Executive* succinctly, "is technologically not supportable."

By industrialists at an association meeting in Washington that, in view of today's "genuine crisis in energy," where the inventory of nuclear power plants today "is where it should have been 10 years ago; and would be were it not for AEC hypersensitivity to uninformed public criticism." Muntzing has heard that before. Said he in November, 1971, a month after he was appointed to his present post, "The AEC is here to serve the public interest as a whole. Its purpose is to achieve and enforce public goals. To be specific, the AEC's primary role is to regulate light-water nuclear power reactors, not to promote them."

In sum, the Regulatory mission is "to ensure that activities involving nuclear materials and facilities are conducted in a manner which will protect public health and safety, preserve environmental quality, and maintain national security."

EXPERIENCED SOME "BLOWDOWNS"

How well they've done so far is on the record. Not since the first use of a nuclear reactor to generate electrical energy has any public utility employee or member of the Public been injured by the failure of a reactor and the accidental release of radioactivity—an amazing record in an advancing, high-technology industry. Notes Muntzing, "Probably the worst thing we can say we've experienced are some 'blowdowns,'" i.e., the unplanned escape of reactor coolant because the safety valves, after opening as they should, failed to close.

Pointedly, a safety projection by AEC, based on present and predictable future safety requirements, shows that by the year 2000, when some 1,000 nuclear power plants are expected to be in operation, the likelihood of a catastrophic accident occurring are predicted to be one chance in 100 billion per year.

As to the radioactivity permissible in routine reactor discharges, Muntzing says the standard is "as low as practicable" which, he says, means "as low as practically achievable, taking into account the state of the technology and the cost of improvements in relation to their benefits." That translates into saying that, in general, the annual exposure of individuals will be about one percent of the limits set forth in Federal radiation protection guidelines; or, in essence, the equivalent of the natural radioactive exposure a person would receive in a round trip airline flight between Washington, D.C., and San Francisco.

The industry says that is excessively severe; but says Muntzing, "Where the technology to achieve (those standards) is available, (the uncertainties) should be resolved in favor of the public." His objective: "We have a very tough regulatory program. We want to be fair but we will be firm, too."

Specifically, AEC regulations build into nuclear power plant operation three levels of defense:

1–A primary level which, in simplest terms, means seeing that everything in the system, thick walls, redundant controls, etc., is designed and built to—and does—work right;

2–A secondary level of defenses which assumes even if it is built right, the plant will have an "early alarm" system, with back-up systems, to shut down the plant in case something doesn't work right anyway;

3–A third level which postulates that even beyond the first two levels it is hypothetically possible to have a failure of several redundant protective systems simultaneously with the accident they are intended to control. Thus, the third level demands plant features and equipment, such as emergency core cooling systems (ECCS) and containment structures to further protect public health and safety.

Maintaining and improving that "defense-in-depth" is an endless effort involving thousands of man-hours of continual study, research, and data gathering both from plants in operation and from industry and AEC research and development programs—and change in the regulations to adjust to the new knowledge. And even beyond that, says Muntzing, "we'll listen very carefully to anyone who feels there is a problem—just to make sure we haven't overlooked anything."

Best recent example: the regulatory staff received, from what turned out to be a disgruntled industry employee, an anonymous letter complaining that pipes at one nuclear site were in the wrong location. They rechecked every plant and plans for proposed plants in the entire inventory to be sure there was no problem, or to require corrections where problems did exist.

Sums up Muntzing, "We are very sensitive because we are determined to listen to every point of view, though," he adds, "sometimes a point of view has more emotion in it than technical contribution to make."

Nor, as anti-nuclear power critics often suggest, does the regulatory staff work behind closed doors. "We operate in the context of public hearings," says Muntzing. "It is mandatory on a construction permit request and at the public's option on an operating license." Moreover, they will voluntarily release to any "intervenor," as these public inquirers and/or objectors are called, internal AEC memoranda dealing with any problem being raised, as well as make available AEC or AEC laboratory personnel requested for questioning by an "intervenor."

But one thing all that openness does mean is that a contested hearing is the rule rather than the exception—which serves largely just to add to the regulatory staff's legal and technical workload. But there is more. On top of the sheer volume increase in construction and operating license applications, is the requirement that AEC must continue even after that to inspect power plants for regulation compliance throughout their operating life. On top of the public hearings concerning plant safety, the staff must prepare draft and final reports on the environmental impact of both operating and proposed new plants.

This task, under the National Environmental Protection Act, was laid on the AEC regulatory staff by the famed (or infamous, as the viewpoint may be) Calvert Cliffs (named after a plant going in near Baltimore, Md.) decision. Rendered in mid-1971, it caught the staff largely unprepared and they are only now beginning to work themselves out from under the burden of doing some 60 environmental-impact studies right away, let alone getting on schedule with the rising volume of new site applicants.

TRADEOFFS TO BE EVALUATED

Of their track record to date on the environmental side, Muntzing thinks "The public is satisfied generally with the routine operation of the plants. There is virtually no air pollution, and when necessary, alternative means to control thermal pollution have been incorporated." But, he suggests, more work needs to be done to evaluate just how much heat pollution a receiving body of water can afford to accept above its ambient natural temperature.

"There are tradeoffs that have to be evaluated," he said. "Cooling towers control the thermal pollution problem but they evaporate water, a problem if water is scarce." In one plant location a court-imposed restriction resulted in "thousands of acres of land being torn up to recycle water to avoid heating some 50 acres of water in a bay." Muntzing's point: "It is possible to create some problems worse than the one to be solved."

The builders and buyers of nuclear power plants are less patient about such things. Officials among the major nuclear reactor builders (Westinghouse, General Electric, Babcock & Wilcox, Combustion Engineering, Gulf General Atomic) and hosts of public utilities claim all this public outcry not only has ballooned the initial capital cost of nuclear power plants, but is largely uninformed and unwarranted.

Though they are almost all privately angry, one, Westinghouse Electric Corp. Chairman Don Burnham, summed up the complaint in public recently. Said he: "It is inconceivable that the opposition of a relatively few people could be permitted to halt or even slow down progress in nuclear power which represents man's greatest resource for meeting his future energy needs and one of his most effective tools in the fight against air pollution . . . .

"If those misguided opponents of nuclear energy should be successful in blocking its

application at this time when our Nation is facing a genuine crisis in energy, the Nation would suffer a setback of major proportions."

Fending off industry's complaints to override these "misguided opponents" and get on with the program is only one of Muntzing's problems with the industry. Another: "We are just beginning to get into antitrust problems, primarily holding hearings on matters of the relationship with small public utilities which want to buy power at a competitive price." (Though nuclear plants cost more to install, they have a lower operating cost over the life of the plant—that, plus fuel availability, being the major reasons the big public utilities, which can afford the downpayment, buy them.)

Still another industry growl: AEC's announced plan to raise its license fees. Indicative of the range: a construction permit fee would increase from $300,000 to $760,000; an operating license fee from $410,000 to $805,000; the annual fee from $36,000 to $195,000.

The new rates will produce an estimated $32 million in FY 1974. Charged to cover expenses in connection with handling license applications and inspections, the raises are designed to get the system around to being self-sufficient. Says Muntzing, "We believe since the licensee is getting the benefit from the license, he ought to pay at least the cost associated with his plant or activity."

But the one complaint of the industry most prevalent in the past is the one Muntzing feels he has just about brought under control, i.e., the too-long lapse of time between permit application and AEC approval. More pointedly, notes one industrialist, AEC's regulatory function was in a hole and going nowhere. "Now it looks as though it's turned around." Specifically, out of the average 8–10 years from concept to start of operation to put a plant in, as much as 48 months was consumed from the time application was filed until it produced a license.

In the construction permit phase, for instance, as late as 1970, the safety review alone, on the average took 23 months, but has been whittled down to an average 15 months in 1973. Though the report on it, in each applicant case, is often bigger than the 1.5-inch or so detailed report on environmental impact, Muntzing's objective is that "the time taken needs to be compressed. It must be, which results in the need for additional people."

He acknowledges, "There is no doubt, in the short term, plants have endured delays. AEC bears part of the responsibility, but there have been construction delays, too, and component parts not delivered on time." His goal in months: to compress the review time on valid applications to a maximum 12 months. Performance to date: "We're looking at several requests that may miss by two-three months," a far cry from the past, but "we're not willing in the future to accept even that kind of miss."

THE CHARGE IS NOT SUPPORTABLE

One help: a standardization program which includes AEC's announced intention not to accept any application for a plant in excess of a 1300 megawatt electrical power range. (Sixty megawatt plants were initially the usual size proposed for construction; today, most requests are in the 800–1000 megawatt range.)

Another standardization help: development of standard application forms and of standardized Siting Criteria for Nuclear Power Plants. A third help: increased staff though achieving that buildup is no easy task. To get 25 professional employees, AEC screens an average 400 applicants for the regulatory staff, interviews from those some 100 candidates.

Finally, just as "We have never approved an application as submitted, but in every case have insisted on changes ranging from improved seismic protection, environmental and safety protection, etc.," so the regulatory staff "does not recall ever having received a single application in the past that was complete, adequate and up-to-date." That charge Muntzing levelled in 1971.

Added he, pointedly, "If it is clear that a real effort has not been made to provide the information that we obviously need, we will not accept the application. Industry starts the ball rolling in this game. We cannot carry the ball and make good headway if applicants fumble it each time they file a licensing application."

Apparently such lectures helped. Muntzing's promise today: "We intend to make a licensing decision at substantially the same time the plant is finished. If the construction capabilities of the utilities can be increased, the regulatory function will keep up."

Keeping up will not mean just running in place. Says Muntzing, himself, "In 1962, it was predicted that by 1980 seven percent of the Nation's electrical energy would be supplied by nuclear power. Today, the Federal Power Commission predicts that electrical energy demand will double by 1980 (to 3,200 million megawatt hours) and double again by 1990.

"Their projections call for nuclear power, which in 1970 supplied 1.4% of the Nation's electrical power generation, to supply 28% in 1980 and 49.3% in 1990."

MONTANA'S NEW STATE LIBRARIAN

Mr. MANSFIELD. Mr. President, Montana has had the great fortune to have one of the most able public librarians at its service for many years. During her work at the Great Falls Public Library, the facility has grown almost twofold in a 19-year period. The Great Falls facility is now one of the best in the State with a large number of volumes. The woman most responsible is Mrs. Alma Jacobs, who will leave Great Falls on August 1, to become the new State librarian. Not only has her record of service to the city of Great Falls been remarkable, but she has been most active in the expansion and development of the rural library service program throughout the State.

The city of Great Falls will miss Mrs. Jacobs, but I know that the State of Montana will benefit greatly in her new capacity as the State librarian. I wish her every success and I know that the Montana congressional delegation will give her every support in the future development of the library services program in Montana.

Mr. President, I ask unanimous consent that an editorial appearing in the June 9, 1973, issue of the Great Falls Tribune be printed in the RECORD.

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

LOGICAL STEP FOR MRS. JACOBS

When Mrs. Alma Jacobs closes her desk at the Great Falls Public Library Aug. 1 to become state librarian, she will leave behind an enviable record of service to readers of this four-county area.

Circulation of the Great Falls library grew from 274,954 volumes a year to 566,594 in the 19 years Mrs. Jacobs has been librarian here, but these figures are only part of the story. During her administration, a new library, outstanding for its beauty of design yet completely functional, has been built and staffed. Library service has been extended to neighboring counties through the federation program.

Since this program was launched in 1959, Mrs. Jacobs has been one of its most enthusiastic advocates. The chance to help counties in other parts of Montana obtain more adequate library service in the same manner constitutes the challenge which draws her to her new position at the state level.

Most states now have some plan for extending library service to their citizens on a regional basis, but in Montana the principle of local autonomy has been followed more rigidly than elsewhere. In the Pathfinder Federation centered in Great Falls, for example, each of the eight participating communities has its local library board which sets policy, maintains the library and staffs it. But books are purchased through the foundation, giving each library advantage of the quantity discount, and books are cataloged in the central library, relieving the local librarian of that tedious chore.

Through operation of the bookmobile, books are constantly being rotated so no one has an excuse to complain of boredom because he has "read every book in the library." New books are brought in regularly from the central library and others moved on to another location.

The existing federations and their respective central libraries, besides Pathfinder here, are Northwest, Kalispell; Sagebrush, Miles City, and Southcentral, Billings. As a result, readers in 13 counties now enjoy as modern library service as those in the four keystone counties—Cascade, Flathead, Custer and Yellowstone.

Moving into the larger field, with the goal of library service for every county in Montana, was the next logical step to take for one as successful as Mrs. Jacobs has been in Great Falls.

THE NATIONAL ENDOWMENT FOR THE ARTS

Mr. SCOTT of Pennsylvania. Mr. President, yesterday's editorial in the New York Times makes an excellent point: The National Endowment for the Arts once again faces Congress to seek $72.5 million in funding, or $0.32 per U.S. citizen. This compares with $1.40 for each Canadian, $2.40 for each West German. The editorial urges the House to "do itself honor by acknowledging, as the Senate has, the needs of the human spirit," by approving the request in the full amount.

I ask unanimous consent that this fine editorial be printed in the RECORD.

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

ARTS AND HUMANITIES

In the next few days the House of Representatives will vote on renewing funds for the National Endowment for the Arts and its twin-agency for the Humanities. The bill would authorize somewhat less money than the corresponding measure already passed by the Senate—less, for that matter, than the amount President Nixon requested—but it is good enough to warrant the hope that it will be passed intact and by so large a margin that the Appropriations Committee will be discouraged from any attempts to cut it.

Administration and Congress have been growing more generous in recent years in the support the Federal Government gives to the arts and humanities. But unfortunately the costs of maintaining such expressions of civilization as theater, museums, orchestras and dance companies, and of keeping their personnel alive and active—these, too, are relative. The point has been made that in a country of 230 million people, even the pro-

posed Federal allowance of $72.5 million for the arts will come to about 32 cents a head, compared with the $1.40 put up by each Canadian and the $2.40 by each West German.

Yet even this modest assistance would help struggling institutions to jump the gap of rising costs without having to price admission tickets out of the market. In view of groups, indeed to the cultural life of the nation, the House could only do itself honor by acknowledging, as the Senate has, the needs of the human spirit.

SENATOR BIBLE'S CONTRIBUTIONS TO OUR COUNTRY'S PARK AND RECREATIONAL RESOURCES

Mr. JACKSON. Mr. President, as we note the environmental problems that confront our country today, we realize more than ever the priceless value of our national park system and other Federal estate and local recreation programs. The Congress has expanded the Nation's parks and these programs on an unprecedented scale in the past decade.

For this growth of their recreation resources the American people can thank, in large measure, the senior Senator from Nevada, Senator ALAN BIBLE. Largely through Senator BIBLE's leadership 86 areas were authorized by Congress for addition to the national park system alone in the past 15 years. Add to this, the numerous historic sites plus the many additions to parks and recreation areas and one has some idea of the magnitude of the accomplishments that have been realized under the Senator's guidance.

His contributions prompted the authors of the Ralph Nader Citizens Look at Congress to conclude that "ALAN BIBLE's name is synonymous with parks in Federal and private lands all over this country."

In the years ahead we are certain to see unprecedented use of our park and recreation areas. It is gratifying to realize that we have available the guidance and leadership of this Senator whose rich experience in the field of park and recreation legislation is unsurpassed in the country today.

KEY COMMITTEE POSTS

Senator BIBLE has been a member of the Interior and Insular Affairs Committee for 18 years. Appointed in 1955, he has chaired the subcommittee responsible for parks and recreation since 1961.

Senator BIBLE also had been appointed to the Appropriations Committee in 1959. During the 1960's he accepted increased duties on the Subcommittee for Interior and Related Agencies as the distinguished subcommittee chairman entrusted Senator BIBLE with rapidly expanding responsibilities. Consequently, Senator BIBLE was active in negotiating and funding of the National Park Service, the land and water conservation fund, the Forest Service, and other public land and wildlife agencies well before he became subcommittee chairman in February of 1969.

THE LEGISLATIVE RECORD

A listing of the legislation Senator BIBLE has piloted into enactment by Congress in the 1960's and 1970's reads like a rollcall of the Nation's national parks and historic treasures.

In the 87th Congress Senator BIBLE guided through legislation for Cape Cod, Point Reyes, and Padre Island National Seashores; Piscataway Park; Lincoln Boyhood National Monument; Theodore Roosevelt, Sagamore Hill, and Frederick Douglass Home National Historic Sites and eight other areas. In the 88th Congress he was successful in securing passage of bills authorizing Canyonlands National Park, Ozark National Scenic Riverways, Fire Island National Seashore, John Muir National Historic Site and six other significant areas.

In the 89th Congress he led action authorizing Guadalupe Mountains National Park, Assateague Island and Cape Lookout National Seashores; Pictured Rocks and Indiana Dunes National Lakeshores; Delaware Water Gap, Bighorn Canyon, and Whiskeytown-Shasta-Trinity National Recreation Areas; Nez Perce National Historical Park; Herbert Hoover National Historic Site, and 11 other outstanding areas.

In the 90th Congress, Senator BIBLE successfully piloted legislation to create Redwood and North Cascades National Parks, Appalachian National Scenic Trail, John Fitzgerald Kennedy National Historic Site and seven other areas.

He continued to work for major park legislation in the 91st Congress, guiding to enactment bills to authorize Gulf Islands National Seashore, Voyageurs National Park, Sleeping Bear Dunes National Lakeshore, Chesapeake and Ohio Canal National Historical Park, Florissant Fossil Beds National Monument, Apostle Islands National Lakeshore, and Andersonville, William Howard Taft and Lyndon B. Johnson National Historic Sites.

The 92d Congress saw Senator BIBLE excel his previous records in the struggle to preserve parklands for the people. This was evident in the passage of such monumental projects as the Gateway National Recreation Area in New York and New Jersey, and the Golden Gate National Recreation Area in and around San Francisco Bay. Both of these new parks offer urgently needed recreation space for large urban populations.

Four other significant regions were added to the national park system—Cumberland Island National Seashore, with its magnificent beaches and unparalleled natural attributes; John D. Rockefeller Jr. Memorial Parkway, which links Grand Teton National Forest and Yellowstone, Buffalo National River in Arkansas with its 132 miles of uncomparable beauty and Glen Canyon National Recreation Area, which includes an area of over one and a quarter million acres of land and water in Utah and Arizona.

Other legislation authorized funding increases and boundary changes needed for the completion of 27 existing park areas.

Some of the most significant changes saw the addition of 79,618 acres to Utah's Canyonlands National Park, additions which nearly doubled the size of Johnstown Flood National Memorial, Pa., and Adams National Historic Site, Mass., the enlargement of Cowpens National Battlefield, S.C., from 1.24 acres to 845 acres, and authorization of some $30 million to complete land acquisition in the Delaware Water Gap National Recreation Area, N.J.-Pa., which will provide recreational opportunities for some 25 million people in the densely populated Northeast.

Over 1,750,000 acres were authorized by Congress for addition to the national park system during the past 2 years. There are now a total of 298 units in the overall national park setup.

Other projects of far-reaching importance were the Oregon Dunes National Recreation Area on the Oregon coast—32,250 acres—to be administered by the Secretary of Agriculture; second, the Sawtooth National Recreation Area in Idaho—750,000 acres—which contains a 209,000-acre primitive region; third, redesignation of Arches National Monument in Utah to park classification; fourth, the Benjamin Franklin National Memorial in Philadelphia; fifth, restoration of the famous gunboat *Cairo* at Vicksburg, Miss., and sixth, establishment of the Pennsylvania Avenue Development Corporation which will help materially in revitalizing the downtown District of Columbia sections adjacent to the avenue.

New park legislation, however, is only part of Senator BIBLE's contributions. He succeeded in achieving passage of such park and recreation milestones as the Bureau of Outdoor Recreation Organic Act of 1962; the Land and Water Conservation Fund Act of 1964, with subsequent amendment; and the National Historic Preservation Act of 1966 among others. He introduced the national park foundation bill and guided it through to enactment in 1967. And he successfully led the effort to restore the Golden Eagle program.

Quietly and effectively Senator BIBLE has carried out his heavy park and recreation responsibilities now for more than a decade and a half. He has earned, and I am sure he will receive, the gratitude of the American people for his role in preserving their natural, scenic recreational and historical heritage.

A few years ago—even before Senator BIBLE's most recent extraordinary service as chairman of two vital subcommittees—the Senator from Montana, Senator LEE METCALF, appropriately summarized the great accomplishments of the senior Senator from Nevada. During debate on the Redwood National Park bill, Senator METCALF said on the floor of this body:

> When we are talking about conservation and the challenge of meeting the outdoor recreation demands of a growing nation, one man stands at the top in terms of accomplishments. I doubt that enough attention has ever been directed to the man and his work—the senior Senator from Nevada (ALAN BIBLE). During more than a decade in the U.S. Senate, ALAN BIBLE has clearly established himself as a leading conservation figure. Certainly, his record in the area of parks and recreation is unmatched.
>
> As chairman of the Parks and Recreation Subcommittee and, before that, the Public Lands Subcommittee, Senator BIBLE has been instrumental in passing legislation that has added no less than 47 new areas to the National Park system. And that record, I believe, is about to be greatly

extended with the passage in the 90th Congress of bills creating two new landmark national parks—the Redwoods National Park bill we are considering today and the North Cascades National Park and related recreation and wilderness areas. This is a record unequalled by any other Senator in his position in the history of Congress. I submit it is a record that represents the greatest period of recreation development ever witnessed by our Nation.

Senator BIBLE'S calm guiding hand was largely responsible for solving the complex problems that had thwarted progress on the Redwood National Park bill. It was the same effective capacity for overcoming obstacles that made his record of achievement possible.

Under Senator BIBLE'S leadership we have seen the long overdue resurgence of national recreation areas, national seashores, and national lakeshores designed to provide for the badly neglected recreation needs of those in crowded urban areas. We have seen two new national parks—Canyonlands and Guadalupe Mountains. And we have seen many historical parks and national monuments established.

So spoke Senator METCALF. Today, 5 years later, Senator BIBLE continues to lead and to persuade in order to strengthen our National Park system. He seeks to bring about enactment of park and recreation legislation that will enrich American life, instill pride in our national heritage, and benefit untold generations to come.

THE APPROPRIATION RECORD

As chairman of the Appropriations Subcommittee for Interior and Related Agencies Senator BIBLE has been able also to render exceptional service in securing funds for Redwood National Park, Point Reyes National Seashore and other areas, including Forest Service recreation units which are also funded under the appropriation bill handled by the Bible subcommittee.

Significant increases in Land and Water Conservation Fund appropriations in recent years resulted largely from action by Senator BIBLE'S subcommittee. These funds, benefiting State and local recreation programs as well as Federal acquisition of park and recreation lands, rose from $99.5 million in fiscal 1969 to $361.5 million this year—fiscal 1972—under his leadership. Senator BIBLE consistently expressed a keen interest in following through on the authorizing bills handled by his legislative subcommittee with the funds processed by his appropriations subcommittee to get the jobs done.

He stated:

We should not continue to approve a rapidly expanding program of parks and recreation unless we are willing to put up the money. With constantly escalating land values and increases in associated expenses, I consider it essential that funding be expedited wherever possible.

Few expenditures will have such lasting benefit to the Nation. They will permit the acquisition of many private lands which now mar natural areas in the National Park System. They will buy wetlands to assure adequate breeding places of wildfowl. They will enable communities in every State in the Union to provide for their recreational needs by acquiring open spaces, shorelines, playground equipment and wooded parkland.

MILESTONES IN NEVADA

In his own State of Nevada, Senator BIBLE has worked equally hard to secure needed outdoor recreation areas and facilities of national stature. The development of Lake Mead National Recreation Area into one of the most popular units in the entire National Park System resulted largely from his continuing efforts to secure not only needed construction of facilities but adequate land acquisition and staffing for management and protection. And under Senator BIBLE'S bill Lake Mead became the first national recreation area to be sanctioned by Congress. His efforts on behalf of the Lake Mead Recreation Area were recognized by the National Park Service and the Boulder City Rotary Club in 1972 when he was presented with the first annual Charles Richey Award for Distinguished Service.

Senator BIBLE personally went to bat for special allocations from the Land and Water Conservation to help finance important State land acquisition at Lake Tahoe, making it possible to save countless irreplaceable acres of scenic beauty from the bulldozer of commercial development. Senator BIBLE'S legislation also made it possible to expand land acquisition by the U.S. Forest Service to launch a comprehensive Federal study into recreation needs at the lake. Recently he was to secure a major reprograming of Forest Service funds to acquire one of the last major undeveloped scenic areas at Lake Tahoe.

THE FUTURE

In this brief recital of Senator BIBLE'S contributions to our park and recreation resources, we obviously have not been able to enumerate every bill or appropriation which he has nursed to passage.

But perhaps it is not too much to say that every man and woman who wields a canoe paddle will be grateful to him for his role in the passage of the Wild and Scenic Rivers Act, for example. And every American who treads a wilderness trail in the years to come may well thank him for prodding through the Nationwide System of Trails Act. And young and old will benefit in town and city across the Nation from Senator BIBLE'S tireless efforts on behalf of the Land and Water Conservation Act.

Senator BIBLE has left his mark of distinction not only on our magnificent National Park System and Federal recreation program but on a larger sphere of American life as well.

CHESAPEAKE BAY

Mr. MATHIAS. Mr. President, the Chesapeake Bay is a majestic body of water cleaving the eastern and western shores and sweeping down through Cape Charles and Cape Henry to the Atlantic. It carries the ocean commerce of the world.

At the same time, it is the most intimate of waters, with coves, creeks, and harbors of personal dimensions that shelter fishermen and other sailors in stormy weather and invite adventure on the past of the very young and very old.

It is Maryland's especial jewel in her crown of nature's bounty.

It may also become a dead sea.

It is the shipping channel to the Port of Baltimore. Its waters serve the needs of industry, public utilities and fisheries. It is the source of livelihood for watermen and thousands of other persons in many different occupations. The communities on its shores are a home for many of our citizens. And the bay has considerable historical significance.

These diverse interests have created problems. For example, how do we reconcile the demand of industry and the utilities with the need to protect the biological life of the bay?

How do we balance the interests of the economic advantages the bay offers with the interests of environmental protection?

What should be the role of the Federal, State, and local governments?

To help me evaluate all of the various interests that are involved in any consideration of the future of the bay, I am planning to conduct a personal 5-day factfinding tour of the region.

The specific purpose of my tour is to determine whether new Federal legislation is required to protect and improve the bay for the benefit of all who use it. I have talked to a number of shipping and port spokesmen in Baltimore. I shall talk to environmentalists, ecologists, marine biologists, and fish and wildlife experts. I shall seek the advice of county commissioners, mayors, and city councilmen.

After weighing all the factors involved, I hope to be able to determine the best course of action I can take as a Member of the U.S. Senate to enhance the bay in the best interests of Maryland and the Nation.

There seem to be at least five possible general approaches to the future of the bay and I will consider them all. They are:

First. An interstate compact, similar to the compacts created for the Potomac River and the Susquehanna River;

Second. Federal "gateway" legislation, similar to that enacted to protect the future of the San Francisco and New York-New Jersey shoreline area;

Third. A Federal-State task force or a series of task forces that would serve in an advisory and coordinating capacity;

Fourth. The use of the existing Federal framework of laws concerned with the problems of waterways and coastal areas; and

Fifth. Designation of the States or localities involved as the governmental units with principal responsibility and authority for the protection and enhancement of the bay.

Whether any of these courses of action, or some other approach is the best direction to take needs careful study—and that is the purpose of my tour.

It is clear, however, that we must act quickly if we are going to save the bay from the cross-currents of sometimes conflicting interest, that might do more harm than good unless they are brought together into an effective program. That

is the type of program that I want to develop.

My tour will begin June 22 in Baltimore Harbor and will end June 26 here in Annapolis.

In those 5 days, I will visit communities on both sides of the bay and talk to everyone I can who has an interest in the bay.

I will do most of my traveling on a boat, which I am using through the generosity of D. Eldred Rinehart, who will be skipper and navigator.

With the assistance of Governor Mandel, Secretary Morton, Senator BEALL, Maryland Members of the House of Representatives and many others who understand the problems of the bay—and with the help of all Marylanders who treasure this magnificent waterway as much as I do—I hope that we will be able to do whatever is necessary to protect this valuable resource for all time.

Father White described the bay in 1634 in these words—

Birds diversely feathered—eagles, swans, hernes, geese, bitters, duckes, partridge read, blew, partie coloured and the like, by which will appreae, the place abounds not alone with profit, but also with pleasure. The most delightful water I ever saw (lies) between two sweet landes . . .

Our challenge is to restore it to this natural condition and yet to continue to live near it and on it without destroying it.

THE NATIONAL LAND USE POLICY AND PLANNING ASSISTANCE ACT

Mr. TUNNEY. Mr. President, on Thursday, June 7, 1973, the Senate Interior Committee reported the National Land Use Policy and Planning Assistance Act. As a cosponsor of this bill, I am hopeful that this essential piece of legislation receives early consideration by the Congress.

Land use planning has remained substantially untouched by national policy and should be a priority issue for this Congress.

Although it is difficult at this stage to predict the precise impact of the bill on existing State law, general observations can be made. At this point in the RECORD, I ask unanimous consent to print an analysis of the impact of S. 268 on existing California statutes:

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

S. 268

STATUS OF CALIFORNIA STATUTES

Informational components

Inventory of Land and Natural Resources; Partially complies—Gov't Code Section 65570.

Compilation of Socio-Economic Data; Complies—Gov't Code Sec. 65041 and Public Resources Code Section 27300.

Forecast of Future Needs; Complies—Gov't Code Sections 65041–65049.

Inventory of Public Lands and Needs and Priorities for Use of Federal Lands; Does Not Comply.

Inventory of Financial Resources for Land Use Planning; Complies—Gov't Code Section 65049.

Inventory of State and Local Activities which Have Land Use Impact; Partially Complies (Agriculture only) Gov't Code Section 65302.

Method for Identifying Large-Scale Development and Projects of Regional Benefit; Does Not Comply.

Inventory and Designation of Areas of Critical Environmental Concern or Impacted by Key Facilities; Could Comply with Broad Interpretation of Section 65040(a) and 65040(g) 65560, 65563(b) of the Gov't Code.

Technical Assistance and Training Programs; Complies—Gov't Code Section 34212 and Section 65040(i).

Exchange of Land Use Planning Information and Data Among Governmental Units; Complies—Gov't Code Section 64040 and Section 65042.

Coordinating Functions

Method for Coordinating State and Local Agency Programs; Does Not Comply.

Coordination of Interstate Aspects of Land Use Issues; Partially complies in limited areas i.e. Lake Tahoe Regional Commission Gov't Code Sections 67000–67130.

Public Participation

Public Hearings on Statewide Planning Process; Probably Complies—Gov't Code Section 65043 (hearings are not mandatory) Public Resources Code Section 27420(b).

Participation by Public in Formulating Statewide Planning Process; Probably Complies—Gov't Code Section 65043 (public participation procedures are not mandatory):

State Land Use Planning Agency

Primary Authority for Development and Administration of State Land Use Program; Partially Complies. The Office of Planning and Research is the planning authority. Administrative authority is lacking.

Coordination of Planning Agency with State Agencies Responsible for Environmental Matters; Complies—Gov't Code Section 65040.

Authority to Hold Public Hearings and Permit Public Participation in Developing State Land Use Program; Complies—Gov't Code Section 65043.

Procedure

Administrative Appeals Procedure; Complies only with regard to the coastal areas. Coastal Conservation Act; Public Resources Code Section 27433(a) thru (c).

Judicial Review for Determining Compensation for Taking; Same as above; Public Resources Code Sections 27424–27425.

PERMIT OR APPROVAL SYSTEM

Overview

Opportunity for Public Hearings for Revision of Permit System; Complies with local zoning and open space plan. Government Code 65804 also Complies with regard to the coastal areas. Coastal Conservation Act; Public Resources Code Section 27224 and Section 27420(b).

Biannual Revision of Guidelines and Rules; Does Not Comply.

Assurance that Taxation Policies are Consistent with Goals of State Environmental Protection Policies; Does Not Comply.

Procedures

Public Hearings for Issuance or Approval; Complies with local zoning and open space plan. Government Code 65804 also Complies with regard to the coastal areas; Coastal Conservation Act; Public Resources Code Section 27224 and Section 27420(b).

Administrative Appeals Procedure and/or Judicial Review; Same as above. Public Resources Code Section 27423(a) thru (c).

Public Availability of Information; Same as above. Public Resources Code Section 27422.

Public Announcement in Advance of Issuance; Same as above. Public Resources Code Section 27422.

Advisory Council of Elected or Appointed Officials; Does Not Comply (could exist on an informal basis).

STATE LAND USE PROGRAMS

Methods of Implementation

Direct State Land Use Control; Complies only with regard to coastal areas. Coastal Conservation Act. Public Resources Code, Sections 27000–27650.

Implementation by Local Governments According to State Criteria and Guidelines with State Veto Power; Does Not Comply.

Implementation by Local Governments According to State Criteria and Guidelines with Judicial Enforcement; Partially complies. Sec. 65567–Gov't. Code.

Exercise of State police powers

Prohibit Land Use Within Areas of Critical Environmental Concern Impacted By: 1. Key Facilities; Complies only with regard to coastal areas. Coastal Conservation Act, Public Resources Code Sections 27000–27650.

2. Potential and Use for Regional Benefits; Same as above.

3. Large-Scale Developments or Subdivisions; Same as above.

EVERETT AND ELIZABETH JOHNSON HONORED BY BOY SCOUTS OF AMERICA

Mr. MATHIAS. Mr. President, last month two Marylanders, Everett and Elizabeth Johnson were awarded the highest commendation of the National Capital Area Council, Boy Scouts of America. In recognition of their long and dedicated years of service, Mr. and Mrs. Johnson received the Silver Beaver Award and the Silver Fawn Award, respectively. I know I speak for all Marylanders in voicing my admiration for these outstanding community leaders, and I ask unanimous consent that an article from the Frederick, Md., Post dealing with the annual recognition dinner of the Francis Scott Key District in honor of Mr. and Mrs. Johnson be printed in the RECORD.

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

MYERSVILLE COUPLE AWARDED SCOUTING'S HIGHEST HONORS

Everett and Elizabeth Johnson of Myersville were awarded the highest honors of the National Capital Area Council, Boy Scouts of America, at the Annual Recognition Dinner of the Francis Scott Key District, Saturday, May 5 at the Junior Fire Hall, on North Market Street. Everett Johnson received the Silver Beaver Award and his wife, Elizabeth received the Silver Fawn Award, for lady Scouter's. Mrs. Johnson is the first recipient of the Silver Fawn in the Francis Scott Key District.

The majority of Everett Johnson's life has been involved with Scouting. In 1920, he began his Scouting career as a Scout in Troop 39, Washington, D.C. For 30 years, as an adult leader, Johnson has influenced Scouting wherever he's lived. In Bucks County, Pa. where there was no Cub Pack, he helped Mrs. Johnson and other parents organize Pack 45 and became its first Cubmaster.

Arriving in Myersville, he helped the Lions Club organize its first Scout unit, Troop 273, and became its first Scoutmaster. In Stucket, N.Y., he helped organize Post 70 and became its first Advisor.

While living in Pennsylvania, he was also District Organization and Extension Chairman. In Denver, he was an Assistant District Commissioner and until 1971 he was an ADC for Francis Scott Key. Johnson currently serves as Exploring Program and Service Chairman. He also assists at Roundtables and with Cub training. He has also provided

leadership and assistance at numerous district camporees, field meets, swim meets and first aid contests.

In addition to his many Scouting activities, he has fully supported his community. Johnson has taught Sunday School, has held the offices of Secretary and Vice-President of the Myersville Lions Club and has helped the Lions sponsor three Little League teams. Furthermore, he has worked for 27 years as a voluntary public health counselor for problems related to alcoholism.

In the last 30 years, through Mrs. Johnson's dedication to Scouting, many children have received outstanding Scouting experiences. Mrs. Johnson has given tirelessly of herself, often without thanks, to serve boyhood.

In 1949, in Bucks County, Pa., Mrs. Johnson helped her husband organize Pack 45 and served as its first Den Mother. Here in Francis Scott Key she helped organize Pack 1051 and has served as Den Leader Coach for that Unit. She is currently serving as District Den Leader Coach and conducts Den Leader sessions at the District Cub Roundtables. There have also been many instances when she has trained Den Mothers and District volunteers as the need arose. She has actively served Girl Scouting as Committee Woman, Junior Girl Scout Leader and as Troop Service Director. She has also been instrumental in the organization of several Girl Scout Units.

Besides her Scouting experience, Mrs. Johnson has been active in the PTA and was a member of the Homemakers Club.

Mr. and Mrs. Johnson live in Myersville. They are retired and have two grown sons. She has integrated Scouting with her family life, supporting and attending meetings with her husband, enabling her sons to reap the full benefits of an active Scouting program. Also she has worked with others to make a Scouting program possible in communities where none existed, organizing and training leadership then following up with an active well rounded program.

The Silver Beaver and Silver Fawn were presented by Niemann A. Brunk, the National Capital Area Council's Silver Beaver Committee Chairman and by Grayson B. Haller Jr. the District Chairman for Recommendation to the National Court of Honor.

The recognition dinner is held every year to honor those persons who unselfishly give of their time to support Scouting activities in the Frederick area.

The Francis Scott Key District, Boy Scouts of America is a participating agency of the United Giver's Fund.

GENOCIDE: THE THREAT OF MENTAL HARM

Mr. PROXMIRE. Mr. President, article II of the Genocide Convention states that:

The crime of genocide shall include the act or the intent to cause serious bodily or mental harm to members of the group.

Although this would seem self-explanatory there are critics of the convention who queston the use of the phrase "mental harm." This, they maintain, is far too ambiguous for inclusion in an international agreement.

For most, the language of the treaty itself is quite straightforward, but the implementing legislation recently introduced dispels any remaining doubts. Mental harm is described as:

Any act which causes the permanent impairment of the mental faculties of members of the group by means of torture, deprivation of physical or psychological needs, surgical operation, introduction of drugs . . . or psychiatric treatment calculated to permanently impair the mental process.

The atrocity which is herein described could be condoned by no civilized society. Nor can there be any doubt as to what is meant by the phrase "mental harm" for the implementing legislation is explicit. We need only remember the activities of Nazi Germany 30 years ago to find wretched examples of the most inhuman mental torture. Brainwashing and brainbreaking are not unknown to our civilization.

Therefore, to prevent the recurrence of these horrible crimes against humanity, I call upon Senators to move swiftly to approve this implementing legislation and ratify a very necessary treaty to outlaw genocide.

MARYLAND'S EDUCATIONAL LEADERS PAY TRIBUTE TO DR. WILLIAM BRISH

Mr. MATHIAS. Mr. President, last month Washington County, Maryland's educational leaders came together to pay tribute to a very capable and deserving individual, Dr. William Brish. Dr. Brish is retiring this year after 26 years of outstanding service as Washington County's Superintendent of Schools. During nearly half of this time he and I have been associated in public service and in the quest for quality education. Our personal friendship covers an even longer period of time.

On May 22, the Hagerstown Morning Herald featured an article relating the highlights of Dr. Brish's retirement dinner. I ask unanimous consent that this article be printed in the RECORD.

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

DR. WILLLIAM BRISH HONORED AT RETIREMENT DINNER

Dr. William M. Brish was the MAN OF THE HOUR recently.

According to the nearly 300 people who had assembled at Fountain Head Country Club to pay him honor he has been the "Man of the Hour For the 26 Years" he has spent as Washington County's Superintendent of Schools.

Hosts for the Retirement Dinner, that drew people from his family and educational circles from far and near, included the Board of Education of Washington County, the Central Office Staff, the Elementary School Principals' Association of Washington County and the Washington County Association of Secondary School Principals.

Coming to Hagerstown to express their sentiments of a job well-done were Dr. James A. Sensenbaugh, state superintendent of schools; Dr. William Schmidt from Prince Georges County; David W. Zimmerman, retired Deputy State Superintendent of Schools, from Catonsville, who served as Dr. Brish's first principal at Thurmont; three of Dr. Brish's Local students, whom he taught at Frederick High School, one of which was Dr. John H. Kehne, who served as the skilled master of ceremonies. The other two were John McCardell of Potomac Edison Co. and E. Mason Hendrickson of the First National Bank of Maryland.

Also present were Dr. Brish's daughters and their husbands, including Dr. and Mrs. David Evett (Marianne), of Cleveland, Ohio; The Reverend Roderick J. Wagner and Mrs. Wagner (Margaret), of Hagerstown; and Mr. and Mrs. David Shenk (Marcia), of Silver Spring, Md.

TRIBUTES BEGIN

The Reverend Mr. Wagner began the parade of profound words of praise in the invocation he gave, paying tribute to his father-in-law for "Leaving a legacy of ideas and pursuing concepts . . . that stirred the fragile wills of youth."

Franklin R. Miller, president, Washington County Board of Education, in a wine toast shared by everyone said, "When he came here we knew he was a scholar. Since then we have found him to be a gentleman. A toast to my personal friend and yours, Dr. William M. Brish."

Members of the committee in charge had not only decorated the room in lavish style featuring pastel flowers and greens, but they had selected the creme de la creme of not only instrumental but vocal music as well. Prior to the dinner, and during the dinner hours, the "Satin Strings 'N Things," from North Hagerstown High, under Marvin Hurley, played popular show tunes for his pleasure.

As part of the entertainment singers from each of the high schools in the county, the Washington County Youth Choral Ensemble, under the direction of William Makell, sang three favorite melodies of the honored guest. The first, "Dancing In The Dark," came from "The Bandwagon," a show with Fred and Adele Astaire, which Dr. Brish and Rachel attended when they were in New York on their honeymoon. The second was a "jazzed up version" of "Lili Marlene" that had been arranged by Makell and John Fignar, after the sheet music arrangements were found to be unavailable. "When You're Smiling" was the final melody, that had piano and a bass fiddle as accompaniment.

Dr. John Kehne, in giving the official "Tribute To Dr. Brish" told how the committee in charge had met in great secrecy, "unbugged" by "The Godfather." He recalled a number of amusing incidents when Dr. Brish was his instructor at Frederick High School, noting also that this was in his "bachelor days" that ended when a mutual friend escorted Rachel to a birthday party. Not too long after this the couple was married.

But, he paid tribute to Dr. Brish as a teacher, noting his diverse interests and his pleasure in working with the students. "He was interested in photography, and organized the Photography Club. Later we all became a part of the Brish family as we worked in the darkroom in their home."

In quoting Will Durant on the quality, personality and character of a teacher, Dr. Kehne said, "Durant said a teacher is more what he is than what he teaches. He must awaken in the learner that restless drive, that insight, that desire to learn. This represents Bill Brish. Washington County is indeed fortunate to have had a person of such capability."

A PICTURE STORY

Feeling that the complexity of the personality of the honored guest was hard to describe, those in charge took to the record to better explain him. Using photos on a wide screen, and a dual process of presentation, they first showed a picture of Dr. Brish as a young boy of perhaps seven, holding a book in his hand, thereby foretelling his interest in learning. The story veered on to a clipping from The Daily Mail, Wednesday February 12, 1947, announcing the appointment of Dr. Brish as superintendent of schools.

Pictures of him, from 1938, at Thurmont, at Frederick High School, at his school in Kent County, at meetings of the board of education at the various schools in this county as they were built; at the Outdoor School in the Catoctins; at staff development meetings; on a cruise to Betterton Beach and down the Chesapeake, staff members in tow, all underscored his interest in

bringing personnel together for better workmanship.

Pictures as he participated in civic events, the United Fund, Washington County Health Association, Washington County Museum and Library, the Boy Scouts, Sister City and his conversation to Wesel via Telstar in 1962, flashed by.

The most significant phase began in 1960 when the Ford Foundation felt that the medium of TV had a contribution for education and set up the five year project of TV in the schools here. A forerunner of the five year stint establishing educational TV in Nigeria, as the result of a visit here by a Nigerian educator, was shown. Dr. and Mrs. Brish were shown as they took off for Nigeria in 1963; to India in 1960 and 1961; and again in 1971, with local educators, made up this panorama.

Visits here by the New York Herald Tribune students, and visitors from many countries who came to observe TV, put the honored educator into the category of an "Educational Ambassador of Good Will."

"Because of his leadership Washington County has modern schools," Dr. Kehne, the narrator stated. "Thirty four of the existing 46 school buildings have either been built or remodeled and 11 more are planned for the near future. The contribution to the building program has been tremendous and the enrollment has nearly doubled since he first began here, with a like number in the increase of teachers."

His contribution to Special Education and the establishment of one of the first Junior Colleges in the State of Maryland were cited, also.

USDA COMMODITY DISTRIBUTION AMENDMENT TO S. 1888

Mr. HUMPHREY. Mr. President, last week the Senate adopted my amendment to S. 1888, the Agriculture and Consumer Protection Act of 1973, to insure that the 2.5 million recipients under the commodity distribution program get enough food under that program to meet their daily nutritional requirements.

The intent of this amendment was to broaden the Department of Agriculture's authority to make commodity purchases to maintain the programed package of some 20 food items for donation to needy families. This would include authority to provide donations to families who need food assistance because of floods and similar natural disasters. The Department's package of food for needy families has been programed to offer some 20 foods whose nutritive value exceeds 100 percent of daily nutritive requirements, except for calories. The use of the term "125 per centum" in the amendment was intended as a description of that nutritive value level. The foods to be supplied in the future for the family phase of the food donation program are intended to be of the kinds of foods and in the amounts that normally have been made available in the past.

ROSS BODDY RETIRES

Mr. MATHIAS. Mr. President, this year Ross Boddy, school community coordinator for Montgomery County's area 5 will retire. Ross Boddy leaves in Montgomery County many friends and a distinguished career as an educator and an administrator.

On May 16 the Montgomery County Courier carried an excellent article outlining the highlights of Ross Boddy's career, from his early days as a teacher in a one-room schoolhouse in Carroll County to his activities over the past 9 years as school community coordinator in Montgomery.

I ask unanimous consent that this article be printed in the RECORD.

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

ROSS BODDY: SCHOOL COMMUNITY COORDINATOR TO RETIRE; TAUGHT FIRST IN ONE-ROOM SCHOOL

(By Lyn Skillington)

Ross Boddy, who taught his first class in a one room school house in Carroll County, will retire this year as School Community Coordinator for Montgomery County's Area 5.

Boddy, originally from Cecil County, aspired to be a teacher when he was in second grade. He completed his college degree at State Teachers and Morgan State and has done graduate work at the University of Maryland.

When he took his first Montgomery County job, it was as principal of Sandy Spring Elementary School in 1935, when that school contained just three rooms.

Since that time he has held a variety of outer county positions as a classroom teacher, principal of Sherwood Annex, assistant principal of Highland Elementary and has served in his present position for the last nine years.

During this period he has made many friends and some of those persons are planning a dinner in his honor which will be held at the Washingtonian Country Club on June 6.

In a recent interview, Boddy told the Courier he has seen many changes in education during the past 40 years. When he began teaching, most schools were contained in one to three rooms and were segregated.

He believes that in addition to having better qualified teachers now, the curriculum and after school activities have also improved.

Boddy would like to see several changes at Sherwood, where his office is based.

First, he wants teachers to somehow make classes more interesting so students will want to go to class instead of cutting.

Second, he supports the six period day. He thinks that more time should be spent on the basics so that a student is an authority on a subject after a year's study.

"Now," says Boddy "a student can get as many as twenty-eight credits when he can only use eighteen of them."

Boddy said the high point of his career is his present job as community coordinator.

In this job he has been able to do many things. He has created after school study halls, organized Teen Clubs, developed swimming programs for underprivileged children, set up Adult Education classes, organized Little Leagues for children who can't afford large organized teams, worked with youth groups and on advisory committees. He has even organized income tax help.

The most satisfying part of his job, he said, has been the opportunity to go into disadvantaged communities and see results as the people are able to learn to help themselves.

Boddy said the best things about the Montgomery School system are the superior teachers, facilities and an abundance of supplies.

But he tempers his praise by saying that the schools seem to be unable to keep tabs on students. Students seem to be constantly roaming the halls and leaving the school premises, he noted.

Boddy thinks that the students' worst problem, especially in the affluent areas, is that they don't have anything for which to work. If they want something, in many cases all they have to do is ask for it. Boddy believes many students don't care about grades or doing well in school.

He does not think that Sherwood has a big drug problem.

Many of the students have experimented with drugs, he said, but he does not believe that there are many hard drug users in the school.

Boddy feels the best way for parents to help raise the standard of their children's education is to create an atmosphere in the home that encourages good study habits.

More information about the June 6 banquet is available from Mrs. Dottie O'Keefe at 384–7603.

ABANDONMENT OF HELIUM CONSERVATION

Mr. MCCLURE. Mr. President, I would like to quote from a U.S. Government report, "The abandonment of the helium conservation program is a disaster, to put it mildly." As a longtime member of the House Interior Committee, a strong advocate for conservation of our natural resources and vitally concerned with our deteriorating environment, I think that statement clearly represents my views. Three items have come to my attention recently:

First. The report from which the quote is taken.

Second. A news release from the Secretary of the Interior.

Third. A news release from the National Science Foundation.

I ask unanimous consent to have printed in the RECORD, excerpts from the report and the two news releases. We all know of our dwindling natural gas reserves, and I cannot understand the rationale behind the Secretary of Interior's decision to terminate a program set up to save the key to the future energy production and distribution.

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

UNDERGOUND POWER TRANSMISSION BY SUPERCONDUCTING CABLE

PREFACE

Background of this study

Since 1947 Brookhaven National Laboratory has built machines that were at the forefront of current technical knowledge. These include the Brookhaven Graphite Research Reactor, the Cosmotron, the High Flux Beam Reactor, and the Alternating Gradient Synchrotron. In the early sixties a research program was begun to develop superconducting pulsed magnets suitable for a very high energy synchrotron. As an understanding of practical ac superconductors was gained it was natural to turn to other applications such as machines and transmission lines. Through 1969 and 1970 an *ad hoc* committee, drawn from the Accelerator Department and the Department of Applied Science, met somewhat irregularly to discuss these topics. In March 1971 a formal study of superconducting underground power transmission was started, supported by the Program of Research Applied to National Needs of the National Science Foundation under an interagency agreement* with the Atomic Energy Commission. Considering the applied nature of much of the work at Brookhaven, it is not surprising that we have taken a hard look at the practical implications of using superconducting cables in the electric power system of the U.S. as it might be in 20 years. This viewpoint, we felt, has been missing to a large extent in many previous studies. The result of this work, "Re-

*National Science Foundation Grant No. AG–251.

port on Superconducting Electrical Power Transmission Studies" (BNL 16339), was published in December 1971. The present report is based on that work. Our conclusions are guardedly optimistic. Although there are many pitfalls in the design of superconducting devices, and many technical problems to be overcome to make a practical system, the use of superconducting cable appears to be beneficial for future electric power networks. In contrast to conventional cables, superconducting cables will not inflict the penalty of relatively large reactive currents, and underground transmission distances of several hundred miles appear feasible for large blocks of power.

Summary of the report

We have been fortunate in persuading Dr. Philip Sporn to write the Foreword on the need for research in electric power and how to finance it. We believe the report will have many readers whose field is neither electric power nor superconductivity, both immensely complicated subjects. For this reason the early chapters mainly provide introductory material in these areas, although in Chapter II forecasts for the next 30 years are used to predict required cable characteristics and helium demand. Chapter IV is a review of current research in underground cable design, including work on superconductivity in this country and abroad. Most of the BNL work is contained in Chapters V and VI. Chapter V contains BNL measurements of losses in niobium-tin at power frequencies, apparently the most comprehensive such data available today. On the basis of these measurements, two conceptual superconducting *flexible* cables are presented. These cables could be manufactured and installed in quite long lengths. Chapter VI is a discussion of some of the implications of using high-current cables, with particular regard to electrical characteristics, reliability, economics, cryogenic equipment design, and operation under abnormal conditions. In electric power systems abnormal conditions, or faults, are misnamed: they are in fact quite normal. Short circuits, lightning strokes, etc., occur frequently and an underground cable must be able to tolerate these conditions without damage or even loss of transmission. It is also noted that extensive use of these cables will tax the helium reserves of the U.S., the only country in the world with any substantial reserves. In Chapter VII the use of superconducting cables in dc transmission schemes is discussed, and conclusions are presented in Chapter VIII.

Acknowledgments

The work described in this report was supported by the National Science Foundation. The Power Transmission Study Group included a Steering Committee and a Working Group. The Steering Committee consisted of J. M. Hendrie, Principal Investigator, J. P. Blewett, and D. H. Gurinsky. The members of the Working Group, drawn from the two departments previously mentioned, were R. B. Britton, E. B. Forsyth, M. Garber, J. E. Jensen, G. H. Morgan, and J. R. Powell, not all of whom were full-time members. E. B. Forsyth was head of the Working Group and editor of this report. We were very fortunate in obtaining the consulting services of Dr. Philip Sporn, Dr. A. Kusko, and Mr. E. D. Eich. Throughout the study period we organized a series of seminars and we are very grateful to the following specialists from outside Brookhaven National Laboratory who presented lectures: Mr. W. Engelmann, Long Island Lighting Company; Dr. H. Feibus, Consolidated Edison Company; Dr. R. W. Meyerhoff and Mr. D. Haid, Union Carbide Company; Mr. S. H. Minnich and Dr. B. C. Belanger, General Electric Company. We also wish to mention the enthusiastic support of many of the Laboratory staff. This has ranged from consultations on topics raised during the study of the speedy preparation of this report.

6.8 Use of Helium Reserves for Superconducting Transmission Lines

The helium reserves of the U.S.[28] are summarized in Table 16, together with estimates of price and availability. The secure reserves will be available until used specifically for helium. The insecure reserves will be largely gone by 2000 A.D., since they are part of the U.S. natural gas reserves which will be burned for fuel. If the Government stops storing helium, as planned, only the secure reserves will be available for superconducting transmission lines and other uses.

TABLE 17.—ESTIMATED USE OF HELIUM RESERVES FOR TRANSMISSION LINES

Year	U.S. generating capacity, megawatt	Power plant construction, megawatt per year	Circuit miles of underground transmission added per year	Fraction of new underground lines ≥2,000 MVA	Total miles[1] of underground transmission ≥2,000 MVA	Use of reserves if all lines ≥2,000 MVA are superconducting[2]		
						Percent secure rich reserves	Percent rich reserves	Percent total reserves
1990	1.0×10^6	7×10^4	800	0.2	(3)			
2000	1.7×10^6	1.3×10^5	1,200	.4	2,000	5.5	1.6	0.8
2010	3.0×10^6	1.0×10^6	1,600	.6	8,000	22.0	6.4	3.4
≈2100[4]	1.0×10^7				25,000	75.0	22.0	11.5

[1] In units of 2,000-MVA lines.
[2] 1.25 MCF of helium is required per circuit mile of superconducting transmission line (2,000-MVA unit size).
[3] Negligible.
[4] Asymptotic level.

It is difficult to predict the growth rate of underground transmission lines. The rate depends critically on what laws regulating transmission will be passed, future siting practices, right-of-way costs, etc. A simple growth law cannot be applied to current installation rates of underground transmission lines.

We have adopted the following argument for generating plants after 1990:

1. Each plant will trigger the construction of some underground cable in urban areas. The average length of an underground link will be 20 miles.

2. The median value of underground transmission-line circuit capacity will increase with time. In 1970, the median value was of the order of 200 MVA; as system capacity grows, larger and larger circuit capacity values will be possible without endangering system reliability. In general, a factor of 10 increase in system load will permit roughly a factor of 10 increase in line capacity. We have assumed that in 1990, 20% of the lines being installed will be 2000 MVA or above; in 2000, 40%; and in 2010, 60%.

3. The gross generating capacity forecast in Table 1 applies. After the year 2000 a decrease in the growth rate begins, so that total generating capacity becomes asymptotic to the level 10,000,000 MVA.

The circuit miles of superconducting cable shown in Table 17 are based on the assumption that as the system size increases an increasing number of circuits over 2000 MVA will be superconducting. In addition, the average capacity of these circuits will increase with time. However, the distance has been calculated for 2000-MVA units; i.e., a mile of 6000-MVA circuit is equivalent to 3 miles of 2000-MVA circuit as far as helium demand is concerned.

On the basis of these assumptions the percentage use of the country's helium reserves for transmission lines may be calculated. Little impact will occur until after the year 2000, when most of the insecure helium reserves in the natural gas fields will be gone, unless a recovery program is started in the near future. Assuming that this is not done, and that only one-fourth of the secure reserves is allotted to superconducting transmission lines, the lack of helium will seriously limit the number of superconducting transmission lines (if they prove technically and economically more attractive than alternative underground transmission schemes). If all the rich reserves are saved and all underground lines over 2000 MVA are superconducting, then the allocation will hardly be enough to build the capacity required for the asymptotic generating capacity of 10^7 MVA. At this level the use of the expensive helium to replace that lost in the operating lines would greatly increase running costs.

The extraction cost of the lean reserves is so high that apparently it will not pay to extract their helium content in the years left before 2000 A.D. The cumulative interest charges on the capital invested in plants to recover helium from the lean reserves will be much greater than the economic savings of superconducting transmission lines over other types of underground transmission. Therefore, only the rich reserves can be counted on for use in superconducting transmission lines.

The helium inventory has been assumed to be 1.25 MCF/mile for a 2000-MVA system. Since extended overload operation depends on heat storage in the helium, this figure could possibly be reduced; however, this depends on overall system optimization.

In summary, widespread use of superconducting transmission lines can be expected to constitute a major demand on the helium reserves of the U.S. The estimates of helium demand do not include the possible use of superconducting power transmission in other industrialized countries. The margin would be improved by the conservation of helium in the rich insecure reserves. This program would have to begin immediately. It is also important to begin research on economic recovery of helium, possibly in combination with other gases, in order to justify capital expenditure on a plant.

CHAPTER VIII: CONCLUSIONS

8.1 The case for superconducting cables

The expansion of the U.S. electric power industry is continuing at a high rate. In the face of environmental and, occasionally, economic pressures, increasing lengths of the power transmission system will go underground. Before the end of the century feeders to urban centers with capacities of 2 to 5 GVA will be required. If portions of interties between regional pools are forced underground, single-circuit capacities up to 10 GVA may be required. Already short links with capacities of about 2 GVA have been installed in the U.S. and Europe. Although

extensions of present technology may permit long lengths to be installed at this power level, it is close to the limit. Superconducting cables, on the other hand, will be economically competitive at about this level and inherently capable of technical development to provide power transmission capability greater by an order of magnitude.

Superconducting cables appear to have many advantages when considered in the context of system operation. Properly designed, they have the following favorable characteristics:

1. The critical length may be as long as several hundred miles.

2. The cable may be designed to achieve surge impedance loading.

3. Heavy fault currents may be carried without tripping and the line will carry rated current immediately after a fault.

4. Extended overload currents may be carried for many hours. Following a suitable recovery period at rated current the overload cycle may be repeated indefinitely without degradation of the insulation.

5. Cable rating is not dependent on soil conditions.

8.2 Specific Recommendations

The use of helium as a dielectric appears to have several disadvantages, including (1) the possibility of poor dielectric breakdown performance, and (2) the necessity for installing rigid cables in 40 to 60-ft sections.

Even in the early stages of conceptual development, cables must be designed to appeal to the utilities, particularly from an economic standpoint. Thus solid or laminar dielectrics are suggested, as they permit the cable to be made in lengths that can be reeled and pulled into place. Two of the designs presented for flexible superconducting cable appear to be technically attractive. These cables are very light compared with conventional cables of the same rating. It has been shown that concentrating on one parameter, for example, magnetic loss, does not lead to optimization of the total design. In particular, the high critical temperature (T_c) and superior current-carrying capacity of niobium-tin compared with niobium allow a more practical line design. Because of the nonlinear properties of helium in the operating range the higher T_c permits a disproportionate improvement in the refrigerator system. In a practical line it will be a complicated problem to optimize the electrical, mechanical, and cryogenic designs of the cable. System requirements such as fault and overload performance will also enter the picture.

Although the study has concentrated on ac transmission, dc may be preferable for certain types of system operation. Some development or improvement of the associated breakers and converters is required, but the cables themselves appear to be relatively simple modification of ac designs. Advantages of a flexible design still apply.

If superconducting cables become standard it is necessary to hoard all the helium possible. In addition to conserving the rich helium reserves, research should begin on economical ways of recovering helium from relatively lean supplies of natural gas before all the reserves are burnt. Helium will be essential for other projects (e.g., fusion generation) besides superconducting power lines. The abandonment of the helium conservation program is a disaster, to put it mildly.

8.3 Future work

In a separate proposal Brookhaven has outlined the work that must be done to develop a successful cable. Some fundamental knowledge is required of dielectric losses and breakdown in the appropriate temperature and pressure ranges. Properties of supercritical helium must be evaluated for use in cooling cable-type configuration. In particular, regions of nonlinear oscillation must be charted. Some of the many properties required in a superconductor for use in a 60-Hz transmission cable are found in niobium-tin. A reduction of magnetic losses at the proposed current density for this material by a factor of 2 to 5 is desirable. In addition, the compound will have to be made more ductile. Methods of depositing thick layers for carrying faults must be devised and tests carried out to ensure that the superconducting layer will not crack or peel during thermal cycling. The cryogenic equipment will require a great deal of very practical engineering development. Refrigeration systems must be developed for long, reliable, maintenance-free periods. In particular, the Dewars containing the cables must be designed for inexpensive mass production and simple installation in the field, preferably by means of a single welding operation at each joint.

An adequately funded program would produce a cable suitable for utility evaluation in about ten years.

INTERIOR AND EEI SPONSOR STUDY OF CRITICAL CURRENTS IN THIN SUPER CONDUCTING FILMS

The U.S. Department of the Interior and the Edison Electric Institute, Inc., have awarded a contract to Stanford University for the study of critical current characteristics of very thin multilayered films of superconducting compounds. The $44,000 one-year project is being funded by Interior and EEI as part of the multimillion dollar Underground Transmission R&D Program of the Electric Power Research Institute.

As described by F. F. Parry, Interior's Underground Electric Power Transmission Research Program Manager, recent advances in superconducting and cryogenic (low temperature) technology indicate that practical superconducting electrical power transmission—where conductor resistance is almost zero—may be achievable within the next two decades. It is highly desirable to develop superconductors in configurations having higher current carrying capacity than superconductor technology presently allows. Such improvements would make it possible to reduce power cable size, thereby lowering the costs for a line of given power capacity, as well as make economically feasible the construction of lower capacity lines (below 1000 megawatts).

Stanford University investigations will involve superconducting samples produced by electron beam evaporation. The layers will be one or two orders of magnitude thinner than those produced by either solid state diffusion or chemical vapor deposition. Compounds will include Nb_3Sn, V_3Si and other Beta tungsten structures of various thicknesses and with different metallic spacers. Successful completion of this project could substantially influence the emphasis and direction of present as well as future superconducting transmission research.

SUPERCONDUCTING MAGNETS TO STORE ELECTRICAL ENERGY TO BE ANALYZED AT UNIVERSITY OF WISCONSIN

The feasibility of storing electrical power in large superconducting magnets for use in periods of high load is being analyzed by researchers at the University of Wisconsin under a grant from the National Science Foundation (NSF).

Efficient, economic, and environmentally acceptable means of storage are sought as a way of lessening requirements for new generating installations to meet growing demand, increasing flexibility in planning power systems, and improving their performance.

The principal present method, "pumped storage," uses generating machines as motors to pump water during slack demand periods to reservoirs at an elevation, which is released for hydroelectric generation when demand is heavy. The creation of artificial reservoirs in natural settings can encounter public opposition.

Superconducting magnets, cooled to just above absolute zero to achieve superconductivity, storing electric energy in their magnetic fields for use on demand, could, if feasible at a high energy capacity, provide a much more compact and environmentally less intrusive storage installation.

Professors Roger Boom, Harold Peterson, and Warren Young of the College of Engineering at the University of Wisconsin are doing the research on the one-year project, with an NSF grant of $124,500. The work comes under the Division of Advanced Technology Applications (ATA) of NSF's program of Research Applied to National Needs (RANN).

According to Professor Peterson, total electric energy used in the United States in 1972 was approximately half of what could have been generated with available capacity. Yet additionl capacity is being planned, he said, because with the exception of pumped storage, there is no practical method now available for storing large amounts of energy which could be generated during off-peak hours for use during peak demand.

Professor Boom explained that "several studies of electromagnetic energy storage systems are being made, and we feel that the use of superconductive inductors appears to be realistic possibility for large power systems."

"A superconducting magnet, wound from specially-fabricated superconducting alloys, operated only at cyrogenic temperatures (approximately —452 degrees Fahrenheit), is essentially a perfect, resistance-free conductor. Very high magnetic energy levels can be stored and maintained at essentially zero loss until discharged."

The feasibility analysis will seek to identify specific problem areas and evaluate the potential of the proposed storage system.

(EDITORS.—Simultaneous release is being made by the University of Wisconsin.)

NATIONAL SCIENCE FOUNDATION—PROJECT SUMMARY

Name of institution (NSF directory name): University of Wisconsin/Madison.

Principal investigator: Boom, R. W., Peterson, H. A.

Proposal number: P2I3300–000.

Title of project: Superconductive Energy Storage for Power Systems.

Address of institution (include branch/campus and component): Department of Metallurgical and Nuclear Engineering, Madison, Wisconsin 53706.

Division (office) and directorate: Advanced Technology Applications/RA.

Program: Energy Research and Technology.

Summary of proposed work (limit to 22 pica or 19 elite typewritten lines): This research is concerned with determining the feasibility of using superconducting coil magnets for storing large amounts of electromagnetic energy. The installed generating capability of the electric power systems in this country is sufficient to produce almost twice as much energy as has been sold in recent years. Because of the current difficulty of adding new generating capability the possibility of doubling the electrical energy sale without the need for additional generating capacity presents a real challenge. The reason for considering superconductive magnet enery storage is the high energy density obtainable from such a system. Preliminary work has uncovered no fundamental technical objection to such a system. All of the energy stored in the superconducting magnet is returnable to the electric power system under smooth continuous control. The only inefficiencies encountered are in the conventional terminal equipment, leads, and the refrigeration system needed to balance the relatively modest terminal, magnetic and mechanical losses. Specific tasks to be performed will be: (1) a superconducting mag-

net design considering such factors as conductor configuration, stress analysis, conductor cooling, optimization of sizes and costs. (2) Input-output circuiting (3) Systems study considering overall response characteristics. Objectives of this work include finding answers to such questions as size limitations of a single structure and design effectiveness for power flow reversibility and damping.

INSTRUCTIONS FOR USE

1. Program Office will complete all items appearing on the first copy; place Proposal Folder copy in the folder; retain Program Suspense copy; and place other copies inside the folder envelope with carbons intact.

2. Grants and Contracts Office will post grant number, amount granted and inclusive project dates on the S.I.E. copy and make distribution of remaining copies.

NANCY BAKER'S ESSAY "TACKLING JUVENILE DELINQUENCY" ONE OF WINNERS IN COLGATE-PALMOLIVE CO.'S CONTEST

Mr. MATHIAS. Mr. President, the Colgate-Palmolive Co. recently published the winning essays in its Tackle America's Problems Contest. As my colleagues probably know, students from all over the country were invited to submit an essay in the form of an inaugural address, defining and offering solutions to what they felt to be America's most pressing problems.

Six thousand junior and senior high school students entered this contest, and 24 winners were chosen. Mr. President, I know I speak for all Marylanders in expressing great pride in 17-year-old Nancy Baker, of Rockville, Md., whose essay, "Tackling Juvenile Delinquency," was chosen as one of the winning entries. I ask unanimous consent that Nancy Baker's essay be printed in the RECORD.

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

TACKLING JUVENILE DELINQUENCY

(By Nancy Baker)

The future of our great nation depends upon the willingness and the ability of America's youth to uphold the moral and democratic institutions which serve as the foundation upon which this nation has been built. A disturbing pattern has developed, however, which could jeopardize the future stability of our nation. America seems to be losing the support of her youth. An apparent deterioration of the moral standards of America's youth concerning the protection of the rights of others and the basic respect for the preservation of what exists has manifested in an alarming trend toward the use of violence and force. Instead of working through the democratic process which is such a vital part of America and instead of upholding the high standards of America's past, America's youth is turning more and more often toward the use of violence, vandalism and destruction.

If I were a President, I would tackle the rising problem of juvenile delinquency in the United States. My plan is based on the idea that juveniles who turn delinquent cannot respect laws which they do not understand and cannot respect the right of others until they can respect themselves. Children who have a positive self-image seldom find it necessary to call attention to themselves through delinquency. By providing the means for the expansion of some already-existing youth programs, I think we can curb the rise of juvenile delinquency in America.

The key to success when introducing law enforcement education to children is to reach the child at an early age. Personal contact with law enforcement officers through a youth police outreach program would help create a positive impression of law enforcement upon children before they are influenced by the negative attitudes of others. With the cooperation of local school systems and community police departments, programs which would meet the needs of each community and would facilitate maximum youth participation could be designed. Giving a child responsibility in law enforcement would build his self-image and confidence. A combination of the AAA Safety Patrol program and the Police Boys' Clubs could be of help in creating a rapport between a community's youth and law enforcement officers. This program might be followed by the availability of paid and volunteer jobs within the police force so that teenagers could get a feeling of the law enforcement efforts in their communities. Making a youth a part of the police force would help teenagers to understand and respect the laws which they might otherwise violate and the system which they might otherwise reject.

A child needs someone to look up to, someone who can teach him right and wrong, and can serve as a model for the child's behavior. A child also needs to feel that someone cares about him. Not all children have parents to look up to, and juvenile delinquents often come from broken homes. Nation-wide Big Brother and Big Sister projects, in which college students "adopt" a child, visit him regularly, and serve as a parent-image, could help provide children from broken homes with the guidance they need.

The family is a major influence in the prevention of juvenile delinquency. A child's parents are in the best position to guide a child toward a productive life. In order to help parents recognize their children's needs, child guidance classes could be held in a program similar to the Red Cross Baby Care classes now available. Parents in these classes would be instructed by child-psychologists in the necessary elements in guiding a child toward a positive self-image and a realistic view of the necessity of law and order.

The programs necessary for the prevention of juvenile delinquency are already in existence in America. If I were President, I would see the funds and personnel were devoted to youth opportunities and youth guidance programs so that we might deal with the problem of juvenile delinquency in America in a preventive rather than a correctional capacity.

During elections, I would propose that the federal government distribute a voting record of all eligible candidates, and thus present the voting public with factual information on which to base their choice of candidates. Such a factual policy would do much mudslinging that has recently accompanied our campaigns.

I would also propose the direct election of the President. In all truthfulness, there are many people who do not understand the electoral system of electing a President. I feel that the voice of the people should elect the President. That would truly express the wishes of the people, and it would also eliminate any possible "political deals" that the people feel might arise.

The only way that we can enjoy a true democracy is if the people support it. Not just a few people who get out and vote once a year, but thinking, logical, well-informed citizens who participate in their government. That is the only way we can restore the faith of the American people in their government—let them participate in it, let them be the government.

JAMES A. FARLEY

Mr. McGEE. Mr. President, James A. Farley, former Postmaster General and the mastermind behind two successful Presidential drives of Franklin Roosevelt, has become a political legend in this Nation.

Recently, Mr. Farley celebrated his 85th birthday. In commemoration of this event, the editor of the Wyoming Eagle, Mr. Bernard Horton, wrote a column reminiscing about his association with Mr. Farley and paying tribute to the political acumen of an individual who is truly a professional.

I ask unanimous consent that the column be printed in the RECORD.

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

THE REMARKABLE MR. FARLEY PREDICTS AGAIN

(By Bernard Horton)

During the last several days, we have been thinking about that remarkable old political pro, James A. Farley of New York.

Mr. Farley, former Postmaster General who twice masterminded Franklin D. Roosevelt to the presidency, observed his 85th birthday anniversary Wednesday.

This writer first met Mr. Farley personally at the Democratic National Convention in Atlantic City in August, 1964.

We had an exclusive Wyoming Eagle interview with the man who served as national Democratic chairman and campaign manager for the late President Roosevelt in the 1930's. And, in that interview, he predicted that President Lyndon B. Johnson would end up with as great a victory as that scored by F.D.R. in 1932.

That year, Roosevelt carried 42 of the 48 states, losing only six.

Farley told us President Johnson would carry Maine, New Hampshire, and Vermont, which Roosevelt lost in 1932.

Aware of the fact that Mr. Farley had, for many years, been recognized as one of the nation's most respected and astute political pros, we made arrangements to call him shortly before the election for another story on his appraisals.

After all, as long ago as 1936, this man had won nationwide attention when he went against many polls and flatly predicted President Roosevelt would carry every state except Maine and Vermont. That is exactly, to the very states, how that election turned out.

On Oct. 23, 1964, two months after our Atlantic City interview, we called Mr. Farley at the Waldorf Astoria in New York City.

How do things look to you now?

"This is very definitely a landslide comparable to Mr. Roosevelt's of 1936," he replied. "It could be just as big, with Johnson losing only two states. The popular vote will be even higher than Mr. Roosevelt's was."

Farley said he didn't believe Johnson would lose more than six of the 50 states. "That would be the maximum."

He said Johnson might lose Alabama and Mississippi, and he listed Louisiana, Georgia, Florida and South Carolina as questionable.

He predicted Sen. Gale McGee would win in Wyoming and Robert F. Kenned would win in New York, in Senate races.

Then came the election. President Johnson did win in a landslide. He carried 44 states and the District of Columbia, losing in six states—Alabama, Mississippi, Louisiana, Georgia, South Carolina and Arizona, the home state of his opponent, Sen. Barry Goldwater.

Both McGee and Robert F. Kennedy were elected.

We could scarcely believe it!

On his 85th birthday Wednesday, Mr. Farley, still a robust man in excellent physical condition, dressed in a blue suit with white shirt and blue tie, naturally was talking about politics.

He said the situation in Washington "is sad."

"The Watergate affair has brought criticism of the presidency unheard of since the Grant and Harding administrations," he said. "Watergate will be in the newspapers for months and the trials and investigations could continue for years."

He predicted the Watergate scandal will bring more Democrats to the House and Senate in the 1974 elections and he said "the Republicans don't have a chance in 1976."

In view of his political track record and our personal experience with his uncanny accuracy, we are not about to challenge these latest predictions of Mr. Jim Farley.

WHAT IS THE STATUS OF ABM DEPLOYMENTS IN THE SOVIET UNION 1 YEAR AFTER SIGNING THE TREATY?

Mr. FULBRIGHT. Mr. President, a little more than a year ago, the President signed in Moscow a treaty limiting ABM deployments and an interim agreement limiting offensive strategic arms. Much public discussion and extensive Senate debate occurred in the weeks and months following the signing of those accords. A number of concerns were expressed over the wisdom and risks of that initiative toward the control of the strategic arms race. At the conclusion of that discussion, the Senate overwhelmingly approved the ABM treaty and the Congress agreed to the interim agreement limiting strategic arms.

We might now recall some of the arguments that were made in the course of the debate on the Senate floor and consider the current state of the arms race—a little more than a year after the signing of the accords.

In the course of the floor debate, the junior Senator from Washington warned the Senate that the Soviet leadership had a number of large missiles and might be developing a still larger type of missile.[1] He cited the possibility of a tremendous yield of as much as 50 megatons per missile.[2]

The Senator from Washington observed that the United States deliberately has not sought the ability to strike first against hardened missile sites of the Soviet Union, adding—

> That is the difference, and that is what is disturbing about the huge Soviet missiles and the still larger missiles they are now developing.[3]

A day earlier, last September 6, the Senator had said—

> The Soviets have an advantage in missile throw weight that, while already very large, is subject to still larger increases. As things now stand, the overall Soviet transcontinental missile throw weight is approximately four times our own.[4]

To further illustrate his view of Soviet advantage, the Senator in the same statement turned to the subject of ABM:

> We had four sites authorized, we cut back and agreed to two in the ABM treaty—which in effect was really one, and the Soviets did no cutting back.[5]

The Senator's remarks were disturbing to a number of people interested in the strategic situation. Some were alarmed at the prospect of an agreement which allowed such a visible manifestation of nuclear power—the large Soviet missile force—to be made still more terrible in the wake of an agreement. I believed then that it would be better if the Soviet Union were to refrain from the emplacement of larger weapons in substantial numbers. But I was convinced then, as I am now, that with the mutual ability each side possesses to destroy the other many times over—an ability reinforced by the ABM treaty—each side has a viable deterrent and knows that the other side could not hope to start a nuclear war without the certainty of suffering catastrophic losses. I remain convinced of that, although I also believe that, for purposes of reassurance, both sides should exercise restraint in nuclear weapons development, so as to prevent recurrent alarms and also so as to release funds on both sides for constructive social purposes.

At the time of the debate last year, Senator JACKSON seemed interested in the benefits of restraint, especially on the part of the Soviet Union, and he indicated that demonstrated restraint might be a sound basis for both sides to turn their attentions to domestic priorities.

In this connection the Senator said, on September 6 last year, that if the Soviets dismantled the SS–7 and SS–8 IBM's and thus brought their ICBM throw weight down—

> This would be a move in the direction of fairness. And it would be a move in the direction of slowing the arms build-up by beginning to narrow the now considerable disparity between the larger Soviet force and our own smaller one."[6] The Senator added, "Perhaps they can be persuaded to refrain from deploying bigger missiles in the first place. Surely such a result would increase our security and enable us both to forego new strategic programs and make it possible for both countries to have more funds available for important domestic programs.[7]

In light of the Senator's expressed views, I urge him to join me and other Senators in finding out just what has happened since last year. And if it should then be established that the Soviets have in fact shown the restraint the Senator from Washington urged upon them, I would hope that the Senate would then act to change priorities in the way the Senator suggested should be possible.

Since the Senate approved the ABM treaty and the two Houses gave their assent to the signing of the interim agreement, our negotiators have moved well into the SALT II negotiations with the Russian delegation. There are indications that there soon may be tangible progress beyond last year's agreement.

Our experts have had an opportunity since the approval of the agreement to use national means of verification—a use guaranteed in both the treaty and the agreement—to see whether the Soviet Union appears to be living up to the spirit and the letter of that agreement.

I am aware that it is very difficult to know precisely what the Soviet Union is doing with its strategic programs. Much depends upon calculations and assessments based on largely subjective judgments. The same was true last year when we approved the ABM treaty and interim agreement. Allowing that these judgments must still lack certainty, I would like to know the answers to several important questions which arose in the course of our discussion last year:

What in fact happened to those big, terrifying, new Soviet missiles that were seen on the horizon—those missiles that were supposed to be substantially larger than the huge SS–9 missile?

What ever happened to those huge new holes mentioned in press accounts which were supposed to presage deployment of a new generation of still larger missiles?

What ever happened to the tremendous Soviet throw weight advantage mentioned last year? Is the Soviet megatonnage now increasing or declining? Is the megatonnage disparity between the two sides growing or being reduced? Much of the megatonnage in the Soviet force was centered in the approximately 200-missile SS–7 and SS–8 fleet. What happened to that fleet? Are there indications that the Russians will soon be retiring that fleet.

We know what has happened to our ABM plans. The Congress has sensibly rejected the idea of spending billions of dollars on that dubious enterprise. But what about the Soviet Union? They, like us, are limited to two sites. When the treaty was signed last year, the Soviets had only 64 ABM interceptors deployed and only a single complex. Are there more than 64 missiles now? Have any steps been taken to begin the allowed second complex?

If those who were disturbed last year were to consider the answers to these questions, they might now find themselves reassured as to the intention of the Soviet Union to live up to the terms and the agreement. They might find themselves willing to take a new look at the importance of achieving further agreement in SALT and in related fields, such as the long-delayed comprehensive test ban. They might also see the wisdom of restraint now on our part, which would serve to demonstrate our good intent and prevent needless deployments, while allowing the release of money for urgent domestic purposes.

It seems to me that all the Members of this body could join in a thorough reappraisal of defense spending in view of what we know now of Soviet intentions. Certainly our deteriorating monetary situation should provide added incentive for this reevaluation.

The Defense Department shows no sign of letting up in its strategic spending. Congress is being asked to appropriate more than three-fourths of a billion dollars this year for continued procurement of Minuteman III and Minuteman force modification. The executive branch hopes to spend about one-half billion dollars during fiscal year 1974 to convert our Polaris submarines to Poseidon. Beyond that, nearly another one-

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[1] CONGRESSIONAL RECORD, vol. 118, pt. 23, p. 29729.

[2] CONGRESSIONAL RECORD, vol. 118, pt. 15, p. 19410.

[3] CONGRESSIONAL RECORD, vol. 118, pt. 23, p. 29729.

[4] CONGRESSIONAL RECORD, vol. 118, pt. 22, p. 29505.

[5] *Ibid.*, p. 29504.

[6] *Ibid.*, p. 29505.

[7] *Ibid.*

half billion dollars is being asked to continue the development of a new strategic bomber, the B–1. And $1.7 billion is being sought for the development, procurement, and military construction cost of Trident ballistic missiles submarines and Trident missiles. In addition, several hundred million dollars are being spent on other strategic programs.

I look to others in this body more versed in the specific programs than I to inform the Senate as to the relative merits or demerits of these strategic programs. If, however, the Russians are living up to the letter and spirit of last year's agreement, it seems to me that that fact should weigh heavily in the setting of our national priorities.

PENSION REFORM MUST MOVE

Mr. TAFT. Mr. President, America's workingmen and women should be able to look toward their years of retirement with a sense of financial security. That security is dependent in large part upon 33,000 private pension plans which affect approximately 35 million participants. These pension programs currently represent an investment of $150 billion and this figure is expected to reach $240 billion by 1980. A tragically large number of employees covered by such plans, however, never receive their expected benefits as 8,400 participants in pension plans lost $20 million in benefits during the first 7 months of 1972 due to plant terminations alone.

The Senate Labor and Public Welfare Committee has thoroughly studied the issue of pension reform over the last 3 years and conducted extensive hearings in Washington and in the field. As a result of these studies and hearings legislation was introduced in the 92d Congress to strengthen and protect employee pension and welfare benefit programs. This bill was reported favorably by the Labor and Public Welfare Committee and referred to the Senate Finance Committee for consideration. Unfortunately, no action was taken in the Finance Committee on the bill in the 92d Congress.

This year the Labor and Public Welfare Committee has again drafted pension protection legislation. This bill, S. 4, Retirement Income Security for Employees Act of 1973, was reported without dissent from the committee and has been pending on the Senate Calendar since April 18. I strongly endorse S. 4 and have joined with Senators WILLIAMS and JAVITS, and 50 other Senators in cosponsoring S. 4.

The Senate Finance Committee, however, is again considering pension reform proposals this year, including legislation submitted by the administration. I am sure we all welcome any constructive contributions that the Finance Committee may make in this extremely important area. Any lengthy postponement in floor consideration of pension protection legislation, however, should not be tolerated, and I will not hesitate to ask the Senate leadership to have S. 4 brought from the calendar to the floor if delaying tactics are used. Committee jurisdictional problems should not block full Senate consideration of such an important issue. If substantive differences do exist in this area there should be consideration by the full Senate at an early date and an up and down vote on any issues that cannot be resolved. Pension reform is an important issue for all working Americans; executives as well as blue collar workers. Extensive delay in consideration of pension protection legislation by the full Senate would be unconscionable.

I ask unanimous consent that an editorial dated May 31, 1973 from the Columbus, Ohio, Citizen Journal entitled "Protect Pensions Now," be printed in the RECORD.

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

PROTECT PENSIONS NOW

Congress and the administration should resolve their differences and find better ways this year to protect the pension rights of millions of American workers.

There is general agreement that present pension safeguards are inadequate. In too many cases, workers receive little or nothing when they retire—either because their pension benefits are lost when they change jobs, or because pension funds run dry when companies go out of business.

The President wants to guarantee each worker a vested interest in his pension after a specified number of years—an interest that can't be forfeited if he quits or gets fired.

He also wants to require managers to keep enough money in their pension funds to cover their liabilities. In the first seven months of last year, 3,100 workers lost $11 million in benefits from underfinanced plans.

This doesn't go far enough for some Democrats in Congress, however, who want private pensions to be portable—transferrable from company to company—and insist that pension funds buy federal insurance against fraud and mismanagement.

Nixon and many businessmen contend that portability is impractical because of the "vast differences" between pension plans.

But there may be times when a worker would prefer to transfer his benefits to a new employer with a more generous pension plan. And some companies may prefer to close out their books on employes who move to other jobs.

Federal insurance, the President contends, would require too much government "interference" in how private pension plans are run.

Maybe so, but the Government has been able to insure other private enterprises—savings and loans, for example—without snarling them in a web of red tape.

At any rate, the areas of agreement on pension reform are broad enough that the administration and the congressional committees involved should be able to come up with a compromise bill.

The issue has been kicked around now for nearly two years. Any further delay would be contrary to common sense.

THE ALASKAN PIPELINE

Mr. GRAVEL. Mr. President, I ask unanimous consent to have printed in the RECORD Mr. James L. Kilpatrick's column of June 6, which appeared in the Evening Star and Daily News covering the untenable delay in beginning construction of the Trans-Alaska pipeline.

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

LET'S START BUILDING THE ALASKAN PIPELINE

(By James J. Kilpatrick)

A group of Midwestern legislators, pressing for regional advantage at the expense of national needs, has managed once more to delay construction of the trans-Alaskan pipeline. The project is bogged down in committee, and faces a bruising fight when it reaches the floor.

The story is one long chronicle of frustration. If construction of this pipeline had been started three years ago, when its prospective builders were ready to go, the nation might now be benefiting from one to two million barrels of oil per day. We would be significantly less dependent upon supplies from the Middle East. Our balance of payments would not be quite so dangerously out of kilter. At least two billion dollars could have been saved in construction costs.

All this is what might have been. Much of the exasperating delay has resulted from the opposition of the eco-freaks, those conservationist zealots whose frenzy carries them, like the Jesus freaks, beyond faith to fanaticism, beyond dedication to obsession. Their spokesmen have conjured up damage to the migratory habits of the caribou; they have expounded pathetically upon the harm that a four-foot pipeline would do to hundreds of thousands of square miles of tundra; they have raised vague fears of earthquakes, melting ice, oil spills, and harm to polar bears, fish and to 320 species of Arctic birds.

I do not mean to challenge the sincerity of these conservationists. It is their judgment and their sense of priorities that compel a blunt rejoinder: The United States urgently needs Alaska's North Slope oil. We have to have it. Further delays cannot be condoned.

Yet further delays are in prospect. On Feb. 9, the U.S. Court of Appeals for the District of Columbia enjoined construction of the pipeline on a single point: The Mineral Leasing Act of 1920 limits rights-of-way on federal lands to 25 feet on either side of a pipeline. The proposed line from the North Slope to Valdez would have required 70 to 75 feet on either side at certain points.

On Feb. 21, less than two weeks after the court ruling, Alaska's senators, Mike Gravel and Ted Stevens, introduced a bill to overcome the objection. They proposed to cut all the red tape in a single blow, by declaring that the bulk environmental impact statement, long ago supplied by the Department of the Interior, filled all requirements of law. Similar legislation was offered in the House.

We are now into June, and nothing has happened. Instead, the old alternative of a trans-Canadian route has been revived.

William E. Simon, deputy secretary of the Treasury, demolished these arguments in a recent statement. Building a Canadian line, he said, "would delay receipt of vitally needed Alaska crude oil by from three to five years." The Canadian line would be much longer; it would have to cross 12 major rivers; it would cost twice as much.

Every national interest, it seems to me, demands that we get on with this job—and get on with it now.

Mr. GRAVEL. Mr. President, Mr. Kilpatrick concludes his accurate appraisal of our energy crisis and the frustrating delays in getting the pipeline construction underway, by stating:

Every national interest, it seems to me, demands that we get on with the job—and get on with it now.

While we sit here contemplating our dilemma, the dangerous outflow of U.S. dollars continues, and the energy crisis is worsening each day. Construction of the trans-Alaska pipeline will not solve

all our problems but it would be an immediate and positive step toward partially resolving them.

Mr. President, getting construction underway for the trans-Alaska is urgent—and essential—to the welfare of this Nation and to the State of Alaska.

THE INTERNATIONALIST VIEWPOINT OF SWISS FEDERAL COUNCILOR ERNST BRUGGER

Mr. PERCY. Mr. President, I call to the attention of my colleagues an excellent address by the Honorable Ernst Brugger, vice president of the Swiss Confederation and head of the Swiss Department of Economic Affairs. One of the highest officials of the Swiss Government, Mr. Brugger recently visited the United States, where he addressed the Swiss Society of New York and the American-Swiss Association in New York on May 8. During his visit he and the Swiss Ambassador, Mr. Felix Schnyder, and other high Swiss officials, also met in the Capitol with members of the Finance Committee.

Mr. Brugger's address contains much of interest. He makes clear that Switzerland welcomes the "year of Europe" proclaimed by President Nixon, and calls for an end to "periodic crisis management" and a durable solution to monetary and trade problems through international negotiation and cooperation.

Very important in terms of direct U.S. economic interest is the position of Switzerland vis-a-vis the newly expanded European community. I am pleased to have Mr. Brugger's reaffirmation, on behalf of his government, of the outward-looking, internationalist approach to world trade and to trade negotiations that has traditionally characterized Swiss policy, and which distinguished Switzerland's role in the successful conclusion of the "Kennedy round" of trade negotiations in 1967. Switzerland has now secured equal terms of trade and competition for its export industry in Europe, but at the same time looks outward toward negotiations to expand its trade relationships with the rest of the world. Switzerland, Mr. Brugger assures, while firmly based in Europe, "will exercise its negotiating power independently."

, Should stimulate worldwide progress and that trading liberalization in Europe should constitute an incentive for freer and more open trade in the world. We also realize that there is more at stake than the eight or nine percent of our commerce with the United States. What matters is to preserve the climate for partnership and the condition for the functioning of the free enterprise system.

At the same time Mr. Brugger calls on the United States to resume its position of leadership and authority that has resulted in six successive reciprocal trade negotiation rounds since 1934. He cautions, and I firmly join him in that caution, that we should take great care not to permit mechanisms for "temporary" adjustment to harmful imports to backslide into protectionist restraints.

Mr. President, I ask unanimous consent that Mr. Brugger's speech be printed in the RECORD, and recommend it most highly to the attention of my colleagues.

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

Dr. Hoch, Dr. Maier: Thank you very much indeed for your gracious welcome. As you may know, Swiss politicians, especially those whose primary task it is to curb inflation, are not spoiled by public acclaim at home. And so I appreciate all the more your kind and cordial remarks about my activities although they are too generous.

Ladies and Gentlemen: The unique structure of the Federal Government of Switzerland, which takes its decisions collectively and comprises only seven members, fewer than those of any other country of comparable size, rather severely restricts the time left for foreign travel. This is the reason why more than five years have elapsed since my predecessor, Dr. Hans Schaffner, visited New York and the United States in November 1967. My presence here should, however, be taken as renewed evidence of the keen interest of the Swiss authorities to develop the close ties happily existing between our two countries and the value they attach to the relationship with our compatriots and friends in this hospitable metropolitan city.

May I, therefore, express my hearty thanks to Dr. Frank Hoch, President of the American Swiss Association, and to Dr. Anton Maier, President of the Swiss Society of New York, as well as to the distinguished members of their respective organizations, for having arranged this splendid gathering at the Waldorf Astoria.

Whatever the preoccupations of the day, the Swiss people and the Government never lose sight of the additional dimension of our country created by the Swiss living abroad. It is they who determine the image of Switzerland in their host country. We are proud of the way they are doing it and grateful for their loyalty and attachment to the Swiss heritage. The numerous presence of Americans here today attests that they have been well assimilated and have won many friends.

Following the recent currency upheavals, some people in Europe and the rest of the world may have had some concern about America's strength. Well, let them come here and see for themselves this big city and the awe-inspiring industrial belt around it: what an eloquent expression of America's vigor and economic might for years to come.

For us Swiss it is good to know that this great power lies in the hands of a friendly nation which shares with us the attachment to the democratic way of life, the free enterprise system, strong States' rights, civil liberties and the love of freedom. These common values constitute a firm basis for mutual understanding and respect. The United States has for many decades attracted tens of thousands of Swiss immigrants who have contributed to the link between our respective economies, tangibly expressed by the importance of the production of Swiss industries and the rendering of financial services of Swiss banks and insurance companies in this country and, I might add, even enhanced by American methods of technology and management. The revenues from these foreign operations, which, by the way, ease our domestic labor problems, form an essential part of our national economy as do the operations of American companies in Switzerland with respect to the American balance of payments.

This leads me to report to you briefly on the present economic situation in Switzerland and highlight our position with respect to world economic problems.

The Swiss economy is still overheated and our principal concern is to curb inflation. Last month consumer prices for the first time in history rose by more than 8% on a yearly basis. It is against this background that Parliament will consider our proposal to amend the constitution giving the Federal Government the power to act in the field of economic policy and to derogate under special circumstances from the basic freedom of internal trade and commerce. It is little comfort to us that neighboring countries which already possess the necessary power of intervention and have used the whole gamut of corrective measures have not achieved more effective results.

What then are the causes for this situation, the remedies we have tried and the effects on our international competitiveness?

Whereas excessive demand in the late nineteen sixties was generated from abroad and overtaxed the capacity of our export industry, we are now faced with an upsurge of domestic demand and consumption. Building activity is high, bank-lending is at a peak and unemployment still stand at 0. To be absolutely precise, there were 37 jobless registered at the end of March with many thousands of unfilled vacancies.

Needless to say, a country as closely integrated in the world economy as our own is particularly subject to contamination and the international repercussions of economic and monetary disturbances.

The remedies we are trying to apply are threefold: First, the limitation of our foreign labor force at the ceiling reached in 1971 which amounts to roughly 30% of our total labor force and 16% of our population. This limitation, which is imperative for social and political reasons, severely hampers the expansion of production, but at the same time it constitutes a powerful incentive for the wage spiral. Secondly, we have introduced restraints in the growth of monetary liquidity by limiting the expansion of bank credits. And, thirdly, measures had to be taken to ward off the influx of foreign short-term capital as a result of the recurring monetary crises, the most effective of which was the decision of January 23rd, to let the Swiss franc float. In addition, limitations have been imposed on building activities with the exception of social housing projects and a mild form of price supervision is being tested with a procedure for notification and complaints but not for an actual income policy with corresponding controls.

Our economic policy is thus faced on the one hand with a need to curb inflation and excessive demand—and the more some of our measures are making themselves felt, the higher the expectation that the Government will produce quickly tangible results—and on the other hand with the need to provide for normal growth, adjustment of industrial structures, improvement of social services and the protection of the environment. It is not easy to reconcile these requirements. I might add that one of the additional bottlenecks we shall be facing in the future is the supply of energy where we are much more dependent on imports than the United States.

I do not wish to paint a picture of gloom, but simply to emphasize that prosperity has its problems too. We are acutely aware of the limitations to growth and the need to improve the quality of life. Rather than search for scape goats, such as the legendary gnomes of Zurich, or the American multi-national corporations, let us turn our attention to the common task of restoring equilibrium and stability to the world economy.

We know that these problems are uppermost in the mind of the American Government and, therefore, I am gratified to have the opportunity to visit the United States at this particular time and to meet with members of the Administration in Washington during the next few days.

President Nixon and some members of his Government, in particular Mr. Kissinger, have made it known that they intend to devote special attention this year to the rela-

tions with Europe and to the reform of the international economic order. We welcome this development and share the opinion that it is urgent to concern ourselves with world economic problems. Talk of a new Atlantic Charter and Summit meetings—meetings at the highest political level—are, of course, no subjects for a neutral country like Switzerland or a Minister of Economic Affairs. What we are concerned with, however, are the specific issues of the international economic relations. We, too, recognize that fundamental changes have occurred through the enlargement of the European Communities, the ascendance of Japan to a major world economic power and the persistent balance of payments deficit of the United States. The world trade and monetary order which was established in the post-war period and served us extremely well for a quarter of a century has all but collapsed on August 15th, 1971. We have lived on periodic crisis management ever since and a durable solution restoring equilibrium can only be found through international negotiation and cooperation. A special responsibility arises for the United States, Europe and Japan. What then is this Europe to which the United States is turning its attention? And what is the place of Switzerland in today's European structures?

Last year, Western Europe acquired a new profile. This means that the distinctive personality of Europe is once again becoming clearly discernible in the world. And like any personality, it is composed of different traits and not just one single feature: The enlarged European communities as the important nucleus, EFTA as the grouping of the countries which did not join EEC, and, as a link between the two, the bilateral Free Trade Agreements concluded between each of the EFTA countries and the enlarged communities. There are, moreover, the countries of the northern Mediterranean shore. A global solution was reached, encompassing sixteen European states and providing a framework of equal trading rules and equal opportunity.

Needless to stress that this development is of utmost importance to Switzerland since it overcomes the artificial split of the European market which resulted from the parallel existence of two trading groups, maintains the liberalization accomplished within EFTA, despite the shifts of the United Kingdom and Denmark to the Common Market and extends free industrial trading conditions to the dimensions of a continental market, comparable to that to which the United States owes its prosperity. Switzerland has thus secured a firm basis for her trading relations with her neighbors, accounting for 60% of her total exports and 79% of her imports.

I know that this accomplishment—indispensable to Switzerland because of her natural integration in the European economy—has been watched from this side of the Atlantic with somewhat mixed feelings. But we have kept the interests of our non-European trading partners in mind.

In choosing the appropriate form of her relationship with the Common Market, Switzerland has opted for an industrial free trade area. Thus, the low Swiss external tariff with an average incidence of merely 4% will not have to be raised to the level of the Common Market tariff, which is roughly twice as high but in many cases still substantially lower than that of the United States. Moreover, since agriculture is not covered by the free trade agreement and since the few agricultural tariff reductions granted unilaterally by Switzerland are given on a most favored-nation basis, no new impediments are created which would make the access to the Swiss market more difficult for third countries. It would indeed be hardly conceivable that the gradual elimination of low Swiss tariffs on EEC goods over a period of four and a quarter years could result in any trade distortion to the detriment of other suppliers and we are anxious that it should not.

We have thus been able to reconcile our two objectives: to secure equal terms of trade and competition for our export industry in Europe and to retain the possibility of pursuing a liberal world trade policy. As a matter of fact, both Switzerland and the European Communities were anxious to secure their full autonomy for the conduct of their respective trade policy. Switzerland always considered that her treaty-making power constituted an essential prerequisite for the credibility of her policy of independence and neutrality. This fact is now of particular importance in view of the forthcoming multilateral trade negotiations in GATT. Although firmly based on Europe whose interests we share in many respects, we will exercise our negotiating power independently.

These GATT negotiations, unlike those of the Kennedy Round, will no longer be needed to reduce regional barriers inside Europe. This fact, however, does not—and I wish to emphasize this very strongly—diminish our interest in a new round of world trade liberalization. On the contrary, we have always held that regional progress should stimulate world-wide progress and that trading liberalization in Europe should constitute an incentive for freer and more open trade in the world. We also realize that there is more at stake than the eight or nine per cent of our commerce with the United States. What matters is to preserve the climate of partnership and the conditions for the functioning of the free enterprise system. World trade must be able to exercise its beneficial effects on a global basis and not be fractionalized. Fair competition must continue to be the stimulus for technological progress and structural adjustments. From a better international division of labor derives increased productivity. It is also our belief that reciprocal investments should not be motivated by the need to overcome artificial trade barriers but by purely economic considerations.

This traditional attachment of Switzerland to the promotion of freer and stable world trading conditions explains our interest in the policies which are now being formulated in Washington.

I believe that our sights are set on the same objectives which on sheer economic terms are probably even more vital to Switzerland because of her difference in size. Exports are fairly marginal to many American industries and, on the whole, amount to 4% of the American GNP (Gross National Product). With us, because of the smallness of our domestic market, some industries export more than 90% of their total output and many at least two-thirds. Exports account for 25% of GNP and the volume of Swiss foreign trade is in absolute figures one sixth that of the United States, a country with a population forty times larger!

We do not wish to retain this outward-looking position for ourselves. We expect, on the contrary, that American industry will give increased attention to export opportunities now that its prices are highly competitive internationally.

We hope that the negotiating authority requested by President Nixon in his trade reform bill—if it is granted by Congress—will enable the United States to assume once again the leadership for solving the world economic problems by successive moves to liberalize world trade. To the extent that the adjustment process requires temporary import relief, great care should, however, be taken to avoid back-sliding into protectionist restraints which could nullify the expected mutual benefits and jeopardize the stability which the business community needs for their long-term planning.

Much has been said about the global character of the settlement to be achieved and of the interrelation between trade, monetary, defense and development issues. A reminder of this inherent link may be useful to promote the awareness of what is at stake. Negotiations should, however, be pursued separately in each sector. With respect to trade, they can only be based on reciprocity and mutual advantage.

This is particularly true from the point of view of the present state of bilateral Swiss/American economic relations. Foreign trade between our two countries is evenly balanced and foreign investments are not subject to artificial restraints. There is no need to correct a monetary disequillibrium. As a result of the revaluation of the franc in May 1971 and two subsequent devaluations of the dollar, the Swiss exchange rate would now, if anything, be overvalued with respect to the dollar. The present floating rate, determined more by short-term international capital movements than by economic factors represents an appreciating of 33% over a two-year period. It is, in fact, quite surprising that the combined effect of this revaluation and our high rate of inflation has not yet reversed our balance of trade with the United States. Individual sectors of the Swiss export industry have, however, begun to feel the pinch and are now losing ground on the North American market.

Let me conclude by stressing my belief that world trade issues deserve indeed to receive high priority and constitute an important objective of economic policy on their own merits. They should not merely be viewed as a corollary to the monetary problems and a possible though surely overrated means for the restoration of the balance of payments equilibrium. Rather they are the key to increased productivity, general economic development and well-being and a powerful bond for cooperation and for the improvement of the world political climate.

The United States has once again appealed for a common political commitment to this end. Surely, this is in everyone's interest. Therefore, the "Year of Europe" should become the year of world trade, and the Atlantic objectives stated in this respect are really of concern to the trading partners of the world at large. In the trans-Atlantic dialogue between the United States and Europe, the voice of Switzerland will be modest but distinct and we hope not meaningless. We shall staunchly support what President Nixon called the "building of a free and open trading world" and are confident that the interpretation of what this means will largely coincide. Then, let us, through partnership and cooperation between Switzerland and the United States further a common and universal goal.

THE TRANS-ALASKAN PIPELINE CONTROVERSY

Mr. MONDALE. Mr. President, recent discussions surrounding the trans-Alaskan pipeline controversy have pointed up the need for impartial analysis of the many points of debate regarding this massive project.

An article which appeared in the Seattle Times on June 3 by University of Washington geology professor Eric S. Cheney highlights some of the current misconceptions about the Alaskan pipeline.

He shows that markets on the west coast for Alaskan oil will simply not be able to accommodate the entire production of such a line until 1988. The clear implication is that a great deal of this oil will be exported, at the same time that we in America require ever-increasing oil imports.

He shows that—

Even if the pipeline had been built by now, the oil that it would deliver would not be available to the 75 percent of the nation's people who live east of the Mississippi where the biggest shortage exists.

He shows that—massive as the Alaskan pipeline project is for our country by 1985—

The 2-million barrels of Alaskan oil will meet less than 8 percent of the total demand.

I urge careful reading of this article, for it helps to dispel some of the myths surrounding the Alaskan pipeline. No one wishes to delay development of Alaskan oil. All of us want that oil to reach American markets just as quickly as possible. But the decision on how that oil reaches American markets—and to which markets it goes—should be a congressional decision. I believe that such a congressional decision—after we have had intensive negotiations with Canada and a crash study of the economic, national security and consumer implications of a trans-Canadian route—would actually speed up the process of delivering North Slope oil to American markets by ending the long litigation process the Alaska pipeline still faces in the courts.

I ask unanimous consent that the article by Professor Cheney be printed at the conclusion of my remarks in the RECORD.

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

THREE MISCONCEPTIONS: NORTH SLOPE OIL WON'T SOLVE SHORTAGE

(By Eric S. Cheney)

(Eric S. Cheney is an associate professor in the department of geological sciences at the University of Washington.)

Three popular misconceptions about Alaska's North Slope oil need to be dispelled.

First is that the present gasoline shortage has been caused by delays in building the Alaskan pipeline. The gasoline crisis has largely been caused by an increased number of cars on the highways and their drastically reduced mileage due to anti-pollution measures and the installation of air conditioning.

Even if the pipeline had been built by now, the oil that it would deliver would not be available to the 75 per cent of the nation's people who live east of the Mississippi where the biggest shortage exists.

Furthermore, due to lack of increased capacity to refine gasoline, a gasoline shortage probably would exist on the West Coast whether or not Alaskan oil were available.

Secondly, it is instructive to speculate where Alaskan oil will be marketed. Because supertankers are too large for the Panama Canal, the American market for this petroleum would be the West Coast.

In 1970, Arizona, California, Oregon, Washington, Alaska, and Hawaii consumed almost exactly 2 million barrels (42 gallons each) of oil a day. Two million barrels a day is the planned output of the Alaskan pipeline. Thus, to absorb all of the Alaskan oil anywhere except on the beaches, petroleum demand on the West Coast would have to double.

Disregarding the desirability or likelihood of this growth, and assuming a growth of 4 per cent a year (about the average national growth rate for petroleum consumption before the energy crisis was publicized in 1973), and further assuming that the combined volume from present domestic and imported sources of petroleum into the West Coast remain virtually unchanged, it will take 18 years for the market to double and to thereby absorb Alaskan oil.

In other words, until about 1988 a very significant portion of Alaskan oil probably would be sold to another major industrial nation that borders the Pacific Ocean, has huge tankers, and needs oil.

The American public probably will demonstrate a certain amount of economic nationalism about exporting Alaskan oil and could decide to hold it in reserve or to require (and possibly subsidize) a much more expensive trans-Canadian pipeline to the markets in the eastern United States. The same public also may question whether it should assume such grave environmental risks for the exportation of Alaskan oil to another nation.

The third misconception is that the energy crisis will be solved by the importation of Alaskan oil. This would be true only if the oil also could be delivered to the eastern United States and if the country's demand, contrary to all forecasts, actually decreased.

The United States at present imports about 6 million barrels of the 17 million barrels of oil consumed each day. However the energy crises have just begun. If the demand increases to 26 million barrels a day by 1985 as estimated by the National Petroleum Council, the 2 million barrels of Alaskan oil will meet less than 8 per cent of the total demand. An additional 15 million barrels will have to be imported by tankers from other sources, largely the Middle East.

THE INTEGRITY OF FEDERAL STATISTICS

Mr. PERCY. Mr. President, there can be no more important barometer of the credibility of our Government than public willingness to trust the accuracy and integrity of the information Government gathers and disseminates. This is particularly true with regard to economic statistics, which form the base not only of governmental policy but are the common ground on which all who are interested in economic policy issues must base their analyses.

I deeply regret that the credibility of the Federal statistical system has fallen sharply in the last several years. A great many people believe that the integrity of the Federal statistical system has been compromised by the intrusion of politicians who want to modify or even suppress bad news about problems like unemployment or inflation.

In response to this problem, the Federal Statistics Users' Conference appointed a Committee on the Integrity of Federal Statistics. This committee has now reported its recommendations for assuring the integrity and increasing the believability of Federal statistics. These recommendations deserve to be implemented—indeed, the flagging confidence of people in Government demands that they be. I ask unanimous consent that the report of the Committee on the Integrity of Federal Statistics of the Federal Statistics Users' Conference and covering letter be printed in the RECORD.

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

FEDERAL STATISTICS USERS' CONFERENCE,
Washington, D.C., May 1, 1973.

Hon. CHARLES H. PERCY,
Joint Economic Committee, New Senate Office Building, Washington, D.C.

DEAR SENATOR PERCY: We are pleased to send you the enclosed special report entitled "Maintaining the Professional Integrity of Federal Statistics." This report, prepared by a joint committee of the American Statistical Association and the Federal Statistics Users' Conference, has been approved by the Board of Directors of ASA and the Board of Trustees of FSUC.

The joint committee was appointed in early 1972 and charged with the responsibility of drawing up a statement reaffirming the need for a Federal statistical system of unquestioned integrity and to develop policy recommendations concerning procedures designed to protect the integrity of the Federal statistical system. The committee and the officers of the associations believe that implementation of the committee's recommendations regarding form of organization, appointments, and rules of conduct will reduce opportunities for political interference and control. We believe a pattern of organization and rules that follow the essentials of the committee recommendations are necessary to preserve high public confidence in the Federal statistical system and to counteract doubts that have already been created.

It is our hope that this report will make a constructive contribution to the government's ongoing efforts to strengthen and improve the Federal statistical system. In particular, we would refer you to the recommendation on page 6 that calls for a broadening of OMB's Circular No. A–91 regarding the "Prompt Compilation and Release of Statistical Information."

In this critical time when appointments are still to be made to several key statistical posts, we also wish to call your attention to the recommendation on page 6 that emphasizes that "heads of statistical agencies should be in the career service."

Sincerely yours,

JOHN H. AIKEN,
Executive Director.

MAINTAINING THE PROFESSIONAL INTEGRITY OF FEDERAL STATISTICS

INTRODUCTION AND SUMMARY

Origin of Committee

In late 1971, the Federal Statistics Users' Conference Board of Trustees appointed a Subcommittee to obtain further details and information concerning the personal reassignments and reorganization of Federal statistical agencies. In early 1972, the President of the American Statistical Association was authorized by the ASA Board of Directors to appoint representatives of that Association to a joint ASAFSUC Committee on the Integrity of Federal Statistics to draw up a statement reaffirming the need for a Federal statistical system of unquestioned integrity and to develop recommendations concerning procedures designed to protect the integrity of the Federal statistical system.

Growing concern

During the past two years the integrity of the Federal statistical system has come into question. There is growing concern that the Federal statistical system may become politicized to the extent that political expediency may override the canons of professionalism and objectivity which have long characterized major statistical agencies of the U.S. Government.

Accurate and reliable Federal Statistics are absolutely essential if the ongoing policy and planning needs of private and governmental users alike are to be satisfied.[1] The critical role of the Federal statistical system—including all major statistical organizations which are involved in the collection, compilation, analysis, and distribution of a wide range of indicators of the health and well-being of the U.S. socioeconomic system—has been underscored during the current struggle to reduce the rate of inflation and to reduce the level of unemployment in the American economy. The Federal statistical system generates a large number of annual, quarterly,

Footnotes at end of article.

monthly, and even weekly statistical indices which relate to these problem areas which have center stage among current domestic issues.

Wide public concern about the extension of political control over professional statistical agencies was highlighted at the time of the Bureau of Labor Statistics' cancellation of press conferences concerning unemployment and employment data (March 19, 1971). These concerns were heightened as a result of several major developments concerning the Federal statistical agencies. These other developments included:

(1) Reassignment of personnel and reorganization of the Bureau of Labor Statistics,[2] especially those persons previously associated with the press conferences which had been discontinued.

(2) A number of specific personnel shifts and several premature retirements of top level statistical personnel in important statistical agencies, including the U.S. Bureau of the Census.

(3) A reorganization of statistical agencies within the Commerce Department which resulted in a merger of analytical and policy agencies, reducing significantly the authority and power of the major operating statistical agency.

(4) Temporary discontinuance by the Bureau of Labor Statistics of the Urban Employment Survey which, since 1969, had been providing labor force and other information about residents in poverty areas in major metropolitan centers.[3]

These specific events were inevitably accompanied by charges and countercharges concerning the intent and desirability of the actions. For example, two congressional committees investigated these developments.[4] Hearings were published by the Joint Economic Committee. The Subcommittee on Census and Statistics of the House Committee on Post Office and Civil Service issued a report on October 5, 1972, entitled "Investigation of Possible Politicization of the Federal Statistical Programs."

Other professional associations have also expressed concern about this matter. For example, the industrial Relations Research Association (IRRA) which has a particular interest in labor force statistics formed a committee chaired by Professor Killingsworth, Michigan State University, to explore the specific charges which related to the Bureau of Labor Statistics. Concerns have also been expressed formally and informally by the members of the American Sociological Association, the Population Association of America, American Economic Association, The Econometric Society, and the National Bureau of Economic Research's Conference on Research in Income and Wealth.

Approach taken

In view of the wide-ranging interest in problems relating to the integrity of the Federal statistical system, the ASA–FSUC Committee elected to review the record generated by the Congressional hearings and investigations, the official statements of responsible appointed officials, and to discuss informally with selected government and nongovernment officials the appropriate policy and administrative actions to be taken at this time to assure that public confidence in Federal statistics will not be undermined.

In view of the importance of this issue, the Committee chose to conduct its deliberations in a quiet, nonpolitical context with the hope of providing general guidelines concerning effective policy in this area, purposely scheduling its report for release following the National election. This report summarizes the activities and conclusions reached by this Committee.

The Committee decided not to focus on specific charges or allegations since other reports have covered this ground and, importantly, since it is clearly difficult to prove misuse of political power in such specific instances. Rather, the Committee notes that, because of the number of actions which have given rise to public concern, it is essential, at this time, to focus on both the importance of Federal statistics for policy analysis and on identifying and recommending policy for maintaining the integrity of the Federal statistical system in the future. While most developments in and of themselves appear to have had a seemingly plausible and acceptable rationale, their frequency of occurrence and conjuncture in a relatively short time period (with all the disturbing implications falling on the same side) have naturally raised suspicion and concern among a broad and diversified body of users and professional statisticians. These events continued to occur during the period of the Committee's deliberations.

Working premise

Beginning with the basic judgment that the essential function of the Federal statistical system is to provide the best possible measures of social, biological, physical, and economic factors which are essential as the foundation for analysis, policy formulation, and for the effective administration and evaluation of public and private programs, the Committee believes that the system must include several basic ingredients:

(1) The statistics themselves must be accurate, consistent and timely.

(2) The public must have confidence in the statistics which are generated and in the professional ability of the people who produce them.

(3) Statistical programs must be continually revised and improved to reflect new characteristics of the subjects being measured and embrace new subjects as national priorities change. These revisions must be undertaken on the basis of sound statistical principles to assure that the refinements continually result in more reliable and more sensitive statistical indicators.

(4) Technical measures of reliability and sensitivity should be available to define the uncertainties and limitations associated with specific series. This requires equal attention to be given to the gathering of basic statistical data and to the compilation, adjustment, and presentation of the resulting analytical measures and statistical reports.

These characteristics are discussed in the body of this report.

Considerable attention has been given by the statistical profession to procedures for improving the quality and character of specific statistical series. Recently, a broad review of the production and use of statistics in the Federal Government was completed by the President's Commisson on Federal Statistics.[5] The Commission emphasized the need for developing a broad view in government of the scope of statistical activities including specific attention to coordinating statistical activities, eliminating obsolete programs, building public confidence in data gathering, and improving the comparability of statistical series.

In contrast, little attention has been given to steps that have been taken, or additional steps that need to be taken, to develop public confidence in the Federal statistical system, or to identify policy measures whch will ensure wide professional respect for a diverse, multifaceted statistical system. Nevertheless, this Committee believes that there are certain principles which should be emphasized at this time to provide an opportunity for maintaining and building public confidence in the integrity of the Federal statistical system. These recommendations have been developed to parallel the four conditions which are outlined in the body of this report as the basis for building a credible statistical system.

Recommendations of the Committee

Based upon the findings which are stated at the end of this report, the ASA-FSUC Committee on the Integrity of Federal Statistics believes that there is sufficient concern so that specific steps should be taken to allay fears concerning the politicization of the Federal statistical system and to assure the maintenance of high-level, professional statistical work. In light of the importance of such concerns, the Committee urges immediate and careful consideration of the following recommendations. The recommendations are grouped in relation to the conditions outlined above; the order of listing does not imply any priority.

Accurate, Consistent, and Timely Statistics. In order to assure that the Federal statistical system is capable of providing the best measures of social and economic factors which are essential as the foundation for analysis, policy formulation, and for the administration and evaluation of public and private programs, it is essential that the statistics themselves, as collected and developed, be accurate, consistent, and timely. As a policy recommendation for achieving this objective the Committee recommends:

(1) The Statistical Policy Division of the Office of Management and Budget should be encouraged in their efforts to broaden their directive (Circular No. A–A91, "Prompt Compilation and Release of Statistical Information"[6]) to apply to all possible statistical series as a means of better assuring the timely flow of statistics.

(2) The Statistical Policy Division should continue to be held by recognized professional statisticians who have experience in both the Federal statistical system and have established recognition as professional statisticians in their own right. The Division should report to the top level of the Office of Management and Budget.

(3) The Office of Management and Budget should encourage establishment through a recognized professional agency—such as the National Academy of Sciences, the American Statistical Association, etc.—of an ombudsman position whose role is focused on receiving professional and lay criticisms of the Federal statistical system.

The ombudsman role can be particularly significant in evaluating the conceptual base of specific statistical programs. The conceptual base used for defining a statistical series can be influential in relation to political interpretation of the resulting data. Consequently, a high-level professional with resources to call upon specialists, operating as an ombudsman for the professional community could be an important contributor to assuring an independent point of view with regard to critical statistical series.

Public Confidence in the Federal Statistical System. A key factor in assuring public confidence in the Federal statistical system is the professional statistician's evaluation of the quality of the effort by such agencies. Hence, the Committee makes the following recommendations concerning the organization and professionalization of Federal statistical work:

(1) Heads of statistical agencies should be in the career service, a practice which has been and is now observed in all areas except for the Director of the Bureau of the Census, Administrator of the Social and Economic Statistics Administration (SESA), and the Commissioner of Labor Statistics.

The leadership of the government's statistical programs should be of demonstrated professional competence and free of political influence.

The Committee recommends that specific qualities be identified for screening potential appointees to head Federal statistical agencies. Our specific suggestions are that as a minimum the candidates should meet most of the following characteristics and be selected without regard for political affiliation:

Footnotes at end of article.

(a) Membership in a professional statistical association such as—American Statistical Association, Biometric Society, Institute of Mathematical Statistics, and the Econometric Society—and membership in one other professional society (American Economic Association, Population Association of America, National Association of Business Economists, American Sociological Association, Industrial Relations Association, etc.) for at least five recent years.

(b) Ability to make new contributions to knowledge in the field of statistics, or subject matter areas of the agency involved, as evidenced by publication of articles in professional journals, or awards by Federal statistical agencies.

(c) National recognition in the field of statistics as evidenced by honors, such as a Fellow of ASA, member of ISI, high office in professional society or major publication.

(d) Demonstrated professional achievement such as evidenced by successful operation of major statistical projects, by promotions to successively higher position in a Federal statistical organization or working in a responsible statistical position in private industry, education, nonprofit, or labor.

(2) The heads of major statistical agencies should have direct control of such functions as appointments of personnel, budget priority setting, program planning, and publications.

A removal of these functions from the statistical bureau creates an unfortunate education in the effectiveness of the professional statisticians, weakening the Federal statistical system.

(3) In the release of the data, care should be taken to stress the professional statistical production agency—not the department with overall policy responsibility. Initial release should be made by the production agency, except in cases where one agency performs contract services for another. This is particularly true where two individual agencies are created for separate production and analysis.

Specifically, the production agency should be responsible for technical adjustments to the data such as seasonal adjustments and determination of comparability with previous time series. This may mean upgrading of the dedication and competence of the statistics-producing sections of agencies which are basically regulatory or administrative.

(4) Because of the importance of technical advisory committees, guidelines should be established to guarantee the selection and rotation of memberships on such committees without regard for political affiliation and with a number of specific appointments from appropriate professional organizations.

In particular, the Federal Advisory Committee Act (92nd Congress, HR4383) should be followed. Consistent with the intent of this Act, the present Committee recommends that the membership of advisory committees to statistical agencies include a number of appointments to be made by[7] recognized professional organizations such as the American Statistical Association, Industrial Relations Research Association, Federal Statistics Users' Conference, American Economic Association, the National Association of Business Economists, the American Sociological Association, etc. (This is consistent with the requirement that the membership of advisory committees be fairly balanced in terms of the points of view represented with specific attention to the professional point of view.) Further, it is recommended by this Committee that the meeting dates for key statistical agency advisory committees be published through professional society publications in addition to announcement in the Federal Register. This will create the opportunity for widespread professional input and recognition.

Footnotes at end of article.

Statistical Programs Must be Revised and Improved. A sound Federal statistical system requires adequate budget support and development. The Committee applauds the record of the past four years during which the statistical budget has increased from $195 million to $313 million. Professional control of the nature and priorities of improvements is especially important. Given the need to improve the quality and character of specific statistical series, the Committee urges continued consideration of the potential benefits in reliability and effectiveness which can be achieved by appropriate increases in existing levels of support for Federal statistical production and analysis.

Current economic policy is emphasizing the growing pressures on the Federal budget and the consequent requirements for reductions in expenditures. This Committee feels strongly that the benefit of a strong statistical system clearly outweighs the costs which are currently associated with the Federal statistical system.

Technical Measures of Reliability and Sensitivity. Adequate measures of reliability and sensitivity should be developed for all principal statistical series where feasible. Since the interpretation of statistics is primarily undertaken by nonstatisticians, it is essential that there be adequate access to technical advice concerning the nature and limitations of individual statistical series. To facilitate this development, the Committee makes the following recommendations:

(1) The policy of including the name of a senior professional statistician who is responsible for and familiar with the data described in the news release should be extended to all major statistical releases so that the designated professional statistician can be contacted to explain the limitations of the data presented.

Media representatives and others should be encouraged to call this individual for access to professional information concerning the nature and limitations of these series under discussion. Press conferences may be warranted if the demands for explanation become burdensome.

(2) More provision should be made for professional, periodic evaluation of important statistical series, such as that provided in the earlier President's Committee to Appraise Employment and Unemployment Statistics, to provide for regular evaluation of important statistical series.

A good example of such initiative is the recent progress by the Statistical Policy Division of the Office of Management and Budget to create an advisory committee on the national accounts and the establishment of at least two other similar committees which are being planned for Fiscal 1974. Such study commissions, if adequately funded, can provide a wide range of professional judgment and will assure deeper understanding by the professional community with respect to limitations and alternatives to existing statistical programs.

BACKGROUND AND REVIEW

The Need for Public Confidence in Federal Statistics.

The public and private decisions which must be made daily in the conduct of the nation's business, commerce, and social welfare programs require increasingly sophisticated analysis. This is possible only if the data base is available and reliable. The formulation of economic, political, and other types of policy will be haphazard and subject to more than the normal margin of error if the statistics which support policy decisions are not sufficiently accurate. While it is true that timely and accurate statistics will not ensure wise solution to our problems, they are definitely essential to the process of identifying the appropriate direction.

Reliable statistics increase many times our chances for success, especially as they provide the basis for development of better theory and explanation of the workings of socioeconomic processes. This is especially important, at present, now that policymakers are relying so heavily on the use of this data system in their effort to solve pressing social and economic problems. It is not an exaggeration to say that the future direction of national policy could be at stake.

Nothing could undermine the politician and implementation of his policy recommendations as much as an accumulated and intense public distrust in the statistical basis for the decisions which the policy-maker must inevitably make, or in the figures by which the results of these decisions are measured. Unless definite action is taken to maintain public confidence in Federal statistics and in the system responsible for their production, there will be growing tendencies to distrust leadership.

The statistical community, both generators and users, has long been concerned with the integrity of the U.S. statistical system. For example, the President's Committee to Appraise Employment and Unemployment Statistics commented more than 10 years ago:

"The need to publish the information in a nonpolitical context cannot be overemphasized. By and large this has been the case—the collection and reporting of the basic data have always been in the hands of technical experts. Nevertheless, a sharper line should be drawn between the release of the statistics and their accompanying explanation and analysis, on the one hand, and the more general type of policy-oriented comment which is a function of the official responsible for policy making on the other."[8]

As noted later in this report, recent directives regarding the regular scheduling of releases regarding important economic indicators and the delay of at least an hour for the issuance of policy interpretations have been in line with the 1962 statement. It remains true that, as that report indicated more than a decade ago, the importance of a credible statistical system cannot be overemphasized. Federal statistics play a vital role in effective decision-making by government, business, labor, and universities, as outlined in Appendix A.

The President's Commission to Appraise Employment and Unemployment is only one example in the long history of commissions which have focused on Federal statistical activities. A chronological review of 12 major commissions on statistics, beginning with a House select committee in 1844, is contained in the report by Paul Feldman[9] which was prepared for the President's Commission on Federal Statistics and reported in 1971.

The Importance of High Technical Standards in the Federal Statistical System. Since both public and private decision-makers rely heavily upon the products of the Federal statistical system, it is essential that continuing efforts be undertaken to maintain high technical standards in relation to specific statistical programs. A lack of confidence in Federal statistics can result if unduly large errors are evident in published data.

This Committee has not attempted to identify specific weaknesses in present statistical programs, although it is evident that selected programs have been the subject of controversy and technical concern. For example, when the Census Bureau publishes data for extremely small areas, it makes data available for intensive scrutiny by local experts who are able to identify errors that would have been otherwise undetected. Some errors of this sort were found after both the 1960 and 1970 Census. It is regrettable that resources are not available for making corrections in the reported small area data which are increasingly being used as the basis for public and private policy planning. Or, to cite another example, the recent revision of the Survey of Consumer Expenditures (and the transfer of field responsibility from the Bureau of Labor Statistics to the Census

Bureau) has generated considerable discussion concerning the amount of testing given to the new approach, the relative costs involved, and the expected reliability and usefulness of the final results.

Both of these examples illustrate the importance of using highly professional procedures in the development of statistical systems and in the revision of collection or analytical techniques. Problems in the implementation of new approaches are inevitable. However, a high level of professionalism is critical to assure a minimum of such difficulties and to generate confidence that the difficulties will be handled in a sound and professional manner. In short, statistics have long been taken for granted—like the air we breathe. Recently, environmentalists have focused attention on the need to protect the quality of the air we breathe. Likewise, administrators are beginning to recognize the necessity for maintaining the quality of statistics as the basis for sound governmental decision-making.

Requisites of an Adequate Statistical System

The preceding sections have outlined the importance of a sound statistical system which enjoys widespread public confidence. In this section we will turn to the requirements for developing and maintaining a credible and adequate statistical system. As indicated earlier, there are four essential ingredients to achieving this objective. These are briefly discussed below.

Accurate, Consistent, and Timely Statistics. In order for the public to have confidence in the statistical system, it is essential that every effort be made to produce statistics which are accurate, consistent, and timely. It is difficult to meet all three of these criteria with equal emphasis. For example, in an effort to be timely it is often necessary to develop preliminary statistical indicators which are then subject to significant revision when more information becomes available. Likewise, significant problems occur when attempting to develop consistency in statistics produced by agencies with differing purposes, diverse administrative responsibilities, and uneven statistical capabilities.

Nevertheless, while these difficulties must be recognized, it is essential that every effort be made to assure that all governmental statistical agencies strive to meet the highest standards of (1) conceptual development, (2) statistical sampling, (3) internal consistency, and (4) historical continuity.

Public Confidence in Federal Statistics. It is relatively easy to convene professional statisticians to evaluate sample design, historical records of reliability or consistency, or to estimate significance in ranges of errors as tests of the criteria identified in the previous section. In contrast, it is somewhat more difficult to determine specifically those ingredients which will assure public confidence in the statistical system. However, assuming that the basic statistics are accurate, it is essential that the public understand and appreciate this accuracy or the value and usefulness of accurate statistics will be seriously undermined.

The first step in developing public confidence is undoubtedly the development of peer group confidence in the statistics. In other words, if the professional statisticians, biologists, physical and social scientists, etc., who utilize the data have confidence in the statistical system and in the accuracy of the data, it is more likely that the general public will accept this professional judgment as the basis for placing their confidence in the resulting statistics.

Peer group confidence begins with the appointment and advancement of highly professional persons to key policy and program roles in Federal statistical agencies. The professional ability of all agency staff members involved in the collection, compilation, and analysis of Federal statistics is crucial to the development and maintenance of strong peer group confidence in the Federal statistical system.

In a second area, it should be noted that public confidence in the Federal statistical system is strongly influenced by the actions of the press. Most members of the working press cannot be expected to make professional interpretations of the variety of statistical series which are produced by the Federal statistical system. Therefore, it is essential that the press have available to it clear reports concerning important characteristics of specific statistical series and access to expert counsel in the interpretation of those reports.

The third factor related to the public confidence in the Federal statistical system is associated with political use and interpretation of the data. As noted at the outset, a major concern of this Committee has been the exploration of approaches to reducing political influence on the statistical system. Public confidence is influenced both by overt political pressure and by the appearance of political pressures. It is the Committee's position that every effort must be made to reduce both political pressure and the appearance of political pressure if peer group confidence is to be enhanced and if the general public's confidence in the Federal statistical system is to be maintained.

To illustrate the dangers of political pressure on statistical decisions, consider the technical problem associated with assigning the cost of air pollution and emission control equipment on automobiles as a component of the Consumer Price Index. There was considerable debate whether to classify this equipment as a quality improvement—consequently, not influencing the Consumer Price Index—or as a cost increase which would be reflected in the Consumer Price Index.

A statistical decision on cost versus quality in automobile pricing has to be made annually and in 1972 it had to be made during an election campaign. If political considerations were to enter this statistical issue, it would be beneficial to labor to include the emission control equipment as a cost increase, thereby adding a "cost-of-living" increase to the wages of millions of workers and, perhaps, politically reflecting adversely on the success of controls in holding down inflation.

Alternatively, political advocates who are concerned with demonstrating the success of anti-inflationary policies would urge classification of this equipment as a quality improvement, as would those interested in demonstrating the increased productivity of labor and the greater output of the economy.

A technical committee of professional statisticians was convened to resolve this statistical issue, and there is no evidence that political pressure was exercised. However, the nature of this type of decision illustrates the importance of producing technical statistical decisions which are above suspicion and maintaining them in an area which is independent from political pressure. The cumulative effect of a series of political decisions concerning such technical details would be to destroy the effectiveness of the statistical measures as well as to undermine public confidence in the data themselves. This illustration reinforces the importance of professional judgment and decision-making as essential elements in a quality statistical system.

In summary, while it is difficult to identify specifically actions that will assure public confidence in the Federal statistical system, it is important to focus on (1) building peer group confidence in the statistical community by emphasizing professionalism in statistical agencies, (2) improving the understanding of the working press by providing easy access to expert counsel, and (3) minimizing even the appearance of political pressure or influence on the statistical system by eliminating situations and events which arouse these concerns.

Revision and Improvement of Statistical Programs. It is not sufficient to maintain the status quo even if the available statistics are accurate, timely, and consistent. The characteristics of the subjects being measured are subject to continual change. Further, as national priorities change, new subjects must be considered as the focus for Federal statistics.

It is essential that the statistical system include provision for developing revisions and improvements which will encompass sound statistical principles. As Consumer Expenditure Survey, revisions and refinements will inevitably create certain difficulties. It is essential that the decisions to institute such refinements and revisions be based on a firm expectation that more reliable and more sensitive statistical indicators will result, and that revision or discontinuance of a series should not be initiated simply because the available results had proved embarrassing or unresponsive to specific administrative policies.

Each year a number of improvements in the Federal statistical system are recommended and, frequently, adopted. This continual upgrading of the system must be encouraged and, where possible, accelerated. In relation to many other Federal activities, the cost of the Federal statistical system is small. However, with the current demands for budget stringencies, all areas are subject to pressure for future reduction. In view of the importance of statistical programs as the basis for overall policy formulation, caution should be exercised when pruning existing budgets or rejecting new programs which may be essential in the development of public policy.

A professional statistical system requires both well-qualified leadership and adequate budget support. It is recognized that there is a need for central planning to insure proper balance among all areas of demand for improved Federal statistical series. The Statistical Policy Division in the Office of Management and Budget should be encouraged to continue development of statistical policy which emphasizes these points. An outstanding beginning has been made as evidenced by the growth in support of statistical programs from $194.6 million in Fiscal 1970 to $312.6 million which has been requested for Fiscal 1974, an increase of 61 percent. During this period, programs for economic statistics increased from $126.3 million to $174.8 million, an increase of 38 percent, and programs for social and demographic statistics increased from $68.3 million to $137.8 million, a growth of 102 percent.

Adequate Technical Measures of Reliability and Sensitivity. The actual utilization of statistics in decision-making can be significantly influenced by the method of presentation and documentation as reflected in statistical reports. In order to minimize the problems of misuse of statistical series, it is essential that the available reports provide specific technical measures of the reliability and sensitivity of the data at hand. While many users of statistical series do not require full technical documentation of statistical procedures used in compilation, adjustment, and analysis of the data, it is essential for those who have a need or concern about these subjects that the basic reports include either indications of these technical factors or provide reference to source documents where these procedures are defined in detail.

The availability of this information is particularly important in distinguishing between preliminary, revised, and final estimates for key statistical components. If the available report does not clearly call attention to the character of the data being reported, there is a danger that broad media dissemination of the statistical measures will

fail to reflect the limitations of the data themselves. Over time, the failure to distinguish between preliminary and final estimates tends to reduce public confidence in the statistical system by generating the appearance that frequent revisions were unanticipated when, in fact, they may be part of the basic procedures used.

The four characteristics of an adequate statistical system which have been discussed above serve as the framework for the following specific findings of the Committee and the recommendations which were presented earlier.

Findings of the Committee

The causes for concern which led to the formation of this Committee have been intensified during the past year. The primary finding of this Committee on the Integrity of Federal Statistics is that while there is no evidence that statistical results have been altered to support a particular point of view, there are tendencies—through reduced span of authority of professional leadership, appointment of noncareer personnel, and current and proposed reorganizations—to reduce or inhibit the independence of Federal statistical personnel. Therefore, it is particularly unfortunate that a continuing sequence of events has created broad concern regarding the professional integrity of the overall system, especially as a consequence of premature retirements of key professional staff members who, in other respects, would be expected to offer more years of exceptional service.

While the Committee has not elected to pursue specific allegations, it is clear that the organizational structure—especially through current and pending reorganizations—provides increasing opportunities to exert political influence on the development and interpretation of statistical programs. Specifically:

(1) Agency appointments of noncareer personnel, especially those with strong political affiliations rather than statistical credentials, can have an inhibiting influence on the quality, independence, and objectivity of statistical work. A further implication of such developments, in the longer term, will be a reduction in morale and a reduced incentive of both young and mature professionals to associate themselves with agencies which have overt political overtones. This will result in a deterioration of the professional role of Federal statistical agencies.

(2) The reorganization of statistical agencies undertaken in 1971 as the result of a directive from the Office of Management and Budget was intended to reduce the number of separate statistical agencies, to centralize production functions, and to separate the production of statistics from their use in the formulation of policy. These goals would have widespread professional support. However, the application of the directive in the Commerce Department led to the creation of a complicated overlay for the Census Bureau and the former Office of Business Economics, considerably downgrading the role and independence of the operating agencies. In the new organization, the opportunities for influence by noncareer officials for the selection of new programs, for the reduction of old programs, and for other program changes have been substantially increased.

(3) Since, for about two years, target dates for the release of *principal* economic indicators have now been published in advance, the discretionary authority over the timing of these releases has been eliminated. The OMB directive (Circular No. A–91, "Prompt Compilation and Release of Statistical Information"), designed to assure that deadlines are established for the preparation and release of statistical series, has not yet been implemented on an across-the-board basis. Until the efforts now being made to this end in the Statistical Policy Division are put into effect, it is still possible to withhold some reports from preparation or to delay others for political purposes.

The Committee believes that specific steps should be taken to allay the growing fears concerning politicization of the Federal statistical system and to ensure and maintain a high level of credible, professional, statistical work. In the light of the importance of such concerns, the Committee urges that the recommendations listed earlier be promptly implemented and that such actions be properly publicized.

ASA-FSUC COMMITTEE ON THE INTEGRITY OF FEDERAL STATISTICS

Joseph W. Duncan, Chairman, Battelle Memorial Institute.

Daniel H. Brill (ASA), Commercial Credit Company.

Bernard Clyman (FSUC), The Equitable Life Assurance Society of the United States; Queens College, City University of New York.

A. Ross Eckler (ASA), Retired (Formerly, Director, U.S. Bureau of the Census).

Thomas A. Hannigan, Jr. (FSUC), International Brotherhood of Electrical Workers.

Robert E. Lewis (FSUC), First National City Bank, New York.

Robert S. Schultz, III (ASA), New York State Council of Economic Advisers.

DeVer Sholes (ASA), Chicago Association of Commerce & Industry.

FOOTNOTES

[1] Appendix B includes a discussion of the needs for reliable statistics which are evident in government, labor, industry, and universities.

[2] A Statement by the Secretary of Labor concerning the role of the Bureau of Labor Statistics and emphasizing that "the Bureau maintain, in the highest degree, scientific independence and integrity" appears in *The Statistical Reporter,* Dec. 1972, pp. 91–92.

[3] According to the Statistical Policy Division of OMB, during the period when the Current Population Survey was being revised on the basis of the 1970 Population Census, the Urban Employment Survey was discontinued because the cost of continuing the Survey seemed excessive relative to the value of the Survey. This discontinuance was recommended by a technical committee composed of representatives from the various statistical agencies.

[4] The public concern regarding these developments is further evidenced in a series of news commentaries, letters to the editors, and editorials. A selected list of such articles is available from the Committee Chairman.

[5] *The President's Commission on Federal Statistics,* Volumes I and II, 1971.

[6] Revision of A–91, dated April 26, 1972.

[7] An alternative would be to submit a slate of nominees when the agency requires final authority.

[8] *Measuring Employment and Unemployment,* President's Committee to Appraise Employment and Unemployment Statistics, September, 1962, p. 20.

[9] Feldman, Paul, *The President's Commission on Federal Statistics,* 1971, Volume II, Chapter 10, pp. 477–495.

APPENDIX A

ILLUSTRATIVE USES OF STATISTICS IN GOVERNMENT, BUSINESS, LABOR, AND UNIVERSITIES

These brief highlights concerning the role of statistics in governmental, industrial, labor, and universities' decision-making show the importance of selected key statistical series. It should be noted, of course, that there are many specialized statistical series which are not mentioned below which have particularly significant roles in areas where they are applied. There is no intent in this report to evaluate the importance of any specific series.

The Role of Statistics in Government. The importance of the Federal statistical system for policy-making and administration at the Federal, state, and local governmental levels is well-known.

Almost every statistical program has its origin with legislative action which in turn requires data collection in support of program planning, administration, or evaluation. For example, the Decennial Census is mandated by a Constitutional requirement to establish the number of representatives from geographical areas throughout the nation.

The importance of maintaining public confidence in the output of our statistical system can be illustrated by selecting a few examples of the multitude of applications of statistical data in the legislative and executive branches of government. In many cases, the very organization of government itself is dependent upon statistical information. In addition to the apportionment requirement noted earlier, the size of staffs of elected representatives depend directly upon information regarding the number of people in a state or in a Congressional district. At the state and local levels, there are hundreds of provisions in various states where the population level established by the latest Decennial Census is used as a basis for allocating funds, creating boards, granting licenses, establishing jurisdiction of local officials, and setting salary levels.

Official statistical measurements are central to the development of legislative programs by the Congress. The record of legislative hearings is typically filled with statistical exhibits and there are literally innumerable references to specific items of data. Whether legislative policy is being determined, a new program is being established, or the results of existing programs are being reviewed, the legislative uses of governmental statistics are both numerous and extensive.

The range of data involved is impressive. For example, the development of social programs such as those relating to Social Security, welfare, and aid to specific classes of the population depends administratively on data concerning employment, income, hours of work, dependency, and many related subjects. As another example, policy-makers concerned with the problems of our environment and the use of natural resources require data on existing resource availability and utilization as the basis for defining available alternatives and appropriate policies. In this area the available data base must be used to provide estimates of the growth in future uses of these resources, to prepare estimates of time required for resource depletion and to provide a basis for deciding upon quotas and the allocation of supplies among competitive claimants.

In the regulatory area, the role of data as the basis for policy determination is especially evident. Regulation in the fields of transportation, power, and communications—to cite three broad areas—are based to a great extent upon statistical information concerning the number and size of businesses involved, their capacity, capital investment, and degree of penetration in the total market. If the public were to lose confidence in the basic data which are used by regulatory agencies, the very nature of regulation itself would be subject to distrust and controversy.

To many observers of Federal policy-making, the continuing intervention of the administrative agencies of the Federal government in the national economy is perhaps the most evident policy interaction. The national income and wealth accounts play a major role in establishing legislation and policy concerning prices, wages, monetary trends, economic stabilization, and related topics. These data are typically the basis for research and policy planning in the executive branch of government and are continually used to evaluate results achieved by administrative programs. Data concerning cost of living, un-

employment levels, and capacity utilization, provide the underpinning for national economic policy including such vital areas as budget formulation and fiscal administration, as well as the administration of specific programs.

The allocation of Federal and state funds depends directly upon a number of statistical measures—including the size of the population as a whole or selected classes of the population such as public assistance recipients. Data concerning income levels, miles of highway, numbers of pupils, and other measures are provided for in a network of legislation enacted by the Congress and by state legislators. Decisions at a variety of governmental levels relating to urban renewal, public housing, recreational facilities, drainage and water supply, and health and educational facilities of all kinds must be made in the light of full information regarding the population and its characteristics.

These examples indicate that it would indeed be difficult to overestimate the value of sound statistical information in the governmental structure of the United States—a structure which has long been accustomed to making decisions on the basis of facts. The ultimate test of programs depends upon objective evaluation of the results achieved. For this purpose, reliable and continuing social and economic statistics of unquestioned validity are essential. In addition, there should be provided a body of administrative statistics for each major program, properly planned and clearly presented so that agency officials, the Congress, and the general public can judge the results that have been obtained and can call for improvements when necessary.

The Role of Statistics in Business. In addition to the internally generated statistics unique to individual businesses, most corporations rely upon Federal data for many of their critical decisions in areas such as business planning, market research, financial administration purchasing, and personnel administration.

Corporate long-range planning frequently begins with analysis of national income accounts and related data such as industry production levels as the basis for establishing the broad market context for individual corporate operations. In fact, many large corporations employ full-time economists whose primary function is analyzing national economic developments and determining their impact upon the individual corporation.

Businessmen look to statistics to tell them how the economy in general is faring as a guide in making long-range investment decisions or setting sales quotas for the year ahead. They want to get advance warning on cyclical turning points and the amplitude and duration of expansions and contractions. But frequently their needs are more precise. They want to know how each of their product lines is faring relative to industry as a whole. They want to gauge the growth of individual markets as a guide to inventory policy, plant and equipment expenditures, and new product development. They want to assess Federal budget deficits, monetary policy and interest rate trends as they may affect the financing of their firms' growth and investment. They rely on figures on prices, labor markets, wages, and supplies of materials as guides to their current operations.

Market research departments in industry extensively utilize Federal data concerning population characteristics and industry characteristics to determine basic market trends and opportunities.

Financial departments in major corporations carefully evaluate basic monetary trends as measured by the Federal Reserve System to determine current and future financial developments which will influence the cost and availability of capital to the corporation.

Purchasing officers rely upon Federally produced statistics, such as commodity price data of the Departments of Agriculture and Labor and figures on shipments and inventories from the Department of Commerce to determine availability and cost of basic materials for manufacturing the firm's products.

Personnel departments rely upon local and national wage and income surveys to determine appropriate salary and fringe benefit schedules.

Hence, it is evident that in nearly all facets of business and industry, basic decisions which are essential to effective operation of the corporation are made on the basis of Federal data.

Additionally, the Federal statistical system is vital to the concerns of business in many respects beyond their internal use of data for operations and planning. The quality of the statistical base used in establishing regulatory policy, administrative programs such as the New Economic Policy—Phases II and III, and the formulation of legislative guidelines (in vital areas such as pollution standards, product quality, and import-export regulations) is crucial to business leaders and decisionmakers.

The Role of Statistics in Labor Negotiations. Federal statistics directly affect the entire scope of industrial relations, including collective bargaining and contract administration. Collective bargaining is a key element in the American free enterprise system, and it could not be successfully carried on without reliable Federal statistics acceptable to all interested parties—labor, management, and the general public alike. Both parties at the bargaining table need objective insight and understanding into each other's position. Also, they direct much of their efforts toward convincing the general public of the equity of their own positions as reflected in objective official statistics. In this often supercharged atmosphere, negotiations would quickly deteriorate into chaos if no reliable and acceptable statistics were available as the focus of discussion. The same would be true of the day-to-day operations of contract administration.

Statistics of key importance for collective bargaining and contract administration include wages by industry, region and state, and trends and industry data relating to fringe benefits such as paid holidays. vacations, health insurance, and pension benefits. Cost-of-living provisions based in the Consumer Price Index affect the income of four million workers and pensions of two million retirees. Business and labor groups use the Consumer Price Index to develop retirement and health insurance programs, the government, to formulate social and economic policies, and individuals, to check on their real earnings. The Pay Board adopted consumer price indexes along with productivity indexes as the two major criteria governing acceptable noninflationary wage increases.

Labor market conditions and the amount of unemployment are matters of primary interest to union and management negotiators as indicators of the economic situation in given areas or localities. Statistics measuring the frequency and severity of work injuries by industry are of great importance to labor and management since they serve as the basis for specific insurance provisions and new laws designed to protect workers from death and disabling injury. Any lack of confidence in their accuracy or reliability by either of the parties concerned would jeopardize this accepted approach to the settlement of conflicting positions.

The interest of labor in good statistics is not limited to their usefulness in labor negotiations, however. Statistical information is vital in the formulation of much legislation which either expands or restricts the basic rights of labor and management. Many far-reaching economic decisions made by government leaders, such as establishing the Construction Industry Stabilization Council, plus the imposition of wage and price controls, are based upon Federal statistics.

The Role of Statistics in Universities. Universities continually conduct research designed to assist businesses, labor organizations, and government agencies in making sound decisions of the kind illustrated above. In addition, universities use Federal statistics to test basic theories on which such decisions are based and to search for more useful theories in a diverse range of topics including all areas of social, biological, physical, and economic systems. Much of this basic research is cooperative among government, business, and universities. Clearly, we cannot develop true undesrtanding of basic social and economic processes unless our historical records are comprehensive and accurate.

Of equal importance, the entire education process depends upon the evaluation and interpretation of basic data. If the student and/or teacher lacks confidence in the information base, it is difficult for the educational endeavors to proceed.

Other Roles. There are many important uses for statistics which have not been mentioned in the above sections.* The intent here is simply to illustrate the importance of statistics in a wide range of sectors. For example, the discussion of statistics in labor negotiations is only one example of the use of statistical series by the labor movement. Many uses by other sectors could be emphasized including use of crop reports and other agricultural statistics by individual farmers and consumers, statistical analyses by state and local governments in establishing governmental policy, and use of statistics by news media as an underpinning for planning future program emphasis, reporting on current problems, etc.

As noted in the introduction to this report, the discussion of the importance of reliable statistics which are evident in government, labor, industry, and universities are highlighted above to demonstrate that accurate and credible Federal statistics are: ". . . absolutely essential, if the ongoing policy and planning needs of private and governmental users alike are to be satisfied."

APPENDIX B: NOVEMBER 10, 1972

STATEMENT OF POLICY BY THE SECRETARY OF LABOR CONCERNING THE ROLE OF THE BUREAU OF LABOR STATISTICS

In Order No. 49–69, dated November 25, 1969, the Secretary delegated authority for labor statistics programs to the Commissioner of Labor Statistics. Traditionally, the Bureau of Labor Statistics, which the Commissioner heads, has had a dual responsibility. One is to serve as the statistical and research arm of the Department of Labor, supplying the Department and its program offices with data important to their functioning. The other is to provide information to the public on subjects concerning labor in the most general and comprehensive sense. Both responsibilities require that the Bureau maintain, in the highest degree, scientific independence and integrity. The second function, particularly, requires that the public be confident that the Bureau does, in fact, possess these qualities and that they will be preserved.

The purpose of this statement is to reaffirm the importance of the Bureau's scientific integrity, and to set forth certain guide lines that will help to preserve it.

The decisions-making process in producing statistics involves:

The allocation of BLS resources

The appointment of personnel and selection of advisory committees

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*The official report of *The President's Commission on Federal Statistics* includes a lengthy discussion of various groups which are users of statistics—Volume I, pp. 77–102.

The determination of appropriate statistical methods and operating procedures

The preservation of confidential records supplied by respondents to surveys

The preparation of technical analysis and interpretation of the data

The release of information to the public.

The Commissioner's decisions with regard to these matters must, of course, follow the policy, budget and program objectives established by the Department of Labor. They must also conform to the statistical standards and policies established by the Office of Management and Budget under the Federal Repairs Act. However, there shall be no decisions which are not in concert with the professional and technical expertise of the Bureau. Under these conditions scientific independence will continue to be the hallmarks of the Bureau of Labor Statistics.

A number of specific safeguards help to preserve this scientific independence. Among them are the following:

1. Two active advisory councils are informed about and advise upon BLS programs and decisions. They are the Business Research Advisory Council, with representatives drawn from the business community, and the Labor Research Advisory Council, with representatives from labor unions. The two councils operate independently of one another, and both have numerous committees concerned with every subject-matter area covered by the BLS.

2. A new Academic Advisory Council will be organized later this year, with members from several professional organizations. This new group, consisting of economists and statisticians in universities and research institutions, also will advise the BLS on its program and procedures.

3. In the release of principal economic indicators BLS follows guidelines established by the Office of Management and Budget that help to assure the objectivity of Federal statistics:

a. Data are released by the principal statistical officer in charge of the agency. This means that the Commissioner determines the date and hour of release and approves the text of the release, and that the BLS is clearly identified as the source agency in the release.

b. Data are released as promptly as possible, and always within two working days after they have been compiled and checked.

c. The schedule of release dates is published in advance.

d. In order to clearly separate the release of data from policy-oriented commentary, no comments by a policy-making official are made until at least one hour after the release of the data by the BLS.

4. The Secretary has delegated to the Commissioner full authority to set up appropriate procedures and regulations to safeguard the confidentiality of the reports made to BLS by respondents to its surveys. These regulations apply throughout the Department as well as to other agencies or individuals within or outside the government, and prevent the use of BLS data for other than statistical purposes.

James D. Hodgson
Secretary of Labor

Source: *Statistical Reporter*, December 1972, pages 91–92.

APPENDIX C

LISTING OF SELECTED MEDIA ARTICLES CONCERNING INTEGRITY OF THE FEDERAL STATISTICAL SYSTEM *

September 29, 1971—*The Washington Post*, "Nixon Ousting Labor Analysts" by Frank C. Porter.

November 17, 1971—*The New York Times*, "Lawmaker Sees Census Politics" by Jack Rosenthal.

February 25, 1972—*Journal of Commerce*, "A Staff Report—Does the Administration Cloud Statistics on Business Activity?"

August, 1972—Annual Meeting of the American Statistical Association *Statistics and Politics* by Philip M. Hauser.

September 6, 1972—*The Washington Post*, article by Nick Katz, "Farm Income Knowingly Overstated by $1 billion".

October 22, 1972—*The New York Times*, Washington Report Article by Eileen Shanahan on interpretation of economic statistics.

November 5, 1972—*The New York Times*, Letter to the Editor from Harold C. Passer discussing above article by Eileen Shanahan on his interpretation and pronouncements during the recession in 1970.

November 6, 1972—*The Wall Street Journal*, Review and Outlook—"The BLS Fuss."

November 27, 1972—*The Wall Street Journal*, Letter to the Editor by Senator Proxmire pointing out that the Joint Economic Committee has been holding monthly employment data hearings since they were discontinued by BLS.

December 20, 1972—*American Banker*, Business Outlook by J. A. Livingston, reports the surprise and astonishment of economists and statisticians at the accepted resignation of Geoffrey H. Moore as Commissioner of Labor Statistics.

January 29, 1973—*The Wall Street Journal*, front page news item noting resolution by the Industrial Relations Research Association.

* Editorial comments have also included political cartoons such as that in *The New Yorker's* issue of October 14, 1972, depicting the "Bureau of Rosy Statistics".

APPENDIX D

RESOLUTION BY THE INDUSTRIAL RELATIONS RESEARCH ASSOCIATION EXECUTIVE BOARD

The Executive Board of the Industrial Relations Research Association, having received and considered a report from its committee appointed to investigate recent events concerning the U.S. Bureau of Labor Statistics resolves as follows:

1. that public confidence in the professional integrity and credibility of the Bureau of Labor Statistics is essential, because the Bureau publishes data and materials which are used regularly in the labor-management relations, business contracts and economic forecasts;

2. that the credibility of the Bureau of Labor Statistics has been impaired by events of the last two years, including the termination of press conferences by Bureau of Labor Statistics personnel and the subsequent reassignment of key personnel in the Bureau;

3. that the Board views with particular concern the acceptance of the requested resignation of the Commissioner of Labor Statistics three months prior to the expiration of his statutory term of office, because this termination under these circumstances represents a sharp break with the long-established tradition that this position has not been regarded as a political appointment;

4. that it is most important, if further impairment of the credibility of the Bureau of Labor Statistics is to be avoided, that the new Commissioner be a person with the highest professional qualifications and objectivity;

5. that it is desirable that the decision to discontinue press briefings by the Bureau of Labor Statistics technical personnel should be carefully reconsidered;

6. that nothing in this resolution should be construed to indicate that this Association questions the integrity of the preparation of BLS figures.

To be signed by: Ben Aaron, President 1972, Douglas Soutar, President, 1973, David Johnson, Secretary-Treasurer.

Source: *Congressional Record*, January 11, 1973, page S464.

APPENDIX E

EXECUTIVE OFFICE OF THE PRESIDENT, OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, D.C.

April 26, 1972.

Circular No. A–91, revised.

To the heads of executive departments and establishments.

Subject: Prompt compilation and release of statistical information.

1. *Purpose.* The purpose of this Circular is to insure that the principal statistical series which are issued by agencies to the public annually or more frequently are released without unnecessary delay and that the publication dates for the principal weekly, monthly and quarterly indicators are made publicly available in advance. The prompt release of official statistics on a regular schedule is of vital importance to the proper management of both private and public affairs.

2. *Rescission.* This Circular supersedes and rescinds Circular No. A–91, dated February 12, 1969. It covers annual and semi-annual series as well as those issued more frequently. Also it reduces from quarterly to annually the reports required by the Office of Management and Budget on the release of certain statistical series having more limited use than the principal indicators identified each month in the OMB publication, *Statistical Reporter*.

3. *Authority.* This Circular is issued under the authority of Section 103 of the Budget and Accounting Procedures Act of September 12, 1950 (31 U.S.C. 18b), Executive Order 10253 of June 11, 1951, and Executive Order 11541 of July 1, 1970.

4. *Coverage.* The Circular applies to all statistical series issued by agencies to the public annually or more frequently, unless otherwise exempted by the OMB.

5. *Objectives.* It is the aim of this Circular to accomplish the following objectives:

a. The shortest practical interval should exist between the date or period to which the data refer and the date when compilation is completed. Prompt public release of the figures should be made after compilation. In the case of principal indicators, the goal is to accomplish compilation and release to the public within 20 working days. Within this period no more than two working days should be allowed for the public release of data, unless other arrangements are approved by the OMB.

b. In the case of other series, more time can be allowed, but every effort should be made to keep it to a minimum. Series requiring an inordinately long time to compile should be reviewed to see what purpose they serve and whether they should be discontinued or reduced in frequency (e.g., monthly series made quarterly or annual).

c. Release dates for principal economic indicators will appear each month in the OMB publication, *Statistical Reporter*. Care should be taken in scheduling these release dates so that they can be met. Unless directed otherwise by OMB, figures which become available early should be released early.

d. Initial release of statistical series should be made by the statistical agency in a written report. A press release should be issued if it would significantly speed up the release of the data to the public. There should be a one-hour separation between the issuance of the release by the statistical agency and related commentary.

6. *Responsibilities.* Each agency is directed to review continually its practices in releasing statistical series to the public and to take such action as may be necessary to carry out the objectives of this Circular.

7. *Reports and records.* Each agency that publishes statistics subject to the provisions

of this Circular will submit reports to the OMB and maintain records in accordance with instructions in the Attachment and in the formats of the Exhibit.*

8. *Inquiries.* For any information concerning this Circular, please call the Office of Management and Budget, Statistical Policy Division, telephone: code 103–4911 or 395–4911.

GEORGE P. SHULTZ, *Director.*

FOREIGN AID

Mr. McGEE. Mr. President, in yesterday's—June 11—publication of the Washington Post, there appeared an excellent editorial analyzing the merits of a proposal on foreign aid offered by a bipartisan majority of the House Foreign Affairs Committee. The proposal has been introduced by Representative CLEMENT ZABLOCKI, Democrat of Wisconsin.

As we approach our annual problem of attempting to come to grips with the question of foreign aid and how to make it more effective, I believe this proposal is well worth considering by this body.

In commenting on the House proposal, the editorial writer concludes:

Whenever and however it ends, we would hope that both Congress and the administration would keep high in mind the prospect for responsible engagement in the world, which the House aid initiative holds out.

The House proposal is innovative in its approach and certainly represents a positive reassessment and redirection of our foreign aid program. It is a thoughtful and constructive look at what the economic needs are in the developing world; and a very rational approach to meeting those needs, while at the same time, enhancing our own interests as a Nation.

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:

A PROMISING AID PROPOSAL IN THE HOUSE

The lengthy travails of American foreign aid have made clear to its supporters the need to make aid at once more effective for its recipients and more attractive to its donors. Pessimists have doubted that these twin goals could either be served adequately, or even combined at all. A bipartisan majority of the House Foreign Affairs Committee, however, has now produced a well-considered and promising proposal meant to do both. Introduced by Rep. Clement Zablocki (D-Wis.), the proposal is intended to strengthen and enlarge the overall economic aid program and to do so in a way calculated to enhance the prospects of the program's passage in Congress. The first without the second is, of course, useless.

So, to satisfy those who have rightfully demanded that aid do more to improve the quality of the lives of the poor, the new proposal would take the same $1 billion which the administration asks for economic assistance and seek to focus the money more sharply on "human-oriented" needs in population control, agriculture, health and the like. Not every development economist agrees that the poorest of the poor can thus be helped but the approach unquestionably has considerable moral and political merit. Big capital-eating projects such as dams would be left, to an even greater extent than they already are, to the international development agencies.

Then, to satisfy those whose main interest in aid is that it expand American exports, an "export development credit fund" would be established to subsidize another $1 billion a year in easy-term exports to the lowest-income countries. The interest subsidies, costing $40 million, would be funded from repayments of earlier aid loans; repayments now run at $400 million. By training aid on "people not projects" and by hitching to the aid wagon those Americans desiring to help their own economy as well as Americans desiring to help the world's poor, the House sponsors hope to surmount the political obstacles to aid which have grown so high in recent years. To convey the relationship of interdependence which the new proposal reflects and advances, the name of the administering agency would be changed from "Agency for International Development" to "Mutual Development and Cooperation Agency."

It is satisfying to report that, in his department's first formal response, Secretary of State William Rogers Tuesday welcomed the House committee's "thoughtful and positive approach" and noted correctly that AID had itself been moving along similar lines. Mr. Rogers also pronounced himself "especially pleased at the committee's reaffirmation of the central role of the Department of State in over-all guidance of U.S. development policies." Whether the other elements of the government, particularly the White House, will be equally pleased remains to be seen. On that question of bureaucratic politics, a good part of the fate of the House initiative probably hangs. To imagine that any program so multi-dimensional and so worn and frayed as aid can be considered only on its merits is, alas, fantasy.

Nor can the question of congressional politics be ignored. Not every committee of the Congress will rejoice to see the House Foreign Affairs Committee setting up and overseeing a program in what would be for it the new field of direct export promotion. (Foreign aid has always had a heavy aspect of indirect export promotion.) On these grounds, the sooner that Foreign Affairs chairman Thomas E. Morgan (D-Pa.) eases from his current posture of benign aloofness, as one observer calls it, to active sponsorship, the better.

The other big question which will shape the fate of the new economic aid proposal is its political relationship to the equally controversial question of military aid. The administration put the two together in a single package. Predictably the Senate split off the military items—these include general security assistance and grant military aid for Cambodia. Indochina reconstruction funds are also in the administration bill. In welcoming the House economic aid proposal, it was plainly one of Mr. Rogers' purposes to cultivate support for the other items in that bill. Some supporters of the House proposal favor the other items, some don't. A difficult and protracted negotiation is no doubt in store. Whenever and however it ends, we would hope that both Congress and the administration would keep high in mind the prospect for responsible engagement in the world, which the House aid initiative holds out.

NATIONALIZATION OF AMERICAN OIL COMPANIES

Mr. GRAVEL. Mr. President, in recent months I have spoken at great length about the national energy shortage, the balance-of-payments problems, and the urgent need for increased domestic production of petroleum products. We have recognized for some time that continuing dependence upon foreign oil imports from the Persian Gulf held a high degree of uncertainty.

That uncertainty can be expressed in a number of ways—decreased exports by the producing countries, or outright curtailment of exports. An additional method would be the nationalization of American oil companies operating within the producing countries compounding our balance-of-payments problems.

In the June 12 edition of the Washington Post a story appears that Libya has moved to nationalize the Nelson Bunker Hunt Oil Co. So that my colleagues may read of this latest development in our energy crisis, I ask unanimous consent to have the article printed in the RECORD.

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

U.S. OIL FIRM NATIONALIZED BY QADDAFI

Libyan President Col. Muammar Qaddafi yesterday announced the nationalization of the $140 million Libyan operations of the Nelson Bunker Hunt oil company of Dallas, Texas.

"The time has come for us to deal America a strong slap on its cool, arrogant face," the Libyan leader told a wildly cheering crowd at a rally in Tripoli marking the third anniversary of the expulsion of U.S. forces from Wheelus Air Base.

"American arrogance is symbolized in the support of the monopolistic oil companies," Qaddafi said. "It is high time the Arabs take serious steps to undermine American interests in our region."

The nationalization of Bunker Hunt, an independent company in a particularly vulnerable position, sent a new chill through three larger American oil companies—Oasis, Amoseas and Occidental—which together account for about half of Libya's petroleum production.

These three companies have been engaged in talks with the Libyan government over its demand for "full control" of their operations on Libyan territory, and a source close to these talks said yesterday that "they have not been going well."

Cheered on by the crowd, Qaddafi delivered a bitter attack yesterday on American imperialism and the oil companies, which he said reflect America's "policy of domination."

"American imperialism has exceeded every limit," Qaddafi charged. "The Americans support our Israeli enemy, threaten our security with their aircraft carriers, and from time to time, the Americans threaten our territorial waters.

"The time might come," he warned, "where there will be a real confrontation with oil companies and the entire American imperialism."

In Dallas, a Bunker Hunt spokesman reached by phone said a "situation of de facto expropriation" has existed since May 24 when Libya ordered the company to cease producing and exporting oil until further notice.

Hunt, until 18 months ago, was in partnership with British Petroleum, producing 440,000 barrels of oil a day in the rich Sarir oil field. Then in December 1971, Libya nationalized BP's share of the operation in retaliation for Britain's alleged complicity in Iran's occupation of islands in the Persian Gulf.

This left Hunt, with Libya as its only important source of oil, in a particularly vulnerable position. A company spokesman yesterday said Hunt "tried to work with the Libyan national oil company and its subsidiaries." The spokesman said, however, that this proved impossible because of Libya's demands that Hunt "illegally market the oil which has been expropriated from British Petroleum."

About six months ago, when Libya de-

* Attachments available from the Office of Management and Budget upon request.

manded 50 per cent of Hunt's half-interest in the concession, Hunt asked that the matter go to arbitration.

Libya nominated its U.N. ambassador as its negotiator and Bunker Hunt nominated first John Connally and then, when he rejoined the Nixon administration, a member of his law firm.

When Libya ordered Hunt May 24 to suspend production, the company called on Libya to lift this order pending resolution of arbitration. But the arbiters never met and, as a Hunt spokesman said, "Col. Qaddafi gave his answer today."

The spokesman said Hunt now would "pursue all available legal remedies," but declined to elaborate on what moves might be available.

While the Hunt spokesman declined to provide any information about the value of the company's holdings in Libya or the impact on the company's operations, industry sources estimated the value of Hunt's Libyan operations at $140 million.

[In Washington, a State Department spokesman said "The United States recognizes that the Libyan government has a right to nationalize industries. But the United States expects prompt, adequate and effective compensation to be paid to the company."]

Sources also said that Hunt has been drilling for oil in Mozambique, New Zealand and Canada, but is not believed to be producing oil in any foreign country except Libya.

The American oil companies operating in Libya, producing more than 90 per cent of its petroleum, have been growing increasingly apprehensive since Oct. 4, when the government demanded a 50 per cent share in Bunker Hunt's operations.

Several weeks later, Libyan Petroleum Minister Ezzeldin Mobruk indicated that Libya planned to seek similar 50 per cent participation arrangements with all the American companies.

The oil companies strongly opposed this demand and negotiations broke down in December. Then on April 30, the Qaddafi government escalated its demand to "full control" of the American companies' operations in Libya. Three rounds of talks have been held since that date.

Qaddafi, at a news conference last month, warned that Arabs might use oil as "the ultimate weapon" in the Middle East conflict.

"All estimates foresee a growing need for oil in the consuming countries, and oil will not lose importance in the future," he said at that time. "The world—and above all the U.S.—needs more oil every year."

At that news conference, he accused the Oasis group of employing Israeli nationals and importing Israeli products into Libya. "The behavior of this American company is serious and we will put an end to it," he declared.

Presidents Anwar Sandat of Egypt and Idi Amin of Uganda attended the rally yesterday at which Qaddafi announced the nationalization of Bunker Hunt. Sadat and Qaddafi are holding talks on the proposed merger of their two countries by Sept. 1.

Mr. GRAVEL. Mr. President, this story merely foretells of things to come. I think it is reasonable to expect that we will be reading additional reports of nationalization of American oil companies. Therefore, increased production of domestic oil becomes more essential each day. Each day that we ponder and delay construction of the Trans-Alaska Pipeline only finds our national energy situation worsening and our international financial position further eroding. Surely we cannot further delay action on this critical issue.

MINNESOTA'S SUCCESSFUL SOCIETY

Mr. MONDALE. Mr. President, I would like to call the attention of my colleagues in the Senate to an article which recently appeared in the St. Paul Pioneer Press. The article, written by Al Eisele, is based upon the latest volume in Neal Peirce's study of contemporary America, which singled out the State of Minnesota as the best available model of the "successful society" in America.

According to the author, there are many reasons for Minnesota's unusual success. Yet he observes,

> None is so convincing as perhaps the simplest. These people appear to have control of their own destiny.

The climate of openness, of citizen interest and participation in public policy decisions, has, in my view, been essential in shaping a high quality of life in Minnesota.

The credit for Minnesota's remarkable achievements quite rightly belongs to the people of our State, who have worked, in Peirce's words, to make Minnesota:

> A deceptively simple example of how a democratic society should be run.

Mr. President, I ask unanimous consent that the full text of Al Eisele's article be printed in the RECORD.

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

[From St. Paul Sunday Pioneer Press, May 20, 1973]

MINNESOTA'S "SUCCESSFUL SOCIETY" HAILED IN BOOK

(By Albert Eisele)

WASHINGTON.—A monumental new study of the United States has singled out Minnesota as the best available model of the "successful society" in America and an outstanding example of "how a democratic society should be run."

The flattering assessment of Minnesota's social, political and economic climate is contained in a book published today that is the fourth part of a nine-volume examination of contemporary America.

The study, written by political scientist Neal Peirce and patterned after John Gunther's classic 1947 book, "Inside USA", cites Minnesota's "open, issue-oriented (and) responsible" political system as the key to the state's "unique character" and disproportionate national prominence in recent years.

In his latest volume, "The Great Plains States of America," (W. W. Norton & Co., New York), Peirce declares that despite a number of shortcomings, "Minnesota is a state in which its people can take justifiable pride and . . . as good a model as one can find in these United States of the successful society."

Referring to Gunther's observation that Minnesota is a "spectacularly varied, proud and handsome" state with a progressive political tradition, Peirce concludes, "the intervening quarter century has done little to tarnish the bright image of the North Star State."

Peirce, who examines eight other Great Plains states in the same volume and finds that much of the region has become an economic and political backwater since World War II (in fact, Peirce suggests that financially hard pressed North Dakota should merge with Minnesota), says he found many reasons for Minnesota's success in the face of this trend.

"But none is so convincing as perhaps the simplest," he writes: "These people appear to have control of their own destiny."

Declaring that no other Great Plains state "has tried to be so responsive to the needs of its people," Peirce, who visited every state in the union since beginning his project 4½ years ago, said Minnesota leaders responded with a "blank stare" when he asked who "runs" their state.

"No single industrial cabal, no bank group, no patronage-hungry courthouse crowd controls Minnesota," he asserts.

Peirce notes that special interest groups are active in lobbying at the state legislature, but adds, "None is consistently successful, and the crucial decisions of a public nature are made through the political process with few invisible powers lurking behind the throne.

"The political parties, constituted by an especially democratic process from local precinct caucuses on up, wield the significant power—and through them, the people."

Peirce, whose three previous volumes on the 10 largest states ("megastates"), the Pacific States and the Mountain States have been hailed by critics as the best works of their kind since the state guides produced by the Works Progress Administration (WPA) in the 1930s, is unsparing in his lavish praise of Minnesota.

"Its leaders . . . have played an increasingly prominent role in national life, far out of proportion to the state's modest 2 per cent of the national population," he observes.

"Its political structure remains open, issue-oriented, responsible.

"Its state government has been a leader in services for people, even though citizens and corporations alike have had to pay a high tax bill for those services.

"Few states exceed Minnestoa in the quality and extent of the education offered its citizens; none, appears to provide health care of comparable quality.

"Economic growth has been strong and steady, encompassing the brain-power industries of the electronic era along with traditional farming, milling and mining.

"And Minnesota maintains a clear focus of economic and cultural leadership in her Twin Cities, towns whose great industries have resisted the siren call of the national conglomerates."

In his analysis of Minnesota's political and governmental system, Peirce takes note of the "excesses" that occurred when supporters of Sen. George McGovern, D-S.D., took control of the Democratic-Farmer-Labor state convention in 1972 and forced through a platform "clearly unrepresentative of the broad mass of Minnesota Democrats."

But, he notes, "Usually the system works well, and as a general rule one cannot find another state in which party platforms and campaing promises are taken more seriously."

He cites Gov. Wedell Anderson's 1970 campaign promise to work for property tax equalization and a greater state share of school financing as an example, noting that Anderson later successfully pushed for enactment of landmark school financing reform program.

The program was part of a "revamping of the entire fiscal relationship between the state and its localities so sweeping that the National Advisory Committee on Intergovernmental Relations later hailed it as the 'Minnesota miracle'," Peirce states.

Peirce notes that following Minnesota's example, courts across the country began to invalidate the local property tax as the chief source of school financing and that the same change in the tax system was ordered in Minnesota by a federal judge in 1971.

"But in Minnesota, the court action was almost an afterthought," he writes: "The essential point is that in this state the issue

had already been handled in its most appropriate forum, the political-legislative system, not the courts."

Peirce cites numerous other examples of the "quiet revolution" that has taken place in Minnesota in recent years which he says has been characterized by the replacement of the professionals who have traditionally dominated the policy-setting boards in state and local government with "dedicated and interested lay citizens who are more concerned with the breadth and quality of services delivered than with special professional prerogative."

These include "genuine citizen membership" on the new Twin Cities Metropolitan Council ("one of the most advanced regional government bodies in the country"), the nation's first statewide press council, and the Higher Education Coordinating Commission, the water pollution board, as well as most state licensing and standards boards.

"Minnesota is finding a reservoir of citizens able to assume these key policy-making roles in the society—leaving the implementation of programs, of course, to the professionals under their direction," Peirce asserts.

"The openness of Minnesota public life, the willingness of leaders to try new ideas, and the state's demonstrated capacity to handle money and programs well and honestly, bring dividends of many kinds," Peirce notes, adding that Minnesota's reputation has enabled it to become a testing ground for many new private and federal experimental programs.

"In sum," Peirce concludes, "Minnesota is a deceptively simple example of how a democratic society should be run."

Peirce, a Washington-based political writer since 1959 and presently a fellow at the Woodrow Wilson International Center for Scholars here, goes into considerable detail about other aspects of Minnesota life in his 40-page chapter entitled, "Minnesota—the Successful Society."

Among the factors he cities to justify that title are:

An adaptive and diversified economy with a high degree of local ownership and heavy emphasis on science-oriented, "intelligence-devouring industries;"

A "deep orientation to change" among Twin Cities civic and business leaders, "and a determination not to be engulfed by that change, but rather to make it work constructively";

A steadfast commitment to public and private education, to efficient, innovative government even at the cost of a heavy tax burden ("Minnesota is a high-tax, high-service state") and to cultural and recreational activities.

Ironically, Peirce's laudatory comments about Minnesota come in the wake of last week's announcement that the state has dropped from second in the nation to 13th in its overall "quality of life" ranging.

Peirce ends his Minnesota chapter by pointing out the unusually large number of Minnesotans on the national political stage. "Man for man, it would be hard to name a state which has contributed as many men of stature and depth to national political life in the post-war era as Minnesota", he states.

In the light of their accomplishments alone, Peirce observes, "Minnesota's role in the history of post war America seems assured a shining place."

THE ENERGY CRISIS

Mr. GRAVEL. Mr. President, deep concern over the national energy crisis has been voiced extensively in recent months by the Congress, the Government, and the oil industry. The concern of the industry has been voiced through numerous statements by industry officials and through statements in newspapers. An example of that concern appeared in the June 6 issue of the Washington Post by the Gulf Oil Corp. I ask unanimous consent to have the article printed in the RECORD.

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

WE CAN'T TALK OUR WAY OUT OF THE ENERGY CRISIS

It used to be hard to get people to talk about the energy problem. Now, it seems everybody is talking about it. If we're going to solve the energy problem before it becomes a crisis, it's time to stop talking and start taking action.

This country is entering a period in which our available domestic energy supplies will not be enough to meet our needs. In short, we're using up our low cost fuels faster than we can produce them.

Oddly enough we have more energy supplies right here in America. Experts estimate there are substantial quantities of oil and gas and nuclear fuel still to be found. We have billions of tons of known coal and shale oil reserves. What we need is the national determination to initiate the policies and programs that will enable us to develop these resources.

It would have been tough enough to solve the energy problem if we had started ten years ago. The tragedy is, we haven't really started yet. If this country is going to maintain its national security and current standard of living, every single one of these policies must be put into effect as soon as possible.

WE MUST PRODUCE 90 PERCENT OF OUR ENERGY FROM DOMESTIC SOURCES

Some people think we can solve our energy problems by importing oil from foreign countries. The trouble is, energy supplies are growing scarce in other industrial nations, too. As we compete with these nations for oil and gas, the price goes up.

Too many foreign imports would result in intolerable balance of payment problems, further devaluation of the dollar and a weakening of our position in foreign affairs.

The keep total energy imports at a reasonable level of around 10%, means that all forms of domstic fuel must be developed.

WE SHOULD STRIVE TO INCREASE OIL AND GAS PRODUCTION BY ⅓ BY 1985

This is a big and difficult task. Federal lease sales wil have to be larger and more frequent. Exploration and production will be required both onshore and offshore with proper safeguards for our environment. Alaskan oil will have to be brought to market. And since some imports will have to continue for a long time import costs must be reduced, by building more U.S. refineries and deepwater ports for super-tankers.

COAL PRODUCTION WILL HAVE TO INCREASE 176 PERCENT BY 1985

There is plenty of coal left in this country. Enough to last hundreds of years. But most coal is dirty. We must continue to develop methods for removing ash and sulphur from coal.

In addition, we should increase coal prices to encourage construction of new mines. We also must allow strip mining, but under conditions which insure the restoration of the land. And we must develop processes for making natural gas from coal on a commercial basis.

NUCLEAR ENERGY WILL HAVE TO INCREASE TO 22 PERCENT OF OUR TOTAL ENERGY NEEDS

Potentially, nuclear power represents our most plentiful energy resource. But today, only one percent of our energy needs are provided by nuclear generators. And there are only 29 nuclear power plants operating in the entire country. We will need anywhere from 230 to 305 new 1-million kilowatt plants initiated in the next several years. To make this deadline will require streamlining of licensing procedures and site approvals and elimination of delays caused by unwarranted environmental concerns.

A STRONG PRIVATE ENERGY INDUSTRY MUST BE MAINTAINED

With all the work there is to be done, it's quite obvious that neither government or industry can do it alone. What's needed is an attitude of mutual cooperation. Much like that which exists in the American Space Program. Price controls over fuels should be eliminated to allow prices to reach a level which will provide incentives for research exploration development and protection of our environment. Tax incentives are needed in the form of credits for research expenditures, tax free bonds for environmental protection facilities and nuclear fuel plants, current deductions for equipment designed to conserve our less plentiful fuels, and depletion allowances. These incentives will stimulate the attraction of capital that is needed to help finance the activity that will solve the energy crisis.

GOVERNMENT SHOULD MAKE MORE PUBLIC LANDS AVAILABLE TO THE ENERGY INDUSTRIES

Currently, one-third of the nation's land mass is under Federal domain . . . 750 million acres in all. The Federal Government also has control over vast tracts of the continental shelf. It is estimated that half of our remaining oil and gas potential lies under Federal controlled lands. Not to mention 80% of our oil shale, 40% of our coal, and 40% of our uranium.

These lands must be made available for commercial energy resource development. This would include exploration, mining, and the building of power plants, refineries, pipelines and deepwater ports. The Federal Government should also establish uniform land-use laws among the states, and jurisdiction over the submerged lands of the continental mass.

A BALANCE MUST BE ESTABLISHED BETWEEN THE NEEDS OF OUR ENVIRONMENT AND THE NATION'S NEED FOR ENERGY

It's true that the energy industries, like most industries and most people, were once guilty of neglect of our environment. And it was only right that conservationists and ecologists were concerned. But now the pendulum has, in many cases, swung too far in the other direction.

Energy is not the enemy of our environment. We need them both. We can, and must, arrive at programs that will strike a proper balance between energy production and a suitable environment.

Environmental standards must be set at levels that can be met at reasonable cost. Because eventually the public must pay this cost in the form of higher prices for fuel.

We must permit offshore drilling to find new reservoirs of oil and gas while utilizing effective methods to avoid ecological damage. In 25 years, there have only been three major oil spills in the drilling of our 14,000 offshore wells. And we are constantly improving on that record.

We must construct the Alaskan Pipeline. The nation's largest oil field has never yielded us a drop of oil in spite of the most extensive environmental impact study in history and the proven technology of pipeline construction. And right now, we need that oil more than ever.

Strip mining must be permitted under conditions where the land can be returned to beneficial use. In many areas, such restoration has been accomplished with outstanding results.

And we must not allow delays in the construction of nuclear power plants. Some environmentalists have succeeded in doing this, in spite of an outstanding performance to date of the nation's 29 operating nuclear power plants.

The people in the energy industries have no interest in harming the earth. We live here, too. In recent years we have tried to understand the environmental problems. It is time the environmentalist tried to understand the energy problem.

ENERGY CONSERVATION MUST BE ENCOURAGED BY THE GOVERNMENT, THE PUBLIC, AND INDUSTRY

Nobody thinks that proper energy consumption practices alone will solve the energy problem. But they can make it much easier to solve the problems by other methods.

A free market price system would encourage conservation. As supply decreases, prices will increase. Increased prices will, in turn, stimulate more production and increased efficiency in the use of existing fuels.

We must also encourage the use of mass transit smaller automobiles, and more building insulation.

THE GOVERNMENT SHOULD ENCOURAGE U.S. INDUSTRY TO DEVELOP ENERGY SOURCES IN FOREIGN COUNTRIES

Our ability to discover and develop oil in other countries would not only result in a greater supply, but would lower world prices, improve the balance of payments picture for this country, and provide us with a more secure access to the oil we need to import. The Federal government must maintain a stable and friendly relationship with oil producing countries and provide a stable tax and financial climate that will encourage foreign investment.

THE GOVERNMENT SHOULD CREATE THE ECONOMIC ENVIRONMENT NEEDED TO COMMERCIALIZE SYNTHETIC FUELS

There are large deposits of shale and coal in this country which could be converted into clean fuel. But the price would for some time be too high for general commercial use.

And there are environmental and engineering problems still to be solved. What's needed are incentive devices to generate capital so that private industry can afford to tap these valuable resources.

THE GOVERNMENT MUST SUPPORT LONG RANGE RESEARCH PROGRAMS

The energy problem that faces this country is immense. To solve it is going to require one of the most extensive technological programs in history. Not only a research and development program, but a framework to provide for practical commercialization as well.

The Federal government and private industry will have to share in the funding of such a research program. Incentives such as tax credits and a strong patent program should be used to reward those companies willing to take risks to help solve our energy problems.

ENERGY COMPANIES MUST CONTINUE TO INVEST IN NEW SOURCES OF ENERGY

While long-range programs are being established, the energy industry must continue to make substantial investments in energy sources and technology.

For example, Gulf invested $141 million in exploration and dry hole expense last year, and expects to spend even more this year. We continue to try to find economically viable ways of getting oil out of plentiful shale. We are building a pilot plant in Tacoma, Washington that can remove virtually all of the ash and up to 80% of the sulphur from coal. We are the leading builder of high-temperature gas-cooled nuclear reactors, and we've invested millions of dollars toward developing breeder reactors which will actually make their own fuel.

The nation's need for energy is so great, we're going to need all the sources of energy we can find or invent.

A NATIONAL ENERGY PROGRAM SHOULD BE ESTABLISHED

If you have read this far, it should be painfully obvious that there is an incredible amount of work to be done. To develop the policies and programs that are needed, the Federal government must act as a focal point for the energy problem. It's up to the small, top level group recently formed by the President within the executive branch of the government to issue energy plans and recommend energy policies. These policies and plans put forth by the executive branch will, by necessity, require much Congressional legislation. And all of this needs the understanding and support of the public.

A country like ours needs energy. Energy to run our factories and our electric power plants.

Energy to run our trains and trucks. Energy to drive our cars, heat our homes and cook our food.

To develop this energy isn't going to be easy. It's going to be expensive, time-consuming and, in some cases, unpopular.

But the important thing is that we stop talking and start doing something. Right now. Today. We can't wait for tomorrow.

For a free brochure that explains the energy problem and solutions in more detail, write: The President, Gulf Oil Corporation, P.O. Box 1166, Pittsburgh, Pa. 15230.

Mr. GRAVEL. Mr. President, while concern has been expressed by the Congress, government, and industry, the most important voice—that of the people—is in the making and will come in full force when the impact of our energy situation is felt by them individually.

There is now no doubt that millions of citizens will have to forgo their long-awaited and well-earned family trips this summer. Because of the gasoline shortage they will be spending their vacations at home. While canceling vacation trips will serve as disappointments and inconveniences, the economic suffering will fall upon those depending upon the tourist industry for a livelihood.

The question of whether or not we have an energy shortage has somehow become: "Is the energy shortage a contrived one by the oil industry?"

Mr. President, to try to find a scapegoat for our predicament is not the answer to our energy crisis. A partial solution, however, would be to get the trans-Alaska Pipeline under construction without further delay.

JOHN B. McGILL

Mr. RIBICOFF. Mr. President, John B. McGill is a man held in high esteem in my State of Connecticut.

His name is synonymous with fair play, good sportsmanship, and meaningful education.

John McGill is a teacher in the finest sense of the word. He loves youngsters and has brought to thousands of them guidance and instruction and inspiration, in the classroom and on the athletic field.

John McGill is retiring after more than 33 years of service to education in the Hartford area.

This week the Hartford community honored John McGill with a testimonial dinner, a tribute he much deserves.

I want to join with John's many friends in saying how deeply appreciative we are of the great work he has done for his community and its young people. As a coach, teacher, and administrator, John McGill always gave his all. All of us who have known and worked with him are taking this opportunity to say how grateful we are for all the fine things he has done for us and our children.

Bill Lee, the sports editor of the Hartford Courant, expressed my sentiments about John McGill in a column June 11, 1973.

I ask unanimous consent that Bill Lee's column, "With Malice Toward None," be printed in the RECORD.

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

WITH MALICE TOWARD NONE
(By Bill Lee)

John B. McGill is retiring this month after 33½ years of service to education in the Hartford area.

Sometimes a man teaches with great skill because he relates to young people in a class of mathematics or history or physical science.

Or it may be as a vice-principal with responsibility for discipline or as an instructor in social studies.

A man like John McGill has reached some difficult young men as a coach in some athletic sport. He has been a good teacher in several areas and a competent administrator. Having known this man at close range over a number of years, I cannot imagine him failing in any area of teaching young people what it is all about.

The best of two cities which John served so well, East Hartford in the beginning and later at Weaver and Hartford Public High School, will come together tonight at the Hartford Hilton to give John B. McGill a testimonial dinner he richly deserves.

JOHN M'GILL, MAN TO SALUTE

McGill coached football, baseball and jayvee basketball, worked at the college level during World War II and probably had as much to do with getting boys straightened out as any of his teaching conferees.

In any event he is ending his distinguished career as vice-principal at HPHS. There will be men and women present tonight from every part of Hartford County and even beyond. Husbands and wives have been invited to salute John at a dinner in the Hilton's grand ballroom at 7:45. There will be a social hour from 6:30 to 7:30.

All of John's friends will be welcome, whether fellow staffers in the field of education or not.

A man who has devoted such a large slice of his life to helping others should have a testimonial. I hope John McGill's is one of the best.

DISASTER RELIEF LEGISLATION

Mr. BURDICK. Mr. President, on May 17 the distinguished chairman of the Banking, Housing and Urban Affairs Committee, Senator SPARKMAN, introduced the administration's proposals to provide for a basic revision of our present disaster relief programs. I was recorded as a cosponsor of the bill, S. 1840. While I find certain portions of S. 1840 to be laudable, I want to make it clear that I in no way intend my cosponsorship of this measure to indicate that I feel that the proposal represents the final answer. Although the legislation has been referred to the Banking, Housing and Urban Affairs Committee where it is now under active consideration, I feel that the Senate Public Works Committee, and its Subcommittee on Disaster Relief, which I chair, will be able to make substantial recommendations as to the final shape of this bill. Already the subcom-

mittee has heard testimony in the efficacy of present disaster laws in Biloxi, Miss., Rapid City, S. Dak., Wilkes-Barre, Pa.; and Elmira-Corning, N.Y. wrap-up sessions are to be scheduled here in Washington.

The evidence presented to the Subcommittee on Disaster Relief, still being studied by the subcommittee members and the Public Works Committee staff, should provide valuable insights into achieving truly effective disaster relief legislation.

IMPOUNDMENT OF WATER POLLUTION FUNDS

Mr. MUSKIE. Mr. President, a few weeks ago, Judge Oliver Gasch of the U.S. District Court for the District of Columbia, in a case brought by the city of New York, held that the President's decision to limit allocation of funds under the 1972 Water Pollution Control Act was unlawful. I inserted that decision in the RECORD on May 9, 1973 at S. 8604.

On June 5, 1973, another Federal District Judge, Judge Robert R. Merhige, Jr., in Richmond, Va., also held that the Administrator of the Environmental Protection Agency abused his statutory discretion by refusing to allot among the States 55 percent of the funding authorized under the 1972 act. Judge Merhige stated:

> Upon the foregoing, the Court is well satisfied that the challenged impoundment policy, by which 55 percent of the allocated funds will be withheld, is a violation of the spirit, intent and letter of the Act and a flagrant abuse of executive discretion.

Mr. President, this and similar litigation is important. The performance of the Environmental Protection Agency must be constantly scrutinized by the public, and the courts must be asked to review this performance. Only in this manner will intent of Congress be upheld and the public interest protected.

Mr. President, I ask unanimous consent that Judge Merhige's memorandum and order in the case Campaign Clean Water, Inc. against Ruckelshaus be printed in the RECORD.

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

[In the U.S. District Court for the Eastern District of Virginia, Richmond Division, No: 18–73–R, June 5, 1973]

CAMPAIGN CLEAN WATER, INC. v. WILLIAM D. RUCKELSHAUS, ADMINISTRATOR ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

Campaign Clean Water, an environmental group organized to "promote the ecological and environmental advancement of Virginia," seeks in this action to compel the defendant Administrator of the Environmental Protection Agency (E.P.A.) to allot among the states the full sums authorized to be appropriated by Section 207 of the Federal Water Pollution Control Act, as amended by Public Law 92–500 (the "Act") and to estop him from withholding funds so alloted. Jurisdiction is alleged pursuant to 28 U.S.C. §§ 1331 and 1361. The parties are presently before the Court pursuant to plaintiff's motion for summary judgment and defendant's cross-motion to dismiss. Respective counsel have submitted comprehensive memoranda on the issues raised, and it is upon same that this matter is ready for disposition.

The facts are not in dispute. For preliminary purposes they are as follows: On October 4, 1972 the Congress passed a water pollution bill authorizing appropriations in the amount of $11,000,000,000 for waste treatment plant construction grants for fiscal years 1973 and 1974. The bill was vetoed on October 17, 1972 by the President who stated that he found the measure to be of an "inflationary" nature. The Congress promptly overrode the veto. On November 28, 1972 the Administrator announced that pursuant to the President's direction he was allotting only $5,000,000,000 of the total $11,000,000,000 for treatment plant construction projects for fiscal years 1973 and 1974. It is the Administrator's announced action, which is popularly referred to under the rubric of "impoundment of funds", which is challenged in this suit.

The issues raised are as follows:

1. Whether plaintiff has standing to maintain this action.

2. Whether this action is rendered moot by virtue of *City of New York* v. *Ruckelshaus*, CA No. 2466–72 (D.C. 5/8/73).

3. Whether the defendant is immune from this suit by virtue of the sovereign immunity doctrine.

4. Whether this matter presents a justiciable controversy.

5. Whether, upon the merits, plaintiff is entitled to the relief sought.

These issues will be considered seriatim.

I. Standing

Campaign Clean Water, Inc., as described in the complaint, is a Virginia corporation "organized to promote the ecological and environmental advancement of Virginia. Its officers, directors, and financial contributors include Virginia residents who use the nation's waters for both sport and commercial fishing and for other recreational purposes." The affidavit of the organization's president, Newton H. Ancarrow, indicates that it was created through the efforts of various groups. Included among the founders is the Chesapeake Bay and its tributaries Watermen's Union, whose members derive their income from shellfishing, and among its contributors are the Virginia Beach Innkeepers Association and other individuals who engage in boating and swimming on Virginia's waters and who own waterfront property. They allege that their interests are impaired by the discharge of untreated or inadequately treated sewage from overly burdened waste treatment plans into the waters of Virginia. In particular, it is alleged that individual members of the groups who have formed and contributed to Campaign Clean Water, Inc., have suffered economic injury from contaminated waters caused by sewage discharge from several plants operated by the Hampton Roads Sanitation District. Members of the Chesapeake Bay and its Tributaries Watermen's Union, for example, allege that shellfish beds in the area have been rendered unusable by such contamination. The injuries of the various members of Campaign Clean Water, Inc., are tied to the acts of the defendant by the allegation, supported by a letter from the General Manager of the Hampton Roads Sanitation District, that the withholding of funds will have a disastrous effect on future plans for water treatment plants on Virginia's waters and will thus allow the injury to the plaintiff's interests to continue.

The doctrine of standing, emanating from the case or controversy requirement of Article III of the Constitution and from general principles of judicial administration, seeks to ensure that the plaintiff to an action has "alleged such a personal stake in the outcome of the controversy as to assure that concrete adverseness which sharpens the presentation of issues upon which the Court so largely depends . . ." *Baker* v. *Carr*, 369 U.S. 186, 204 (1962). Problems of standing in actions against public officials may arise in either of two contexts, depending upon whether the plaintiff relies in this action upon a statute authorizing the invocation of the judicial process. The majority of cases in which the plaintiff relies upon such a statute involves the Administrative Procedure Act (APA) and its language granting the right of review to any party "suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action within the meaning of a relevant statute." 5 U.S.C. § 702. Standing in such cases is available only where the plaintiff *has* alleged active injury in fact at the hands of the defendant and where the alleged injury was to an interest "arguably within the zone of interests to be protected or regulated" by the statutory requirements to which the plaintiff seeks to compel adherence. *Association of Data Processing Service Organizations, Inc.* v. *Camp*, 397 U.S. 150, 153 (1970). Where the plaintiff does not rely upon a specific statute such as the APA, he still must meet standing requirements which are virtually identical to those imposed by the APA. Specifically, he must allege an actual injury to himself and in addition show that such injury is to an interest that is protected by the legal right which he asserts is violated by the defendants act *Linda R.S.* v. *Richard D.* 41 U.S.L.W. 4371 (March 5, 1973). As the Supreme Court has framed the second aspect, there must be a "logical nexus between the status [of the plaintiff] asserted and the claim sought to be adjudicated." *Flast* v. *Cohen*, 392 U.S. 83,102 (1968).

Although the plaintiff does not invoke the APA in pursuing this claim, the Court is satisfied that the action is one which could have been brought pursuant to that act. See *City of New York* v. *Ruckelshaus*, CA No. 2466–72 (D.D.C., May 8, 1973). Even if it could not, however, the Court's foregoing discussion leads it to conclude that generally the same standards apply as would apply in an APA case. In either case, Campaign Clean Water clearly has standing in this action.

The allegations of the complaint and affidavit indicate that individual members of groups belonging to and contributing to the plaintiff suffer direct, pecuniary injury as a result of waste contamination in Virginia's waters. Such injury is particularized and sets these members apart from the public, in general. Since an organization whose members are injured may represent those members in judicial proceedings. *Sierra Club* v. *Morton*, 405 U.S. 727, 739 (1972); *James River and Kanawha Canal Parks, Inc.* v. *Richmond Metropolitan Authority* C.A. 12–73–R (E.D. VA, May 7, 1973), Campaign Clean Water, Inc., *may* assert these claims. The fact that the groups representing the individuals injured rather than the individuals themselves are the actual members of Campaign Clean Water is unimportant, since it is the interests of the individual persons that the plaintiff ultimately represents.

The Court further finds that the requisite nexus between the injury and the right asserted exists in this case. The plaintiff by its allegations directly attributes the injury incurred to the inadequacy of waste treatment plants, particularly in the Hampton Roads area. With federal money, new treatment plants will be built and old ones improved, all of which will lessen the existing damage suffered by the plaintiff. Since the plaintiff's assertion is that the defendant is under a duty to release federal funds for waste treatment plants, it is clear that the injury incurred falls within the scope of interests benefited by that duty. Accordingly, Campaign Clean Water, Inc., has standing to pursue this action.

II Mootness

The Court *sua sponte* raises the issue of mootness in view of the recent District Court decision of Judge Oliver Gasch in *City of New York* v. *Ruckelshaus*, CA No. 2466–72 (D.C. 5/8/73). In that action, the plaintiffs, the Cities of New York and Detroit, challenged the refusal of the pres nt

defendant to allot the funds appropriated under the Act which are the subject of this action. Judgment was entered for plaintiff. Whether or not the Administrator will appeal that decision is unknown at this time.

The Court has examined Judge Gasch's opinion and concludes that, in light of the relief sought and order entered in that matter, the present action is not moot.

The City of New York sued on behalf of itself and all similarly situated municipalities in the State of New York. The City of Detroit, additionally, was granted leave to intervene as plaintiff. While the relief granted included *inter alia* declaratory and injunctive relief which applies to the whole fund, the Court has some doubts that the present plaintiffs could, in view of the class definition in *City of New York*, properly enforce that judgment as it applies to them.

There is, however, a more compelling reason militating against mootness which, in part, derives from the peculiar nature of the administrative procedures under the Act. While these procedures will be reviewed at length *infra*, for these purposes a brief summary will suffice.

The procedure is as follows:

Section 207 authorizes specific sums of money to be appropriated. The administrator is required by § 205 to allot the sums in accordance with a formula set forth in § 205(a). Once allotted to the states or municipalities contract authority exists up to these amounts. In a second stage, the Administrator reviews grant applications from the states and municipalities to determine whether they satisfy the criteria of § 204 of the Act. Once these plans are approved, a contractual obligation on the part of the United States arises to pay the federal share allocable to the project. In sum, there is a two step process of 1) allotment and 2) expenditure.

The *City of New York* suit challenged only alleged abuses of discretion by the defendant with respect to allotment. Relief with respect to the expenditure stage was neither sought nor granted. This action seeks relief with respect to alleged abuses of discretion or possible abuses of discretion at both stages of the program. For this reason as well, this action is not moot.

III Sovereign immunity

The defendant grounds his motion to dismiss in part upon an asserted application of the "sovereign immunity" doctrine. The gravamen of that doctrine has been stated in *Land* v. *Dollar*, 330 U.S. 731 (1947): a suit is one against the sovereign, and therefore barred, if "[t]he 'essential nature and affect of the proceeding' may be such as to make plain that the judgment sought would expend itself on the public treasury or domain, or interfere with public administration." While the instant matter squarely falls within this definition, it also falls within a well-settled exception to the sovereign immunity doctrine.

Said exception is expressed in *Dugan* v. *Rank*, 372 U.S. 609 (1963), which holds that a suit may be brought against an officer of the United States to challenge an action which allegedly exceeds statutory authority or, if within the scope of authority, is premised upon a power which is unconstitutional. See also *Malone* v. *Bowdoin*, 369 U.S. 643, 647 (1962). One common vehicle for challenging an official's action upon this theory is mandamus jurisdiction, 28 U.S.C. § 1361, which is relied upon here by plaintiff.

The complaint alleges that the defendant has exceeded his statutory authority in impounding funds. If sustained on the merits, plaintiff will come within the above recited exception to the doctrine. Accordingly, at this stage, the Court is satisfied that Campaign Clean Water has carried its burden in overcoming the bar of sovereign immunity.

IV Justiciable case or controversy

The defendant urges that this action does not present a justiciable case or controversy. A two-pronged argument is presented, and the two issues raised thereby will be considered in turn.

A. Ripeness

Defendant contends that this action is premature. The gravamen of that argument is that plaintiff (or those interests it represents) is without claim absent specific denial of funds to proposed projects. Because no proposals have been submitted and rejected, it is argued that the present claim is hypothetical.

Defendant's argument is without merit. Legislative history is probative of the fact that the scheme of allotment followed by obligation was adopted in the Act to facilitate long range planning, a necessary element in the development of water treatment plants. 118 Cong. Rec. H. 2727 (3/29/72); *City of New York, supra*. Because funds are allotted on a yearly basis, (Section 207), it appears that those funds not allotted in the appropriate year are forever lost.[1] The failure to allot, therefore, may have a decisive and detrimental impact upon treatment plant development planning. Said impact gives rise in part to the injuries alleged here and satisfies the Court that this action is not premature.

B. Political question

The defendant urges that plaintiff has called upon the Court to decide a "political question," which it is asserted is beyond the proper exercises of federal court jurisdiction. *Colegrove* v. *Green*, 328 U.S. 549 (1946), *Baker* v. *Carr*, 369 U.S. 186 (1962). While the Court is cognizant that the issue raised here has contemporary political overtones, it is satisfied, for reasons that follow, that this matter does not present a political question in the legal sense. The Supreme Court in *Baker* v. *Carr*, 369 U.S. at 217 clarified this distinction and enunciated as well the standard by which political questions may be identified:

It is apparent that several formulations which vary slightly according to the settings in which the questions arise may describe a political question, although each has one or more elements which identify it as essentially a function of the separation of powers. Prominent on the surface of any case held to involve a political question is found a textually demonstrable constitutional commitment of the issue to a coordinate political department; or a lack of judicially discoverable and manageable standards for resolving it; or the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or an unusual need for unquestioning adherence to a political decision already made, or the potentiality of embarrassment from multifarious pronouncements by various departments on one question.

Unless one of these formulations is inextricable from the case at bar, there should be no dismissal for nonjudiciability on the ground of a political question's presence. The doctrine of which we treat is one of "political questions," not one of "political cases." The courts canont reject as "no law suit" a bona fide controversy as to whether some action denominated "political" exceeds constitutional authority.

In determining whether this action, by reason of the above recited standards, presents a political question, the Court has considered defendant's assertion that "[w]hile spending controls are not 'textually committed' by the Constitution to any of the three departments, it is clearly not a matter for the judiciary. Moreover, the grant of 'executive power' in Article II comes very close to a 'textually demonstrable' commitment of this responsibility to the President." Defendant's brief at 11. Defendant overstates the issue here present: *contra* to defendant's broad assertions, the Court is required to determine whether the specific Act in question mandates spending policies in contravention to those announced by the Administrator. This is a narrow issue and a matter of statutory interpretation. The Court recognizes that this conclusion impliedly makes short shrift of defendant's underlying contention that spending of funds legislatively appropriated is solely within the province of executive discretion. Nevertheless, to support defendant's contention would require the Court to postulate a broad reading of executive power which includes the proposition that the Congress may make funds available for spending or mandate the manner in which they are spent, but may not mandate that they, in fact, be spent. That contention has in essence been firmly rejected in a well-reasoned opinion by Judge Jones in *Local 2677* v. *Phillips*, — F. Supp — (D.D.C. 4/11/73). As Judge Jones noted in language appropriate here, "[t]he defendant really argues that the Constitution confers the discretionary power upon the President to refuse to execute laws passed by Congress with which he disagrees."

More than a century ago the United States Supreme Court laid to rest any contention that the President has the power suggested. See *Kendall* v. *United States*, 37 U.S. 524 (1838), where the Court stated:

To contend, that the obligation imposed on the president to see the laws faithfully executed, implies a power to forbid their execution, is a novel construction of the constitution, and entirely inadmissable. 37 U.S. at 611.

See also *National Automatic Laundry* v. *Shultz*, 443 F2d 689, 695 (D.C. Cir. 1971), holding that "the judicial branch has the function of requiring the executive (or administrative) branch to stay within the limits prescribed by the legislative branch."

Accordingly, the issue before the Court calls for an interpretation of the Act. There is no issue here vis-a-vis "executive power" and in that respect this case does not present a political question. Defendant also urges that there is a "lack of judiciary discoverable and manageable standards for resolving" the questions posed here. The Court disagrees. The Court is not being asked to supervise the operations of the EPA. Solely sought here is declaratory and injunctive relief with respect to the announced policy of impoundment. The standards for fashioning that relief, if appropriate, will be discussed in conjunction with the merits. At this stage, however, the Court fails to discern a political question lurking in the record before it.

V The Merits

Plaintiff essentially challenges the defendant's announced policy with respect to impoundment of allotments and prays as well that the Court retain jurisdiction so as to grant appropriate relief to prevent abuse of discretion with respect to appropriations. The allotment question will be considered first.

A. Allotment

The relevant portions of the Act read *inter alia* as follows:

Allotment

SEC. 205. (a) Sums authorized to be appropriated pursuant to section 207 for each fiscal year beginning after June 30, 1972, shall be allotted by the Administrator not later than the January 1st immediately preceding the beginning of the fiscal year for which authorized, except that the allotment for fiscal year 1973 shall be made not later than 30 days after the date of enactment of the Federal Water Pollution Control Act Amendments

Footnotes at end of article.

of 1972. Such sums shall be allotted among the States by the Administrator in accordance with regulations promulgated by him, in the ratio that the estimated cost of constructing all needed publicly owned treatment works in each State bears to the estimated cost of construction of all needed publicly owned treatment works in all of the States. For the fiscal years ending June 30, 1973, and June 30, 1974, such ration shall be determined on the basis of table III of House Public Works Committee Print No. 92-50. Allotments for fiscal years which begin after the fiscal year ending June 30, 1974, shall be made only in accordance with a revised cost estimate made and submitted to Congress in accordance with section 516(b) of this Act and only after such revised cost estimate shall have been approved by law specifically enacted hereafter.

Authorization

SEC. 207. There is authorized to be appropriated to carry out this title, other than sections 208 and 209, for the fiscal year ending June 30, 1973, not to exceed $5,000,000,000, for the fiscal year ending June 30, 1974, not to exceed $6,000,000,000, and for the fiscal year ending June 30, 1975, not to exceed $7,000,000,000.

The specific issue is whether the language of § 205, "Sums authorized to be appropriated . . . shall be allotted . . ." allows the discretionary impoundment policy announced by the Administrator. The parties have taken preliminary positions upon the face of the statute. Plaintiff urges that the phrase "*shall* be allotted" proscribes the exercise of discretion announced by the defendant; the Administrator, on the other hand, urges that the language "not to exceed" in section 207 is expressive of the range of discretion built into the Act. See *Housing Authority of San Francisco* v. *United States Department of Housing and Urban Development*, 340 F. Supp. 654 (N.D. Cal. 1972). Because the statute itself gives rise to conflicting interpretations, inquiry directed beyond the precise language is called for.

Defendant urges that legislative history is supportive of his position. Specifically he cites amendment of the language in question by a House-Senate conference committee which deleted the word "all" before the phrase "sums authorized to be appropriated" in § 205 and the addition of the aforementioned phrase "not to exceed" in § 207. With specific reference to § 205 the Court finds the amendment highly significant. Thus, the House bill originally considered read:

"*All* sums authorized to be appropriated . . . shall be allotted by the Administrator . . ." (emphasis supplied).

The amended section reads as amended:

"Sums authorized to be appropriated . . . shall be allotted by the Administrator . . ."

Defendant urges that the only logical interpretation of this amendment is that the Congress did not intend that "all" sums authorized be appropriated, or conversely, that the Administrator was given authority to exercise his discretion in that regard. The views of Congressman Harsha, the House sponsor, are supportive of this view:

"Furthermore, Mr. Speaker, we have emphasized over and over again that if Federal spending must be curtailed, and if such spending cuts must affect water pollution control authorizations, the administration can impound the money.

"I want to point out that the elimination of the word "all" before the word "sums" in section 205(a) and insertion of the phrase "not to exceed" in section 207 was intended to emphasize the President's flexibility to control the rate of spending." CONGRESSIONAL RECORD, vol. 118, pt. 28, p. 37056.

Yet the Senate sponsor, Senator Muskie, was of the opinion that this "flexibility to control the rate of spending" occurred at the obligation rather than allotment stage:

"Under the amendments proposed by Congressman William Harsha and others, the *authorizations for obligational authority* are "not to exceed" $18 billion over the next 3 years. Also "all" sums authorized to be obligated need not be committed, though they must be allocated. These two provisions were suggested to give the Administration some flexibility concerning the obligation of construction grant funds." *Id.*, at p. 33694 (emphasis added).

This view is itself not inconsistent with other remarks by Congressman Harsha which followed his above recited statement:

"I might add, while this legislation does provide for contract authority, the present administration recommended contract authority in H.R. 18779, the bill I introduced in behalf of the administration some time ago.

"Furthermore, let me point out, the Committee on Public Works is acutely aware that moneys from the highway trust fund have been impounded by the Executive. Expenditures from the highway trust fund are made in accordance with similar contract authority provisions to those in this bill. Obviously expenditures and appropriations in the water pollution control bill could also be controlled. However, there is even more flexibility in this water pollution control bill because we have added "not to exceed" in section 207, as I indicated before.

"Surely, if the administration can impound moneys from the highway trust fund which does not have the flexibility of the language of the water pollution control bill, it can just as rightly control expenditures from the contract authority produced in this legislation by that same means.[3]

"Second, I would like to point out that the Administrator of the Environmental Protection Agency must approve plans, specifications, and estimates. This is the pacing item in the expenditures of funds. It is clearly the understanding of the managers that under these circumstances the Executive can control the rate of expenditures." Id. at p. 37056.

Judge Gasch in *City of New York* concluded from this language and other by-play that, in accordance with Senator Muskie's views, the discretionary elements incorporated into the Act and referred to by the various legislators were meant to apply to executive control over the "rate of spending," but that the rate of spending was to be monitored only at the obligation stage and not by the withholding of allotments.

This Court respectfully declines to adopt this interpretation, primarily because it appears to de-emphasize the syntactical history of Section 205 which shows the purposeful removal of the word "all" from § 205. While the legislative debates lend strength to Judge Gasch's conclusion, the Court, the plaintiff, and, to a limited extent, the defendant, are in agreement that legislative history is in the main unclear, politically charged, and in the Court's view, to some degree based upon suspect constitutional interpretation of the powers of the President.[3] In this context the syntactical history must be given great weight. See generally *Gilbert* v. *General Electric*, 347 F. Supp. 1058 (E.D. Va. 1972). The Court accordingly concludes that the Congress did intend for the executive branch to exercise some discretion with respect to allotments. Plaintiff, in fact, does not seriously dispute this conclusion, but contends that "the Congress could not have intended to give the Administrator the discretion to gut the Act." This latter contention merits close scrutiny.

Legislative history from the time of the veto is especially helpful because the executive's position with regard to the bill passed was framed in the context of its alleged inflationary impact. Accordingly, the issue of just how much was required to be spent under the terms of this legislation was central to the discussion that followed.

The President's veto message with regard to the Act is made perfectly clear in the following language from his veto message:

"Certain provisions of . . . [the bill] confer a measure of spending discretion and flexibility upon the President, and *if forced to administer this legislation I mean to use those provisions to put the brakes on budget-wrecking expenditures as much as possible.*

"But the law would still exact an unfair and unnecessary price from the public. For I am convinced . . . that the pressure for full funding under this bill would be so intense that funds approaching the maximum authorized amount could ultimately be claimed and paid out, no matter what technical controls the bill appears to grant the Executive." CONGRESSIONAL RECORD, vol. 118, pt. 28, p. 37055 (emphasis added).

Both houses of Congress promptly overrode the veto. Prior to the respective votes, Senator Muskie reiterated the national commitment to clean water,[4] and cognizant of the spending discretion vested by the Act in the President, urged that the large scale policy adopted be reaffirmed by overriding the veto. CONGRESSIONAL RECORD, vol. 118, p. 28, p. 36871 et seq. Eighty-one jercent of the Senators present voted to overcide.

Representative Harsha, upon resubmission, expressly addressed the alleged inflationary nature of the bill, stating that a large scale water improvement effort was worth the price that might be caused:

"I don't think there is one Member of this body who has not asked his constituents whether or not they were willing to pay the high price to achieve our national environmental goals. I don't think that there is one Member of this body who could report that after such polling, his constituents objected * * *

"* * * [T]he President maintained that a vote to override the veto of the Water Pollution Act Amendments of 1972 was a vote to increase the likelihood of higher taxes. So be it, the public is prepared to pay for it. To say we can't afford this sum of money is to say we can't afford to support life on earth. Id at p. 37056.[5]

The House voted by a margin of 91% of those present to override.

From the above recited history, the Court draws several conclusions:

1) The Congress passed a large scale clean water bill committing the nation to an extensive program to fight pollution. In so doing, the Senate rejected a smaller scale commitment proposed by the administration.

2) The Congress purposefully incorporated provisions in the Act which would allow some degree of spending discretion by the executive. These provisions were motivated in part by a desire to avoid a veto, see CONGRESSIONAL RECORD, vol. 118, pt. 28, p. 33694, and in part of the assumption of some legislators (notably Rep. Harsha), but not all (notably Senator Muskie), that some funds may be impounded.

3) The President vetoed the bill because of its alleged inflationary impact, notwithstanding his recognition of the discretionary provisions of the bill.

4) The Congress overrode the veto by large margins, reaffirming the massive national commitment to environmental protection and the willingness to incur vast expenses in achieving that commitment.

Upon the foregoing, the Court is well-satisfied that the challenged impoundment policy, by which 55% of the allocated funds will be withheld, is a violation of the spirit, intent and letter of the Act and a flagrant abuse of executive discretion. Accordingly, the Court will enter a declaratory judgment holding that the policy is null and void.

Further relief, however, is not now required. The Court will not and cannot supervise the Administrator in the administration

Footnotes at end of article.

of the Act. Issuance of an injunction would accordingly be inappropriate. While the Court has no reason to conclude that the defendant will not make a good faith effort to proceed in the allotment of funds in accordance with the letter and spirit of this memorandum, it does note that the plaintiff may at any time move to reopen this matter so as to contest such future actions or lack of actions on the part of the Administrator as they may contend are arbitrary, capricious or violative of the Act as herein enunciated. At this stage, the Court will only require that the defendant report to the Court within ten (10) days of this date such actions as have been taken to conform the administration of the program to the principles enunciated in this memorandum.

B. Appropriations

For the reasons heretofore stated, the Court is satisfied that the defendant may not with propriety adopt policies which contravene the letter and spirit of the Act. However, specific relief with respect to future appropriations at this stage would be premature, especially in view of the expert discretion designed for the appropriations stage. See *City of New York, supra*. For these purposes, the Court concludes that the declaratory relief issued with respect to the allotment stage will place the defendant on notice that a similarly designed and motivated impoundment policy with respect to appropriations would contravene the letter and spirit of the Act.

VI. SCOPE OF RELIEF

In view of the nature of the relief granted, the Court declines to issue same with respect to those interests not represented directly by plaintiffs. To do otherwise would potentially burden the Court and prospective parties with reviewing individual actions of the Administrator which may apply to locations in more appropriate forums. Accordingly, declaratory judgment will be issued only with respect to those interests in Virginia represented by the plaintiff organization. This determination as well precludes further difficulties of class determination and notice not warranted by the nature of the relief given.

An order consistent with this memorandum shall issue.

FOOTNOTES

[1] However, funds allotted for a given year but not obligated may be reallotted the following fiscal year § 205(b)(1).

[2] As Judge Gasch observed in *City of New York*, Con. Harsha's position has itself been rendered suspect by a subsequent Court decision:

"It should be noted that the Court of Appeals for the Eighth Circuit has construed the Federal-Aid Highway Act as requiring obligation of allotted funds, and has thus declared the impoundments referred to by Congressman Harsha to be illegal. *State Highway Commission of Missouri* v. *Volpe*, —— F. 2d ——, Civil No. 72-1512 (8th Cir., April 2, 1973."

[3] See note 2, *supra* (re: highway fund impoundments) and discussion at page 9, *ante* (re: general power of the executive to withhold funds absent congressional authorization.)

[4] Interestingly, the Senate had originally chosen not to pass an administration bill (S. 1013) which would have authorized sums close to those slated for spending under the challenged impoundment policy.

[5] The tenor of these remarks is akin to the remark of Senator Muskie prior to passage of the bill:

"* * * [T]hose who say that raising the amounts of money called for in this legislation may require higher taxes, or that spending this much money may contribute to inflation simply do not understand the language of this [water pollution] crisis.

"The conferees spent hours and days studying the problem of financing the cleanup effort required by this new legislation. The members agreed in the end that a total of $18 billion had to be committed by the Federal Government in 75-percent grants to municipalities during fiscal years 1973-75. That is a great deal of money; but that is how much it will cost to begin to achieve the requirements set forth in the legislation. * * * *

"* * * [T]he conferees are convinced that the level of investment that is authorized is the minimum dose of medicine that will solve the problems we face." CONGRESSIONAL RECORD, vol. 118, pt. 28, p. 33693 et seq.

ROBERT R. MERHIGE, Jr.,
U.S. District Judge.

[In the U.S. District Court for the Eastern District of Virginia, Richmond Division, No. 18-73-R, June 5, 1973]

CAMPAIGN CLEAN WATER, INC. v. WILLIAM D. RUCKELSHAUS, ADM., ENVIRONMENTAL PROTECTION AGENCY

ORDER

In accordance with the memorandum this day filed and deeming it just and proper so to do, it is adjudged and ordered that:

1) Upon the Court's own motion, Robert W. Fri, Acting Administrator of the Environmental Protection Agency, shall be, and is hereby, substituted for William D. Ruckelshaus as the proper party defendant.

2) Campaign Clean Water, Inc., is granted leave to proceed in this action on behalf of its members and those similarly situated in the Commonwealth of Virginia.

3) Defendant's motion to dismiss shall be, and the same is hereby, denied.

4) Plaintiff's motion for summary judgment shall be, and the same is hereby granted.

5) It is declared that the announced policy of the Administrator to refuse to allot $6 billion of the designated $11 billion under Section 205 of the Federal Water Pollution Control Act Amendments of 1972, 15 U.S.C. 1251 et seq. for the fiscal years 1973 and 1974 constitutes an abuse of discretion under the authority and powers conferred by the Act. Accordingly, said policy shall be, and the same is hereby, declared null and void.

6) The defendant is directed to report to the Court within ten (10) days of this date those actions taken to conform the administration of the Act to the principles enunciated in the memorandum.

Let the Clerk send a copy of this order and memorandum to counsel of record.

ROBERT R. MERHIGE, Jr.,
U.S. District Judge.

S. 707 AND S. 1160—AN ANALYSIS AND COMPARISON

Mr. RIBICOFF. Mr. President, the Subcommittee on Reorganization, Research, and International Organizations and the Consumer Subcommittee have held 5 days of hearings on the Consumer Protection Agency legislation, at which more than 20 witnesses have testified. In addition to these views, the subcommittees have received written comments from several experts on consumer matters and have solicited the opinion of several others, including Prof. Ernest Gellhorn of the University of Virginia Law School. He is a well known and widely respected authority on administrative law.

Recently, I received Professor Gellhorn's views on S. 707 and S. 1160. His analysis reviews the rationale for a consumer advocate and compares the bills on several fundamental issues. While I do not agree with all his conclusions concerning these bills, his analysis is fair and objective, and I commend it to my colleagues' attention. I ask unanimous consent that Professor Gellhorn's letter to me and his views be printed in the RECORD.

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

UNIVERSITY OF VIRGINIA SCHOOL OF LAW,
Charlottesville, Va., May 11, 1973.

Re S. 707 and S. 1160, bills to establish a Consumer Protection Agency.

Hon. ABRAHAM RIBICOFF,
Chairman, Subcommittee on Reorganization, Research, and International Organizations, of the Committee on Government Operations, U.S. Senate, Washington, D.C.

DEAR SENATOR RIBICOFF: In response to the request of Mr. Robert J. Wager, the staff director and general counsel of your subcommittee, I have prepared a comparative analysis of S. 707 and S. 1160 which would establish a Consumer Protection Agency to represent the consumers' interests before federal agencies and other governmental bodies.

Analysis of these bills and the functions of the CPA can operate on several levels. One is a technical comparison of the precise differences between the two bills. This approach would be primarily descriptive. I have not chosen this approach for several reasons. First, a comparison of the major differences between S. 707 and S. 1160 is well served by the description already prepared by the subcommittee staff; mere duplication would be of little benefit. Second, a listing of the differences in most instances clearly identifies the significant approaches of the two bills. Their effect on the CPA often appears obvious. Third, until basic policy approaches are settled, minute differences in style and implementation are of lesser importance.

Another analytical approach would be functional. That is, specific questions raised by the provisions of the two bills could be discussed. Originally, I understood that such an approach was included in my assignment. However, after reviewing the statements offered by several witnesses in recent Subcommittee hearings, I concluded that my comments would only be redundant. I endorse with almost no reservations the thoughtful and careful analysis of the Chairman of the Administrative Conference, the Honorable Antonin Scalia, in his statement submitted on April 5, 1973 (and forwarded to me by Mr. Wager). He has assessed the procedural merits of the two bills in detail; his statement is outstanding and I urge the Subcommittee to consider and generally implement his suggestions. I have two additional comments to pass along in this regard, however. First, I am doubtful that the mere authorization of CPA's participation in other agency proceedings or even of seeking judicial review will have any impact on the standard of judicial review of the host agency's decision. Hence I think the Subcommittee need only note in its supporting report that the grant of authority to the CPA contemplates no change. Second, I do not agree with Mr. Scalia's criticism of the judicial review provisions in § 204(b) of S. 707; and in any case I do not think his proposed change is helpful. The review procedure in § 204(b) merely allows the host agency an opportunity to review its decision in light of a noticed CPA appeal; fairness and efficiency support this courtesy notice. But my main concern is with Mr. Scalia's suggested alteration, which would subject the CPA's standing to appeal "to the same conditions and procedures required of private parties." While the law of standing has been revolutionized and liberalized by the Supreme Court in the past five

years, there are nevertheless some twists and turns still applicable to private parties. There is, I suggest, no reason in logic or experience to apply this doctrine to a governmental party such as the CPA. There is no need to assure that the CPA will not involve review courts in frivolous actions, false controversies, etc. The law of standing applicable to private parties generally has not been applied to public parties in the past. Nor does it make much sense to determine CPA's legal interest or to ask whether it has suffered a legal wrong, is a party aggrieved or is adversely affected. Just to state these tests of the law of standing explains their doubtful application to the CPA.

A third approach, and one which I have adopted, would review the foundation and rationale for a consumer advocate as a separate agency, and would measure S. 707 and S. 1160 against this standard. That is, in looking at the major differences between the two bills, I have sought to ask which provision best serves the underlying purpose of establishing an independent CPA. This analysis assumes—as both bills apparently do—that it would be desirable to increase the consumer presence in agency proceedings and that the most effective method for reaching this goal is the establishment of an independent agency with considerable powers of its own. Nevertheless, both bills contemplate that the CPA's major function is that of an advocate before other agencies or during judicial review of other agency decisions. Again this analysis accepts that division of responsibility. The major focus of my comparative analysis, then, is on the following issues: (1) the scope of CPA participation in formal agency proceedings; (2) the scope of CPA participation in informal administrative activities; (3) the CPA's power to invoke judicial review; (4) the CPA's investigative or discovery rights from private persons and other agencies; and (5) the CPA's authority to disclose sensitive data and its treatment of confidential file information. My views are contained in the enclosed memorandum. Despite its length, this memorandum does not attempt to spell out each point in great detail. I shall, however, be happy to supplement this analysis if you desire.

I have not addressed that section of S. 707 establishing a Council of Consumer Advisers or of the program of grants in S. 707 and S. 1160. I have no special information or ideas in these areas.

Finally, I have a specific addition to suggest and that is that the Consumer Protection Agency title in both bills is really a misnomer. The CPA's principal function is to represent the interests of consumers before other Federal agencies and courts. Additional powers are authorized primarily to serve this representative function. Consequently, it would be more accurate to call this office and its administrator the Consumers' Advocate or Representative. Otherwise the public and other agencies are likely to be misled as to the functions and, subsequently, the performance of the agency. A change in title would help avoid any misunderstanding.

I have shown a draft of the attached memorandum to my colleague, Professor Marshall Shapo, a leading scholar in the field of consumer protection. He has authorized me to say that he joins in the substance of the memorandum. While he did not participate in its preparation and he does not seek identification with all its particulars, he is not unsympathetic with its views. If I can be of further assistance to you in your consideration of the establishment of a Consumer Protection Agency, please do not hesitate to call on me.

Sincerely yours,

ERNEST GELLHORN,
Professor of Law.

MEMORANDUM

Re comparative analysis of the major provisions of S. 707 and S. 1160, bills to establish a Consumer Protection Agency.

INTRODUCTION

This memorandum is a comparative analysis of S. 707 (hereafter referred to as the *Ribicoff Bill*) and S. 1160 (hereafter referred to as the *Allen Bill*, which would establish a Consumer Protection Agency (hereafter referred to as the *CPA*) to represent the consumers' interests before Federal agencies and courts. The two bills are strikingly different in outlook and scope. The Allen Bill is the more limited; it would establish a CPA with powers in the Administrator to represent the consumer interest (which, as defined, is generally restricted to matters affecting consumer purchases of products and services) in *formal* rule-making and trial-type proceedings where the issue being decided might affect that interest. Consequently, it does not authorize the CPA extensive powers of investigation, information gathering or release, or judicial review of other agency decisions. The Ribicoff Bill, by contrast, would issue a much broader mandate to the CPA. It would allow intervention as a party in formal agency proceedings to represent the consumers' interests (defined as including any matter affecting consumer health, safety or economic status) and also would permit its participation in *informal* agency processes, as the CPA determines is desirable. Implementing this direction, the Ribicoff Bill authorizes broad subpoena and report powers for the CPA, direct access to confidential documents in other agency files, the power to disclose any information in its possession, and broad rights to seek judicial review. There is, in other words, a wide gulf between these two approaches.

Both bills, however, view the principal function of the CPA similarly. It is to be an advocate before other agencies and sometimes the courts. The CPA is to be an institutionalized consumer representative. Since the consumers' interests are often diverse and discrete, this will require the CPA to be selective. However, its choice will not necessarily be exclusive since other representatives of consumer views may still be able to participate in agency proceedings even though the CPA has intervened (or chosen not to participate).

I. BASIC STRUCTURAL ASSUMPTIONS

Despite their differences, the two bills appear to share certain assumptions about the form and shape which a CPA should take. These are not questioned here (although this is not to suggest that they are irrefutable). It seems useful to identify these structural premises, however, because they provide a framework for the analysis which follows.

Providing a more effective consumer input into governmental decision-making could be achieved in several ways. Each agency with a significant impact on consumer interests could be directed to establish within the agency an office charged with representing the consumer view. Alternatively, private groups representing consumers could be subsidized to participate in agency proceedings (by direct grants, payment of fees and costs, etc.). Or, following the lead of the Legal Services Program of the Office of Economic Opportunity, a government agency could be established to provide free legal representation to consumer groups seeking to participate in agency proceedings affecting their interests.

The Allen and Ribicoff bills reject these alternatives by implication. Instead they propose to create a new administrative agency, the CPA, to act as an advocate for the consumers' interests. The CPA would be an independent agency, thus avoiding the problem raised by intra-agency representation where the consumer representative—a member of the "host" agency's staff—might not be effectively insulated from agency pressures (especially since the host agency would determine his salary, promotions, etc.). Rather than relying on private consumer groups to determine which proceedings deserve consumer representation, the CPA would be in charge of its priorities and determine when such participation should be made and how the consumers' interests should be presented. On the other hand, neither bill establishes the CPA as the exclusive route for representation of consumer views. Each would allow—with some differences noted below—continued consumer input into agency decisions from other sources.

Although the two bills assign different functions to the CPA (consisting primarily of additional assignments in the Ribicoff bill), both assume that the primary focus of the CPA will be to represent the consumer interest in other federal agency proceedings. The CPA is to be an advocate of the consumers' interests. Its assignment is to focus attention of how the host agency's decision will affect the consumers' interests. Such interests are thought to be separately identifiable and often in conflict with the position of the host agency's staff, private respondents or other public parties. In any case, the establishment of a separate, independent advocate would seek to assure that the voice of the consumers' interest would not be supported by the authority of a government agency.

II. RATIONALE FOR A PUBLIC CONSUMER ADVOCATE

The purpose of establishing a consumer advocate is to assure that decisions by government agencies are responsive to consumer needs. Views not adequately presented are likely to go unnoticed and unheeded, particularly where the decisional mold follows the judicial trial format. Consumer interests are often not represented by other participants in agency proceedings. Public agency staffs cannot be relied on to present forcefully the views of consumers separately and distinctly from other interests. When other discrete interests have surfaced and been deemed worthy of separate consideration, their views have been represented by institutional advocates or by other techniques. For example, environmental interests are now forced on agencies by filing an impact statement as required by section 102 of the National Environmental Protection Agency. Minority interests are served by several executive orders, specific legislative commands (e.g., the Civil Rights Act of 1964, as amended) and two agencies (the Civil Rights Commission and the Equal Employment Opportunities Commission). Business interests with a significant economic stake in the proceedings are also present.

The consumers' position is such that without independent representation their interests will go unprotected. Individually their stake in any proceeding is so limited that it would be irrational to expect them to participate. Nor are consumer groups sufficiently funded or broadly-based so as to promote an effective alternative. And agencies are not particularly receptive to consumer attempts to participate—although the barriers to participation are not as difficult to surmount today.

Note, this analysis—and the premises supporting the CPA—does not rest on the narrow view that government agencies or their staffs are insensitive or mean-minded. Rather, it recognizes that their perspectives and decisions are necessarily limited by the information available to them and are affected

by available systematic checks and balances. If only a regulated business can appeal or question an agency decision, it seems obvious that the agency decision will be most concerned with business objections. Equally important but unraised concerns of consumers are unlikely to receive the same attention.

The CPA, in other words, seeks to provide a number of potential advantages. CPA participation can provide agencies with another dimension useful in assuring responsive and responsible decisions; it can serve as a safety valve to express consumer views before policies are announced and implemented; it can ease the enforcement of administrative programs relying on public cooperation; and it can satisfy judicial demands that government decisions observe the highest procedural standards. If agency decisions are reached after an opportunity for effective presentation of the consumers' interests, public confidence in the performance of government institutions and in the fairness of administrative hearings might be measurably enhanced.

The conclusion that the consumers' interests should be formally represented is a direct result of increasing intervention by private consumer groups—as representative of the consumers' concerns and interests in agency proceedings. All too often such attempts have been rebuffed by the agencies and these groups have had to battle to establish their "right" to participate. This effort has now generally succeeded, with the aid of the courts, and it is now generally recognized that consumer groups have a legitimate interest to present and should be heard, especially where their views are not otherwise adequately represented and the group can make a substantial contribution to the agency proceedings.

Despite this success at the threshold, private consumer groups have not been particularly successful in capitalizing on their entry. Their resources are limited. The costs of participation are high. It is difficult for them to maintain a constant watch on agency proceedings, to score significant gains in order to assure continued support, to coordinate their efforts, etc. In other words, they have by serious effort opened the way for consumer representation but they have not been able to follow through on these gains.

Administrative agencies are often created to respond to society's felt needs. The constant but not always successful pressure by consumer groups has demonstrated the desirability of separate agency identification of the consumers' interests when making significant decisions. It is also clear that merely opening the way for public participation—as individuals or by organized groups—is inadequate. Hence the need exists to assure such representation by some other means. The environmental and minority group precedents—of "impact" statements or intra-agency equal opportunity officers—suggests that the search for alternative techniques should continue. The CPA is an example of such experimentation. In assuring that the experiment is given a fair opportunity, Congress should neither overburden the agency with assignments unrelated to its immediate task nor fail to authorize the agency sufficient power to perform its task. The legislation creating the CPA, therefore, must be measured by (a) whether the assignment given the agency is central to the agency's primary purpose (presenting the consumers' views before government decisions affecting their interests are made) and (b) whether the authority granted the agency is equal to this task.[1]

[1] This memorandum recognizes that many disparate and often contradictory views may be included in the consumers' interests. Such diversity is not unique to consumers, however. The CPA's decision to represent one consumer interest would not be preclusive. That is, the continued opportunity for public participation in agency proceedings will permit others to present their views if not supported by the CPA.

III. BASIC ISSUES IN ESTABLISHING A CONSUMER ADVOCATES—CPA

With this background, the specific choices presented by the Allen and Ribicoff bills include: the scope and extent of the CPA's participation in other agency proceedings; the CPA's standing to obtain judicial review for its views; the CPA's authority to order reports and acquire sensitive information from private parties or other government agencies; and the agency's treatment and public disclosure of confidential information within its possession.

A. CPA participation in formal agency proceedings

Both bills recognize the importance of CPA participation in formal agency proceedings—that is, in administrative trial-type proceedings (quasi-judicial proceedings which are the administrative counterpart to judicial trials) and in substantive agency rulemaking (quasi-legislative proceedings which are the administrative counterpart to legislative hearings). Such proceedings often precede significant agency action likely to affect consumer interests. They are also designed to permit participation by formal parties or others seeking to represent discrete views. Thereafter the bills diverge immediately. The Allen bill allows the CPA to "present" its views "as of right" orally or in writing[2] after a timely filing of the CPA's determination and reasons for its participation. The Ribicoff bill is more generous to the CPA, authorizing its intervention in formal proceedings as a party or such other participation as it (the CPA) deems necessary to represent the consumers' interests. The critical difference, then, is in allowing the CPA the choice of intervention as a party and in the manner of presentation of its views.

The Ribicoff bill's approach seems clearly preferable in this instance. If the consumers' interests are to be presented adequately, they deserve full representation. Party representation means a full opportunity to participate in the proceeding including the shaping of the issues, the presenting and testing of evidence, the opportunity to argue the significance of the evidence and the meaning of precedents, etc. Having this authority does not mean it will always or even frequently be used. Without such authority, the CPA could become a supplicant without power to make its voice heard or heeded. No reason supports the Allen bill's second-class status for the CPA. In fact, CPA party status might expedite formal agency proceedings where private interest groups and others might otherwise seek to present the consumers' views; the participation of the CPA with an opportunity for full party status would permit consolidation of consumer representation, thus limiting the number of parties, their briefs and witnesses. Without such powers, however, the CPA might not be in a position to oversee such consumer representation. Thus, CPA participation in formal agency proceedings as a full party or otherwise, as the CPA determines, is consistent with its primary mission and necessary for its adequate representation of the consumer interest.

[2] It is not clear whether it is the CPA or the host agency who decides which procedure is permitted. Compare § 103(a) with § 103(b), S. 1160.

B. CPA participation in the information administrative process

But many, and perhaps most, agency decisions are not made in the formal administrative process. As a landmark study of administrative agencies concluded a generation ago (Attorney General's Committee on Administrative Procedure, S. Doc. No. 8, 77th Cong., 1st Sess. 35 (1941)), "even where formal procedures are fully available, informal procedures constitute the vast bulk of administrative adjudication and are truly the lifeblood of the administrative process." More recent studies not only reach similar conclusions but they go even farther suggesting that it is in the informal administrative processes that many governmental decisions important to the consumers' interests are made. They also conclude that it is in the informal process where unchecked abuses most readily occur. By their very nature they tend to be unseen; their procedures are unstructured; access is limited to those familiar with the process; and judicial review to assure regularity and fairness is generally unavailable. The informal administrative process not governed by section 553–57 of Title 5 of the United States Code (the Administrative Procedure Act) or not involving a hearing conducted on the record includes such diverse agency activities as: interpretative rulemaking; much substantive rulemaking (e.g., when it is within one of the exceptions enumerated in 5 U.S.C. § 553); tests and inspections (e.g., FDA or Department of Agriculture drug and food testing); agency surveillance of business activity by supervision (e.g., bank regulation); applications and claims (e.g., tax return audits, immigration visas, social security claims); investigation, negotiation and settlement (the unseen work which limits agency need to rely on formal processes). This bare bones outline makes clear that it is in the informal administrative process that effective consumer advocacy could make its most significant contribution.

The approaches of the two bills to CPA participation in this vast area of the informal administrative process is radically different. The Ribicoff bill specifically authorizes the CPA "as of right [to] participate for the purpose of representing the interests of consumers"; such participation must, of course, be "in an orderly manner and without causing undue delay." S. 707, § 203(b). Except for its authorization to the CPA allowing it to request another federal agency to initiate action (S. 1160, § 103(c)), the Allen Bill makes no provision for CPA representation of consumer interests in the informal administrative process. One section of the Allen Bill even goes so far as to provide that the CPA shall not intervene or otherwise participate in this fundamental process (*id.* § 103(g)).

As measured by the standards suggested earlier it seems obvious beyond question that the CPA should be authorized to participate in the informal administrative process. To fail to do so would ultimately frustrate the Congressional will since it is in the informal administrative process that many significant consumer decisions are made and that the consumers viewpoint is most sorely missing. Professor Pitofsky's statement to the Subcommittee that over 90% of Federal Trade Commission activity affecting the consumers' interests falls into the area of informal regulation is most persuasive. One can question, as he does, some of the specifics related to the grant of authority to participate in informal proceedings—e.g., the notice provisions (S. 707, § 205) could prove unduly burdensome if read broadly—but such comments should not divert attention from the principal point: broad representation of the consumers' interests in the informal administrative process is the sine qua non of an effective CPA.

C. CPA's right to judicial review

Effective participation in agency proceedings, whether formal or informal, often depends ultimately on access to the courts. The availability and scope of judicial review of administrative action has a direct bearing not only on the matter under review, but also on agency procedures and substantive policies. Judicial review not only legitimates administrative action, it is a procedure for public accountability of the administrative process. And what is most important is not necessarily the actual judicial order. Rather it is the availability of review—the ability to challenge an erroneous or unjustified decision—which may be most effective in assuring that consumer comments are considered and CPA objections are taken into account.

Again a comparison of the Ribicoff and Allen bills suggests the soundness of the former's provisions. It recognizes (S. 707, § 204) the CPA's standing to appeal from the decision of another agency where it participated in that proceeding. Where the CPA did not participate below, such standing to obtain review—and then to participate in the judicial proceeding—is conditioned only on the review court's determination that such review "would be detrimental to the interests of justice"[3] and on filing a petition for reconsideration with the agency if its rules require. In other words, the CPA would have almost unrestricted authority to seek judicial review. This does not mean, of course, that such review would be always (or even frequently) sought. The proper analogy here is to the policeman who walks his beat. His presence is not justified by the number of arrests he makes or crimes he observes being committed. Rather it is his presence which is considered important. Similarly, the opportunity for judicial scrutiny of agency action appealed by the CPA is likely to assure an awareness of the CPA's presence far beyond the actual appeals taken. Judicial review is likely to be effective without numerous appeals or significant burden on the courts (unless agencies prove insensitive to cosumer interests, which seems doubtful).

The Allen bill's provision for judicial review (S. 1160, §§ 103(f),(g)) seems unnecessarily restrictive. It would limit the CPA to a presentation to the court of "relevant information." It could not initiate an appeal, participate as a party, or otherwise make effective use of judicial review to assure that agency action adequately considers the consumers' interests.

Finally, the two bills take different approaches on judicial review of CPA action. The Allen bill would permit judicial review of CPA action which causes anyone "legal wrong." (S. 1160, § 109(d).) While it is doubtful whether this provision could be used actually to impair activities, it would permit legal harassment by providing a basis for interests adversely affected by the CPA's participation to challenge that action in court. This provision is philosophically related to the Allen bill's restrictive definition of the consumers' interests. On the other hand, it is inconsistent with the CPA's primary function of being the consumers' advocate. Finally, adequate restraints on the actions of the CPA are afforded by the rules of practice of the host agency or on judicial review of their actions. For these reasons, the limited review of CPA actions allowed other persons in the Ribicoff bill (S. 707, § 210(e)) appears more consistent with effective CPA representation of consumer interests.

D. CPA authority to obtain information

Just as the ultimate sanction of judicial review may be necessary to assure sympathetic agency reception to CPA presentations, the CPA's authority to acquire information is another predicate necessary to its future operation. Without information the CPA would be impotent to find out when consumer interests are likely to be affected, to determine what data should be presented or to represent consumer interests effectively. Several steps are necessary. The CPA must receive timely notice where practicable, obtain relevant factual information from whatever source, and develop useful data. Agencies should provide the CPA with notice; consumers should direct complaints to the CPA; the CPA should have the same powers for acquiring information available to others appearing before the agency—whether from private or government sources; and, to aid its planning and priorities, the CPA, like other government advocates, should have significant powers of investigation.

Neither the Ribicoff nor the Allen bills satisfactorily meet this standard. The latter is too parsimonious; it denies the CPA any significant powers of investigation and would limit CPA access generally to available written trial data (S. 1160, § 103(a)(1)) or to files in the possession of another agency, but only at the latter's discretion and if the data is not sensitive (*id.* § 106(b)). This is an anomalous standard since even complaining consumers, who the CPA is designed to replace and protect, have greater rights under the Freedom of Information Act. (5 U.S.C. § 552). These provisions in fact seem counterproductive. An uninformed CPA may unnecessarily seek to participate in agency proceedings unaware that its representation is duplicative or unnecessary. An uninformed consumer advocate is unlikely to be an effective spokesman.

The Ribicoff bill generally provides a sound framework, although, on occasion, it leans too much in the other direction. Its provision making host agency file material available to the CPA in the same manner that such material is available to other participants in these proceedings (S. 707, § 203(e)) is practicable and sensible. Likewise, the modest information gathering authority in § 207 seems desirable.[4] On the other hand, the notice provisions of § 205 of the Ribicoff bill seem too all-encompassing; applied literally they would unduly burden other agencies and drown the CPA in a sea of notice. What is needed, rather, is a right in the CPA to request reasonable notice of proposed actions, formal or informal, likely to have a significant impact on consumer interests. Here the language of the Allen bill (S. 1160, § 104) seems preferrable, except that it needs some expansion to include informal actions and timely notice (rather than notice at the time the public is advised, *id.* § 104(a)) should be required. Finally, the CPA's authority to require reports, acquire information and obtain access to other agency files seems unduly complicated. They could be simplified and might prove clearer if some of the standard language of other agency enabling acts were relied on. And they might be properly limited, as Professor Pitofsky's statement urges (in connection with S. 707, § 207), so as not to disrupt or delay unduly other agency proceedings.

E. Public disclosure of sensitive data

The issue of public disclosure of sensitive data is distinct from authorizing the CPA to obtain such material. It would seem that an effective CPA must have the power to obtain information from a variety of sources. There is no one repository; the cheapest, quickest, most efficient sources should be available. And one cannot foretell in advance where such sources will be. (And as noted above, such information has many uses.)

It is, however, unclear to me why the proper and effective operation of the CPA requires that it have special powers to disclose sensitive data (acquired from whatever source). The CPA is to represent the consumers' interest in order to assure that other agency decisions are made only after having received CPA's input. Where such proceedings are public, such presentations should generally be made in open hearings. On the other hand, as Federal Trade Commission hearings have long demonstrated, many techniques are available for allowing *in camera* or other confidential treatment of business secrets and similarly sensitive data. Identifying names or information can be deleted, fictitious names can be supplied, etc. where necessary. The statements of Professor Pitofsky and Mr. Scalia make additional valid points which I will not repeat here. I also question the seemingly different standards stated in the Ribicoff bill regarding public disclosure depending on the source of the information (this is an irrational test in my view since it is usually the information itself and not its location which is significant) and the apparent authorization to the CPA to indicate by implication what are "best buys." (*See* S. 707, § 208(e)(3) prohibiting only express preferences.)

But my basic concern goes much deeper than the particular provisions in the Ribicoff bill governing public disclosure. I would urge that this assignment be reconsidered. What purpose is served by having the CPA make available unevaluated consumer complaints, file information from other agencies or information gathered from private sources? Where such information reveals potential consumer injury from fraudulent securities issues the SEC has jurisdiction, from deceptive sales practices the FTC can act, from dangerous drugs, foods or products the FDA or Consumer Product Safety Commission can respond, etc. CPA's mission is different. It is an advocate, not a quasi-judicial body. And where such information is relevant in other agency proceedings, the disclosure of such information to the public is adequately assured and protected by their procedures (or more appropriately addressed to that forum). Giving the CPA authority to make public disclosures implies some responsibility to do so. Its mandate should not be so diluted. Nor is it likely to have sufficient staff or information to perform this function adequately; its errors could be significant and might reduce the CPA's credibility and effectiveness.

Consequently, I would urge the deletion of the various disclosure provision in the Ribicoff bill (S. 707, §§ 206(c), 208). It might also be desirable to instruct the CPA not to disclose sensitive data except in the course of its participation in other agency proceedings and in accordance with the host agency's rules. Here the provisions of the Allen bill (modified to comport with the other suggestions in this memorandum) seem wholly acceptable.

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[3] While I do not share the concern expressed by John T. Miller, Jr., Chairman of the Administrative Law Section of the American Bar Association, of the dangers of this condition, I agree with him that it is unnecessary; therefore it should be deleted.

[4] As I read Mr. Scalia's objections to § 207, his primary concern is with public disclosure of sensitive data (which is considered in subpart E. *infra*). In any case, I am not in full agreement with his position here. He misconceives the CPA's functions—viewing it solely as an advocate representing obvious consumer interests—and fails to take into account the difference between agency investigations and agency staff discovery during adjudicative proceedings. I think the CPA has a greater need for information than do ordinary parties. It is a government agency with an obligation to plan its program, to establish priorities and to use its resources wisely. In this respect it is like the host agency whose staff prosecutors have limited post-complaint discovery powers, but whose investigative staff can rely on broad investigatory powers in all other respects. (For an illustration of this distinction, *see* All-State Indus. of N.C., FTC Docket 8738 [1967–70 Transfer Binder] Trade Reg. Rep. ¶ 18,103 (FTC 1967).)

CONCLUSION

This evaluation of the Ribicoff and Allen bills focuses attention on whether their provisions are helpful in assuring that the CPA can effectively represent consumers in agency proceedings, formal or informal, likely to have a significant impact on their interests. Thus I have concluded that the CPA should have broad powers of intervention as a party or other participation, in its discretion, in informal as well as formal agency proceedings. In addition, the CPA's access to judicial review should not be restricted. On the other hand, the CPA's mission should not be diluted. Its representation can be impaired if it is asked to pass on product quality or be a clearinghouse for public concern about product performance. That representation can also be reduced if the CPA is not given adequate authority to obtain information, from any source and without regard to its sensitivity. Consequently, it is recommended here that the CPA should have wide authority to acquire information and to use it in representing the consumer interests before other agencies. But that authority should be limited in that the CPA does not need authority to disclose such information or allow public access—nor should it engage in publicity practices. Finally, a more descriptive and accurate title should be assigned the CPA and its Administrator. If labeled the Consumer Advocate or Representative, the public and other agencies would have a better understanding of its functions. Undue expectations followed by harsh disappointments can thereby be minimized or avoided.

ERNEST GELLHORN,
Professor of Law, University of Virginia.
CHARLOTTESVILLE, VA., *May 11, 1973.*

A TIME FOR ACTION

Mr. MONTOYA. Mr. President, the wholesale price index rose 2.1 percent in May, the second largest monthly increase since the Korean war—second only to the rise in March. This rise practically guarantees soaring consumer prices for the second half of 1973, unless action is taken now.

Phase III has been unsuccessful in controlling inflation. It is time to recognize this hard fact and act to meet our current economic crisis. The administration had predicted a slowdown in the rate of inflation under phase III, but we have had intolerable increases instead. The 18.7-percent, 1-year rise in consumer wholesale prices, for example, was the largest yearly increase on record. More of the same is on the horizon: Wholesale prices in general have risen at an annual rate of 23.4 percent over the last 3 months; farm and food prices surged ahead 4.1 percent in the month of May; prices for industrial commodities—the best overall indicator of inflation—rose sharply for the fourth consecutive month.

This inflationary spiral and administrative inaction have created uncertainty and economic disruption both at home and abroad. Inflation psychology is running rampant. Consumers are buying today, before prices go up tomorrow. Businesses are raising prices today in anticipation of a price freeze tomorrow. The economy is accelerating faster and faster. There is fear of a bust. A falling stock market reflects uncertainty at home, while the rising price of gold reflects uneasiness abroad. The value of the dollar continues to fall.

Unfortunately, there are no easy solutions in sight. Cosmetic adjustments to phase III have not worked. The stick in the closet turned out to be a toothpick. Though wage increases through phase III have held the line, profits and prices have gone out of sight. Interest rates are following suit. Now the Federal Reserve Board has raised the prime interest rate to 6.5 percent, the highest level since 1921.

When phase III was initiated, it was feared that the plan could well put people out of work without curbing rising price, resulting in the further weakening of confidence in the dollar. We have witnessed just that. Although unemployment has not increased in the last few months, it has remained fixed at 5 percent. With tightening monetary and fiscal policy, the Nation could experience an increase in unemployment similar to that experienced during the 1969–70 recession.

After two serious bouts with inflation within the past 4 years, we might begin to wonder if the administration has not incorrectly, or at least incompletely, diagnosed the underlying causes of inflation. Apparently, the administration believes that the major cause of inflation is excess demand, that is, too much money chasing too few goods. Under phase III, therefore, the administration has relied primarily on monetary and fiscal policy to combat inflation. Everyone, including the administration, recognizes that supply constraints are a current cause of inflation, shortages existing primarily in foods, lumber, nonferrous metals, and fuels; and everyone now recognizes that the process of "reflation" usually occurs after a recession, that is, a needed adjustment that must occur to restore balance in prices and unemployment in those segments of the economy that are subject to market forces. Much of the food price increase in the past months, for example, may be attributed to the process of reflation.

There are two additional causes of inflation, however, that the administration seems to ignore under phase III: Expectation of continued inflation, and exercise of market power by business management and labor unions. Record price hikes and profit gains imply that business management has been exercising its market power. As prices and profits continue to rise, we might expect unions to demand higher wage settlements. As undesirable and difficult as it might be, the task before us now is to stop excessive inflationary expectations and to mitigate the use of market power and the resultant administrative inflation, as it is sometimes called. This we must do as a nation.

Unfortunately, monetary and fiscal policy is not enough, given the current situation. These Federal policy tools cannot control the use of market power, nor can they allay present inflation psychology. The use of these tools alone failed to curb inflation in 1957 and again in 1969 and succeeded only in slowing down the economy and creating unnecessary unemployment. A new term was even coined to describe the 1969–70 economic situation: "Stagflation."

The administration recognized its failure in rejecting any type of wage-price policy during that round of inflation, or stagflation, and instituted in August of 1971 a 90-day freeze on most wages and prices. But by then, incorrect Federal policy, or at least incomplete Federal policy, had cost the Nation $50 billion in potential gross national product and had forced millions of persons to suffer from unnecessary unemployment.

Under phase III, the administration has repeated the same mistakes. They have again placed the major emphasis on monetary and fiscal policy, relying upon a phantom "stick in the closet" to control powerful market forces. The Nation, perforce, must also retrace its steps. It must again take the bitter medicine of a freeze, this time on prices, wages and salaries, rents, profits, and interest rates.

During this freeze, ground work must be laid for new wage-price guideposts, a new phase II if you will, for a Cost of Living Council with sufficient personnel and authority to do the required job. Setting a time limit on this policy and on this agency is something we need not concern ourselves with, for the threat of administrative inflation will continue to be with us as long as monopolistic and oligopolistic forces are at work in the economy.

It is not as if we are blazing a new and unchartered economic course, however, The Kennedy wage-price guideposts and the Nixon phase II were the pathfinders, and they were successful, particularly when compared to the alternatives. Further, I cannot take seriously those who preach that we are suffering today for the economic "sins" of yesterday, that inflation today is that which would have otherwise occurred during phase such and such. This is the philosophy of the dark ages. It ignores the advancements in man's ability to set his own course, to take preventative action, to take corrective action. It assumes that we are helpless in the face of events. It assumes that "things" must take care of themselves. They might in the long run, but we live in the present. People need jobs today. They need sufficient income to buy necessities today. The economy needs stability today. Why sit idly by and wait for the fates to determine our economic course. We must use our knowledge and our experience to meet the challenge. The Nation must act, and it must act now.

PUBLIC LIBRARY SERVICES AND CONSTRUCTION ACT, TITLE II OF THE ELEMENTARY AND SECONDARY EDUCATION ACT, AND TITLE II OF THE HIGHER EDUCATION ACT

Mr. MONTOYA. I want to share with you today a sample letter from a constituent. It could be from any one of the hundreds who have written to me recently on the same subject. It could be from a student in a small school with inadequate library facilities, or from a farmer who is 50 miles from the nearest public library or town. It could be from a teacher in a poverty-pocket area with

a need for special library programs, or from a blind woman, or a social worker, or a college freshman.

I chose this letter because it says so simply and clearly what letters from these other people have said. "Dear Senator," it begins—

Our bookmobile is going to stop. Why? We need it. Yours truly, Peter G., aged 8.

That is all, Mr. President. That says it all. Why? What do I respond to a question like that one? How do you explain to an 8-year-old that America, in 1973, cannot afford money for books, or libraries, or bookmobiles? How do you explain to a college student that a nation which is still losing $12 million fighter planes in Cambodia, in a nonexistent war, cannot afford to spend $176 million to support all the public and school libraries of the United States this year? How do you explain to a blind constituent that the talking-book program he has come to depend on is so successful that the Federal Government has decided to discontinue it?

I can tell all of these people, of course, that money is the problem. That is true. Not many of us here really believe that money is the root of all evil, but few of us would not agree that money is the root of most debate here on this floor.

We may prefer to call it a debate about priorities. That is one of the code words we use to hide what we are talking about. But when we speak of priorities we are really talking about money: How much we have, how much we will spend on which programs, and why. That is a debate the people understand. Every family, every businessman, every giant corporation and every government in the world spends a great deal of time on that debate every day.

And every year for 5 years we Members of Congress have debated the priorities for the library program and the bookmobile Peter G. is asking about. We are now in the midst of the yearly rerun—a congressional version of the summer rerun: The series of money debates which have gone on every spring and summer here on this floor since 1969. Our congressional show has all the dramatic elements of "The Perils of Pauline": a legislative program which provides a service to the people, a threat by the administration to weaken or destroy it, cries for help from the people as they see a program they need in trouble, and a last-minute rescue by a harried Congress.

Most of the arguments in favor of these service programs for the people have been made before and are made again each year. The same needs are illustrated, the same statistics are repeated, and the same conclusions are reached year after year.

This year our summer show has some new factors. This year in their budget proposals the administration has asked us not simply to reduce funds for many of these programs, but to mortally wound them—to terminate them completely.

The group of programs I want to speak about today is one which has now become an "endangered species," Mr. President. It is the group of programs encompassing Federal assistance to public and school libraries and library systems.

For 4 years we have had to fight every summer to retain Federal money for the Library Services and Construction Act and for the library programs funded under title II of the Elementary and Secondary Education Act and title II of the Higher Education Act. We have heard the same debates and we have fought back with some success every year against those who want to stop spending money for books.

No one in Congress, or in the administration, has ever argued that books and libraries are bad, of course. The arguments are usually couched in very elegant and complicated language which boils down to: First, books are important but we cannot afford them; second, books are important but other things are more important; third, books are important but somebody else should pay for them; and fourth, we already have enough books to "get by" until times are better.

We all know what these library programs are, why they are needed, and why they were first legislated. Many of us were here when the original legislation was passed to put them in motion. All three of our library programs were ideas which resulted from long months of testimony as to the needs of the American people and espcially of American children. In 1964 and 1965, when this legislation first passed, one half of the elementary school children of America attended schools without libraries. No textbooks were provided in one-third of the schools of major American cities. Hearings brought out the tragic fact that 27 million Americans had no access to local public libraries and that another 53 million had inadequate or poor service. Rural and poverty areas of the Nation were, in this as in all other services, worst served and least able to provide for themselves on a local or State basis.

Since Federal help for library construction started, 1,864 of the Nation's 12,000 public libraries have been built, remodeled, or expanded. That is almost one-sixth of all our libraries. Services have reached many people who never before had the use of a library or access to books. Twelve percent of the Nation still does not have such service. States have been encouraged to provide matching funds and increases in library services, with results which are rewarding to all of us who worked for so long to achieve this kind of legislation.

More than 66,000 school libraries have received title II aid under ESEA title II. College and university libraries have eagerly absorbed as much library help as they could get, and as a result have developed many of the exciting new library techniques and systems which promise truly modern information services for the years ahead.

The need for these programs is ongoing. We still have a long way to go to reach the day when every American family will have books and library service available on a local basis. But we have made real progress toward that day, and we have begun to locate the areas of real need and to fill those needs. American children still need books in order to learn, and American families still need libraries in order to be informed. Local and State governments have not yet been able to take over the provision of seed money for new programs or ongoing help to maintain service to rural or poverty areas. We know better now what services are most needed and most wanted, and we must find ways to keep those services going.

So our debate today really centers on who can help to pay for those services—or at least for the share which the Federal Government has paid in the past. State and city governments, libraries, schools, colleges, universities—all of these have indicated that the Federal Government must continue to help at least at the present level.

But the administration wants the Federal Government to stop library support.

In 1968 Richard Nixon said—

America's school, university, research and public libraries . . . are the repositories of the American culture. In a world where knowledge is the key to leadership, a modern progressive library system is a vital national asset.

But 7 months later we began our first struggle to preserve the fledgling library programs funded by Federal money. It was the first run of our own "Perils of the American Library System" show. The first Nixon budget proposal eliminated entirely all funds for books under title II of the ESEA. The American Library Association estimated that if the administration's proposed cuts had been approved 2 million people in low-income and disadvantaged areas would have lost all public library service. Instead, of course, the Congress rescued the programs and authorized $200 million for them—although only $42.5 million was finally appropriated.

Every year since that time we have been over the same territory again, fighting the same fight. But this year it is going to be tougher. This year we were asked to eliminate these programs entirely and finally. Administration spokesmen have stated that the programs are so successful that they no longer need Federal money. They have said that revenue sharing and local and State tax money can be used to continue these "highly successful" programs and to build the new libraries and library systems still needed in so many places.

But, of course, Mr. President, the revenue sharing offer is a tragic trap. States and local communities most in need of the library programs are, of course, those which have the least resources and the most need of revenue sharing and tax money for other things. There is absolutely no evidence to show that revenue sharing will be used to fund or construct libraries except perhaps in the most affluent cities and States. State and local property taxes are needed just to keep existing libraries open and operating on a minimal level. Without increases in State taxes there is no way that special programs for schools or public libraries could continue. So without Federal help there will be no alternative to turning back the clock.

A further serious problem for libraries if Federal support is taken completely

away is the continued development of "networking"—that system of information gathering and dispersal which ties libraries within a State and within the Nation together so that modern techniques can miraculously increase library service to every American no matter where he lives or how poor he is. Local funding could not provide for the continued development of this essential modern method, and could not reach across State borders. Regional and multistate programs need backing and leadership at the Federal level if they are to survive.

Perhaps it will help us to consider the basic human values to each citizen. My colleagues must think in terms of their own States. I think in terms of what these programs mean to New Mexico.

I have to consider the following facts:

The bookmobile service for 370,000 rural citizens of New Mexico makes 250 monthly community stops and accounts for one-fourth of the public library circulation in my State.

Blind and handicapped New Mexico citizens receive 30,000 talking books and tapes every year.

The hotline service which handles 12,600 inquiries from public, special and academic libraries in New Mexico is vitally needed by people everywhere in my State.

More than 1,200 people participated in library workshops in New Mexico last year, and carried information and new library systems back to their local communities.

New Mexico is in the midst of developing an information system which will die without continued matching support from the Federal Government. The State government has already invested a great deal in that system on the promise of Federal help.

All of these programs will disappear from my State if the Federal support money which helps to make them possible is withdrawn.

On May 8 of this year the Nation's libraries dimmed their lights as a symbolic gesture against the proposal of the administration to eliminate Federal aid to libraries. Librarians and educators everywhere are as bewildered as I am, Mr. President, at the contradiction between the statements of men who speak publicly for the administration and the actions of the men who sit in the Office of Budget and Management with scissors in hand deciding who is going to get what share of the tax money. Little boys like Peter G., who wrote to me, are bewildered. State legislators who have depended on the statements of administration spokesmen are bewildered. I am bewildered and unable to answer their questions.

If it is true that a "modern progressive library system is a vital national asset" and if it is true that the administration is "justly proud of the contributions of LSCA, ESCA title II and HEA title II library programs," then why have they asked each year for less and less money and why have they finally asked for zero funding?

Why are we still discussing this problem? Or rediscussing it?

There is a demonstrated need for libraries and books in the cities and towns and schools of America. Federal money has been used successfully to encourage and stimulate growth of new library systems. There is no other place for public and school libraries to turn for this funding, and no other place for them to look for national leadership in developing national library systems.

I have urged the Appropriations Subcommittee on Labor, Health, Education, and Welfare to consider the restoration of these library funds. I urge your support for these programs. If we cannot provide for this kind of essential need—books—for American citizens, we had better have a pretty good explanation ready for the constituents who, like young Peter G., ask us, "Why?"

NONDEGRADATION

Mr. MUSKIE. Mr. President, yesterday, the U.S. Supreme Court failed to overturn a lower court decision and thus preserved a critical element of the Clean Air Amendments of 1970, the so-called nondegradation provision.

The concept of nondegradation is an essential element to the Nation's clean air effort.

It provides a means to assure that maximum effort will be made to protect air quality from further deterioration.

It requires States to require the best emission control technology available and then take another look to assure that available technology will not result in significant deterioration of air quality.

It provides a means to force development of new, better technology and it provides an interim regulatory mechanism where new source performance standards either do not exist or have not been updated to reflect new control technologies.

Nondegradation imposes a benchmark for State and Federal environmental and planning agencies in making land use decisions, especially siting decisions.

Finally, it establishes firmly that research and development on control technology is to be focused on recycling of pollutants and confined and contained disposal of polluants, and not on ways of putting polluants into the ambient environment.

Mr. President, for the past 2 years there has been disagreement between the Subcommittee on Air and Water Pollution and the Environmental Protection Agency regarding the control strategy options available for implementing air quality standards. The Supreme Court action should end that disagreement. Proposals by the Environmental Protection Agency to authorize pollution control strategies based on meteorological and climatological conditions, rather than technological options, should now be shelved.

So-called intermittent control strategies which place reliance on wind, rain, and weather—which require fuel changes or plant shutdown where pollution peaks occur—have always been available for pollution alerts, they do not provide for a basis for regulation; they are not enforceable, and they are no substitute for constant emission controls. Clearly, they are inconsistent with a nondegradation policy because such strategies would permit constant deterioration of air quality. Tall stacks, another strategy under consideration in the Agency, is also in fundamental opposition to the Clean Air Act and its nondegradation policy. Tall stacks are but manifestations of the out-of-sight-out-of-mind mentality of earlier times. They shift pollution problems to more and more extensive areas of the biosphere.

Mr. President, the Environmental Protection Agency has been considering proposals to permit intermittent control strategies—so-called closed-loop systems—and tall stacks as substitutes for emission controls. Even though this alternative has been mooted by the Supreme Court actions of yesterday, I believe the public should have an opportunity to review the available documents on this strategy.

I ask unanimous consent that a draft document of intermittent control strategies, tall stacks and associated material be printed in the RECORD. Also, I ask unanimous consent that appropriate sections of the Subcommittee on Air and Water Pollution hearings on the viability, enforceability, and legality of intermittent—closed loop—control strategies be printed in the RECORD.

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

STATEMENT OF WILLIAM H. RODGERS, JR., PROFESSOR OF LAW, UNIVERSITY OF WASHINGTON

(Subcommittee on Air and Water Pollution Hearings, Implementation of Clean Air Act—February 16, 1972)

"The closed loop is a sorry strategy for keeping intact smelting technology that poses unacceptable air pollution risks. It is an excuse for avoiding the emission controls the 1970 amendments mandate. Applied to all industries, it would reduce the air pollution regulatory effort to a sham. It is a lawyers' paradise of uncertainties in meteorological prediction, instrument calibration, reading of ambient data and sorting out of SO_2 sources, which already has bogged down thoroughly State and local agencies."

* * * * *

Senator EAGLETON . . . could the closed loop be considered as a control strategy under the 1970 Act as you read it?

Mr. RODGERS. No. I believe that the Act calls for emission limitations, and I submit that the closed loop is not an emission limitation. I might say further on that, because the industry has worked so closely in their technical activity and their political activity with respect to these standards, the word "closed loop" has become almost a catch word in their presentations. Everyone uses it. Everyone makes the same argument before the different State agencies. As pointed out, basically it is an opportunity to curtail when the weather turns bad. According to their statements, they have been doing that for a century, I think. At least they have been doing that a good part of this century.

Senator EAGLETON. You stated it is not an emission limitation. Could it be considered as a pollution reduction enforcement technique?

Mr. RODGERS. I don't believe so. I think that essentially the problem is that it is unenforceable, and that might be a question put to EPA. I understand that presently in-house there is a draft or at least the agency is considering what might amount to an en-

forceable closed-loop system as described here. I submit that it is virtually unenforceable.

Senator EAGLETON. How would you apply a compliance schedule to a closed-loop system and how would you monitor it?

Mr. RODGERS. Again it is impossible.

STATEMENT OF BENJAMIN WAKE, ADMINISTRATOR, DIVISION OF ENVIRONMENTAL SCIENCES, MONTANA STATE DEPARTMENT OF HEALTH AND ENVIRONMENTAL SCIENCES, FEBRUARY 16, 1973

The crux of the petition by the Anaconda Co. and the American Smelting & Refining Co., for less stringent ambient air quality standards and for the destruction of the 90 percent emission control standard is, in my opinion, whether the Government, State, and Federal, will be required to use ambient air quality standards as the determining factor in whether or not pollution controls will be applied at all and the effectiveness of such control devices if they are.

The philosophy of the emission standards, on the other hand, revolves round requiring control in keeping with the "most advanced state of the art" which may, in fact, produce ambient air quality better than demanded by the air quality standards.

In my opinion, the latter is the only acceptable posture for the air pollution control program to assume since developing the program around ambient air quality standards procedures acknowledges that control equipment less effective than is currently available or even may have been the standard operating procedure for years, may not be needed simply to roll back to, or not pollute beyond, the ambient standards.

The ambient air quality approach acknowledges that control facilities may not be required at all to prevent the ambient air quality standards from being exceeded. Adopting the ambient air quality standard philosophy as the primary determination of whether or not control devices will be installed is to permit degradation of air quality that is better than the ambient air quality standard and to require rollback of air dirtier than the standards only to that standard and no more.

The latter, in fact leaves no margin for release of unavoidable emissions from other emission-producing enterprises that may come into the area. Once the ambient air quality standard is reached, there is no way to get—but dirtier.

STATEMENT OF FRANK MILLIKEN, PRESIDENT, KENNECOTT COPPER CORP., FEBRUARY 24, 1972

Senator EAGLETON. Are you going to apply a closed-loop system?

Mr. MILLIKEN. Yes, we will have a closed-loop system for surveillance of our operation so anybody can see what sulfur dioxide concentrations are at numerous places around our properties.

Senator EAGLETON. Who will monitor those?

Mr. MILLIKEN. We will monitor those, but they can be monitored by the States if they wish.

Senator EAGLETON. In a State like Montana, which doesn't have the most expansive budget in the world, is there expected to be a State agent to monitor?

Mr. MILLIKEN. Not if they will take the word of the company's operations, although this stuff will be on computer printout. Of course, you could juggle those if you wanted to, and someone could make that accusation, but we don't expect that to happen.

Senator EAGLETON. You will purchase the monitoring equipment and your employees will do monitoring?

Mr. MILLIKEN. That is right. That is what we propose. If someone wants something different, we will have to listen.

STATEMENT OF CHARLES BARBER, CHAIRMAN, AMERICAN SMELTING & REFINING CO., FEBRUARY 24, 1972

The curtailment of operations that is currently required to implement the intermittent control systems at our copper plants has been costly to us and the mines that ship to us. Copper production at our El Paso smelter was reduced 29 per cent by air pollution curtailment during 1971. We expect, however that by 1974 the need to curtail production, even to meet the federal secondary standards, will be minimal. I say this because, in order to achieve the goal of timely and full compliance with federal ambient standards, Asarco is investing $50 million in sulfur removal facilities at our three copper smelters. These installations will recover more than 50 percent of the process sulfur at each plant.

ENVIRONMENTAL PROTECTION AGENCY,
OFFICE OF THE GENERAL COUNSEL,
Washington, D.C., April 30, 1973.

Reply to: Michael A. James, Attorney, Air Quality and Radiation Division.

Subject: Implementation of Section 110 of the Clean Air Act.

To: Joe Padgett, Director, Strategies and Air Standards Division, Office of Air Quality Planning and Standards, OAWP.

MEMORANDUM OF LAW

Facts

Your memorandum of February 27, 1973 to Robert Baum raises several questions involving subjects discussed at the Regional Administrators' meeting on power plants. All of the questions are concerned with EPA's overseeing of State implementation plans.

Question No. 1

If a State has an approved emission regulation which is more stringent than necessary to attain the national standards but refuses to enforce its emission regulation by obtaining compliance schedules from regulated sources, may EPA reject the State emission regulation and promulgate a less restrictive measure that provides for the attainment of ambient air quality standards?

Answer No. 1

Where EPA has approved a State emission regulation as part of an applicable plan and the State does not enforce the regulation, EPA's responsibility under the Clean Air Act is to enforce the approved emission limitation and, in so doing, the Agency must provide for compliance with the approved emission limitation.

Discussion No. 1

It is helpful to begin with a general discussion of EPA's authority and responsibility under §§ 110 and 113 of the Act, since most of the questions raise basic problems of interpretation of those sections. It is important to recognize that we are discussing two separate functions, viz approval/promulgation and enforcement.

EPA's authority to promulgate implementation plan regulations stems from the disapproval of regulations submitted by the State, or by the failure of the State to submit necessary regulations. If State regulations are approved by EPA, the Agency has no authority to promulgate different regulations. Under the law, EPA must approve regulations which are more stringent than those needed to meet the national standards. Once these regulations are approved, there is no authority to promulgate less stringent regulations. This is true even if a State fails to enforce these regulations.

With regard to the second function raised by the questions; i.e. enforcement, EPA is given clear authority to enforce approved implementation plans or plans promulgated by the Administrator. As we have previously pointed out, under § 110(d), for purposes of the Clean Air Act ". . . an applicable implementation plan is the implementation plan, or most recent revision thereof which has been approved under subsection (a) or promulgated under subsection (c) and which implements a national primary or secondary ambient air quality standard in a State." The words "applicable implementation plan" are in this case, words of art. Section 113 authorizes Federal enforcement of an "applicable implementation plan." Accordingly, it is clear that it is only approved or promulgated plans which EPA may enforce.

As you know, the submission by a State with regard to regulations and compliance schedules is really two separate submissions. On one hand, EPA evaluates the emission limitations to make certain that they are sufficient to achieve the national standards. If the degree of reduction is sufficient, that emission standard is approved. Many State plans contain provisions by which they are require to procure a compliance schedule subsequent to the adoption and submission of the emission standard. Failure to obtain the compliance schedules in no way affects the validity of the approved emission regulation. Accordingly, EPA does not have authority to promulgate a different emission regulation. What is left to EPA is the authority to procure compliance schedules which meet the applicable implementation plan, in this case, the emission limitations submitted by the State and approved by EPA.

Question No. 2

When imposing Federal compliance schedules or approving State compliance schedules for sources subject to approved State emission regulations which are more stringent than necessary to attain the national standards, must EPA require compliance with the approved regulation or may it impose or approve instead whatever less stringent requirements are necessary to achieve the national standards?

Answer No. 2

Unless the State revises its approved regulation and obtains EPA approval of that revision, both the State and EPA are bound by the approved regulation when obtaining or approving compliance schedules.

Discussion No. 2

The premise of your second question is that the State has submitted emission limitations which are more stringent than necessary to achieve the national ambient air quality standards. The issue is whether if a State submits a compliance schedule or we have to procure one, can we accept or procure one which will achieve the standards or must we accept or procure one which meets the State emission regulations. This situation is similar to the first one discussed above. The applicable plan contains an emission limitation which is the only guide for the preparation and approval of compliance schedules. Quite aside from the requirements of § 110, a different answer would put EPA in the position of approving or trying to secure a compliance schedule to meet an emission limitation which does not exist, except in EPA files. More specifically, even if it were possible to try to adopt or procure compliance schedules to meet some number less stringent than that approved in the plan, exactly what that number would be in each case would be subject to question and litigation. We should point out that if the State has in fact adopted emission limitations which are more stringent than necessary to meet the national standards, they can submit a plan revision with more lenient requirements if they still conform with the requirements of the Act.

Question No. 3

Is a change in control strategy by a State (e.g. from a firm emission limitation to a system of intermittent control, tall stacks, and/or some other measures) to be considered a plan revision?

Answer No. 3

Yes. This action would constitute a substantive modification of the regulatory scheme which carries out the control strategy to provide for attainment and maintenance of the national standards.

Discussion No. 3

The change in question would involve the regulatory requirements applicable to a source or class of sources. Emission limitation requirements are the most critical parts of any plan and are specifically required to be included in the plan by § 110(a)(2)(B) of the Act. It is axiomatic that a substantive modification of such requirements must be considered a plan revision.

Question No. 4

May States revise an approved plan requirement because of the difficulty or impossibility of sources meeting that requirement? Where a State makes such a determination, may it now apply for an extension of the statutory attainment date for the national standards?

Answer No. 4

A State may revise an implementation plan requirement in the situation described, if the plan as modified will still provide for the attainment of the relevant national standards within the attainment date set forth in the plan approval. If the revision to a plan requirement would necessitate postponing the date specified for attainment of national standards, a revision for that purpose is also possible under the Act so long as the date is as expeditious as practicable and does not extend beyond mid-1975. Either type of revision would have to be approved by EPA.

Discussion No. 4

Where the State, in negotiating compliance schedules with individual sources, determines that compliance with the approved emission regulation by a source or sources will be difficult or impossible by the prescribed compliance date, it may revise its plan with respect to that source or sources. A source may be granted a variance from the initially-applicable compliance date if compliance is required to be as expeditious as practicable (40 CFR 51.15(b)) and the compliance date does not extend past the prescribed attainment date for the national standards. Any extension of compliance past that date would require a postponement under § 110(f) of the Act (40 CFR 51.32(f)).

Alternatively, the State may reassess the control strategy and choose to revise its emission regulations to reflect the non-availability of technology or other control measures (e.g. low sulfur fuels), if the revised regulations will still provide for attainment of the national standard within the prescribed attainment date. The State may also set back the attainment date for a national standard if the new date is no later than mid-1975 and the plan demonstrates that the new date represents attaining the national standard as expeditiously as practicable.

Question No. 5

May EPA approve implementation plan provisions which utilize stack height requirements for emission dispersing in lieu of measures requiring limitation of emissions?

Answer No. 5

As noted in your memorandum, this question is now being considered by the Court in the National Resources Defense Council suit challenging EPA's approval of the Georgia plan, and we feel it is appropriate for us to defer any action on the question until the Court makes a decision.

Discussion No. 5

As you may be aware, a briefing package on the stack height limitation issue is being prepared for the Administrator's consideration.

Question No. 6

Does the Act allow a State revise a plan by acquiring emission regulations adequate to attain the national standards but less stringent than those approved by EPA or to require emission regulations resulting from a reclassification of a region from Priority I to Priority III?

Answer No. 6

Yes, provided the State demonstrates to the Administrator's satisfaction that the less stringent regulations provide for the attainment of the relevant national standards as expeditiously as practicable, but no later than mid-1975. In the case of regional reclassification, the Administrator could approve the recission based on a determination that the controls are not necessary since the national standard (NO_2) is being attained. Where the standard is being attained only marginally, however, recission of all NOx controls may threaten maintenance of the standard and necessitate the Administrator's disapproval of all or part of the recission.

Discussion No. 6

In our view, § 110 did not require States in the preparation of their plans to make faultless judgments with respect to the practicability of controlling sources and attaining the national standards. Reassessments and consequent revisions to plans are approvable by the Administrator so long as the revised plan demonstrates attainment of the national standards as expeditiously as practicable (but no later than mid-1975). As noted in No. 4 above, in the case of individual source compliance schedules (including variances), the source must be required to comply as expeditiously as practicable (40 CFR 51.15(b)). The unavailability of low sulfur fuels is an appropriate factor for consideration in determining the practicability of control, both as applied to individual sources (in compliance schedule development) and to attainment dates.

It should be noted that the Agency is currently engaged in litigation with the Natural Resources Defense Council over the question of relaxation of plan requirements, through either granting of variances or other regulatory revisions. NRDC argues that the only permissible means of postponing plan requirements is pursuant to § 110(f) of the Act, the provision for one-year postponements upon specific findings by the Administrator on the record of a formal hearing.

PROPOSED FEDERAL REGISTER NOTICE RECOGNIZING THAT TALL STACKS AND VARIABLE (INTERMITTENT) CONTROL MAY BE USED FOR SOME SOURCES TO PROTECT AGAINST VIOLATIONS OF SO_2 NAAQS—ACTION MEMORANDUM

SYNOPSIS

It is proposed that EPA provide for the use of dispersion enhancement techniques (tall stacks and variable emission or intermittent control systems) in State implementation plans. The attached draft of a Federal Register notice sets forth the conditions under which such techniques may be applied. Their use would be limited to large, existing, remote facilities which cause violations of the SO_2 NAAQS.

DISCUSSION

The air quality standards represent very restrictive targets that provide for the protection of public health and public welfare. In order to meet them in a timely fashion and without unreasonable social disruption, it is necessary to utilize all the techniques available to the air pollution control profession and to constantly seek new techniques that will hasten attainment, and lower the social impact of achieving clean air, yet not sacrifice the integrity nor credibility of the Clean Air Act. Among the technological approaches EPA has been examining for several years are techniques *which take advantage of the capability of the atmosphere to disperse and dilute pollutants.* There are two approaches—increasing the effective height that the emissions take place, i. e., tall, stacks, and managing the rate of emission according to the continually changing dispersive capability of the atmosphere (often called intermittent control or variable emission control). It is now concluded that for a limited number of cases and under carefully controlled conditions, these dispersion enhancement approaches can be added to the techniques available to control air pollution and to meet ground-level ambient air quality standards.

In arriving at this conclusion, it is recognized that *there is value in reducing* the pollution load on the atmosphere by removing emissions rather than relying wholly on dilution techniques to meet air quality standards; therefore, these techniques should be considered only where adequate emission control technology is not readily available or reasonable to apply. Generally, effective and relatively inexpensive techniques are available for the control of particulates and CO, and sources emitting these pollutants are not likely candidates for dispersion enhancement. It should be noted that once effluents leave any source, the natural dispersion and removal processes of the atmosphere dilute the concentrations. All strategies designed to attain national ambient air quality standards take advantage of these processes in some way.

It is also recognized that a dispersion enhancement system must conform to the same tests of reliability, enforceability, and source responsibility that are applied to more conventional air pollution control strategies. Therefore, at this time, techniques to attain standards by enhancing dispersion are being considered only for isolated sources whose impact on air quality is unambiguous and when terrain, meteorology and the source location makes relatively simple the design and enforceability of effective variable emission control systems. This emerging technology cannot presently accommodate systems involving hydrocarbons, oxidant or nitrogen dioxide. Because of the atmospheric reactions involved with these pollutants, the knowledge required to relate emissions from a specific source to air quality throughout the area is simply not available. Similarly, the application of these techniques for any pollutant simultaneously to many sources, especially in or around metropolitan areas, is tenuous and cannot be reliably enforced at this time.

Because variable control systems have been discouraged in the past, data on their reliability is sparse. Recently, however, TVA and ASARCO presented data from three widely separated geographical areas (Kentucky, El Paso and Tacoma) indicating that these approaches can significantly reduce violations of the short-term SO_2 standards. The data are "company" data, but the Tacoma information is generally supported by independent data collected by the Puget Sound APCA. On the basis of these data, and an assessment of the reliability of diffusion modeling and emission reduction techniques, it is now concluded that these techniques may be used by some sources to protect against violations of SO_2 standards as effectively as flue-gas control systems.

The use of techniques to take advantage of the dispersive capability of the atmosphere is subject to inherent uncertainties due to its great and often rapid variability in space and time. Therefore, it seems prudent at this time to discourage their use for attaining primary air quality standards—these that are designed to protect public health. There are three problems that attend the implementation of such a policy. The first problem is that limestone scrubbers are not

particularly applicable. If a source must reduce emissions by 40% to meet primary standards, and 80% to meet secondary standards, and no means other than a limestone scrubber are available, then the option to use dispersion enhancement for secondary standards is effectively foreclosed.

The second problem is that emission reduction control methods (cleaner fuel, scrubber, acid plant) may be unavailable, insufficient, or infeasible for meeting the primary 24-hr. standard in some instances. The choice would then be between forcing plant operation curtailment or shutdown, and granting a variance. Dispersion enhancement would be preferable to either of these options.

The third problem is that considerable emphasis has been placed on insuring that dispersion enhancement systems will be designed, operated and enforced so that all air quality standards will be reliably achieved. Since secondary standards will be attained, the less stringent primary standards will simultaneously and reliably be attained. Therefore, the basis for rejecting dispersion enhancement for meeting primary standards no longer exists.

The decision as to whether dispersion enhancement may be used for a particular source is built into the proposed regulations up to the point where no more than 150–200 large, isolated, existing SO_2 sources can qualify for consideration. Although an element of judgment is inescapable when weighting the various inputs to the acceptability decision, the information required by Appendix Q should allow clear decisions in the public interest in most cases. It is inevitable that the limited acceptance of dispersion enhancement will lead to a law suit. One issue in such a suit is the interpretation of the Clean Air Act.

The Clean Air Act states (Sec. 110(a)(2)(B)) that each State Implementation Plan must include "emission limitations, schedules and timetables for compliance with such limitations, and such other measures as may be necessary to insure attainment and maintenance of such primary and secondary standard, including, but not limited to, land use and transportation controls." This requirement, and the words "and such other measures" in particular, may be interpreted in three ways: (1) Emission limitation is the only allowable means of attaining standards; "other measures" are alternative means and procedures for effecting emission limitation; dispersion enhancement is not acceptable, (2) "other measures" refers to measures other than emission limitation (e.g., dispersion enhancement). Such measures are allowable if they are necessary (i.e., if emission limitation sufficient to attain standards is unavailable or impractical), (3) any combination of measures which attain and maintain national standards is acceptable provided emission reduction is included.

The strong emphasis on emission reduction throughout the Clean Air Act (see Sections 111(a)(1), 111(d)(1) and 112(b)(1)(B)) and the benefits of emission reduction over dispersion enhancement lead OAWP to conclude that the third interpretation is environmentally unsound and inconsistent with the intent of Congress. On the other hand, the fact that dispersion enhancement can reduce ground-level concentrations at moderate cost and acceptable reliability while some emission reduction methods for sulfur oxides are expensive, limited in availability, based on emergent technology, and of only moderate efficiency and reliability argues strongly for the inclusion of dispersion enhancement in the array of acceptable control techniques. Consequently, Section 110(a)(2)(B) is interpreted to mean that dispersion enhancement is an "other measure" which may be used when "necessary." This legal interpretation underlies this proposed change in the regulations.

Issues which are expected to arise include:

a. Is it legally and technically possible to limit use of dispersion enhancement techniques to attainment of SO_2 standards by large isolated power plants and smelters? Technically, it is appropriate to confine the use of these techniques to large isolated sources. Responsibility for the violations is easily shown; enforcement is simplified. Nonurban areas allow flexibility in acquiring the large amounts of data necessary to develop and demonstrate the reliability of the procedures. The impact of threats to the standard is more readily assessed. The legal arguments for limiting the use of these procedures are not known. A suit should be anticipated.

b. What other types of industries might desire to apply these procedures? Sulfuric acid plants and zinc and lead smelters are potential candidates for use of these procedures to attain SO_2 standards. If they meet the isolation test and they are located so that the controls needed to meet the standards are infeasible or unavailable, they warrant consideration.

c. Should oil-fired power plants be considered? No. The control technology, de-sulfurized fuel, is prevalent and highly reliable. Further, few, if any, oil-fired plants are isolated. In this regard, EPA will continue to discuss with the concerned firms, the technical, legal and enforceability aspects of the Pioneer Valley, Long Island Lighting Company and General Elecrtic (Lynn, Mass.) proposals.

d. What increase in total emissions of SO_2 should be expected? The change in total emissions should be limited to the increase caused by additional demand for energy placed on existing generating facilities. New sources will come under new source performance standards. Emissions will be managed so that adverse effects on ground-level air quality will be minimized.

RECOMMENDATION

That you approve the enclosed revisions and additions to 40 CFR Part 51.

Appendix Q, description of an Intermittent Control System and Criteria for a Regulation.

This appendix describes procedures to supplement the attainment and maintenance of National Ambient Air Quality Standards for sulfur dioxide by taking advantage of the dispersive capability of the atmosphere. The air quality standards represent very illusive targets that provide for the protection of public health and welfare. In order to meet them in a timely fashion and without unreasonable social disruption, it is necessary to use all the techniques available to the air pollution control profession and to constantly seek new techniques and to reevaluate and upgrade old techniques that will hasten attainment and lower the social impact of enhancing the air environment. Among the technological approaches being examined are systems that more fully use the dispersive capability of the air. It is now concluded that for a limited number of cases and under carefully controlled conditions, procedures which enhance the dispersion of effluents from large isolated existing sources of sulfur dioxide can be added to the techniques available to meet ground-level ambient air quality standards. In making this determination, it is recognized that there is value in reducing the pollution load on the atmosphere by removing emissions rather than relying wholly on enhancing dispersion to meet the air quality standards. It is recognized that continuing and increasing demands for energy place increasing stress on the environment, including the quality of the air, and that even under the best conditions for dispersion, the dispersive capability of the atmosphere may be overwhelmed. Therefore, use of techniques to enhance dispersion can be considered only where adequate emission control technology is not readily available or reasonable to apply.

The statements presented herein are not intended, and should not be construed, to require or encourage State agencies to authorize procedures to enhance the dispersion of sulfur dioxide as a means to attain and maintain air quality standards without considering (1) the frequency and severity of threats to the air quality standards in the vicinity of large, remote sources of sulfur dioxide, (2) the availability and socio-economic cost of emission reduction control technology for the attainment of air quality standards around such sources, (3) the availability of low sulfur fuel, (4) the reliability and enforcement problems associated with dispersion enhancement techniques, and (5) the environmental effects of emissions even though such emissions are sufficiently diluted at ground level to attain air quality standards.

Failure of a State agency to adopt a technique for enhancing dispersion of emissions to attain and maintain National Ambient Air Quality Standards within the time prescribed by the Clean Air Act will not be grounds for rejecting a State implementation plan if the plan provides for attainment and maintenance of the standards. Nor will adoption of such techniques be grounds for the approval of the implementation plan if the national standards are not attained and maintained. In preparing plans which use dispersion enhancement techniques, State agencies should be assured that the plans deal with the particular and unique problems of their own State and that the techniques they approve deal with the problems in a reliable and enforceable manner.

1.0 DEFINITIONS

"Intermittent Control Systems" are designed to meet air quality standards by varying the emission rate with meteorological conditions order to take advantage of the continually changing dispersive capacity of the atmosphere.

"Effective stack height" means the sum of the physical height of the stack above grade and the height the effluent plume rises above the height of this stack top. Under most circumstances, an increase in the effective stack height results in a decrease in the maximum ground-level concentration of the emitted pollutant and an increase in the distance from the source that the maximum concentration is experienced.[1]

2.0 GENERAL CONDITIONS FOR ACCEPTABILITY OF TECHNIQUES TO ENHANCE DISPERSION OF POLLUTANTS

The following general conditions must be satisified before techniques to enhance dispersion of pollutants may be applied to attain and maintain National Ambient Air Quality Standards.

2.1 Emission enhancement techniques may be applied to sulfur dioxide emissions only.

2.2 The existing source of sulfur dioxide emissions must be remote from other sources (e.g., located in an area where the contribution of other sources does not cause contamination of more than 10% of the annual standard.)

2.3 Emission control technology for the source's sulfur dioxide emissions is unavailable, infeasible or insufficient to attain and maintain the National Ambient Air Quality Standards or would result in unreasonable social disruption.

2.4 The technique to enhance dispersion of sulfur dioxide will enable the National Ambient Air Quality Standards to be met in a timely fashion.

2.5 The technique to enhance dispersion will include intermittant control of the emissions and adequate effective stack height. Increasing effective stack height without the application of intermittent control procedures is not an acceptable technique.

2.6 The technique to enhance dispersion must be reliable and enforceable. It must conform to the same tests of reliability, en-

forceability and source responsibility as are applied to techniques to attain National Ambient Air Quality Standards by the constant, continuous and permanent control of emissions.

3.0 ELEMENTS OF AN INTERMITTENT CONTROL SYSTEM

3.1 Figure 3.1 presents a block diagram of the elements of an intermittent control system and the relationships among them.

3.2 The function of each element follows:

(a) Meteorological inputs. Observations and predictions of the values of meterological parameters required by the operational model to determine the degree of control needed to avoid threats to the air quality standard.

(b) Operation model. An intellectual construct which relates meterological inputs, emission rates, source data and terrain and location factors to current and future ambient air quality in the vicinity of the source.

(c) Schedule emission rate. The emission rate which would result under the currently scheduled processes and levels of operation.

(d) Control decision. Decisions, based on either the model prediction or real-time air quality, whether or not to continue with scheduled processes and their attendant emissions, and if not, how much to curtail the emission rate.

(e) Controlled emissions. The emission rate resulting from the control decision.

(f) Actual meterological conditions. The measures of wind speed, wind direction, stability, mixing height and other weather factors at the time of emission release.

(g) Air quality. Actual ground-level pollutant concentrations and their spatial distribution.

(h) Air quality monitors. An array of SO_2 sampling stations located at the points where maximum ground-level concentrations are most probable to occur, at representative points which are readily accessible to the public, and in sufficient numbers to allow calibration of the diffusion model so that it may accurately interpolate air quality between samplers. A portion of the monitors may be mobile or portable.

(i) Threshold values. Values of SO_2 concentration somewhat below air quality standards and/or rates of change of SO_2 concentrations which serve as indicators of potential violations of the standard. They are selected so that a control decision for emission reduction can be made in sufficient time to prevent air quality standards from being violated.

(j) Data storage. Time phased records of meteorological conditions, emission rate, model prediction, measured air quality and control decisions available for control agency review and model upgrading.

(k) Upgrade model. A periodic evaluation of the model's prediction accuracy and, if possible, a revision of the form or parameters of the model in order to improve that accuracy.

3.3 The intermittent control system described in Figure 3.1 will be seen to consist of three basic operations: control based on air quality prediction, control based on air quality measurement, and periodic model upgrading. Each of these operations is considered necessary to a reliable system, for each performs a valuable function. The operating model is used to predict ground-level pollutant concentration sometime in advance of its potential occurrence, and to interpolate between monitors. The monitored data and threshold values are used to supplement and, if necessary, override decisions based on the model output thus compensating for the less than perfect accuracy of the model. The model upgrade operation is used to convert the tentative initial model into an accurate prediction mechanism tailored to the specific plant and site.

4.0 CRITERIA FOR AN ACCEPTABLE REGULATION AUTHORIZING USE OF TECHNIQUES TO ATTAIN NATIONAL AMBIENT AIR QUALITY STANDARDS BY INTERMITTENT CONTROL SYSTEMS

4.1 This section presents criteria for an acceptable regulation concerning intermittent control systems. The purpose of such a regulation is to ensure that the proposed intermittent control system will enable air quality standards to be attained and maintained, that the system will be reliable and enforceable, and that the necessary elements of the system will be clearly and legally identified.

4.2 An acceptable regulation should:

(a) Authorize approval of each ICS only after reasonable notice and public hearing.

(b) Define air quality violations as:

(1) A single ambient concentration that exceeds the standard at any air quality monitor.

(2) Repeated or consecutive excesses at the same monitor or nonsimultaneous excesses at different monitors are multiple violations.

(3) Non-compliance with stated and agreed upon emission curtailment conditions and procedures.

(c) Permit a source to submit a plan for an ICS only after the source justifies the need for the system. The justification should discuss:

(1) Type and location of facility.

(2) Demographic aspects of the location.

(3) Anticipated growth: population, industrial, urbanization, etc.

(4) Frequency and severity of air quality standard violations.

(5) Availability and reliability of constant control systems.

(6) Economic aspects of constant control methods.

(7) Life expectancy of facility.

(8) Plan for development and demonstration of an ICS.

(9) Other factors pertinent to the facility.

(d) Apply only to those sources which are reasonably remote from other sources of the same pollutant (e.g., in areas where the source will assume full responsibility for observed SO_2 concentrations).

(e) Apply only to those sources which can curtail their emissions at a rate compatible with the advance warning time (of adverse atmospheric dispersion conditions) afforded by the ICS.

(f) If a permit is granted, require periodic rejustification (e.g., 3–5 year intervals) to insure that changes in economic, control, demographic, etc., factors do not warrant change in authorization for the ICS.

(g) Authorize a fee for the permit (funds from which will be used by the control agency for the additional surveillance and enforcement functions created by the intermittent control system).

(h) Require the source to establish, maintain and continuously operate monitors for sensing the rate of emission of the pollutant, air quality and meteorological parameters.

(i) Grant the agency continuous access to all data generated by the source's network of sensors and authority to inspect, test and calibrate all sensors, recorders and other equipment of the monitoring network.

(j) Require the source to notify the control agency when emission curtailment is initiated and when air quality standards are exceeded.

(k) Authorize the control agency to initiate emission curtailment as it seems appropriate; i.e., allow the agency to override the source's operation of the ICS.

(l) Require the source to submit a plan and schedule for implementing an ICS. The plan shall have two parts:

(1) A comprehensive report of a thorough background study which demonstrates the capability to operate an ICS. The report shall describe a study during a period of at least 120 days when air quality standards are frequently or likely to be exceeded which:

(i) Describes the emission monitoring system and the air monitoring network.

(ii) Describes the meteorological sensing network.

(iii) Identifies the frequency, characteristics, times of occurrence, and durations of meteorological conditions associated with high ground-level concentrations.

(iv) Describes the methodology (e.g., dispersion modeling and measured air quality data) by which the source determines the degree of control needed under each meteorological situation.

(v) Describes tests and results of tests to determine optimum procedures and times required to reduce emissions.

(vi) Estimates the frequency that ICS is required to be implemented to attain air quality standards.

(vii) Describes the basis for the estimate.

(viii) Includes data and results of objective reliability tests. "Reliability," as the term is applied here, refers to the ability of the ICS to protect against violations of air quality standards.

(2) An operational manual which:

(i) Specifies and substantiates the number, type, and location of ambient air quality monitors, in-stack monitors, and meteorological instruments needed.

(ii) Identifies the meteorological situations before and/or during which emissions must be reduced to avoid exceeding short-term air quality standards.

(iii) Describes techniques, methods and criteria used to anticipate the onset of meteorological situations associated with the excessive ground-level concentrations.

(iv) Describes the methodology by which the source determines the degree of control needed for each situation.

(v) Identifies specific actions that will be taken to curtail emissions when critical meteorological conditions exist or are predicted to exist and/or when specified air quality levels occur.

(vi) Identifies the company personnel responsible for initiating and supervising such actions.

(vii) Demonstrate that the curtailment program will result in maintenance of short-term and long-term air quality standards.

(viii) Describes the manner by which monitoring data are transmitted to the control agency (in a manner acceptable to the agency).

(ix) Describes a program whereby the source systematically evaluates and improves the reliability of the ICS.

(x) Identifies a responsible and knowledgeable person (and alternate) who can apprise the control agency as to the status of the ICS at any time.

(m) Require the source to submit monthly reports on the ICS, including an analysis of how the system affected air quality and how response to adverse dispersion conditions will be improved.

(n) Require annual review of the ICS by the control agency, and authorize the agency either to impose a fine on the source or to deny its continued use of the ICS if:

(1) The source has not complied with all provisions designed to protect long-term standards.

(2) The source has not developed a control program that is effective in enabling short-term standards to be met.

(3) The source has not demonstrated good faith in operating an effective control program by failing to:

(i) Utilize trained competent personnel.

(ii) Maintain and calibrate the monitoring equipment properly.

(iii) Refine and continuously validate and upgrade the response of the ICS to adverse dispersion conditions.

(iv) Attain annual and short-term standards in the vicinity of the source.

ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 51]

REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

Notice of proposed rule making

On August 14, 1971 (36 F.R. 15486), the Administrator promulgated as 40 CFR Part 420, regulations for the preparation, adoption, and submittal of State implementation plans under Section 110 of the Clean Air Act, as amended. These regulations were republished November 25, 1971 (36 F.R. 22398), as 40 CFR Part 51. The amendments proposed herein would revise 40 CFR Part 51, Subpart A, § 50.1 and Subpart B, § 50.12, § 50.13. The amendments proposed herein would also revise 40 CFR Part 51 by adding a new Appendix Q and providing additions to existing Appendix B.

The proposed amendments to 40 CFR Part 51 provide for the use of dispersion enhancement techniques in State implementation plans and set forth the conditions under which such techniques may be approvable.

Dispersion enhancement means the release of pollutants into the ambient air such that those pollutants are distributed throughout a larger volume of air and over a larger land area thus reducing the peak and average pollutant concentration at ground level. There are two basic techniques which produce this effect: (1) temporal variation of emission rate based on the dispersive capacity of the atmosphere as indicated by certain predicted and observed meteorological conditions (e.g., wind speed, stability, mixing height), and (2) increasing the height of the effluent plume through increased stack height or increased effluent temperature and/or exit velocity. These two techniques are complementary and should be employed together if dispersion enhancement is used to achieve air quality standards at ground level.

In the past, emphasis has been placed on attaining standards by reducing emissions. Tall stacks and techniques to vary the emission rate based on weather conditions (variable control systems) have not been encouraged. These approaches deliberately take advantage of the capability of the atmosphere to disperse and dilute pollutant concentrations. Because the dispersive capabbility of the atmosphere varies over several orders of magnitude with time and location, the reliability of these techniques compared to reducing emissions continuously has been questioned. The enforcement of regulations that would authorize the use of variable control techniques appears difficult, complicated, less certain and more costly than enforcement of regulations requiring permanent emission rdeuction. In addition, there are clear benefits to society in limiting emissions independent of the achievement of NAAQS. The past position with respect to variable (intermittent) control systems is conveyed in 37 F.R. 10845, May 31, 1972, and specifically in 37 F.R. 15095, July 27, 1972, which states:

"At this time, it (variable control) is not considered an acceptable substitute for permanent control systems for attaining and maintaining national standards. Experience with systems employing intermittent process curtailment indicates that although air quality is improved, violations of ambient air quality standards still occur. Additional experience with these systems may, however, in specific cases improve this reliability.

"(7) All sulfur dioxide emissions are required to be properly captured and vented through a stack. Although this may result in some improvement in air quality, the precise degree of improvement cannot be defined at this time; accordingly, it could not be taken into consideration in determining the total degree of emission control required to attain and maintain national standards."

The acceptability of dispersion enhancement techniques is being reevaluated for three reasons: (1) Recent data for both coal-fired power plants and copper smelters indicate that variable emission control systems can reduce ground-level concentrations to levels below air quality standards with a reliability in some circumstances equivalent to stack gas cleaning devices when such systems are operated in conjunction with adequate stacks, (2) Section 110(a)(2)(B) of the Clean Air Act specifies that other features besides emission reduction may be used to attain air quality standards if such other measures are necessary, (3) the availability cost and threats to other aspects of the environment associated with emission reduction methods for SO_2 are such that other measures (i.e., dispersion enhancement) may be necessary for the timely and cost-effective attainment of air quality standards.

The proposed revisions and amendments to 40 CFR Part 51 restrict the use of dispersion enhancement techniques to isolated sources of SO_2. These restrictions are based on the strong preference for emission reduction in the Clean Air Act [see Sec. 110(a)(2)(B), 111(d)(1) and 112(b)(1)(B)], and on the necessity of relating source emissions to the resultant pollution concentrations in order to reliably operate dispersion enhancement systems. Cost-effective emission reduction control technology is considered by the Administrator to be available for stationary sources of carbon monoxide and particulate matter, so dispersion enhancement is unnecnecessary for control of those pollutants. Source accountability for ground-level concentration of nitrogen dioxide and ozone cannot be estimated with sufficient accuracy for dispersion enhancement techniques to be a reliable means of control for stationary sources of those pollutants. Therefore, dispersion enhancement will be acceptable only for sources of sulfur oxides.

In order for dispersion enhancement to be reliably operated and adequately enforced, the ground-level concentation of sulfur dioxide must be related to the source emission rate. In urban or other areas where many sources may contribute to the observed ground-level concentration, the emission-concentration relationship of any one source is difficult to estimate with sufficient accuracy to allow reliable emission control or supportable enforcement action in the event that air quality standards are violated. Therefore, dispersion enhancement will be acceptable only for isolated sources which will accept full responsibility for ground-level concentrations of sulfur oxides in their vicinity.

Two additional conditions must be met for dispersion enhancement to be acceptable for nonurban sources of SO_2 emissions: emission enhancement techniques must be *necessary* to attain air quality standards, and the proposed emission enhancement must be technically capable of achieving air quality standards with a reliability consistent with emission reduction methods.

Demonstration of the necessity for omission enhancement will be made if (1) All available and practical emission reduction means have been employed, (2) air quality standards are threatened by the residual emissions, and (3) further emission reduction means are unavailable, infeasible, would result in serious socio-economic disruption, or are impractical for other reasons. The fact that emission reduction may be more costly than dispersion enhancement is not necessarily a sufficient demonstration of the necessity for dispersion enhancement, although cost considerations are clearly germane to this demonstration. For example, oil-fired power plant emissions of sulfur dioxide may be controlled by the use of desulfurized oil. Dispersion enhancement is not necessary for oil-fired power plants even though it may be less expensive than the use of desulfurized oil. On the other hand, the use of limestone scrubbers on coal-fired power plants to achieve short-term air quality standards which are violated less than one percent of the time may be over ten times as costly as variable emission control. It may be no more reliable and may seriously degrade the environment by producing large amounts of liquid and solid waste. Such a case would clearly qualify for consideration of dispersion enhancement. Certain nonferrous smelters may also be candidates for dispersion enhancement control techniques. Acid plants are cost-effective control methods for removal of the majority of sulfur from the emissions of such sources, but this emission reduction may not be sufficient for standard attainment. Further control of ground-level sulfur dioxide concentration using dispersion enhancement may be acceptable in such instances.

The determination of when dispersion enhancement is "necessary" cannot be made with precise objectivity. The problem is to balance the finite value of emission reduction over dispersion enhancement against the additional cost of emission reduction. Unfortunately, neither the effect of sulfur oxide emissions beyond those effects on which national standards are based, nor the value of reducing those effects is quantifiable at this time. Nevertheless, such effects are real and serious. They include contribution to suspended sulfate formation, acidification of soil, streams and lakes, visibility reduction, and increase in the "background" concentration of areas adjacent to the emitting source. The factors which should be considered in assessing the necessity of dispersion enhancement for a particular source include total annual emission after control, cost of alternative control systems (including various combinations of emission reduction and dispersion enhancement), environmental elements at risk, life expectancy of the emitting source, expense which can be borne without shutdown, practice in similar industries or in industries with similar emission problems, priority for limited fuel or control technology, amenability of the source to modification, availability of land for added equipment and fuel storage, etc., any of which may create difficulties that warrant procedures to attain air quality standards by tall stacks and varying emission rates.

An added surveillance burden on control agencies is expected when dispersion enhancement is used. This is due to the fact that dispersion enhancement depends on the prediction of, and response to, continually changing meteorological conditions. It is recommended that any State choosing to allow dispersion enhancement adopt a licensing fee to cover this added surveillance expense.

The intent of these proposed regulation changes is to provide States who have large existing isolated sources of sulfur dioxide emissions another control technique for attaining national ambient air quality standards in a timely fashion and without unreasonable social disruption.

Appendix Q sets forth the conditions under which the technique may be applied, describes a comprehensive variable emission control system, defines the elements of the system and provides criteria for an acceptable regulation which authorizes the implementation, operation and enforcement of a system.

These changes are not intended to:

1. Allow the unnecessary emission of sulfur oxides into the ambient air.
2. Allow dispersion enhancement techniques to displace emission reduction techniques which are available and cost effective.
3. Allow the use of emission control methods that cannot reliably attain national air quality standards.

4. Allow the use of emission control techniques which circumvent or inhibit surveillance and enforcement of air quality standards.

5. Allow dispersion enhancement techniques in areas where there are numerous interacting sources.

6. Allow the use of dispersion enhancement techniques in or near urban areas.

7. Allow the use of dispersion enhancement techniques for pollutants other than sulfur oxides.

8. Require a State to allow dispersion enhancement techniques.

Interested persons may submit written comments on the proposed regulations in triplicate to the Office of Air Quality Planning and Standards, Environmental Protection Agency, Research Triangle Park, N.C. 27711. All relevant comments postmarked not later than 30 days after publication of this notice will be considered. The regulations, modified as the Administrator deems appropriate after consideration of comments, will be effective upon the date of their republication in the Federal Register.

This notice of proposed rule making is issued under the authority of——.

REVISIONS TO PART 51, CHAPTER I, TITLE 40, CODE OF FEDERAL REGULATIONS

1. Revise the first sentence in paragraph (n), subpart 51.1 to read 51.1 Definitions—

* * * * *

(n) "Control strategy means a combination of emission reduction and such other measures as may be necessary for the attainment and maintenance of a national standard, including, but not limited to, measures such as: * * *

2. Add paragraph (q) to subpart 51.1 as follows: 51.1 Definitions—

* * * * *

(q) "Dispersion enhancement" means the timing of the release of emissions to avoid meteorological conditions conducive to abnormally poor pollutant dispersion, and improvement in stack design and operation in order to increase the effective stack height. Such techniques are generally considered inferior to emission reduction for attainment of national standards, particularly primary standards, and will be acceptable only if emission reduction control technology sufficient to attain national standards in the required time is unavailable or infeasible. The conditions for acceptability of dispersion enhancement techniques are set forth in Appendix Q, provided that Appendix Q to this part is not intended and shall not be construed to require or encourage a State to allow such dispersion enhancement techniques without due consideration of (1) the advantages of emission reduction over dispersion enhancement, (2) the availability and cost of emission reduction control technology, (3) the availability of low sulfur fuel, (4) the relative reliability of dispersion enhancement and emission reduction for achieving and maintaining national standards, (5) the relative difficulty and cost of surveying compliance with regulations governing dispersion enhancement and emission reduction methods.

3. Revise paragraph (a), subpart 51.12 to read—

51.12 Control strategy: General (a) "In any region where existing (measured or estimated) ambient levels of a pollutant exceed the levels specified by an applicable national standard, the plan shall provide for the degree of emission reduction and other measures necessary for attainment and maintenance of such national standard including the degree of emission reduction necessary to offset emission increases that can reasonably be expected to result from projected growth of population, industrial activity, motor vehicle traffic, or other factors that may cause or contribute to an increase in emissions.

4. Revise paragraphs (a), (b) and (e) of subpart 51.13 to read—

51.13 Control strategy: Sulfur oxides and particulate matter. (a) "In any region where existing or projected levels of sulfur oxides or particulate matter exceed a primary standard, the plan shall set forth a control strategy which shall be adjusted for the attainment or maintenance of such primary standard by July 1975.

(b) (1) "In any region where a secondary standard for sulfur oxides can be achieved through the application of reasonably available control technology and dispersion enhancement, "reasonable time" for attainment of such secondary standard pursuant to § 51.10(c) shall not exceed July 1975, unless the State shows that good cause exists for postponing application of such control means.

(b) (2) "In any region where application of reasonably available control technology and dispersion enhancement will not be sufficient for attainment and maintenance of such secondary standard, or where the State shows that good cause exists for postponing the application of such controls, "reasonable time" shall depend on the degree of emission reduction and other measures needed for attainment of such secondary standard and on the social, economic and technological problems involved in carrying out a control strategy adequate for attainment and maintenance of such secondary standard.

(b) (3) "In any region where the control strategy for attainment and maintenance of a secondary standard for sulfur oxides requires or results in extensive fuel switching, "reasonable time" may extend beyond July 1975, provided that the minimization of the demand for substitute fuel through the use of dual-fuel variable control systems has received serious consideration. In establishing a time for attainment of a secondary standard which the State considers reasonable, the following criteria shall be considered:

(i) The nature and prevalence of any adverse effects on the public welfare.

(ii) The value and useful life of existing combustion or control equipment which would need to be replaced as a result of the control strategy.

(iii) The availability and cost of any substitute fuel.

(iv) Other relevant social and economic impacts of the control strategy and pollutant emissions.

(b) (4) "Where the time for attainment of a secondary standard for sulfur oxides established by the State extends beyond Jan. 1, 1978, the State shall submit, after notice and public hearing, a reanalysis of the considerations specified in subparagraphs (b) (2) and (3) of this section at intervals of no more than three years from the date of plan approval by the Administrator. States shall apply reasonable interim emission reduction measures to minimize adverse welfare effects which occur at air quality levels in excess of the secondary standard.

* * * * *

(e) "Adequacy of control strategy.

* * * * *

(4) (i) "If dispersion enhancement is used as part of the control strategy, each source using this technique must be treated separately. It must be shown through a combination of diffusion modeling and air quality sampling that the emission rate control system and emission release characteristics are sufficient to insure that national standards will not be violated at any point significantly influenced by emissions from said source.

(ii) "The plan shall show that each source using dispersion enhancement to achieve national standards is sufficiently isolated from other sources so that observed and calculated pollutant concentrations in the vicinity may be attributed solely to that source. In some exceptional cases, two or more sources located in close proximity to one another may be treated as one source.

(iii) "Other conditions for the acceptability of dispersion enhancement as a control strategy for attainment of national standards are set forth in Appendix Q.

5. Add the following sentence to Appendix B, Part 3.1 at the end of the second paragraph:

Appendix B—Examples of Emission Limitations Attainable with Reasonably Available Technology.

3.1 Fuel combustion.

* * * * *

If these means are unavailable, infeasible, or insufficient to achieve national standards in the required time, then dispersion enhancement techniques, as described in Appendix Q may be considered. * * *

6. Revise Appendix B, Part 3.4 last sentence to read Appendix B—Examples of Emission Limitations Attainable with Reasonably Available Technology.

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3.4 Nonferrous smelters.

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In such cases, less restrictive control can be coupled with restricted operations and or dispersion enhancement techniques to achieve air quality standards.

STAFF PAPER INTERMITTENT CONTROL SYSTEMS

(Prepared by Monitoring and Data Analysis Division, Office of Air Quality Planning and Standards, OAWP, EPA)

April 1973

INTERMITTENT CONTROL SYSTEMS (ICS)

Synopsis

1. The purpose of this paper is to analyze the alternative positions available to EPA on the acceptability of intermittent control systems (ICS) as a strategy element of state plans to protect air quality.

2. An ICS is a system designed to meet air quality standards by taking advantage of the continually changing dispersive capacity of the atmosphere. Through an ICS, emissions are curtailed during poor dispersion conditions to prevent ground-level concentrations from exceeding the standards. As dispersion conditions improve, emissions may be increased accordingly because the effluent will be dispersed through a greater volume. The emission variations are effected through such procedures as fuel switching and process rate variation. An ICS may be contrasted with constant control system (CCS), which reduce emissions by a fixed amount that is dictated by the worst expected dispersion conditions.

3. The past position of EPA has been to discourage the use of ICS because (a) it primarily relies on dispersion rather than emission reduction, (b) its reliability compared to that of CCS is questioned, and (c) enforcement of regulations that would have to accompany an ICS appears to be difficult and costly. The past position is conveyed in 37 F. R. 10845, May 31, 1972, and stated in 37 F. R. 15095, July 27, 1972. " . . . At this time, it (intermittent control) is not considered an acceptable substittue for permanent control system for attaining and maintaining national standards. Experience with systems employing intermittent process curtailment indicates that although air quality is improved, violations of ambient air quality standards still occur. Additional experience with these systems may, however, in specific cases improve their reliability."

4. The EPA position on ICS is being reevaluated because (a) reliable systems are now being demonstrated and (b) constant control technology may not be available for meeting air quality standards, or may be

much more costly than ICS, especially for short-term standards.

5. There are 150–200 facilities (power plants and smelters) whose operators are particularly likely to desire to employ intermittent control systems. These facilities emit one-third or more of the nationwide sulfur dioxide emissions.

6. The issue to be resolved is whether and under what circumstances a control strategy which includes ICS will be acceptable to EPA.

Discussion

1. Theory and operation of ICS.

The two basic methods of reducing ground-level pollutant concentrations are emission reduction and atmospheric dispersion. However, control systems which reduce emissions by cleansing the stack gases rely to some degree on dispersion. Pollutant concentrations in the cleansed stack gases are rarely less than the ambient air quality standards. The amount of CCS needed by a facility to attain ambient air quality standards is based in part on the expected dispersion of the facility's effluent plume by the time it reaches ground level.

The rate of dispersion depends on meteorological conditions (wind speed, mixing height, stability). These conditions vary with time such that the peak ground-level concentration varies over several orders of magnitude even though the emission rate is constant. ICS takes advantage of this natural variation in dispersion potential by adjusting the emission rate in accordance with meteorological conditions so that ground-level pollutant concentrations do not exceed pre-selected values.

Methods of varying the emission rate may be adjustment of the plant's process rate, scheduling of high and low emitting processes to take place during the appropriate weather conditions, or varying fuel quality.

Depending on the circumstances, ICS may or may not reduce the *average* long-term emissions. If plant operation is curtailed during poor dispersion conditions, then it may be increased during good conditions to make up for the lost production. Average emissions would be about the same with or without ICS for this situation. If clean fuel is used to reduce emissions during poor dispersion conditions, then average emissions will be reduced somewhat. If fuel with higher sulfur content is used during good conditions, then average emissions could be greater with ICS. It must be concluded, therefore, that although ICS employs temporary emission limitation, the long-range control method is that of taking advantage of good dispersion rather than emission reduction. The elements of ICS operation are shown in Figure 1.

The estimate of present and future dispersion conditions is based on current and predicted weather conditions. The predicted conditions may be based on observed present weather in the vicinity of the source, on the informed opinion of a meteorologist who interprets the significance of the weather conditions and trends occurring over a wide area, or both. The rate of change of air quality measured by the monitoring network may also provide significant clues to the current and future dispersion conditions. The weather predictions are used as inputs to the operating model. The complexity of the model(s) will vary tremendously with the local terrain, the season, the geographical area; broadly speaking, with the local climate. The complexity is also a function of the characteristics of the source, such as the height of the stack. A tall stack generally enables the model(s) to be simpler (and more reliable) than if a source uses short and multiple stacks.

The models provide data or indications as to whether and how much to vary the emission rate. These data together with a firm understanding of the source's operation, form the basis for an emission control decision. If the model and meteorological predictions were perfect, this would be all that was necessary. No dispersion model or meteorological prediction is perfect, however, so feedback from the air quality monitoring network is used to check and, at times, to override the operating model calculation. There is a time delay between emission and concentration at a monitor so some "lead" or anticipation must be used when controlling on the basis of air quality data. This "lead" has the form of ground-level concentration thresholds somewhat below the standard to be met. When such thresholds are exceeded, emissions must be reduced regardless of the model output.

Data on actual meteorological conditions, monitor readings, emission rate, and predicted concentrations are stored, analyzed, and used to upgrade the operating model. Thus a properly operated ICS should become more reliable with use. (See Tab. 1, Theory and Operation of ICS.)

2. Reliability.

The reliability of an ICS is considered to be a technical rather than a policy matter. In application its reliability is as good as that of some presently acceptable stack gas-cleaning systems.

Further, ICS is a flexible approach. Even while being developed, an ICS possesses a capability to improve air quality once the decision is made to control emissions, although probably not reliably. Experience with the ICS should improve its reliability. A satisfactory level of reliability (i.e., a dependable model) might be expected in 1-2 years. Reliability should eventually approach the reliability of stack gas-cleaning methods by the time such methods could be installed (also 1-2 years). Thus, some benefits are derived from ICS during its development period; none are expected from a CCS until it is placed "on-line."

If dispersion conditions are less favorable during a season or year than expected (based on long term data), the model may be modified or the criteria for control made more stringent. If the necessary efficiency of an installed CCS were determined using weather data collected during an anomolous period, considerable delay and substantial costs may be involved in rectifying the circumstances and enabling the standards to be attained. An ICS system can react to such situations more promptly. Its flexibility enables the operator to respond to the need to attain standards within hours or days rather than months.

Nevertheless, the preferred procedure to attain National Ambient Air Quality Standards (NAAQS) everywhere, always, is to limit emissions on a continuous basis. With a combustion source the most reliable tactic is to burn clean fuels. With a process source, the most reliable tactic is to limit the rate of operation to the level that emissions pose no threat to the NAAQS during the most adverse atmospheric conditions, taking due care that the conditions on which the rate is based are, in fact, most adverse. These approaches are uneconomical for some facilities.

As a consequence, control devices to clean the stack gases are employed on many facilities. Unfortunately such devices do not operate continuously at design efficiency. EPA engineers estimate that an SO_2 flue gas-cleaning device will be inoperative about 15% of the time; 5% for scheduled maintenance and 10% because of malfunctions. The threat to NAAQS created by such outages varies among facilities.

Factors such as these determine the effect of the periods of inoperation: Are the breakdowns weather related, systematic or random? Does the facility operate continuously? Does it terminate operations when the devices are inoperative? If an uncontrolled facility threatens the standards 75 days per year, and control device malfunctions are random, the NAAQS would be violated on about 11 days per year or 3% of the time.

Similarly, if the operators of an ICS err not more than 15% of the time (15% x 75 poor dispersion days=11 days), the ICS will protect the NAAQS as effectively as a CCS.

Data on the effectiveness of ICS are sparse. TVA reports that when the decision to curtail operations was made 18 hours before a curtailment was required to be initiated, 18% of the decisions were in error. However, additional updating procedures are now used and the "go–no go" decision is executed 2 hours before curtailment is required.

Data indicating the effectiveness of ICS systems are available from TVA, the Puget Sound Air Pollution Control Agency and ASARCO.

Source	Period	Number of samplers	Number of violations, NAAOS 24-hr, 0.14 ppm	3-hr, 0.50 ppm
TVA	January 1968–September 1969 (before ICS).	14	8	10
	September 1969–June 1970 (after ICS).	14	0	2
ASARCO	1970	Not stated	3	8
El Paso	1971	do	2	2
ASARCO	1969	5	9	26
Tacoma	1970	5	2	13
	1971	5	0	3
	January–June 1972	5	0	0

Source	Period	Number of samplers	Number of violations 24-hr,[1] 0.10 ppm	1-hr,[1] 0.40 ppm
PSAPCA: Tacoma	1971	Unknown, but at least 9	3	45
	1972		0	19

[1] Note: PSAPCA standards.

The TVA and ASARCO data are reported by them. TVA data are the more objective because a date for inaugurating the ICS was established (Sept. 1969). The ASARCO data indicate an increasing capability to reduce violations of air quality standards at the sites where air quality is monitored by an ICS program. ASARCO has operated ICS programs since 1969 at increasing levels of effort. The Puget Sound APCA data, though based on local standards, indicate an improved reliability of the Tacoma ICS operation.

In summary, an ICS, when properly designed and diligently and conscientiously operated, can be used to attain air quality

standards with the same reliability as a CCS. (See Tab 2., Reliability of ICS and CCS.)

3. Enforcement.

For an enforcement system to succeed it must provide an adequate incentive for sources to comply with emission and air quality regulations. Adequate incentive exists if the regulation associated with the ICS (1) provides for adequate control agency surveillance of the source and its impact on air quality, (2) enables the agency to establish liability if air quality or emission standards are violated, and (3) prescribes sufficient penalties to deter a source from allowing such violations to occur.

If the incentives are adequately provided for, the control agency has four basic approaches to enforcement of an ICS:

1. Enforcement on air quality. The source operates the ICS and is held directly responsible for maintaining air quality standards in vicinity of the plant.

2. Enforcement on emissions. The source operates the ICS and is required to vary emissions in accordance with pre-arranged "curtailment criteria." These criteria are specific meteorological conditions or air quality levels at which the source curtails emissions by predetermined amounts.

3. Enforcement on emissions and air quality. This is a combination of the preceding approaches. The source basically operates in accordance with curtailment criteria, but simultaneously is responsible for maintaining air quality.

4. Enforcement by control agency operation of ICS. The agency, on an operational basis, determines when and in what manner the source varies emissions to attain and maintain air quality standards.

When air quality is the basis for enforcement (Approach 1), the source, as a condition for being permitted to use ICS, assumes full responsibility for maintaining the air quality standards. To assure that the standards are maintained, the control agency has access to air quality data on a real-time basis and has access to all air quality sensors to assure that they are operated, maintained, and calibrated properly. Enforcement actions are initiated if air quality standards (or regulations) are exceeded. This approach allows the source the maximum degree of flexibility.

When emissions are the basis for enforcement (Approach 2), the source, as a candidate for being permitted to use ICS, provides the control agency with a set of curtailment criteria. These are meteorological conditions (and occasionally air quality levels) which, in the course of developing the ICS, have been ascertained to be precursors or indicators of the need to limit emissions to avoid air quality violations. The agency requires access to air quality, meteorological and emission data. Enforcement actions are initiated if the source does not properly adjust emissions when conditions meet the curtailment criteria. This approach has the advantage of requiring curtailment even though an air quality sensor is not located in an area where the ground-level contamination is most likely to exceed the air quality standard. It does not require the source to assume responsibility for maintaining air quality standards. Repeated violations of the air quality standards would be corrected only by periodic reviews of the system by the source and agency, at which time revision of the "curtailment criteria" would be in order.

Enforcement on emissions with responsibility to maintain air quality standards (Approach 3) is a combination of the preceding approaches. "Curtailment criteria" are developed and justified to the control agency. Nevertheless, the source is immediately responsible for any violations of air quality standards. This approach entails continuous monitoring of emissions, dispersion conditions and ambient air quality by the control agency. If properly operated, it protects against violations of air quality standards in areas where no sensors are located; against unquantified effects of pollutants (see Tab 4); and provides prompt feed-back to improve the curtailment criteria when the air quality data show the criteria to be inadequate.

Enforcement by control agency operation of the ICS (Approach 4), in essence, requires the agency to operate the facility. The source has no flexibility. It responds to the direction of the agency. This approach is likely too paternalistic and so philosophically divergent from normal economic and industrial practices as to be unacceptable to any source.

Any of the four approaches, due to the relative complexity of an ICS would impose a considerable administrative, surveillance and enforcement burden on a control agency. The burden is compounded if sources are located in rugged terrain, if more than one source is involved, or if sources are not isolated from each other. Particularly troublesome is a multi-source system or system operated where the background levels of contamination exist. Under these circumstances establishing liability for violations is difficult, uncertain and time consuming.

Further, EPA and most State and local control agencies are not staffed to cope with the burden of enforcing the requirements of the CAA in areas where several intermittent control systems are present. If use of ICS is not carefully restricted, the enforcement burden can easily become unmanageable.

A reasonable remedy to the cost of enforcement to the agency would be to require a permit to operate an ICS. The permit fee would be set at a level which would pay for the costs of surveillance and enforcement of the system.

In summary, the problem of enforcing an ICS is a major reason for the reluctance of many to endorse the use of such systems. If ICS is limited to use by single, isolated sources, enforcement appears manageable. If allowed to be applied by multi-sources, in urban areas, enforcement requirements place great demands on the resources of air pollution control agencies, including those of the EPA. Necessary resources might be acquired from fees for permits to use an ICS. Assuming administrative problems are overcome, the preferred approach is to enforce on the basis of emissions and air quality. (See Tab 3., Enforcement.)

4. Legal Position of ICS.

The most important policy decision relating to ICS (and tall stacks) is the interpretation of Section 110(a)(2)(B) of the Clean Air Act. This section requires that the SIPs achieve NAAQS through ". . . emission limitations . . . and such other measures as may be necessary. . . ." This key phrase may be interpreted in two ways. It may be construed to mean that "other measures" may be used only if sufficient emission limitation means are unavailable or infeasible, thus making "other measures" necessary. Or it may be interpreted to mean that any combination of emission limits and "other measures" may be used, provided NAAQS are attained.

Both ICS and tall stacks are "other measures." Both techniques rely on the dispersion of pollutant emissions through a larger volume of air to reduce ground-level concentration. A taller stack does not reduce emissions. ICS reduces emission sometimes, but may increase emissions at other times. The average emissions are reduced only slightly if at all.

If ICS and tall stacks are to be rejected in favor of the more costly emission limitation methods (CCS), and this cannot be done on reliability grounds, then EPA must adopt and defend the interpretation of Sec. 110 that "other measures" may be used only when emission limitation is unavailable and/or infeasible. (See Tab 4., Legal Position of ICS.)

5. Unquantified Effects.

The present ambient air quality standards are first steps towards quantified standards of environmental quality. However, they do not yet include such effects as contribution to background concentration, conversion of SOx to suspend sulfates, acid rain, climatic change, and long-range ecological damage. All these presently unquantifiable effects will be reduced if emissions are limited but not if NAAQS are attained solely by dispersion of the contaminants.

Unquantified effects may also include restrictions on growth, particularly in the vicinity of large point sources which operate an ICS. If the objective is only to attain standards in the vicinity of the source, then the air quality will have been usurped and no other additional facility may be located in the neighborhood of the source. (See Tab 5., Unquantified Effects of Pollutant Emissions.)

6. ICS and the SIPs.

The state implementation plans (SIPs) and EPA procedures for determining their acceptability are primarily based on air quality control through emission reduction. Acceptance of dispersion techniques (viz., ICS) in lieu of emission reduction, in more than a carefully limited number of cases, may require major revisions in the SIPs. Unless considerable care is taken in defining and limiting the situations in which EPA will accept ICS as a control measure, the basic SIP philosophy of control through emission reduction may be undermined.

7. Costs of ICS.

An ICS is not cheap. The costs occur in three areas: Direct installation and operating costs to the source, lost production for the source and lost wages for its employees, and costs for surveillance and enforcement to the public sector.

The direct costs to the source include equipment to monitor emissions, weather and air quality; computer and modeling services; addtiional technical and scientfic personnel; etc. It frequently requires one-year and $300,000 to $400,000 to develop an elementary ICS system and another $100,000 to $150,000 to maintain and operate it.

Lost production may or may not be a serious cost factor depending on whether the method of emission reduction is production curtailment, whether the facility operates at full capacity, whether lost output can be recovered without serious cost penalties, and on lead time for curtailment. ASARCO indicates that they curtailed annual production 30% at one plant. EPA estimates the curtailment may have cost $800,000 to $1,000,000.

The increased cost of surveillance and enforcement may be considerable. It is reasonable to expect the source to defray at least a part of this public expense.

The relative cost of ICS and alternative CCS will vary widely with the particular conditions. TVA data indicates that limestone scrubbers might be 10 times as costly as ICS for meeting short-term SO_2 standards near TVA's power plants. Kennecott estimates that the cost of 90% reduction of sulfur emission by CCS would cost 50% more at their Utah smelter and 350% more at their Nevada smelter than a least cost system which employs a combination of CCS and ICS. (See Tab 6., Cost Effectiveness.)

8. Estimate of Number of Facilities Involved.

There are 379 coal-fired power plants in the U. S., each of which consume more than 50,000 tons of coal annually. About 85–100 of these are located in remote or rural areas and are required by state regulations (as indicated in the SIPs) to reduce the sulfur content of their fuel to 1% or less. These plants currently emit about 13% of the sul-

fur dioxide emitted nationwide. If the critical sulfur content of the fuel is 2%, the number of such facilities rises to 150–200. Nationwide they emit about 26–28% of the Nation's sulfur dioxide.

Most of the country's 16 copper smelters, because of their sites, the magnitude of their emissions and their inability to control their sulfur dioxide emissions sufficiently, threaten the MAAQS. Currently, they emit 3.5 million tons of SO_2 annually.

In summary, 100–115 facilities probably will apply for permission to meet SO_2 NAAQS by ICS. Another 85–100 facilities, making a total of about 200, *are likely* to apply because of state limitations on the sulfur content of the fuel. These 200 plants emit one-third or more of the nationwide emissions of sulfur dioxide. (See Tab 7., Number of Facilities which may Employ ICS.)

9. Self-Retirement Factor.

An Intermittent Control System, though currently cost-effective in many situations, over a period tends to be self-retiring. As constant control systems increase in reliability, and decrease in costs, the differences between the ICS and CCS cost-benefits decrease. The ICS is an inconvenience to the operator. Costs of idled workers, equipment, stock piling of raw or partially processed materials add a "harassment" aspect to the operation of the ICS. It is reasonable to anticipate that it eventually will become less attractive as a control tactic for many sources and some source categories.

10. Pollutant.

The availability and cost-effectiveness of control methods vary with the pollutant. Relatively inexpensive and very efficient COS is available to control particulate matter emissions from point sources. Similarly, cost-effective controls for CO from stationary sources are available. Therefore, ICS is not necessary for the control of these pollutants. The very high percentage of NO_x and HC emissions from mobile sources and atmospheric chemistry considerations make these two pollutants poor candidates for ICS. On the other hand, control techniques for SO_x emitted from combustion sources are expensive, supplies of low sulfur fuel are inadequate, and methods to cleanse SO_2 from exhaust gases are not very efficient. Non-ferrous smelters emit greater amounts of SO_2, much of which can be captured at reasonable costs. However, in some situations and in some locations, sufficient amounts of SO_2 would still be emitted to threaten NAAQS.

In summary, of these pollutants, ICS is warranted as a control tactic only for SO_2.

11. Source Size.

The cost of monitors, modeling and enforcement limit the use of ICS to large sources. Only if these services are provided by the control agency will it be feasible for small sources to use an ICS.

12. Source Isolation.

The contribution of a source's emissions to the observed ground-level concentration is a vital factor in the development, operation, upgrading and enforcement of an ICS (see Fig. 1). If a source is sufficiently isolated, and the pollutant of concern is SO_2, it can be assumed that all of the observed ground-level concentrations in the vicinity of the source are due to the source. The development, improvement and enforcement of the ICS can be straightforward, unambiguous, and reasonably objective. If a group of sources is isolated and *a priori* agreement can be obtained on the division of liability among the sources, then such isolated clusters may be treated as one isolated source. Sources located in or near urban areas, where some contribution to the ground-level concentration may result from several or many smaller sources, pose severe technical and enforcement difficulties.

The use of an ICS should be limited to isolated sources of SO_2. Otherwise, difficulties in developing, upgrading, enforcing and assessing liabilities may be created which increase costs and jeopardize attainment and enforcement of the NAAQS. A criteria for isolation might be that an ICS be approved for a source only if it were located in an area where contributions from other sources to ground-level contamination do not exceed 10% of the annual NAAQS.

Options for acceptability of ICS

There are three broad options as to the acceptability of ICS for existing sources: always, never, and sometimes.

In all cases the option refers to a proposed use of ICS that is technically capable of meeting air quality standards with a reliability equivalent to acceptable CCS, legally enforceable, and acceptable to the state agency. These technical and enforcement conditions will severely limit the number of proposals for ICS use.

The policy options cover the likely cases where ICS would be economically attractive to a source *and* could meet EPA requirements for reliability and enforcement. Such cases would primarily be large, nonurban-sources of SO_x.

Option 1: Accept ICS for any existing source or pollutant if the proposed control system is technically sound and legally enforceable for meeting AAQS.

Pro:

(a) The cost of meeting NAAQS will be lowered.

(b) The demand for low sulfur fuel will be lowered.

(c) Large sources will be able to respond flexibly to changes in NAAQS and to extreme meteorological conditions.

(d) NAAQS will be attained sooner.

(e) Legal support for this option may be found in Sec. 110(a)(2)(B) of the Clean Air Act in the words ". . . and such other measures as may be necessary to insure attainment and maintenance of such primary or secondary standard . . ."

Con:

(a) This option is the most difficult to legally defend.

(b) Annual emissions from sources using ICS would not necessarily be reduced and may even increase in some cases.

(c) The SIP preparation and approval process will be seriously upset by this option.

(d) Both growth and degradation problems will be increased.

(e) State and federal resources for plan evaluation and enforcement will be strained.

(f) The potential benefits of ICS may not be realized due to over-taxed surveillance resources.

(g) Available and economically reasonable CCS will not be used in some cases due to the lower cost of ICS. This is especially true of particulates.

Option 2: Reject ICS. Accept only CCS. Allow compliance delay until 1977 if necessary for development of CCS.

Pro:

(a) This option is the most legally defensible.

(b) This is consistent with past policy that NAAQS are to be met by permanent emission reduction.

(c) ICS may be used under this option as an *interim* control measure in accordance with Sec. 110(f)(1)(c).

(d) No revision of SIPs is required.

(e) No extra burden is placed on surveillance and enforcement resources.

(f) Pollutant emissions are minimized.

Con:

(a) The cost of meeting NAAQS will be highest under this option.

(b) The demand for low sulfur fuel will remain high.

(c) Little flexibility will be available to sources to respond to changes in air quality standards or exceptionally poor dispersion.

(d) Attainment of NAAQS will be delayed.

(e) The position of EPA will be inflexible. In some instances prohibitively expensive CCS or permanent production curtailment will be the only available control options.

Option 3: Accept ICS only under certain conditions.

Discussion: Three suboptions are presented below. Each suboption is a method of separating acceptable from unacceptable uses of ICS *in addition* to the requirements that ICS be reliable and enforceable.

Suboption 3a:

Require available control technology to be applied. Allow ICS if available technology is insufficient to achieve air quality standards. Require replacement of ICS by CCS when new technology becomes available.

Pro:

(a) Minimum deviation from past policy.

(b) Relatively easy to defend legally. ICS may be used when *necessary* to meet NAAQS (Sec. 110(a)(2)(b)).

(c) Minimum revisions of SIPs required.

(d) Minimum burden on surveillance resources.

(e) Minimum relaxation of emission reduction requirements.

(f) An alternative to permanent plant operation curtailment is available if the CCS is insufficient to achieve air quality standards.

Con:

(a) Permanent controls may be technically available but economically impossible. In such cases EPA would be put in the position of forcing partial or total plant operation curtailment while withholding an effective and economically viable control method.

(b) ICS may be much more cost-effective than any CCS, particularly where short-term NAAQS are violated only a few days or hours per year. EPA would be put in a position of defending an economically irrational policy.

Suboption 3b:

Allow ICS only for attainment of secondary NAAQS. Require CCS for the attainment and maintenance of primary NAAQS.

Pro:

(a) ICS is more subjective in design than CCS and in some cases may be less reliable than the best CCS. Its use should be prevented when health-related standards are involved.

(b) This option provides a clear-cut criteria for the acceptance or rejection of ICS.

Con:

(a) ICS, when properly designed and conscientiously operated, can be as reliable as stack-gas cleaning methods which are acceptable for the attainment of primary standards.

(b) The cost of meeting NAAQS is high under this option.

(c) The demand for low sulfur fuel will remain high.

(d) Attainment of NAAQS may be delayed.

(e) The position of EPA will be inflexible. In some instances prohibitively expensive CCS or permanent production curtailment will be the only available control options for meeting the primary standard.

Suboption 3c:

Determine the acceptability of ICS on a case-by-case basis. Base the decision on the availability and cost and expected emissions of alternative control systems, the expected life of the plant, the frequency and severity of pollution due to the plant and any other relevant factors. Review the decision periodically. Require CCS when conditions change in its favor.

Pro:

(a) Allows for the optimization of public benefits by balancing the value of emission reduction against the cost of such reduction.

(b) Allows the use of a complete range of emission reduction and dispersion techniques for the timely, effective, and economical improvement of air quality.

(c) Avoids unreasonable decisions due to inflexible criteria (i.e., allowance of ICS for particulates when cost-effective CCS is available or the requirement that multi-million

dollar SO_2 scrubbers be used to avoid violations expected only a few days per year).

(d) Allows the States maximum flexibility for meeting NAAQS on time and at reasonable cost.

Con:

(a) Case-by-case decisions may result in case-by-case lawsuits—at least until a precedent is established.

(b) The lack of objective criteria may lead to charges of arbitrariness, inequity, or favoritism.

(c) An accurate, quantitative measure of the environmental effectiveness of emission reduction is not available for use in optimizing the cost-effectiveness of emission control.

(d) The acceptance precedure will be inherently lengthy and complex.

(e) Negotiations over the acceptability of ICS may delay the application of any control.

Summary arguments

A basic premise to the recommended EPA policy on ICS is that there are benefits to society from reducing emissions of most pollutants into the atmosphere independent of the attainment of NAAQS. An important portion of the effects of pollutant emission is presently unquantifiable (e.g., acid rain, corrosion, suspended sulfates, property damage, ecological change). These effects are a function of atmospheric loading and are reduced most effectively by attaining NAAQS through permanent emission reduction. They are not alleviated through use of tall stacks and slightly alleviated by ICS, if at all.

The benefits of emission reduction over emission dispersion are of finite, not unlimited, value. The outright rejection of dispersion techniques when emission reduction techniques are unavailable or prohibitively expensive, would not optimize benefits to society. It would be unreasonable to force permanent curtailment of production or severe increases in product prices due to the insistance on CCS if reliable and much more cost-effective ICS is available.

The problem has been to find a decision-making framework to determine an acceptable strategy for attaining NAAQS which optimizes benefits to society. Many alternatives are available to accomplish this objective, from unrestricted use of any tactic that will meet NAAQS to the prohibition of ICS or tall stacks. Neither of these extreme alternatives allows the optimization of benefits.

Combination alternatives that allow ICS only to solve part of the problem (i.e., after application of reasonably available, or best, or most practicable control technology, or after attaining primary NAAQS by permanent emission reduction) do not really address the problem of maximizing benefits. They have the advantage of providing more dogmatic criteria for decisions on acceptable strategies. However, they are arbitrary in initial selection of criteria and once selected they are relatively inflexible. Such inflexibility can force unreasonable decisions in some circumstances for, in fact, there are few situations which are precisely alike. The cost advantage of ICS over CCS is 1:10 or more for power plants with tall stacks where short-time SO_2 standards are violated only 1–2% of the time. Some smelters see no advantage in attaining standards by ICS alone. A combined CCS–ICS system may be less costly than either CCS or ICS. The cost advantage of a combined system over CCS ranges from 1:1.5—1:3.5 depending on the smelter involved. Other variable factors include the local climate and topography, the expected life of the plant, population and biota surrounding the plant, etc.

It appears logical that the way to make the proper decision in each case is for EPA or the State to decide each case individually within a consistent policy framework. It is essential that the framework formally recognize that the growth of population and economy, and changes in technology create increasing stress on the environment; recognize that there are benefits of emission reduction over dispersion at the present, as well as in the future, and recognize that such reduction has a finite, not unlimited, value that must be compared to the cost differential between emission reduction and dispersion.

This policy would lead to many generalizations that predetermine the decision in most cases. For example, ICS would be limited to attaining SO_2 standards, would apply to isolated sources, would consider terrain problems, would apply to sources whose processes are adaptable to variable levels of operation, would apply particularly to facilities which threaten short-term standards, etc.

This policy allows States maximum flexibility to devise acceptable control strategies for attainment of NAAQS. If they can place a high value on the benefits of generally clean air, they can require much emission reduction; EPA has not "sold them out." (EPA should continuously and vigorously support States in their desire to achieve highest quality air attainable.) If the State wishes to use ICS to meet NAAQS, they can allow it and, with reasonable justification, EPA can approve the strategy. Since decisions will be made on the facts in each case, EPA can avoid being forced into unreasonable actions.

In summary, Camp recommends the following three-tiered approach to ICS:

1. Adopt a policy that emission reduction is preferred to dispersion techniques even though NAAQS can be reliably attained in some circumstances by the latter techniques.

2. Decide whether a source is a viable candidate for ICS on a case-by-case basis, taking into account the availability and cost of CCS, and the numerous other factors that may be relevant to the particular case.

3. Scrutinize the reliability and enforceability of the proposed ICS, if it is deemed feasible for the source to use ICS as a part of its control strategy. The ICS, if approved, would be reevaluated periodically (1) to determine if cost-effective CCS had become available, and (2) to determine if the reliability of the ICS is adequate and improvable. (See Tab 8., Conditions for Acceptability of an ICS.)

TAB. 1. THEORY AND OPERATION OF ICS

Definition

In the broadest sense an Intermittent Control System (ICS) is the deliberate variation of pollutant emission rate based on estimates of atmospheric dispersion potential order to reduce the environmental impact of impact of those emissions.

This broad definition includes many practices not generally considered to be intermittent control, such as soot-blowing or agricultural burning during good dispersion conditions and the alteration of work schedules to change the time and intensity of peak traffic density. A narrower and more familiar definition of ICS refers only to emissions from stationary sources which operate continuously or during fixed working hours and which reduce their emission rate during periods of poor atmospheric dispersion conditions in order to avoid the high ground-level pollutant concentrations probable under those conditions.

The second, narrower definition will suffice for our purposes provided two qualifications are added: (1) The emission rate may increase during periods of good dispersion as well as decrease during poor conditions, and (2) ICS is not necessarily an exclusive control strategy; it is one of several control strategy elements which may be used in combination to mimize the impact of pollutant emissions on the environment. These control strategy elements include process change, removal of pollutants from the exhaust stream, and the use of cleaner fuel, all of which reduce pollutant emissions and ICS, taller stacks, and appropriate siting, which rely on improved dispersion of pollutant emission to reduce or redistribute the ground-level pollutant concentration.

Variable dispersive capacity

It has been observed that pollutant concentrations resulting from a constant rate of emission vary over several orders of magnitude at any given ground-level monitor. This phenomenon is due to three mechanisms, all related to temporal variation in meteorological conditions: (1) The pollutant is transported toward or away from the receptor due to changes in wind direction, (2) the maximum ground-level concentration attributable to a source varies both in magnitude and distance from the source with changes in atmospheric stability and wind speed, and (3) the pollutant is mixed throughout a larger or smaller volume of air due to changes in wind speed, stability and mixing height.

The first mechanism is of limited interest for it does not necessarily reduce the ground-level concentration, but only moves that concentration from place to place. The other mechanisms are of considerable environmental significance.

The adverse effect of a pollutant on an environmental element (animal, plant, material) is an increasing function of the rate of transfer of that pollutant to that element. This rate of transfer is, in turn, an increasing function of the atmospheric concentration of the pollutant to which the element is subjected. The relationship between pollutant concentration and adverse effect is most probably non-linear. At high pollutant concentrations, the effects may be rapid and intense; at lower average concentrations the effects may be slow, subtle and cumulative; at still lower average concentrations, there may be no adverse effect; in fact, some waste products may have a net beneficial effect on some environmental elements when present in low concentration.

The relationship between pollutant emission rate and ground-level concentration of that pollutant is, therefore, of considerable importance. If a pollutant emitted into the atmosphere is dispersed through a greater volume of air, then its impact on the surface environment will be less per unit of surface area, but more surface area will be affected. If all the pollutant is eventually deposited on the surface, then the product of (pollutant per surface area) times (surface area effected) is constant. If, however, the adverse environmental effect due to ground-level concentration and pollutant deposited on the surface decreases more rapidly than pollutant per unit volume and pollutant per unit area, then wider pollutant dispersion will reduce total environmental impact of those pollutants. NAAQS are based on the assumption that no adverse effect occurs below a threshold ground-level concentration. This assumption is undoubtedly simplistic (See Tab. 4: Unquantified Effects of Pollutant Emissions). However, the assumption that total environmental damage decreases with increased pollutant dispersion is reasonable. It may be concluded, therefore, that the capacity of the environment to absorb waste with a given environmental impact (not necessarily at zero impact) varies with the dispersion of that waste throughout the air and, eventually, over the Earth's surface.

Effectiveness of ICS

Now consider two emission sources which produce the same long-term average amount of emissions under identical circumstances except that one source emits at a constant rate and the other source varies its emission rate with dispersion conditions. Both the peak and average environmental impact of the source using ICS will be less than that of the source that emits at a constant rate. (See the appendix for an example supporting this statement.) If a source using ICS

has a lower average emission rate than a constant rate source (in addition to variable emission rate based on dispersion potential), then its environmental impact will be that much less. Thus, there are at least two cases in which ICS is clearly environmentally superior to CCS.

The third, and most difficult case, is where the ICS source emits more pollutant on the average than the CCS source. There is certainly a point at which the greater emission from ICS is no longer compensated by the wider distribution of that emission. The determination of this balance point depends on the indicator of environmental impact used, the accuracy of dispersive capacity prediction and the relationship between emission rate and dispersive capacity. It is sufficient for our purposes here to state that the relative environmental effectiveness of ICS in comparison with CCS becomes positive at some point where average ICS emissions are somewhat greater than average CCS emissions, and increases as ICS emissions are reduced. This statement is illustrated in Figure 1–1.

ICS operation

There are three types of ICS. These are not mutually exclusive. In fact, an ideal ICS would include all three.

1. Open loop system based on diffusion modeling.

This system is illustrated in Figure 1–2a. The heart of this ICS is the operating model. This is a diffusion model that estimates maximum ground-level concentrations based on emission rate, meteorological conditions (wind direction, wind speed, stability, mixing height), and local topography. The meteorological conditions needed to operate the model generally must be predicted. The prediction will be based on the short- and long-range past history of the weather in the vicinity of the plant and on National and regional weather forecasts. The desired or expected plant emission rate is also entered in the operating model.

One form of model output is the expected maximum ground-level concentration. This estimate is compared with the relevant short-term air quality standard. If the expected maximum concentration is less than the standard (with some safety factor included to compensate for uncertainty), then no action is taken and the plant operates normally. If the estimated maximum concentration exceeds the appropriate threshold, then plant emission must be reduced. Emission reduction may be achieved by switching to cleaner fuel, reducing the level of plant operation, or delaying high emission processes that may have been scheduled.

2. Closed loop system based on air quality monitoring. (Figure 1–2b)

This ICS relies entirely on real time air quality feedback for information on which to base the control decision. An array of continuous air quality monitors is located at those points where maximum concentrations are expected. The level and rate of change of pollutant concentration at each monitor is continuously scanned. The emission rate is *curtailed* whenever a monitor indicates that a standard is in danger of being exceeded. Because of the time delay involved in reducing the emission rate and because of the time required for the pollutant to travel from the stack to a monitor, control must be initiated somewhat before monitored concentration reaches the standard. Threshold values of concentration and rate of change of concentration will be set, based on the reduction response time and source-receptor distance. The amount of reduction needed is not estimated by this system. A step-wise reduction schedule would be appropriate.

3. Closed loop system based on diffusion modeling upgraded by emission-concentration data (Figure 1–2c)

This system is similar to the first except that air quality monitors, data storage, and periodic upgrading of the operating model have been added. In most instances, a detailed climatological study and a validated diffusion model will not be available at the initiation of an ICS. The collection of emission and concentration data provides a basis for analysis of the model's accuracy, and for possible improvements in that accuracy. The monitoring network required would be similar to that discussed under an ICS system based solely on air quality monitoring (2, above), except that fewer monitors would be required because the model is available to interpolate air quality between monitors.

The existence of a monitoring network may improve meteorological prediction, especially in cases of complex topography, because source-receptor pollutant transport is an indicator of meteorological conditions.

4. Combined system (Figure 1–2d)

An ideal ICS would employ three complementary operations. The emission source would first look at meteorological predictions and adjust its emission output accordingly. If that adjustment were not sufficient, as indicated by air quality monitoring, then additional procedures for further emission reduction would be activated. Records of the emissions, measured concentrations, and meteorological conditions would be continually or periodically analyzed to determine if improvements in the prediction accuracy of the model could be effected. Such improvements would then be incorporated in the model.

The advantage of a combined system lies in the fact that each of the loops performs a different, valuable function. The model allows lead time in performing control operations. This is desirable in that time is necessary to switch fuel or curtail operations. Furthermore, there is a lag between the emission of pollutants and the registration of their effects at the monitors. Even if all control functions were instantaneous, this lag time could still result in unacceptably high concentrations at the monitoring site(s) for a limited period. The lead time associated with the model is a valuable compensation for the several system lags. The air quality loop firmly establishes the connection between air quality and emissions. During the initial operation of a combined system, when the operating model is tentative and the dependency of air quality on local meteorology only partially known, it is possible that the air quality loop would often be the controlling one. As time goes on and data are accumulated, it should be possible to improve the operating model so that the air quality loop is activated less and less frequently and the overall ICS operation becomes smoother and more predictable.

APPENDIX TO TAB. 1. COMPARISON OF ICS AND CCS FOR EQUAL AVERAGE EMISSION

The example below is for illustrative purposes only. It does not represent an actual or proposed control system.

Frequency of occurrence (percent)	Concentration no control	CCS control applied (percent)	Expected concentration CCS applied	ICS control applied (percent)	Expected concentration with ICS applied
(1)	(2)	(3)	(4)	(5)	(6)
20	100	50	50.0	100	0
20	75	50	37.5	80	15
20	50	50	25.0	50	25
20	25	50	12.5	20	20
20	0	50	0	0	0
100	[1] 50	[1] 50	[1] 25.0	[1] 50	[1] 12

[1] Average.

Column (1) represents the frequency that an ambient ground-level air quality concentration represented in column (2) as a result of a source's operation. Column (3) indicates that 50% constant control is applied. Column (4) indicates the concentration expected as a result of the constant control. Column (5) represents the amount of ICS control applied to each frequency of occurrence interval. Column (6) is the expected ambient concentration as a result of the degrees of ICS control applied during each frequency of occurrence interval.

Not only is the peak concentration reduced when ICS is used, but the average concentration is reduced as well. The reader is invited to substitute any schedule of radiation which averages to 50% control and decreases from top to bottom for the schedule used in column (5) to assure himself that both peak and average expected concentration will be less for ICS.

TAB 2. RELIABILITY OF ICS AND CCS

Many control officials are reluctant to accept an ICS as a control measure because the reliability of such systems for protecting national ambient air quality systems (NAAQS) has not been adequately demonstrated. Recent data have become available [1 2 3 4] that permit a judgment to be made of the reliability of an ICS.

The traditional and preferred, procedure to attain and maintain in the ambient air quality standard is to limit emissions on a continuous basis to the extent that NAAQS are not exceeded during the most adverse meteorological conditions. With a combustion source, the most reliable technique is to use fuels which contain sufficiently small amounts of the polluting elements and to use them in a manner such that pollutant emissions are kept to a minimum. Where a process source is the threat to NAAQS, the most reliable technique is to maintain a rate of operation such that emissions are sufficiently small to constitute no threat to NAAQS. For some facilities these approaches impose serious economic consequences.

Control devices to clean the exhaust gases have been (and are being) developed to limit emissions to comply with regulations designed to attain NAAQS. Unfortunately, such devices often do not operate continuously at design efficiency. EPA engineers estimate that SO_x flue gas cleaning devices will be inoperative for scheduled maintenance at least 2 weeks per year and for unscheduled repair an additional 10% of the time.

The threat to the NAAQS created by such outages varies among facilities, depending upon whether the breakdowns are systematic or random; whether the facility operates a 24-hour day, 7-day week; whether the facility terminates operations when the control devices are inoperative; whether the malfunctions are weather related; etc.

Let us assume that a continuously operating facility without control devices causes NAAQS to be exceeded on 20% of the days of the year; that its control devices, which when operating are sufficient to eliminate threats to NAAQS, are inoperative 15% of the time; and that the facility operates at normal capacity whether or not the control devices are operating. Then, if malfunctions of the control devices are random, the NAAQS

would be expected to be exceeded on 3% of the days (15% x 20% = 3%) or 11 days per year.

Let us now assume that the facility operates an ICS to curtail emissions during periods when NAAQS are most in jeopardy and that the threats occur on 75 days per year. It would be required that the operators of the system err in the direction of too little control on not more than 15% of these 75 days for the ICS to protect NAAQS as effectively as the control devices. This is a reasonable and attainable standard for reliability of an acceptable ICS.

Information on the effectiveness of ICS as a procedure to protect air quality is limited to data from operators of the systems, especially TVA (at the Paradise Steam Plant) and ASARCO (at the Tacoma and El Paso smelters). Futhermore, the indicated effectiveness of the system may be closely tied to the number of air quality sensing sites if the objective of the operators is primarily to avoid violations of the standard at the sampling sites. (It must be pointed out that an ICS system went into operation at the Trail, B. C., smelter in the early 1940's.[5] TVA operated a system for a period in the middle 1950's at their Kinston Steam Plant.[5] However, comparative data are not readily available for before and after implementation of the ICS.)

TVA reports[1] the following "before and after" data for their ICS at the Paradise Steam Plant.

	Violations of SO_2 NAAOS	
	3-hr, 0.5 ppm	24-hr, 0.14 ppm
January 1968 to September 1969 (before)	10	8
September 1969 to June 1971 (after)	2	0

These data are from 14 sensing sites within a 22½ degree sector centered on the 33½ degree azimuth from the source. Approximately 10% of the wind directions cause the plume from the plant to threaten this sector. TVA curtails emissions without regard to wind direction so it is expected that unsensed violations would be not more than 10 times those reported. Since weather situations which are conducive to high ground-level concentrations occur more frequently when winds have a southerly than a northerly component, the factor of 10 alluded to is undoubtedly a maximum.

ASARCO reports[2,3] the following numbers of violations in vicinity of the El Paso smelter to the variance to the Texas SO_2 standard (0.5 ppm for 1-hr.):

Year and number of violations

1970	100
1971	26
1972	30

These data are based on data sensed at 18 sites. The system incorporates a continuous feedback of air quality information to the control center. Therefore, the operators have information as to impending threats to the standards at the sites.

ASARCO independently reported that the 24-hr SO_2 NAAOS was violated 3 times near El Paso in 1970 "when the fully telemetered closed-loop system became operational" and 2 times in 1971.[4] The same source reported the 3-hr SO_2 NAAQS was violated 8 times in 1970 and 2 times in 1971.

The following air quality trends near their Tacoma, Washington, smelter are reported by ASARCO[4] and Puget Sound APCA.[6]

VIOLATIONS OF NAAQS SO_2 STANDARDS

	24-hr, 0.14 ppm	3-hr, 0.50 ppm
ASARCO Sensors[4] (5 sites):		
1969	9	26
1970	2	13
1971	0	3
1972 (January–June)	0	0

VIOLATIONS OF PSAPCA STANDARDS

	ASARCO[4] (5 sensors)		PSAPCA[6] (9 sensors)	
	60-min, 0.40 ppm	24-hr, 0.10 ppm	60-min, 0.40 ppm	24-hr, 0.10 ppm
1969	273	28	----	----
1970	175	8	----	----
1971	29	1	45	3
1972	----	----	19	0

These data are not strictly comparable for a number of reasons: The facilities are in different climatic and topographic situations; the systems are devised to meet different standards; and one is a combustion source, the others, process sources. Nevertheless, substantial reductions in pollutant levels occurred at the sensing sites in all cases. Where 24-hour data are available, the evidence is strong that the 24-hour primary SO_2 standard may be attained near large isolated point sources by ICS methods. Violations of shorter-term standards are reduced by a factor of 4 to 5.

Several caveats are in order:

a. The reliability of an ICS is a function of the vigor with which the system and standards are policed and enforced. ASARCO for example, established their systems first at facilities which were near populated areas. Public concern provides an incentive to attaining the standards.

b. The indicated reliability of an ICS may be a function of the number and placement of air quality sensors. Data from Texas APCS[2] suggests that the hours of violation increased roughly linearly from 1968 to 1970 with the increase in the number of monitoring stations.

c. A well-operated ICS may be expected to become more reliable with time. The operators acquire experience and a better understanding of the nature of their problem. On the other hand a CCS may decrease in reliability with time due to aging and wear.

In conclusion, for some sources an ICS may as effectively protect against violations of the NAAQS at ground level as a CCS.

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TAB 3. ENFORCEMENT

For an enforcement system to be successful, it must provide adequate incentive to pollutant sources to comply with emission and/or air quality regulations. With an ICS, establishment of incentive is especially critical because of the relative degree of independence the source has through its authority (albeit limited authority) to vary emissions. Adequate incentive exists if the regulation associated with the ICS: (1) Provides for adequate control agency surveillance of the source and/or its impact on air quality, (2) contains provisions enabling the control agency to establish legal liability if air quality standards and/or ICS emission regulations are violated, and (3) prescribes sufficient penalties to deter the source from allowing such violations to occur.

If the above conditions for adequate incentive hold, there are four approaches to enforcement that a control agency could pursue:

1. Enforcement on an air quality basis. The source operates the ICS and is held directly responsible for maintaining air quality standards in the vicinity of his facility.

2. Enforcement on an emission basis. The source operates the ICS and is required to vary emissions in accordance with emission "curtailment criteria." (Curtailment criteria are specific meteorological conditions or specific air quality levels at which the source must curtail emissions by predetermined amounts.)

3. A combination of approaches (1) and (2). The source is held directly responsible for operating in accordance with curtailment criteria, and simultaneously with assuring air quality standards are protected.

4. Control agency operation of the ICS. The agency, on an operational basis, determines when and in what manner the source varies emissions to attain and maintain air quality standards.

Enforcement on an Air Quality Basis:

This approach allows the source the greatest degree of independence and flexibility because the source operates the ICS itself, and its daily operations are not necessarily subject to control agency surveillance. The only stipulation is that the source must assume full responsibility for maintenance of the air quality standards.

Of course, as with enforcement on an emission basis, the curtailment criteria used by the source in its daily emission control decisions must meet prior approval by the control agency. In addition, the criteria are subject to periodic re-evaluation by the agency on the basis of how well the system is performing.

To assure that the standards are being met, real-time air quality data must be transmitted from the monitoring sites directly to the control agency, as well as to the source. The agency must have free access to all monitors to assure that they are properly calibrated and maintained. Enforcement actions are initiated if and when air quality standards (regulations in this case) are not met.

The number of sources desiring to participate in an ICS will be a major factor in determining whether air quality is the preferred basis for enforcement. In the case of a single isolated point source, the problems involved with air quality as the basis for enforcement (e.g., establishment of liability if air quality standards are exceeded) are minimized. Given a single isolated source, air quality monitoring would seem to offer a more direct approach to surveillance and enforcement than emission monitoring and

engineering inspections because attainment of specific air quality levels (standards) is the principal objective.

The success of a system that bases enforcement primarily on measured air quality depends upon whether or not it can be shown, through analysis of the data, that a given source contributed a specific amount to the ambient concentration at a specific monitoring site. In a multiple-source situation, such a determination is difficult or impossible unless extensive emission data from the sources involved and appropriate detailed meteorological data from the area are continuously available. When more than one source is involved, it would probably be necessary, from an enforcement standpoint, to prearrange a legally binding distribution of liability.

With air quality as the principal basis for enforcement it is especially important that the number of air quality monitors be sufficient to provide a reasonable estimate of maximum ground-level pollutant concentrations due to the source in question. The eventual determination of what is "reasonable" will depend on (1) the cost involved with each additional air quality monitor, and (2) the acceptable degree of error in estimating concentration maxima. An acceptable trade-off point between those two factors would have to be found. At any rate the required number (a dozen or more) of air quality monitors about each source would be much greater than is currently generally required.

The required number of air quality monitors might be considerably reduced if (1) meteorological dispersion models can be used in conjunction with air quality monitoring or (2) mobile sensors are employed, (3) or both. However, until validated dispersion models for the vicinity of the source in question are developed, a full complement of fixed and mobile air quality monitors would be required.

To be sure, the determination of optimum locations for placement of air quality monitors is difficult. The locations of maximum ground-level concentrations depend upon source characteristics, topography, meteorological conditions, and travel times before emissions reach ground level. The optimum network may be achieved only after considable experience and adjustment of the locations of air quality sensors. However, it is at least as difficult to determine with any confidence (1) the degree of constant control (CCS) that would be required and (2) to demonstrate that air quality standards have been achieved as a result of that control.

Enforcement on an air quality basis, would, however, bring about a problem that does not exist with enforcement of emission regulations. Under emission regulations, the source is not necessarily subject to enforcement action if an air quality standard is exceeded in its vicinity, as long as it complied with the (fixed) emission regulations.

With air quality as the basis for enforcement the source must be held directly liable for violations of the standards if the source is to have adequate incentive to operate the ICS with the degree of diligence necessary to protect air quality. The problem is that for any large emitter, violations of short-term standards can easily occur due to the vagaries of the weather and the dependence of the success of an ICS on the skill and conscientiousness of the operators of the system.

The crux of the problem is how to legally enforce against such violations. Since a large emitter using ICS will likely cause air quality standards to be exceeded, ample incentives are needed to assure that the source would do its best to minimize the risk of such violations. Perhaps a graduated penalty system would be in order, penalties being assessed in proportion to the frequency and severity of violations.

Enforcement on an Emission Basis:

This approach to enforcement is similar to enforcement on an air quality basis in that the source operates the ICS; i.e., the source operators determine when curtailment criteria are met, and emissions are varied accordingly. However, in this case, the control agency oversees the daily source operations. Source emission data, meteorological information, and air quality data must be available to the control agency (not necessarily on a real-time basis) so that it can determine if emissions are, in fact, being curtailed when the curtailment criteria indicate the need to do so. Enforcement actions are initiated if the source does not properly (and promptly) respond to the curtailment criteria. Through this approach to enforcement it may not be possible to hold the source legally responsible for violations of air quality standards, as long as the source curtails emissions as dictated by the curtailment criteria. Such a possibility exists because the source will have been utilizing curtailment criteria approved by the control agency prior to initial acceptance of the ICS.

At any rate, enforcement entails a considerably different approach if emission regulations (for variable emissions) are involved, rather than air quality regulations. With an ICS, surveillance of source emissions and establishment of liability for violations would be a relatively arduous task because of the variations in emission rates that are effected at the source in response to continually changing meteorological conditions. Enforcement would be based at least in part on whether the source properly curtailed emissions as required by the regulations. The control agency administrative burden would be relatively complex because emissions would have to be continually matched with measured air quality, predicted air quality, and/or meteorological information to determine if the emission regulations are being complied with and whether the air pollution model is operating appropriately.

Enforcement on the Basis of Air Quality and Emissions:

This approach employs surveillance of both air quality and emissions as a basis of the enforcement procedure. The air pollution control agency monitors air quality to assure that the standards are being met. It monitors emission rates to assure that air quality standards are not jeopardized in areas where no air quality sensors are located and to afford some protection from unquantified adverse effects of the pollutants (see Tab. 4).

Control Agency Operation of the ICS:

Through this approach, the control agency operates the ICS itself, and dictates to the source when and in what manner to vary emissions. Through such an approach, the source is relieved of all direct responsibility for air quality, as long as it follows the instructions from the agency. Enforcement actions are initiated if and when the source does not follow those instructions. Control agency personnel would be required to have extensive training, not only in meteorology and dispersion modeling, but also with regard to the source operations.

This approach allows the source no flexibility. The source is continually subject to direct operation orders from the control agency. Agency personnel would constantly oversee and dictate the source's control activities and possibly, depending on the type of operation, its production rate as well. This approach is highly paternalistic. It is so philosophically divergent from normal economic and industrial practices that it is unlikely to be acceptable to any source.

DISCUSSION

A situation where only two or three sources are involved needs consideration. As with the case involving many sources, more complex emission regulations or some fixed diversion of liability would be in order to determine the proportion of the ground-level concentration at any given point is due to each source. The feasibility of enforcing the complicated regulations for such a system would have to be determined on a case by case basis.

In addition to all of the above considerations, there is the prominent fact that EPA and most state and local control agencies are ill-equipped to meet the enforcement demands placed on them by numerous ICS operations. If the use of ICS is not carefully restricted, the enforcement burden could easily become unmanageable. In addition, EPA will have to establish legal enforcement procedures and assign additional field personnel to intervene in those ICS situations where state and local control authorities do not act effectively to ensure adequate protection of air quality.

Any of the four approaches to enforcement, due to the relative complexity and inherent uncertainties of an ICS would impose a considerable administrative surveillance and enforcement burden upon the control agency. The burden is compounded if the source is located in rugged terrain, if more than one source participates in the system, or if the source is not isolated from other sources.

Terrain poses an extremely difficult problem because of the variety of subtle changes in dispersion characteristics found in such areas and the consequent effect on ground-level concentrations. Multi-source operations or operations in areas where a significant background of pollutant exists render the establishment of liability, the identity of the offender, or both highly uncertain.

In summary, enforcement considerations dictate that ICS be applied primarily, if not solely, to single facilities that are isolated from other sources of the pollutant involved or for multiple sources which agree beforehand to share responsibility for air quality violations on a fixed percentage basis. If there are measurable background concentrations of the pollutant, the source(s) desiring to use an ICS should assume responsibility for all, or at least a fixed percentage, of ground-level concentrations at the monitoring sites. From the standpoint of environmental protection (and enforcement, for that matter) the preferred approach to enforcement in any ICS is to base enforcement on air quality *and* emissions.

TAB 4. LEGAL POSITION OF ICS

The standard setting procedure for stationary sources of pollutant emission is covered by Sections 110, 111, and 112 of the Clean Air Act. Section 110 requires that each State submit a plan for the achievement and maintenance of NAAQS which "includes emission limitations—and such other measures as may be necessary—." Section 111 requires "the best system of emission reduction—taking into account the cost of achieving such reduction—" to be applied to new sources or source modifications "which contribute significantly to air pollution—." Section 112 requires that "emission standards" be prescribed for sources of hazardous pollutants.

The only language in the Clean Air Act that would allow the use of dispersion techniques (ICS & tall stack) to achieve NAAQS are the words "and such other measures as may be necessary" in Section 110(a)(2)(B), and the mention of "interim measures" and "available alternative operating procedures and interim control measures" in Section 110 (e) and (f) dealing with extension of the time for compliance with parts of the SIP.

There is no question that ICS qualifies as an "interim control measure" and as an "available alternative operating procedure" under 110 (c) & (f). EPA would be required by the Act to accept, and even to demand

ICS to minimize pollutant concentration during SIP extension periods. Nor is there any question as to whether a reliable and enforceable ICS qualifies as "such other measures as may be necessary" in a case where no alternative CCS is available. Improved dispersion is the only alternative to emission reduction for lowering ground level pollutant concentrations.

The principal question involves the legality of rejecting dispersion control methods in favor of emission reduction when the former is sufficient to achieve NAAQS, preferred by the source, and allowed by the State.

EPA has rejected ICS in the past, but on grounds of reliability. An example of this approach is given in the preamble to the regulations proposed for non-ferrous smelters in Western States on July 27, 1972 (37 F.R. 15095). This policy is as follows:

". . . At this time, it (intermittent control) is not considered an acceptable substitute for permanent control systems for attaining and maintaining national standards. Experience with systems employing intermittent process curtailment indicate that although air quality is improved, violations of ambient air quality standards still occur. Additional experience with these systems may, however, in specific cases, improve their reliability."

Recent data from TVA (See Tab. 2) indicate that very significant reductions in violations of NAAQS can be achieved with ICS—reductions such that no violations of the primary 24-hour SO_2 standard occurred at the locations of 14 samplers. So the general rejection of ICS on reliability grounds is no longer supportable.

ICS could be rejected for some sources, confined to a supplementary role for others, and accepted only until more cost-effective CCS becomes available for still other sources *if* the CAA were interpreted to place value on emission reduction above and beyond NAAQS attainment. The CAA has not been so interpreted to date. For example, the following exchange on this point took place during the oversight hearings before the House Subcommittee on Public Health and Environment, January 1972. The speakers are Subcommittee Chairman, Paul G. Rogers, EPA Administrator, William D. Ruckelshaus, and Deputy Assistant Administrator, Dr. John T. Middleton:

"Mr. ROGERS. Let me suggest this is something we would like to go into. Section 110 requires inclusion of emission limitations.

"I notice on page 3, you do not mention that. Maybe it is covered, is it?

"Mr. RUCKELSHAUS. I am not sure I understand the question.

"Mr. ROGERS. In the States' implementation plan which they must submit as to how they will implement the law, the law requires the inclusion of emission limitations in that plan. I do not see you mentioning that. Perhaps you overlooked it. Is that a requirement in your guidelines?

"Mr. RUCKELSHAUS. The answer to your question, Mr. Chairman, is that we have told the State that while they may submit a strategy in which emission limitations are provided, if they can show that the standards can be met without emission limitations, then we will review the plan with that in mind.

"Now, the vast majority of the plans that have been and are being submitted, do contain and will require emission limitations.

"Mr. ROGERS. How will they know if they have to have emission limitations until something happens?

"Mr. RUCHELSHAUS. In virtually all of the plans that we have now, there are emission limitations.

"Mr. ROGERS. Why is that not a requirement since it was specifically stated in the law?

"It is my understanding this was changed at OMB, that you had it in your suggested guideline but it came back from OMB and it was not in it. Maybe I am mistaken.

"Mr. RUCKELSHAUS. It was simply amended to say that if a State could show they could meet the air quality standard without emission limitations, then there would not be such a requirement. Frankly, I do not know how they are going to do it, but if they can make such a showing——

"Mr. ROGERS. I do not know how they could do it either. It seems to me there was a requirement, and I hope it is still a requirement because it is required in the law.

"Mr. MIDDLETON. Mr. Ruckelshaus spoke to other opportunities to meet the standards. I think if you or your staff had the opportunity to look at the rules and regulations, which we will submit for the record, you will see under subpart A, 42.1 a description of what a control strategy is. I might just read that to clarify the point since it is one of concern to all of us. It says:

" 'Control strategy means a combination of measures designated to achieve the aggregate reduction of emissions necessary for attainment and maintenance of a national standard including but not limited to measures such as emission limitations.' These are first on the list.

"Mr. ROGERS. And I would think the most important.

"Mr. MIDDLETON. That is why they appear first on the list.

"Mr. ROGERS. I cannot conceive of any plan coming in where they do not have some thoughts, some plan, some method of eliminating emissions, because this is where we are beginning to start one.

"Mr. RUCKELSHAUS. I have yet to see one which does not have any limitations.

"Mr. ROGERS. I would hope you would not approve any plan that does not include that within their proposal.

"Shouldn't each plan have that?

"Mr. MIDDLETON. We would not want to stop progress if there is an innovative idea.

"Mr. ROGERS. This does not stop any new ideas. It just says that if the new ideas do not work, we can stop the emissions.

"Mr. MIDDLETON. The Administrator will have to approve the plan.

"Mr. ROGERS. How are you going to effect anything or carry it out unless you know how to bring about a limitation of the emissions? Here we state it first in the law, and then it is left out of your guidelines.

"Mr. RUCKELSHAUS. I do not think it is left out.

"Mr. ROGERS. Then the intent is that they shall, is that correct?

"Mr. RUCKELSHAUS. It is certainly so stated in the regulations.

"Mr. ROGERS. If that is the clear understanding, fine, but I think that should be made clear, and I think the States should know that because certainly that was the intent of Congress and I am sure your intent in getting into it."

It should be clear from the remarks of Congressman Rogers that the intent of Congress in the Clean Air Act is that the State Implementation Plans must include emission limitations. It is also clear that the words "and such other measures as may be necessary" exclude the interpretation that emission reduction is the only acceptable means of meeting NAAQS. Between these boundaries to interpretation, there is a broad, unexplored territory.

This territory includes such questions as: Are emission limits required for each source or for the SIP generally? How much emission limitation is required before "other such measures" can be employed? On what basis is the proportion of ICS and CCS established? Is ICS an emission limitation control method?

There are two basic approaches to this legally unexplored territory. The first approach, which may be called the broad interpretation, views the CAA in its entirety and notes that emission limitation (Section 111) is required of new sources *without regard to air quality* unless NAAQS would be exceeded by a new source with the specified emission control. The criteria for control of new sources is that the "best system of emission reduction" be used provided that it has been demonstrated and that its cost has been taken into account. Emission standards are also required for hazardous pollutants (Section 112). Section 111(d) refers back to Section 110 as follows:

"(d) (1) The Administrator shall prescribe regulations which shall establish a procedure similar to that provided by Section 110 under which each State shall submit to the Administrator a plan which (A) establishes *emission standards*. For any existing source for any air pollutant (i) for which air quality criteria have not been issued or which is not included on a list published under Section 108(a) or 112(b) (1) (A) but (ii) to which a standard of performance under subsection (b) would apply if such existing source were a new source, and (B) provides for the implementation and enforcement of such *emission standards*. (Italic added.)

This section requires *emission* standards for *existing* sources of non-criteria pollutants established "by a procedure similar to that provided under Section 110." This clearly implies that *emission* standards are required under Section 110. This implication is made not only by the plain language of the Act, but also on equity grounds. Why should *emission* standards be required of *existing* sources of non-criteria pollutants when such *emission* standards are not required for criteria pollutants? When Section 110(a) (2) (B) is read in this light, emission reduction is clearly the preferred control method, and "such other measures" are allowed only if emission reduction sufficient to meet NAAQS in the time specified (3 years) is unavailable or infeasible—or, in the words of the Act, only if they are "necessary."

The second interpretation, which may be called the narrow approach, focuses on the objective of Section 110(a) (2) (B) rather than the means of attaining that objective. The principal objective of an SIP is that it meet primary and secondary standards by the appropriate deadline. Several means have been *suggested*, including emission limitation land use controls and transportation controls, but Congress was careful to add "other such measures" and "but not limited to." Thus *any* means may be employed provided the ends are attained. This interpretation is strongly suggested by Dr. Middleton in the testimony quoted above.

These, then are the legal arguments to be expected when this issue arrives in court. The environmental organizations will use the first argument coupled with the material presented in Tab. 4: Unquantified Effects of Pollutant Emission. Industry will use the second argument supported by cost-effectiveness arguments similar to those presented in Tab. 8.

One further legal point requires discussion. That is whether or not ICS is an emission limitation method. This is discussed in Tab. 1: Theory and Operation of ICS. No clear-cut answer can be given because emissions under ICS are reduced sometimes. If, however, ICS emissions are viewed over a period of months or years, emissions close to or even greater than before ICS are likely to be seen. Therefore, in a very practical sense, ICS is *not* an emission reduction control method, but an alteration of the timing of emissions so that ground-level air quality impact is reduced. ICS must be classified primarily, if not totally, as a technique for increasing pollu-

tant dispersion different in operation but similar in effect to a tall stack.

TAB. 5. UNQUANTIFIED EFFECTS OF POLLUTANT EMISSIONS

There are three types of effects due to pollutant emissions that are not presently covered by NAAQS:

1. Known adverse effects which cannot be quantitatively linked to emissions,

2. Undesirable effects of emissions that are difficult to evaluate in terms of public welfare costs, and

3. Unknown cumulative effects of sustained or repeated exposure to low-level concentrations.

The first category covers the acid rain phenomenon, conversion of SO_2 to suspended sulfates and the effect of suspended particulates on climate. Visible smoke, visibility decreases to below 5 miles, visible damage to vegetation, sundry other aesthetic effects, subtle ecological changes and effects on non-economic flora and fauna fill the second category. The third category obviously cannot be documented. It is related to the concept of damage threshold, basic to the setting of NAAQS. There may be no thresholds of adverse effect. Present NAAQS may only protect against the more obvious and rapid adverse effects.

Acid Rain

a. Evidence

Normal precipitation would tend to have a slighty acidic pH (pH 7 is considered neutral) due to CO_2 absorption and subsequent carbonic acid formation. Because pH is a logarithmic function, a pH of 5 is 10 times more acid than a pH of 6 and 100 times more acidic than a pH of 7. In this light, normal carbonic acid rain has a pH of about 5.7. Data in Scandinavia show 200-fold acidity increases in rainwater in some parts of the country since 1956 with a low pH recorded at 2.8, a value some 2000 times more acid than normal precipitation.(1)

A brief note on the atmospheric reactions of SO_2 is needed. Where SO_2 is not absorbed in plant or animal tissue, or brought to earth as particulate sulfate, it subsequently is oxidized to SO_3 and, ultimately reacts with atmospheric water to become sulfuric acid (H_2SO_4). The acid is then cleansed from the atmosphere by normal precipitation. The rate of the above reactions can vary from between a few hours (under conditions of high ozone, high humidity, and temperature, as well as high aerosol content) to four weeks under conditions antithetical to those cited above.(1) Studies in Scandinavia indicate that increases in acid precipitation levels at various points between 1955 and 1970 coincide with increased anthropogenic SO_2 emissions.

Chemical studies on the nature of precipitation in the U.S. are far less complete than those in Scandinavia. However, where measurements have been made over the course of years, a trend similar to that noted in Scandinavia is noted.

Experiments in the Northeastern part of the U.S. include those at Hubbard Brook, N.H., the Finger Lake Region, N.Y. State, New Durham N.H., Hubbardston, Mass., and Thomaston, Conn. All of those rural regions had weighted annual pH averages between 4.2 and 4.3.(2) These data were found in the latter 1960's. New Haven, Conn. showed an average of 3.81 for the pH of rainwater, and Killingworth, Conn., 30 miles east of New Haven, had a pH of 4.3 during the same time period.

On the other hand, sections of the country where SO_2 emissions are not present to any considerable degree, or where prevailing winds would tend to prevent air from polluted regions from arriving at some site, pH values in rainwater are close to normal. This certainly indicates that as SO_2 emissions increase, regions within a few hundred miles of the point source will show increased rainwater acidity. The National Center for Atmospheric Research (NCAR), an arm of NOAA, has performed an investigation of U.S. precipitation chemistry during the 1950's. Much of their data is unpublished, but available, and might be utilized to get a better handle on U.S. acid rain over a period of years.

b. Ecological effects

Because of the general chemical activity of the hydrogen ion, it can be considered as a non-threshold type species as defined earlier; i.e., its effects are cumulative and only the extent of damage depends on concentration. The ecosystem is threatened primarily in five ways by excess environmental acid.

(1) Direct Damage to Trees and Plants.

P. Gordon[3] showed that pine needles inoculated with acid solution of pH<3.5 were dwarfed and that needles sprayed with acid solution <4.0 grew to one-half normal length. It was concluded that acid rain contributed to the tree dysfunction known as "short-long" conifer needle syndrome.

(2) Direct Damage to Microorganisms.

Most nitrogen fixing bacteria are primarily confined to alkaline soils. Therefore, a reduction in alkalinity could have an impact on the available soil nitrate used as plant nutrient. Furthermore, the breakdown of plant litter by decomposing bacteria varies as a function of pH. This implies that optimum decomposition and mineralization may be reduced due to soil pH changes.

(3) Indirect Damage to Biota.

Because calcium, magnesium, and potassium present in soil are essential plant nutrients, their loss, due to acid leaching, has serious environmental implications. This problem has been studied quite extensively by the Scandinavians over the past ten years or so.[1]

The Swedes took soil samples from 200 locations and measured the pH, Mg, K, and Ca contents of the soil. Assuming a fixed acid deposition rate of 10 milli-equivalents of H^+ ion/M^2—year, and then computing the leaching from areas of different original cation concentrations, forest productivities are computed. An average of .4%/year is found, but is considered too high by a factor of two due to not considering cationic concentrations below the 5 cm top soil level. Therefore, an average reduction of .2% per year with a worst case of .5%/year are calculated. The extrapolation to 1972 shows an average of about .3%/year due to an increase in SO_2 emissions. These calculations exclude direct leaf damage from sulfate acid aerols, and acid rain, as well as population changes among decomposing and nitrifying bacteria.

Furthermore, secondary effects could set in, e.g. seeds may not take in more acid conditions. Due to decreased growth of root systems, watersheds might deplete and soil begin to erode thus hastening the ecological deterioration of the forest.

(4) *Effect on Arable Lands.*

The acid problem on arable lands is mostly economic. The more acid deposited, the more alkaline fertilizers must be used, which create expenses both in terms of fertilizer needed and manpower needed to spread it. Also, it is not a certainty that all adverse effects could be mitigated by additional fertilizing, or that adverse side effects would not spring up because of the excess liming required.

(5) *Effects on Lakes and Rivers.*

In Sweden and Norway pH values of rivers have dropped as much as .5 pH units in five years (a seven-fold acid increase) with an average annual increase of .3 pH units. These data are for heavily polluted aquatic systems. In systems where the only pollutant source is precipitation, the average pH drop appears to be about .15 pH/5 years. Furthermore, because bicarbonate ions are being depleted (they act as buffers to mitigate the pH drop when acid is deposited), the rate of pH decrease is expected to begin a rapid increase shortly. The situation has become so bad that certain salmon species have ceased to breed.[1]

Another study performed in Canada[4] shows the urgency of the acid problem. The study deals with the acidification of the Lumsden Lake system 45 miles southwest of Sudbury, Ontario (site of much ore smelting activity). The lake pH dropped from 6.8 in 1961 to 4.4–5.8 in 1971 . . . an 80–90 fold acidity increase! No man made discharges empty into the lake, while organic bogs don't exist in the area, and pyrite concentrations are extremely low. Thus it was concluded that the pH drop was primarily due to SO_2 fallout as sulfuric acid in rainwater.

The result of the pH lowering was the almost complete elimination of the following fish species from the lake: white sucker, lake trout, lake chub, trout-perch, slimy sculpin, burbot, and yellow perch. Some investigators documented terrestrial plant damage within a 5 mile radius of the smelters (including Linzon, Dreisinger, McGovern) as well as pond acidification within the 5 mile radius, but damage outside of a 15 mile radius was considered negligible. It is now apparent that the bicarbonate buffer system began degrading, while acidification rapidly advanced in the decade of the 1960's.

In the U.S. there have been few long term studies on inland bodies of water with respect to pH changes. One striking result is that reported by Schofield which shows that one large clearwater lake in the Adirondacks has gone from a 1938 pH of 6.6–7.2 with a calcium carbonate concentration of 12.5–20 mg 1 to a 1960 pH 3.9–5.8 with a carbonate concentration of 3.0 mg 1.

Other information on larger aquatic systems appears to show similar, though not nearly as drastic alkalinity reductions. Examples include a 7% alkalinity drop in Lake Michigan over the past 60 years, and sulfate increases in the Ohio and Illinois Rivers.

Suspended Sulfates

Recent preliminary results of the CHESS studies indicate adverse health effects due to suspended sulfates at 24-hour average concentrations in the range 8–12 ug/m^3 (memo from Dr. Finklea to Assistant Administrator, Research and Monitoring, dated 1–12–73 Table 1). Figure 4–1 shows 1967 NASN suspended sulfate data for 160 urban and 31 non-urban sites. The two heavy lines indicate the combustion of geometric mean and standard geometric deviation expected to result in a 24-hour concentration of 8 and 12 ug/m^3 on the second worst day during one year. As can be seen from the figure, the majority of both urban and non-urban sites exhibit sulfate concentrations above both lines. It is clear that significant adverse effects due to sulfates existed in 1967.

The genesis of suspended sulfates is not precisely known. It is certain, however, that a substantial part of observed sulfate concentrations is due to SO_x emissions.

Threshold Standards

When a standard is set based upon a threshold concept, the implication is that the environmental element has a defense system to purge or assimiliate the noxious substance before any chemical damage can occur. However, when the amount of foreign substance becomes great enough, it overwhelms the purging apparatus. On the other hand, a non-threshold standard implies cumulative, non-reversible damage. Usually, the amount of substance plays a role in determining the rate at which damage is done; e.g., silting of a river bottom is harmful, but the damage done is worse if 20 tons/year are deposited than if 10 tons are deposited. This same mechanism holds true for most chemical reactions.

Threshold standards are based upon non-

Footnotes at end of article.

accumulation of pollutant in the environment and an immediate cause and effect when thresholds are exceeded. On the other hand, non-threshold standards are predicated on the fact that: (a) either damage occurs at any level; the lower the level the slower the damage occurrence; or (b) the pollutant accumulates in the biosphere, water, or soil, and *then displays a threshold effect in one of those media.*

The important point to note is that threshold standards protect against high concentration in the atmosphere, while non-threshold standards protect against total quantity of atmospheric fallout. Furthermore, the latter protection may afford biota indirect protection through conserving the medium within which the fauna or flora grows (e.g., water for fishes, soil for trees).

Air quality standards are intrinsically threshold type standards. Emission standards and limitations are non-threshold in that they limit or reduce all environmental impacts of the pollutant in question regardless of the degree of intensity at which those impacts are taking place.

Inadvertent Climate Modification

Based on existing evidence, it cannot be conclusively determined whether man is inadvertently modifying global climate to any significant degree through pollutant emissions into the atmosphere. Nevertheless, certain pollutants are suspected of causing such effects.

The weight of the evidence seems to indicate that global cooling at the earth's surface will result as atmospheric concentrations of suspended particulate increases. It is not clear, however, whether atmospheric particulate levels are even significantly increasing. Nor is it known to what extent controllable emissions contribute to the problem in comparison with agricultural dust, volcanic activity, and forest fires.

Authropogenic injection of sulfur into the atmosphere, primarily in the form of SO_2, is significantly compared to natural sources. Long-term or large-scale effects of SO_2 are largely unquantified, largely due to natural conversion of atmospheric SO_2 to other forms, such as suspended sulfate particulates. It is possible that some of the "measured" increases in background concentrations of suspended particulates are due, in part, to increasing sulfate concentrations. A major climatic effect of suspended sulfates is to decrease atmospheric visibility.

Visibility

The present particulate secondary 24-hour standard is based on preserving a 5-mile visibility. A view of the snow capped mountains would be seriously effected by such a visibility limit. The aesthetic component of particulate limitation is a major portion of the "non-degradation" issue now pending at the Supreme Court. The most likely cause of citizen complaints about air pollution is the sight of particulate emission (smoke). Although aesthetic effects may be difficult to price, they are nevertheless important to the public.

Ecological Impact

In the section on acid rain it is mentioned that breeding habits of some fauna are affected by environmental changes due to pollutants washed out of the atmosphere. Ecological change occurs fundamentally by differential reproduction rates. Any effect on the balance between the reproduction rates of the several animal and plant species in an ecosystem will change the entire system given sufficient time. The "welfare" effect of the decline of a non-economic species may appear negligible, but such decline is an indicator of environmental impact which probably portends much more serious systematic effects if neglected.

Footnotes at end of article.

REFERENCES

(1) Swedish Case Study for the U.N. Conference on the Human Environment.

(2) D. W. Fisher—Personal Communication to G. Likens, Ref. 18 of Likens, Bermann, Johnson, *Environment*—March 1972.

(3) *Gordon—Interim Report to EPA.* Referenced in: *Likens, Cornell U. Water Resources and Marine Science Technical Report #50,* Oct. 1972.

(4) Beamish, R. J. & Harvey, H. *Journal of Fisheries Research Board of Canada,* Vol. 29, No. 8, 1972.

APPENDIX TO TAB. 5. EXAMPLE OF AN INTERMITTENT CONTROL SYSTEM

Since September 1969, TVA has been exercising intermittent control at its Paradise Steam Plant.[1] The program requires reduction in generating loads to reduce SO_2 emissions during adverse meteorological conditions when a prescribed (threshold) ambient ground-level concentration would otherwise be exceeded.

Through several months of field investigation it was determined that the only meteorological condition likely to cause ground-level SO_2 concentrations in excess of the threshold level was a "limited mixing" situation. Because only one "problem" situation prevails at Paradise, it is possible to apply a single model, based on 9 meteorological criteria, to determine when the emission rate must be reduced. The plant curtails emissions by reducing plant load. The criteria are:

1. Potential temperature gradient between stack top (183 m) and 900 m is $>$ 0.46° C/100 m.
2. Potential temperature gradient between stack top (183 m) and 1500 m is $>$ 0.51° C/100 m.
3. Difference between daily maximum and minimum surface temperature $>$ 6° C.
4. Maximum daily surface temperature $<$ 33° C.
5. Maximum mixing height $<$ 200 m.
6. Maximum mixing height $>$ calculated plume centerline height.
7. Time for mixing depth to develop from plume centerline height to critical (maximum) mixing depth $>$ 1.1 hours.
8. Mean wind speed between stack top (183 m) and 900 m is between 2.5 and 8.0 m/sec.
9. Cloud cover $<$ 80 percent.

To determine when the criteria are met, meteorological measurements are made on a daily basis, utilizing a meteorologically instrumented tower and aircraft, specialized support from the National Weather Service, and an ADP facility. The computer facility is used to determine when the criteria are met and, utilizing a TVA dispersion model, the necessary load reduction to assure that ground-level SO_2 concentrations will not exceed the threshold level.

There are two occasions in which attainment of all prerequisite criteria would *not* result in the required curtailment: (1) When further curtailment would lead to system instability (e.g., blackouts) or (2) When the supply of firm power to customers would be interrupted. Neither of these situations has yet occurred.

Air quality data were used to determine the effectiveness of the ICS. A network of 14 SO_2 monitors was established in a 22½° sector downwind of the plant, bounded by the 22½° and 45° azimuths. Before institution of the ICS (1/1/68–9/19/69), there were 10 violations of the secondary 3-hour NAAQS for SO_2 and 8 violations of the primary 24-hour NAAQS. For a period of similar duration immediately following institution of the ICS (9/19/69–6/25/71), there were only 2 violations of the 3-hour standard and no violations of the 24-hour standard. Thus, the ICS was quite effective in reducing the number of violations at the TVA monitors.

It should be noted that the Paradise ICS utilizes but one (critical meteorological criteria) of *several* theoretical bases for emission curtailment; i.e., predicted and measured air quality may also be used, either in lieu of or in combination with meteorological criteria.

Reference

(1) Montgomery, T. L., et al., "Control of Ambient SO_2 Concentrations by Noncontinuous Emission Limitation (at) Large Coal-Fired Power Plants," TVA, Muscle Shoals, Alabama; presented at the 102d Annual Meeting of the American Institute of Mining, Metallurgical and Petroleum Engineers, Chicago, Illinois; February 25–March 1, 1973.

TAB. 6 COST EFFECTIVENESS

The principal arguments in favor of ICS, and the reason that smelter and power plant operators want to use ICS, is that permanent control technology is not available in every case to meet NAAQS and that ICS may significantly reduce the costs of meeting the air quality standards.

There is no doubt that if source operators were allowed to choose the method of achieving NAAQS, that many would choose a combination of tall stack and ICS, or would at least include these tactics in their control strategy. Kennecott Copper Corp. has estimated that the least cost control system for their smelters to attain the NAAQS is a combination of 40–80% CCS (using acid plants) plus ICS. To attain the standards by CCS alone would increase their costs by 50–350%. TVA has estimated that the cost of ICS is about 1/50 the cost of CCS to achieve short-term SO_2 standards. (TVA power plants emit from tall stacks.) (See enclosures.)

There is no question of the cost-effectiveness of ICS when attainment of AAQS is the measure of effectiveness and the cost to the operator is the measure of cost. However, each of these calculations may be questioned.

ICS cost

The cost of ICS may be divided into three parts: Direct installation and operating costs to the source, lost production for the source and lost wages for its employees, and increased surveillance and enforcement costs to the public sector. The direct costs to the source include equipment for monitoring air quality and emissions and for varying the emission rate, modeling services, additional personnel, clean fuel (if that is the method of reducing emissions) and license fees.

TVA has estimated [1] the cost of ICS operation at one plant at $262,000 initially and $103,000 (1970 dollars) annually, excluding the costs of clean fuel or load transfer. This estimate includes only 6 monitors and no telemetry equipment. If 20 monitors were used with telemetry, the cost would increase to about $500,000 initially and $150,000 annually. These cost increases include additional personnel as well as additional equipment.

Lost production may or may not be a serious cost factor depending on whether the method of emission reduction is production curtailment, on whether the plant operates at full capacity, on whether lost output can be recovered without serious cost penalties, and on the lead time for curtailment. If plant operation must be partially or totally curtailed at short notice during a period of high demand for production, this cost may be high indeed. On the other hand, if emission reduction is affected by switching to cleaner fuel, shifting the load elsewhere (in the case of power plants), or rescheduling periodic suspensions of operations for maintenance, then the lost production cost may be relatively small.

For example, Kennecott estimates [2] that the least cost control system for their smelters should include about 60% CCS via acid plants with additional control by ICS. The CCS is required to reduce smelter operation curtailment time. If more ICS and less CCS were used, the smelter could become a se-

rious bottleneck in the mine-to-market production system. Custom smelters, such as those operated by ASARCO, do not have mine operation overhead expenses to deal with, so their least cost operation may include more ICS and less CCS.

The cost of load switching to power plants may be very low if the number and duration of load reductions is low. For TVA's Paradise steam power plant, the estimated reduction frequency is 30 days per year with an average duration of 4 hours. If all the power needed during these curtailment periods is purchased from neighboring power plants not in the TVA system (the worst case), the incremental control cost due to the purchase of power would be about ¼ of 1 percent of the cost of power production. This analysis assumes that the capacity to supply the additional power exists. If additional capacity does not exist, then either additional capacity must be built or emission reduction must be accomplished using a dual fuel system. Either of these alternatives would be considerably more costly than load switching.

The increased cost of surveillance and enforcement incurred by the public air quality control agency due to ICS may be considerable. The reliability of ICS in avoiding MAAQS violation is particularly dependent on vigorous policing (see Tabs 2 and 3). This effort will require additional resources at the control agency. The additional cost of policing an ICS may run as high as $130,000 the first year and $50,000 per year thereafter. These figures include 4–6 independent fixed samplers, a mobile sampler, telemetry equipment and 2–3 men full time to operate the equipment, check source operation and equipment calibration, and review source curtailment procedure. It is reasonable to expect the source to defray at least part of this public expense. This cost, then, should appear in the license fee paid by the source in connection with the control strategy approval procedure.

Indicators of effectiveness

The indicator of effectiveness used in virtually all cost-effectiveness calculations done by prospective ICS users is attainment of AAQS. The discussion of unquantified effects of pollutant emissions under Tab. 4 raises some doubt as to the adequacy of this indicator as a measure of environmental effectiveness.

Unfortunately, there is no good indicator of total environmental impact of emissions. The indicators currently used—annual emission, emission rate, and ambient concentration—each leave something to be desired. Measures of emission neglect the effect of atmospheric dispersion while measures of concentration usually are concerned with peak concentration or concentration at one point and neglect the distribution of concentration in time and space.

In order to quantitatively compare the effectiveness of ICS and CCS, or any control strategy elements for that matter, a superior indicator of environmental impact is desirable. An attempt is made in the Appendix to develop such an indicator. The result is an estimate of environmental impact based on emission rate, emission height, wind speed, stability and ceiling height. Although this indicator is probably superior to either average emissions or maximum pollutant concentration, it is far from ideal because it assumes that environmental damage is linearly related to ground-level pollutant concentration and independent of what is *on* the ground, assumptions certain to be overly simplistic.

In summary, then, there is no available indicator of environmental impact that quantitatively includes all adverse effects of pollutant emissions. The minimum acceptable effectiveness of a control system is the attainment of NAAQS; this is the stated criteria of Section 110 of the CAA. Total annual emission is an indicator that includes all environmental effects but is not quantitatively related to the expected environmental damage. Total annual ground-level concentration (see Appendix) is a potentially superior indicator, but it is complex and based on a simplistic damage function.

Cost effectiveness

In order to compare two or more control strategies on the basis of cost-effectiveness the measure of cost and the indicator of effectiveness must be mathematically related to produce one number or figure of merit for each control system. If attainment of AAQS is taken as a sufficient measure of effectiveness, then the cost of achieving AAQS is the only available indicator of cost-effectiveness, and the system with the lowest cost is the most cost-effective. The assumption underlying this procedure is that all control systems that meet AAQS are equally effective in preventing environmental damage.

If attainment of AAQS is taken as a necessary but insufficient indicator of effectiveness, and annual emission is the indicator of environmental impact, then the control system cost-effectiveness is given by (system cost) x (system annual emission after control). As in the previous example, the system with the lowest product is the most cost-effective. The assumption underlying this procedure is that if NAAQS are met, damaging impact of emission on the environment still occurs and that impact is directly proportional to annual emission. These assumptions are probably superior to the one necessary for the previous calculation, but they neglect the effects of dispersion on concentrations and of concentration on damage—serious omissions.

Total concentration (Appendix) may be substituted for annual emission in the cost-effectiveness calculation and thereby internalize the relationship between dispersion and concentration. The effect of this substitution would be to improve the cost-effectiveness calculated for ICS, tall stacks, or other methods that rely principally on improved pollutant dispersion. The assumption required for this procedure is that environmental damage is directly proportional to the time and intensity of ground-level pollutant concentration (dosage). This assumption is conservative in that there may be no damage due to very low or infrequent dosages.

To illustrate the use of these measures of cost-effectiveness, the following data have been assembled from various TVA estimates:

Estimated cost of scrubber (Experimental Widows Creek Plant)	$42,000,000
Removal efficiency of scrubber	80%
Initial cost of ICS (Initial cost of program including six monitoring stations)	$262,000
Operating cost of ICS (Excluding load switching cost)	$103,000

These data must be manipulated somewhat before they can be made useful. The estimated scrubber cost is undoubtedly high due to its experimental nature. It will be reduced to $20 million. The annualized cost of scrubbers is about 25% of initial cost, so $5 million per year will be used as the cost of the scrubber.

Six monitors are insufficient for ICS air quality feedback. Increasing the number of monitors to 20 will increase the initial cost to about $500,000 and the operating cost to $150,000 per year. If the initial cost is capitalized at 10%, the annual cost of ICS (excluding load switching) is $200,000. The cost of load switching may be as much as $200,000.[2] The total annualized cost of ICS to the plant will, therefore, be taken as $400,000.

Increased surveillance cost must now be added to the cost of ICS. Let us assume that it will cost half as much to police the system as to operate it and set the annualized agency cost at $75,000 per year.

The annual reduction of emissions due to the ICS system will be taken as zero. This assumption is based on the fact that load switching will only need to be performed a few days per year and that the load may increase on some other days due to ICS at other plants. With these very crude data the effects of alternative cost-effectiveness calculations may now be compared.

Case I—Cost Effectiveness as seen by the Operator: Measure of cost—annualized cost of control to the plant; Measure of effectiveness—attainment of NAAQS; CCS cost-effectiveness—$5,000,000; ICS cost-effectiveness—$400,000; Relative superiority of ICS—12.5:1.

Case II—Cost-Effectiveness as seen by the Control Agency: Same measures of cost and effectiveness as in Case I except that $75,000 per year control agency cost is added to the ICS cost; Relative superiority of ICS—10.5:1.

Case III—Cost-Effectiveness using Annual Emission as the Measure of Effectiveness: CCS cost-effectiveness ($5,000,000) (20%) = 1,000,000 $-%; ICS cost-effectiveness ($475,000) (100%) = 475,000 $-%; Relative superiority of ICS—2.1:1.

Case IV—Cost-Effectiveness using Total Concentration as a Measure of Effectiveness (Appendix).

Data are not available to calculate the indicator of effectiveness for ICS and CCS. The cost figures would be the same. The relative superiority of ICS would lie somewhere between Case II and Case III due to the fact that emissions from the ICS would be weighed less heavily than emissions from the CCS because they are released during periods favorable for excellent dispersion.

Summary

Cost-effectiveness calculations performed by plant operators, where attainment of AAQS is the measure of effectiveness used, will make ICS look attractive to large sources of SO_x and perhaps other pollutants as well. Extensive monitoring and real time feedback from the monitors, if required by ICS acceptance procedure, will increase ICS costs and reduce its attractiveness to some marginal sources. The internalization of increased agency surveillance costs in the form of license fees will also increase ICS costs, but probably not enough to make ICS unattractive to a large source.

While attainment of NAAQS is the minimum legal effectiveness required of a control system, it is a poor *measure* of control effectiveness, for all presently unquantified adverse effects of pollutant concentrations below NAAQS are neglected. An indicator of effectiveness that includes all environmental effects of emissions is annual emissions. When this indicator is used in cost-effectiveness calculations ICS and other dispersion techniques appear less attractive, although they still may be more attractive than CCS in some cases.

Annual emission is a very conservative indicator of environmental impact when it is coupled with the requirement that NAAQS must be met. If a control system employing ICS and/or tall stacks can meet NAAQS *and* is more cost-effective than a totally CCS system when annual emission is used as the measure of effectiveness, than acceptance of such a system is most probably in the public interest.

Total concentration (Appendix) is a less conservative and more accurate measure of environmental impact than annual emission. Its use would favor ICS and other dispersion techniques somewhat more than annual emission. It is questionable whether this increased accuracy is worth the greatly increased complexity of this indicator, especially as the accuracy attained is still far from perfect.

FOOTNOTES

[1] An example approach to development of an optimum "Emission Limitation System at Primary Copper Smelters" by Dr. Templeton, Kennecott Copper Corp., presented at a meeting in Washington, D.C. on March 20, 1973. (On file in the Source Receptor Analysis Branch, OAQPS.)

[2] Memorandum "Trip Report—TVA's Paradise Steam Plant" by H. H. Slater, dated October 29, 1971. (Also on file in SRAB, OAQPS.)

[3] TVA Report AQ–72–3, "Cost Analysis for Development and Implementation of a Meteorologically Scheduled SO_2 Emission Limitation Program for Use by Power Plants in Meeting Ambient Air Quality SO_2 Standards." (On file in the Source Receptor Analysis Branch, OAQPS.)

APPENDIX TO TAB. 6. AN INDICATOR OF THE ENVIRONMENTAL IMPACT OF EMISSIONS

The adverse effect caused by the input of a pollutant to an environmental element (animal, plant, ecosystem, etc.) is an increasing function of the rate of input. The rate of input of a pollutant from the ambient air is an increasing function of the concentration of the pollutant in the air. The total environmental impact of a pollutant in the ambient air may be written.

Total Environmental Impact =

$$\sum_{\substack{\text{All}\\ \text{time}\\ \text{periods}\\ (t)}} \sum_{\substack{\text{All}\\ \text{environmental}\\ \text{elements}\\ (i)}} f(x_{it}) \quad (1)$$

where x_{it} = the ambient concentration of the pollutant around element—i at time t—and f indicates an unspecified function. The function, f, is unknown at present. It is most probably not a linear function and it undoubtedly depends on the kind of environmental element involved. Nevertheless, f (x_{it}) will be approximated by k. (x_{it}) where k is a constant, because this is the simplest available function that fits the attribute of f (x_{it}) that is known, namely, that it increases with x_{it}.

The environmental element used will be a unit area of the earth's surface. This also is a gross simplification, for what is *on* a given area is certainly relevant. Yet, to include this consideration would introduce insolvable complexity, so it will be neglected.

The value of x at a ground-level point located x km downwind and y km crosswind from a source of emissions with total plume rise H is given by

$$x = \frac{Q}{\pi \sigma_y \sigma_z \mu} \exp\left[\frac{-H^2}{2\sigma_z^2}\right] \exp\left[\frac{-y^2}{2\sigma_y^2}\right] \quad (2)$$

where σ_y and σ_z are horizontal and vertical dispersion parameters which vary with stability, mixing height, and the distance from the source (x).

If Eq. (2) is integrated over x and y for constant wind direction, wind speed, stability, and mixing height, the result is the value needed for the first sum indicated in Eq. (1). If the values of these integrals are then summed over each combination of meteorological conditions, the result is the indicator of environmental impact sought. In mathematical language—

Total Environmental Impact =

$$k \sum_{\text{Speed}} \sum_{\text{Direction}} \sum_{\text{Stability}} \sum_{\substack{\text{Mixing}\\ \text{height}}} \int_0^d \chi d\Lambda \quad (3)$$

If the meteorological history of a region is available, and the emission schedule and stack parameters of a source are known, this function can be computed. If two or more emission control methods are to be compared, the alteration in the emission schedule expected from each method can be entered into Eq. (2) and (3) to produce measures of the effectiveness of the methods.

This indicator is both crude and complex. It assesses the *ideal* effectiveness of a control system. It assumes that meteorological conditions can be predicted infallibly and that the source reacts instantaneously to every meteorological condition regardless of its duration. Yet it is a much better indicator of environmental impact than a few air quality samples or total emission, and its calculation is within the state-of-the-art. The use of such an indicator would be most helpful in quantitatively evaluating control techniques that rely on dispersion for their effectiveness. ICS and tall stacks are such techniques. The value of this indicator would be entered as the "effectiveness" portion of a cost-effectiveness comparison between alternative control methods.

AN EXAMPLE APPROACH TO DEVELOPMENT OF AN OPTIMUM EMISSION LIMITATION SYSTEM AT PRIMARY COPPER SMELTERS

I. INTRODUCTION

This report describes an economically optimum approach to limiting sulfur dioxide emissions from primary copper smelters. The criterion for sulfur dioxide emissions is that the national primary ambient air standards for sulfur dioxide must be achieved. The following ambient air quality conditions must be evaluated before the emissions limitation can be considered:

1. The effect of fugitive emissions and other low elevation emissions on ambient concentrations in the vicinity of the smelter;

2. The effect of changes in stack configuration.

If, after eliminating fugitive emissions and other low elevation emissions, and accounting for the effects of anticipated changes in stack configuration, ambient concentrations exceed the standards, then an emission limitation strategy can be designed.

A control system which limits smelter emission can consist of a steady state component and a variable component. The steady state component provides for constant limitations of sulfur dioxide, while the variable component provides for limiting emissions in response to changing weather conditions.

Steady state sulfur limitation can be achieved at an existing smelter by—

1. Permanently reducing the smelter production rate;

2. Installing sulfur capture equipment.

Variable sulfur limitation can be achieved by—

1. Substitution of concentrates containing a smaller amount of sulfur than the nominal concentrate feed;

2. Intermittently operating sulfur capture equipment;

3. Reducing gas volumes.

STEADY STATE EMISSION LIMITATION

The costs of steady state emission limitation vary from smelter to smelter. The principal factor which determines the cost of continuously capturing sulfur is volume of off-gas produced per unit of smelter throughput. There are two basic methods of achieving steady state emission limitation, including:

1. Permanently reduce smelter throughput;

2. Install sulfur capture equipment.

Permanent reduction of smelter throughput requires little, if any, capital outlays for equipment; however, there may be a significant penalty in loss of production. Nevertheless, under some circumstances, this may be the least expensive method.

In cases where maximum production from an existing facility is desired, steady state limitation of sulfur can be achieved by—

1. Installing sulfur capture equipment on an existing process;

2. Installing a new process wtih a low volume per unit throughput to minimize the amount of sulfur capture equipment needed.

Figure 1 illustrates the steady state emission limitation costs as a function of per cent steady state sulfur capture as an industry average. While the curve for a specific smelter may deviate up or down from the average, the development of such a curve represents the first step in the determination of the optimum strategy for achieving compliance with ambient air quality standards. The second step is to determine the variable emission limitation costs as a function of percent steady state sulfur capture.

VARIABLE EMISSION LIMITATION

Like the costs associated with steady state emission limitations, variable emission limitation costs can be substantially different for each smelter. For a smelter that is in an area where ambient standards are being met, there is no cost. However, when concentration will exceed a standard unless the smelter emission rate is reduced, there is a cost associated with this reduction in emission rate.

The major factor which influences the cost of variable emission limitation is, of course, the frequency and severity of the limitation episodes. These factors are determined by meteorological conditions and smelter emission characteristics. Once the smelter emission characteristics have been determined, a relationship can be developed which describes the frequency distribution for ambient concentrations in the region around the smelter. From this distribution, the frequency and severity of the variable emission limitation (and thus the cost) can be determined for various degrees of steady state sulfur capture. The cost of variable emission limitations is a function of several elements, including:

1. The cost of the surveillance network;

2. The capital and operating costs of intermittently operated sulfur capture equipment;

3. The costs of stockpiling and utilizing alternative feeds;

4. The penalty for loss or delay of production.

5. The costs of production capacity needed to compensate for curtailment losses.

Figure 2 illustrates an example of a variable emission limitation cost curve. Again this relationship varies from smelter to smelter and can only be determined on the basis of each smelter's operating characteristics, economic condition, and atmospheric dispersion characteristics.

SYSTEM OPTIMIZATION

An economically optimum control system is one which provides for compliance with air quality standards at minimum cost. The optimum combination of steady state and variable emission limitation can be determined from the equation:

$$Co = [\text{Min}|Css(p) + Cv(p)|]$$
$$0 \leq p \leq 100$$

where

Co = Minimum compliance cost

Css (p) = Steady state emission limitation cost as a function of percent steady state sulfur capture

EXAMPLE [1]

Strategy	Relative sulfur abatement costs		
	Total	Dollars per year	Cents per pound
Continuous control system	$100–$117	$27–$29	5.2–5.5
Fixed emission limitations	127–140	40–41	7.5–7.6

[1] Potential advantage of continuous control system over fixed emission limitation 2 to 2.4 cents per pound.

EXAMPLE 2 (NEVADA)[2]

Continuous control system	$20	$1.8	2.0
Fixed emission limitation strategy	50	6.0	6.7

[2] Potential advantage of continuous control over fixed emission limitation 4.2 cents per pound.

TRIP REPORT—TWA'S PARADISE STEAM PLANT

I. PURPOSE

To observe operation of TVA's Intermittent Control System at Paradise Steam Plant.

II. PLACE AND DATE

Paradise Steam Plant (near Greenville, Kentucky) October 26–27, 1971.

III. ATTENDEES

Mr. Jack Leavitt, TVA, Muscle Shoals, Alabama.

Mr. Henry Lekenby, TVA, Paradise Steam Plant.

Mr. Butler, Assistant Supt., TVA, Paradise Steam Plant.

Dr. Noel deNevers, Scientific Advisor—DAT.

Mr. H. H. Slater, Acting Chief, AQMB.

IV. DISCUSSION

1. The intermittent control system used at Paradise was described and discussed. It is essentially as described by Leavitt, et al. in the June 1971 APOA Journal, except that forecast weather conditions are no longer used in the alerting program.

2. Five non-meteorological restrictions are imposed upon implementation of the control procedures. Calculated control actions are not taken if:

(a) The required reduction in plant load threatens plant stability.

(b) The required reduction in plant load threatens system stability.

(c) The required reduction requires a reduction in plant load to below 1500 MW.

(d) The required reduction threatens the coal supply at another plant in the system.

(e) The required reduction in plant load is not more than 10% of the load at the time the reduction is scheduled to take place.

It is understood that to date only Item "e" has been invoked to withhold control action.

3. Because this plant is located on top of its coal supply, it has very low-cost fuel. Thus, its power is the cheapest in the TVA system. Paradise operates at near full capacity at all times. TVA adjusts for daily and seasonal load variations by changing loads to other, higher cost plants.

(a) The operators are reluctant to reduce load because it is inconvenient, and because every change in load introduces thermal stresses into the boiler, thereby hastening the day when the boiler must be shut down to repair tube leaks, which are caused by thermal stresses, erosion, corrosion, etc.

(b) In addition, reduction in load lowers the stack gas outlet temperature, leading to condensation in the cold end of the air preheater, and to tube corrosion. They are currently doing an expensive retubing job on one furnace to repair such damage (not due to load reduction). Because they have this problem they dislike load reduction, which aggravates it.

(c) For each of their three units there are lower operable limits, set by reduction of slag temperature leading to slag drawoff plugging and by minimum fluid recirculation rates. These are equal to about ⅓ of maximum power production, and thus do not normally limit the amount of load reduction which can be accepted.

4. Mr. Leavitt reviewed costs of control system proposed in the recent AQMB staff paper. He will comment further on it after review with the Muscle Shoals staff.

5. Power load reduction is considered when ground-level SO_2 concentrations are expected to reach 0.80 ppm for one-half hour.

6. TVA is considering intermittent control systems for all fossil fueled generating plants.

V. CONCLUSIONS

1. An intermittent control system is a very tenuous mechanism to protect air quality. At TVA, a utility with a reputation for concern for maintaining "acceptable" air quality, the decision to take control action is made by persons whose performance is judged by their capability to produce power at a minimum cost. Their concern for the environment rarely, if ever, is a significant factor in evaluating their "efficiency." The operation at Paradise may at times severely circumscribe the implementation of controls. The outlook for a truly effective use of an intermittent control system by smelters and private utilities is not encouraging.

2. An Intermittent Control System is an inexpensive "control mechanism". See the attached analysis by Dr. Noel deNevers.

HERSCHEL H. SLATER,
Acting Chief, Air Quality Management Branch, Division of Applied Technology.

THE ECONOMICS OF INTERMITTENT CONTROL OF THE PARADISE STEAM POWER PLANT

1. Introduction—International control is attractive to TVA's Paradise, Kentucky, steam power plant because it is very inexpensive. As shown in the attached figures, it increases the annual average cost of power by ⅒ to ¼ of 1%. There is probably no other "environmental improvement" project they could undertake which would cost them less. To make the economic calculations shown below one must have a set of data for the plant operations; the data set below are approximations, based on data obtained on this trip, the published paper about intermittent control, and published data about the Paradise plant.

(a) Data:

Plant capacity 2658 mw.

Fuel cost $0.17/$10^6$ BTU.

Capital cost $150/kw.

Annual capital charge (includes taxes, insurance, maintenance), 15%.

Annual average load factor 70%.

Average heat rate 9000 BTU/kw.

Number of air pollution control days per year, 30.

Average length of pollution control power reduction, 4 hrs.

Average power reduction due to pollution control, 400 mw.

(b) Based on these numbers one may compute that the cost of power from the Paradise plant is:

Capital Charge (kwh)	$0.0037
Fuel Cost	.0013
Labor, materials, misc	.0005
Net cost of power at power plant (kwh)	.0055

2. Worst Case Situation—If the extra power needed to offset the power production at Paradise must all be purchased from neighboring power companies at $0.006/kwh, then the extra cost to TVA is $0.005/kwh minus the fuel saving at Paradise of $0.0013, for a net of $0.0043/kwh. Multiplying this by 400 mw times 30 days times 4 hours equals $204,000. This is the worst-case annual cost to TVA for this system of pollution control. Dividing this sum by the total number of kwh produced at Paradise, we find the incremental pollution control cost is $0.000012/kwh, or about ¼ of 1% of the cost of power at the plant.

3. Most Likely Situation—In most situations, the extra load on the TVA power system due to load reduction at Paradise can be picked up by other plants in the TVA system. These other plants are older and less efficient and/or have higher fuel costs because they are located further from fuel sources than Paradise. Assuming that the extra load is picked up by an older plant with a heat rate of 10,000 BTU/kwh and a fuel cost of $0.30/$10^6$ BTU, we can compute its fuel cost as $0.0030/kwh. In this case the incremental cost of the control system is this extra fuel cost, less the fuel saving at Paradise, or $0.0017/kwh. Multiplying this by the amount of load so transferred leads to a total annual cost to TVA of $81,000. Dividing this by the total amount of power produced at Paradise leads to an incremental pollution control cost for power production of $0.0000047, or slightly less than ⅒ of 1% of the average cost of power production at Paradise.

4. Summary—

(a) These assumptions are intentionally conservative; Mr. Leavitt informed us that he had heard that the annual cost of the program for FY 1971 was $55,000. Thus, the above figures appear to overstate the costs somewhat.

(b) These figures do not include the cost of the meteorological program carried on in support of the power reduction. This probably adds another $50,000/yr., bringing the real cost to TVA of this program up to about ⅔ of 1% of the cost of power production at Paradise.

TENNESSEE VALLEY AUTHORITYS COST ANALYSIS FOR DEVELOPMENT AND IMPLEMENTATION OF A METEOROLOGICALLY SCHEDULED SO_2 EMISSION LIMITATION PROGRAM FOR USE BY POWER PLANTS IN MEETING AMBIENT AIR QUALITY SO_2 STANDARDS

INTRODUCTION

The following cost analysis has been prepared for the development and implementation of a meteorologically oriented program, applicable to large power plants, for limiting SO_2 stack emissions during adverse dispersion conditions. The analysis is based on part on TVA's experience with the Paradise Steam Plant SO_2 emission limitation program[1] which was initiated in September 1969. Through use of this type program, atmospheric SO_2 emissions may be reduced during periods of critical meteorological conditions for the purpose of enabling plant operators to meet ambient air quality standards. Such program implementation may be achieved by reduction in power generation and/or by use of low sulfur fue.. This cost analysis is only for those program elements involved with the development and implementation of this type of meteorologically scheduled SO_2 emission limitation program and does not include costs incurred by the plant operator for power makeup, load interruption, need for increased power reserves, etc.

The first step in planning an emission limitation strategy for an individual power plant requires a preliminary assessment of all program components to determine if implementation by SO_2 emission limitation will provide a feasible method for complying with ambient air quality standards. The degree of feasibility will depend primarily on the expected frequency of the implementation and on the magnitude of the SO_2 emission limitations. These two factors must be evaluated on the basis of plant size and configuration, frequency of adverse atmospheric dispersion conditions, local topographical and

[1] Leavitt, J. M., Carpenter, S. B., Blackwell, J. P., and Montgomery, T. L., "Meteorological Program for Limiting Power Plant Stack Emissions," *Journal of the Air Pollution Control Association*, 21 (July 1971).

meteorological influences, and impact areas of maximum ground-level concentrations where ambient air quality standards may be exceeded.

This cost analysis is based on TVA's experience in developing and implementing the meteorologically scheduled SO_2 emission limitation program at the TVA Paradise Steam Plant (2,558 mw) in western Kentucky. This program was initiated in September 1969 and provides a method for limiting SO_2 stack emissions by reducing power generation during adverse atmospheric dispersion conditions. The scheduling of the program is dependent upon the measurement and evaluation of on-site meteorological elements which identify the need for implementation and the degree of SO_2 emission limitation. Meteorological forecast information from nearby National Weather Service Station facilities is usually required to support the prediction of on-site meteorological conditions during the expected implementation periods.

The cost analysis is presented in two parts. The first includes the costs of the *program development* elements during the first year; they include (1) air monitoring, (2) full-scale field studies, and (3) field data processing and analysis and program design. The second part includes the annual recurring costs for the *program implementation* following completion of the development phase.

PROGRAM DEVELOPMENT

Air monitoring

The air monitoring program serves an essential role in the development phase of the meteorologically scheduled SO_2 emission limitation program. It provides continuous documentation of SO_2 ground-level concentrations during the full-scale field studies for augmenting the special mobile field measurements which are used for identifying the critical meteorological parameters associated with maximum ground-level concentrations. Furthermore, the air monitoring provides supportive documentation of SO_2 ground-level concentrations for evaluating the effectiveness of the program, particularly during periods of SO_2 emission limitation when compliance with ambient air quality standards is the prime objective.

Several principal requirements should be considered in the establishment of an air monitoring network. There must be an adequate number of air sampling stations to provide coverage (usually within 10 miles of the plant) of the impact areas where maximum ground-level concentrations may occur. The network planning should be coordinated with the state and local air quality control agencies to determine the minimal air monitoring network requirements. However, to support an optimum-type SO_2 emission limitation program, a minimum of six air sampling network stations would normally be required. The specific number would depend upon the local topographical and meteorological features and the plume behavior during periods of maximum ground-level concentration occurrence. All stations should be equipped with some form of SO_2 data logging in machine-readable format to eliminate routine manual processing of strip charts and to provide greater flexibility and capability in the data display, interpretation, and analysis. Computer facilities at the power plant or elsewhere must be available for routine processing of the data. It is desirable, but not required, to provide telemetry capability for realtime recording of the network data at a strategically located network station or field office. Estimated costs follow:

1. SO_2 monitors, including analog "backup" recording: 6 @ $4,500	$27,000
2. SO_2 monitor shelters, including installation: 6 @ $2,000	12,000
3. SO_2 monitor installation	3,000
4. Data logging system: 6 @ $2,000	12,000
5. Electronic test equipment; work bench, tools, etc	11,000
Total	65,000

(NOTE.—Telemetry (radio) system with integrated data logging at central station would increase cost about $30,000.)

The air monitoring network should include facilities to provide the necessary meteorological support. The instrumentation can be of minimum sophistication, consisting of a 150-foot steel tower with automatic recording of wind direction, wind speed, and temperature gradient or atmospheric stability. The meteorological data would be used primarily for surveillance of the *general* plume transport and dispersion conditions within the network area. The data could also be used, if needed, to augment the vertical wind and temperature profile data collected by fixed-wing aircraft and pilot balloon methods, respectively, which are used for identifying the meteorological parameters involved in the development and implementation of the control program. Before establishing the meteorological facility, the state and local air quality control agencies should be contacted and the installation plans coordinated. The facility should also be established early enough to ensure reliable operation at the outset of the full-scale field studies. Also, it should be designed, if practical, to accommodate more sophisticated instrumentation for support of a permanent air monitoring program, should one be needed. Estimated costs follow:

1. Steel tower (150 feet), including installation	$3,000
2. Instrument shelter, including installation	3,200
3. Wind system, with sensors at 10 meters and tower top	5,300
4. Temperature system, with sensors at 10 meters and tower top	$1,100
5. Data logging system	3,000
6. Instrument system installation	2,000
7. Analog "backup" recorders: 3 at $1,800	5,400
Total	23,000

The air monitoring network should operate continually throughout the 1-year development phase of the program. Estimated operational costs follow. Note: All staff costs are increased by about 60% for related expenses.

1. Staff:	
A. Electrical engineer	$27,000
B. Instrument mechanics; 2 full-time (calibration, servicing, repair of meteorological and air sampling equipment)	35,000
2. Data Handling:	
A. Computer program support	1,000
B. Data summary, preparation, and storage	500
3. Additional Cost:	
A. Vehicle operation	1,500
B. Instrument charts	500
C. Office facilities	750
D. Expendables—miscellaneous	750
Total	67,000

Full-scale field studies

The purpose of the full-scale field studies is to precisely identify maximum SO_2 ground-level concentrations attributable to power plant operations, along with the accompanying atmospheric dispersion conditions, or dispersion models, i.e., coning, inversion breakup, limited layer mixing (or trapping). These concentrations should be * * * determination of required SO_2 emission limitation or power generation reduction. The magnitude of the SO_2 emission limitation will depend primarily upon the criticality of the atmospheric dispersion conditions. Once these conditions are identified, the governing ranges of the meteorological parameter values are established for use in developing a computer program for scheduling the SO_2 emission limitation.

The full-scale field studies are designed to concurrently collect ambient SO_2 and meteorological data. SO_2 measurements will be made by an instrumented helicopter and a mobile surface vehicle. The helicopter is particularly useful in providing near ground-level measurements of plume concentrations in areas not accessible by surface vehicle or not adequately monitored by fixed network air sampling stations. Meteorological measurements will include vertical temperature and wind profiles by fixed-wing aircraft and standard pilot balloon methods, respectively. Measurements should be made from surface to about 6,000 feet in order to identify the pertinent meteorological criteria and the related parameter values associated with maximum ground-level concentrations, particularly those which will exceed ambient air quality standards.

In geographical areas with seasonal variations in atmospheric dispersion conditions, the field studies should be scheduled during selected periods of the year to document the variance in plume behavior patterns. A total of three months of field sampling should be sufficient with emphasis always given to those days when adverse dispersion conditions are expected to occur.

Four full-time staff members, including a meteorologist, will be required to conduct the field studies. The key member is the meteorologist-helicopter observer who has prime responsibility of organizing and conducting the aerial sampling program and to ensure the collection of quality data. Estimated costs follow:

1. Staff:	
A. Supervisor (meteorologist-helicopter observer): 90 days	$7,000
B. Pilot balloon operator: 90 days	4,500
C. Surface vehicle operators (2): 180 days	9,000
2. Vehicular samplers:	
A. Helicopter: 400 hours at $100/hour	40,000
B. Fixed-wing aircraft: 160 hours at $35/hour	5,600
C. Surface vehicle: 5,000 miles at $0.10/mile	500
3. Equipment:	
A. SO_2 instrument, helicopter	7,000
B. SO_2 instrument, surface vehicle	6,800
C. Temperature instrument, aircraft	2,400
D. Portable radios; 2 at $150/each	300
E. Camera	200
F. Pilot balloon facilities, accessories, and equipment	2,200
G. Expendables	500
Total	86,000

Data processing and analysis and program design

About three months, total time, will be required to process and analyze the field data and to design and formulate the implementation programs for limiting SO_2 emissions during adverse atmospheric dispersion conditions. From the data analysis the critical

meteorological conditions associated with ground-level concentrations exceeding ambient air quality standards will be identified. The related meteorological parameter values for inclusion in appropriate atmospheric dispersion equations, along with plant operational information and required air quality goals, will then be used to develop a computer program for specifying the SO_2 emission limitation by means of power generation reduction. For example, on a particular implementation day, if the power plant's existing generation load is greater than the allowable load specified by the computer program, the plant would be required to limit SO_2 emission by reducing power generation to the allowable level. The period of SO_2 limitation would depend upon the time of day and the duration or persistence of the adverse meteorological conditions. Estimated costs follow:

1. Supervisor (meteorologist): 90 days	$6,900
2. Mathematician—computer programmer: 90 days	6,900
3. Clerical staff (3): 270 days	7,200
Total	21,000
Grand total	262,000

PROGRAM IMPLEMENTATION

Annual operation

The program implementation would begin following completion of the program development elements, i.e., full-scale field studies, data processing and analysis and program design, which would be conducted at intervals throughout the first year.

The major recurring costs will consist of staff salaries, servicing of air monitoring instrumentation, and rental of fixed-wing aircraft. After the first two years of implementation the costs could be reduced somewhat by the replacement of the on-site meteorologist with a qualified technician who would assume responsibility for conducting the on-site phase of the program. Costs could be further reduced after the first two years of implementation by deemphasis of the SO_2 field sampling program and the data collection, processing, and analysis. Estimated annual recurring costs follow.

1. Staff:	
A. Meteorologist	$27,000
B. Meteorological aide	18,000
C. Electrical engineer (10% of time)	3,000
D. Instrument mechanics; 2 full-time (calibration, servicing, repair of meteorological and air sampling equipment)	35,000
E. Clerical services	1,500
2. Data Handling and Processing:	
A. Computer program support	1,000
B. Data summary, preparation, and storage	500
3. Additional Costs:	
A. Fixed-wing aircraft rental	12,000
B. Vehicle operation	2,000
C. Instrument charts	500
D. Pilot balloon equipment and supplies	500
E. Office facilities	1,500
F. Expendables—miscellaneous	500
Total	103,000

In summary, the cost for developing the above meteorologically scheduled SO_2 emission limitation program, including the installation and 1-year operation of the air monitoring network, the full-scale field studies, the data processing and analysis and program design, will approximate $262,000. The annual cost for the subsequent implementation of the program, including the operation of the air monitoring network, the collection and processing of the field data, and the measurements of on-site meteorological parameters for the scheduling of SO_2 emission limitation, will approximate $103,000.

It should be pointed out that this analysis does not include costs incurred by the power plant operator from the reductions in system power generation. Such costs, involving replacement energy, load interruption, increased reserves needed, etc., would be highly variable with individual power plants and power systems and therefore would be extremely difficult to evaluate.

Also, this cost analysis would generally apply to power plant programs where the SO_2 emission limitation could be achieved, provided adequate "lead time" was available, by switching to a low-sulfur fuel during adverse atmospheric dispersion conditions. However, no attempt is made in the analysis to include direct or indirect costs incurred from the intermittent utilization of the low-sulfur fuel.

TAB 7. NUMBER OF FACILITIES WHICH MAY EMPLOY ICS

Between 50,000-60,000 individual facilities annually emit 25 tons or more of a pollutant. Only a fraction of a percent of these sources are considered likely candidates for an ICS. Sources located in urban areas and in close proximity to other sources are eliminated from consideration because of the complexities of a multi-source ICS and enforceability difficulties associated with their location. Particulate matter is not generally considered appropriate for intermittent control because highly reliable and inexpensive constant control devices are available. Further, particulate matter has persistent environmental impacts in even small concentrations. Hydrocarbons (HC) and NO_x are not viable candidates for ICS because of the confounding atmospheric chemical reactions which take place and because they are largely emitted from automobiles. ICS is unlikely to be cost-effective for small sources, even though isolated. The most likely candidates for ICS are coal-fired power plants and nonferrous smelters.

There are about 900 power plants owned by public utilities in the Nation. Of them, 379 are coal-fired with annual fuel consumption rates of 50,000 tons or more. About 85–100 of these plants are located in rural areas and are subject to state implementation plan requirements to use fuel containing 1% or less sulfur. Another 80–100 remotely located plants must use 2% or less sulfur content fuel. These facilities, which emit over 20% of the SO_2 nationwide, are likely candidates for applying an ICS. (The 63 oil-fired plants operated by utilities are generally in or near urban areas. Along with 185 gas and oil-fired plants they emit about 1.5 million tons of SO_2 or less than 6% of the national total.)

The Nation's 30 nonferrous smelters, particularly the copper smelters, are likewise prospective users of ICS. The 16 copper smelters emit 3.5 million tons, or 10% of the Nation's SO_2.

In summary, about 150–200 large sources of SO_2 in remote locations will likely qualify for intermittent control systems. These facilities emit about 11 million tons of SO_2 annually, almost one-third of the national total.

TAB 8. CONDITIONS FOR ACCEPTABILITY OF AN ICS

This tab presents criteria for an acceptable regulation concerning intermittent control systems. The purpose of the regulation is to ensure that proposed and approved intermittent control systems will enable air quality standards to be attained and maintained and that the systems are policeable and enforceable by the control agency. The criteria for the regulation identifies the necessary elements that a prospective user must speak to when submitting a proposed ICS for approval. They also set forth those items that the agency must be concerned with and carefully evaluate before granting approval of an ICS.

An acceptable regulation should:

1. Authorize approval of each ICS only after reasonable notice and public hearing.

2. Define air quality violations as:

(a) A single ambient concentration that exceeds the standard at any air quality monitor.

(b) Repeated or consecutive excesses at the same monitor or non-simultaneous excesses at different monitors are multiple violations.

(c) Non-compliance with stated and agreed upon emission curtailment criteria and procedures.

3. Permit a source to submit a plan for an ICS only after the source justifies the need for the system. Justification should include consideration of:

(a) Pollutant of concern.

(b) Frequency and severity of violations.

(c) Location of facility.

(d) Demographic considerations.

(e) Anticipated growth: population, industrial urbanization, etc.

(f) Availability and reliability of constant control systems.

(g) General description of application of ICS.

(h) Economic aspects of control methods.

(i) Life expectancy of facility.

(j) Other factors pertinent to the facility.

4. If the permit is granted, require periodic rejustification (e.g., 3–5 year intervals) to insure that changes in economic, control, demographic, etc., factors do not warrant change in authorization for the ICS.

5. Apply only to those sources which are reasonably remote from other sources of the same pollutant (e.g., in areas where background levels of the pollutant do not exceed a small percentage of the annual standard).

6. Apply only to those sources which can curtail their emissions at a rate compatible with the advance warning time (of adverse atmospheric dispersion conditions) afforded by the ICS.

7. Require the source to establish, maintain and continuously operate monitors for sensing the rate of emission of the pollutant, air quality and meteorological parameters.

8. Grant the agency continuous access to all data generated by the source's network of sensors and authority to inspect, test and calibrate all sensors, recorders and other equipment of the monitoring network.

9. Require the source to notify the control agency when emission curtailment is initiated and when air quality standards are exceeded.

10. Authorize the control agency to initiate emission curtailment as it seems appropriate; i.e., allow the agency to override the source's operation of the ICS.

11. Require the source to submit a plan and schedule for implementing an ICS which is designed to attain standards. The plan shall have two parts:

(a) A comprehensive report of a thorough background study which demonstrates the capability to operate an ICS. The report shall describe a study during a period of at least 120 days when air quality standards are frequently or likely to be exceeded which:

(1) Describes the emission monitoring system and the air monitoring network.

(2) Describes the meteorological sensing network.

(3) Identifies the frequency, characteristics, times of occurrence, and durations of meteorological conditions associated with high ground-level concentrations.

(4) Describes the methodology (e.g., dispersion modeling) by which the source determines the degree of control needed under each meteorological situation.

(5) Describes tests and results of tests to

determine optimum procedures and times required to reduce emissions.

(6) Estimates the frequency that ICS is required to be implemented to attain air quality standards.

(7) Describes the basis for the estimate.

(8) Includes data and results of objective reliability tests. "Reliability," as the term is applied here, refers to the ability of the ICS to protect against violations of air quality standards.

(b) An operational manual which:

(1) Specifies and substantiates the number, type, and location of ambient air quality monitors, in-stack monitors, and meteorological instruments needed.

(2) Identifies the meteorological situations before and/or during which emissions must be reduced to avoid exceeding short-term air quality standards.

(3) Describes techniques, methods and criteria used to anticipate the onset of meteorological situations associated with the excessive ground-level concentrations.

(4) Describes the methodology by which the source determines the degree of control needed for each situation.

(5) Identifies specific actions that will be taken to curtail emissions when critical meteorological conditions exist or are predicted to exist and/or when specified air quality levels occur.

(6) Identifies the company personnel responsible for initiating and supervising such actions.

(7) Demonstrates that the curtailment program will result in maintenance of short-term and long-term air quality standards.

(8) Describes the manner by which monitoring data are transmitted to the control agency (in a manner acceptable to the agency).

(9) Describes a program where the source systematically evaluates and improves the reliability of the ICS.

(10) Identifies a responsible and knowledgeable person (and alternates) who can apprise the control agency as to the status of the ICS at any time.

(11) Requires the source to submit monthly reports on the ICS, including an analysis of how the system affected air quality and how response to adverse dispersion conditions will be improved.

(12) Requires annual review of the ICS by the control agency, and authorizes the agency either to impose a fine on the source or to deny its continued use of the ICS if:

(a) The source has not complied with all provisions designed to protect long-term standards.

(b) The source has not developed a control program that is effective in enabling short-standards to be met.

(c) The source has not demonstrated good faith in operating an effective control program by failing to:

1. Employ trained competent personnel.

2. Properly maintain and calibrate the monitoring equipment.

3. Refine and continuously validate and upgrade the response of the ICS to adverse dispersion conditions.

4. Attain annual and short-term standards in the vicinity of the source.

UCLA SPECIAL VETERANS PROGRAM

Mr. CRANSTON. Mr. President, the "Veterans Special Educational Program"—VSEP—at the University of California at Los Angeles has now received funding from the Office of Education as an Upward Bound demonstration project. This program—which I have followed carefully since its inception in 1969—is aimed at encouraging and preparing educationally disadvantaged veterans to pursue higher education, particularly those veterans whose prior educational achievement would not normally qualify them for college admission and whose background has not encouraged them to pursue higher education.

Mr. President, the excellent success record of this fine program is of great interest to me because it also operates under the provisions of section 1691 of subchapter V of title 38, United States Code, which I authored in Public Law 91–219. The VSEP program was the model for section 1691, which was designed, in part, to provide precollege remedial and preparatory educational assistance on college campuses for educationally disadvantaged veterans.

Mr. President, the statistics regarding the VSEP program are particularly noteworthy. Of the 1,606 veteran students who have enrolled in this program in the last 4 years, 1,387 or 86.0 percent are continuing their education. I believe these figures speak legions for the value and importance of such programs for educationally disadvantaged veterans.

Mr. President, I ask unanimous consent that the full text of Coordinator Shulamite D. Ash's paper regarding the "Veterans' Special Educational Program" be printed in the RECORD.

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

DEMONSTRATION PROJECT: VETERANS SPECIAL EDUCATIONAL PROGRAM

We have been funded by the Division of Student Assistance, U.S. Office of Education, as an Upward Bound demonstration project, and we wish to acquaint you with our program. The Veterans' Special Educational Program (VSEP) has been in operation since 1969. It encourages and prepares those veterans for success in higher education whose prior educational achievement would not normally be acceptable for admission and whose background has not encouraged them to see higher education.

Students are enrolled for three months in a highly structured, concentrated program of classes held five days a week from 9:00 a.m. to 4:00 p.m. These classes range in size from an average of 20 adult students in skills classes up to 75 in sociology and psychology courses. Every attempt is made to provide as many different learning environments as are presumably experienced on any college or university campus. Personalized tutoring, counseling, and additional assistance are always available, and the Learning Assistance Laboratory provides instructional resources appropriate to individual needs.

The UCLA program does not emphasize occupational (although counseling and guidance are offered), but rather, those skills necessary for student achievement and self-confidence in any field. A curriculum description and a statistics sheet are enclosed for your further information.

The VSEP program is an example of one approach to veterans' education, one that has worked well in our particular circumstances. We invite you to visit us and explore the ways in which we can share each other's experience and knowledge in implementing veterans' special education programs. Depending on your areas of interest, you may want to discuss aspects of the program with our staff members, including administrators, counselors, paraprofessional recruiters, teachers, and our Learning Assistance Laboratory personnel. Our students are also available to discuss with you their needs and perceptions of the program.

We see our responsibilities as 1) serving the veteran; 2) acting as a forum for exchanging ideas and techniques in veterans' programs with educators and other professionals; and 3) encouraging evaluation and feedback on all programs dealing with veterans' education, mutual assistance in general or specific problem areas, and a spirit of cohesiveness among the many efforts for veterans throughout the country.

In that regard we think there are mutual benefits to be gained by your visit or call. Let us hear from you soon.

Cordially,

SHULAMITE D. ASH.

VETERANS SPECIAL EDUCATIONAL PROGRAM STATISTICS

No. of quarters, (Spring 69 to spring '73), 16.

No. of students enrolled, 1,606.

No. of students completed program 1,461	90.9
No. of students continuing education of total enrolled, 1,387	86.0
No. of students continuing education who completed program, 1,387	94.0
Admitted to:	
Junior college	29.5
State colleges	31.0
Universities	37.0
UCLA	*24.5
In State	2.7
Out of State	9.8
Technical schools	2.5
Ethnic backgrounds:	
American Indian	4
Caucasian	725
Mexican-American	264
Black	580
Oriental	33
Percentage of minorities	54.9

*Of the 308 students admitted to U.C.L.A. 239 are now enrolled (77.0%).

CURRICULUM FOR VETERANS SPECIAL EDUCATIONAL PROGRAM

Department: English, Course Title & Number: Subject A 824, Units of Credit: (4 units of credit as prerequisite to English courses).

Department: English, Course Title & Number: English Composition XL 1, Units of Credit: (4).

Department: English, Course Title & Number: Critical Reading and Writing XL 2, Units of Credit: (4).

Department: Speech, Course Title & Number: Principles of Oral Communication XL 1, Units of Credit: (4).

Department: Psychology, Course Title & Number: Introduction to Psychology XL 10 or XL 70, Units of Credit: (4).

Department: Sociology, Course Title & Number: Introduction to Sociology XL 1, Units of Credit: (4).

Department: Mathematics, Course Title & Number: Meaningful Mathematics 801, Units of Credit: (specifically designed for the program).

Department: Psychology, Course Title & Number: Reading for Speed and Comprehension XL 416, Units of Credit: (3 upon petition).

Counseling and testing in a group and on an individual basis.

Non-Departmental Study Skills, (preparation for subjective and objective examinations; use of a library and methods of research; lecture note-making; effective time management, etc.), Non-Credit.

Non-Departmental, Vocational and Educational Group Counseling (designed to disseminate information and sources of information about opportunities at various institutions of higher education, career planning and use of interest inventories). Non-Credit.

Non-Departmental, Learning Laboratory, (audio-tutorial approach, utilizing audio-visual equipment, tapes, and specially prepared drill materials, including programmed texts, to enable students to work independently and at their own level and pace). Non-Credit.

AMERICA'S AIR TRANSPORTATION SYSTEMS NEED IMPROVED FACILITIES FOR MOBILITY OF HANDICAPPED PERSONS

Mr. RANDOLPH. Mr. President, the members of the Subcommittee on the Handicapped, which I have the responsibility to chair, are genuinely concerned with the problems of mobility for handicapped persons. We are approaching this vital issue on many fronts in an effort to achieve a national awareness and action to insure that the handicapped enjoy freedom of movement in our Nation. Clearly, convenient access to transportation, buildings, services, public facilities—and the list can go on and on—is absolutely essential if these citizens are to be full participants in our society. Our efforts in this area must be comprehensive because of the involvement of so many elements. It is my genuine hope that we can help bring into being the national endeavor and a necessary change of national attitudes and awareness to secure freedom of movement and access for the handicapped. Justice demands that we vigorously pursue this goal.

In this regard, air transportation is one mode of transportation to which the handicapped need vastly improved access.

In April of this year an article by Harry A. Schweikert of the Paralyzed Veterans of America, appeared in Paraplegia News pointing out that certain airlines were becoming more restrictive in both attitude and policy toward transporting the handicapped.

I immediately wrote Paul Ignatius, president of the Air Transport Association of America, and requested that he check into any incidents in which an airline had refused transportation to a disabled passenger.

Additionally, I contacted Robert Timm, chairman of the Civil Aeronautics Board, strongly urging affirmative action regarding a long-delayed rulemaking on air transportation of handicapped individuals. The CAB has taken the position in the past that it does not have the "expertise" to proceed on this issue and has deferred to FAA. This bouncing of the issue back and forth between CAB and FAA appears to have a history to it.

However, I am gratified to report that on June 5, 1973, the Federal Aviation Administration issued an advance notice of proposed rulemaking to elicit information basically on the safety aspects of air travel by the handicapped. As stated in the FAA release, the purpose of the advance notice is—

To solicit public participation in developing an operational standard "by which the acceptance of a maximum number and type of handicapped passengers, commensurate with an acceptable level of safety may be achieved."

Mr. President, I do not agree with the hesitancy of CAB and FAA to develop a program now. I do not understand why these two organizations have not moved in concert on this issue. I hope that the FAA action will lead to a resolution of this problem so that a set of standards to insure that the handicapped have access to air travel will be developed. This subject has been intensively investigated in the past, but no final and firm proposal has been brought into being. I strongly urge those involved in this matter to move even more quickly to bring this situation to a satisfactory conclusion.

In 1971, the Paralyzed Veterans of America submitted to CAB an excellent statement on the right of the handicapped traveler to air transportation; the guidelines and recommendations contained in the statement are sensible, appropriate, and provide, in my judgment, a basis for a resolution of the problem. This statement reflects the long delays which have been encountered in this area.

Mr. President, I ask unanimous consent that the letter to Mr. Ignatius and his replies; the letter to Mr. Timm and his reply; the PVA statement; and the FAA announcement and notice be printed in the RECORD.

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

APRIL 16, 1973.

PAUL IGNATIUS,
President, Air Transport Association of America, Washington, D.C.

DEAR MR. IGNATIUS: In April, 1973, edition of *Paraplegia News* there is an article written by Harry A. Schweikert, Jr., entitled: "Airlines Again Limiting Travel for Disabled." Mr. Schweikert mentions Eastern and National Airlines and states that "certain airlines again are becoming more restrictive in their attitudes and policies toward the transportation of physically disabled travelers."

As Chairman of the Subcommittee on the Handicapped of the United States Senate, I strongly urge that you check into any incidents in which an airline has refused transportation to a handicapped individual. I would appreciate knowing the results of your check as soon as possible.

With very best wishes, I am,

Truly,

JENNINGS RANDOLPH,
Chairman, Subcommittee on the Handicapped.

[From Paraplegia News, April 1973]

AIRLINES AGAIN LIMITING TRAVEL FOR DISABLED

(By Harry A. Schweikert, Jr.)

Certain airlines again are becoming more restrictive in their attitudes and policies toward the transportation of physically disabled travelers.

On the Eastern seaboard, restricting incidents have occurred with both Eastern and National airlines.

In most instances, the denial of travel to handicapped wheelchair users appears to be the result of judgment of an individual agent who quotes from a manual. The traveler who does not know how to respond effectively, or has no one to call, is not permitted to board.

REGISTER COMPLAINT

And if he does *not* register a complaint, he permits his cause and that of every other disabled person to be hurt. Each episode of objection or rejection by an airline or its representatives should be made part of the record of a national representative group, such as the National Paraplegia Foundation or the Paralyzed Veterans of America.

Letter of complaint should contain the *airlines' name, the date, the flight number, source and destination of the flight*, and the *names(s) of individual(s) who made the negative decisions*. With such evidence, our national organizations can continue to pursue equal rights in transportation until such rights become firmly established by law.

AIR TRANSPORT ASSOCIATION OF AMERICA,
Washington, D.C., April 19, 1973.

HON. JENNINGS RANDOLPH,
Chairman, Subcommittee of the Handicapped, Committee on Labor and Public Welfare, Washington, D.C.

DEAR MR. CHAIRMAN: Thank you for your letter of April 16, in which you brought to my attention the article in *Paraplegia News* written by Mr. Schweikert. As I am sure you are aware, our industry constantly is striving to attain the highest possible standards to assure the comfortable and convenient transportation of handicapped passengers.

We are deeply concerned, of course, about any report reflecting dissatisfaction with airline service. Consequently, we are now in the process of reviewing the Schweikert article, and we plan to circulate it to our membership with a request for comments relating to the practices mentioned. I will be pleased to share the results of this review with you.

I am most grateful for your courtesy in bringing this matter to my attention.

Sincerely,

PAUL R. IGNATIUS.

AIR TRANSPORT ASSOCIATION OF AMERICA,
Washington, D.C., May 24, 1973.

HON. JENNINGS RANDOLPH,
Chairman, Subcommittee of the Handicapped, Committee on Labor and Public Welfare, Washington, D.C.

DEAR MR. CHAIRMAN: As indicated in my letter of April 19, I would like to advise you of the results of a recent review by our membership of practices being observed with respect to the air transportation of the physically handicapped. Let me reiterate again our desire to be as helpful as possible to this group of citizens to whom air travel is so important.

I am pleased to report the new study confirms emphatically the policies of our member carriers which clearly provide for the acceptance of unaccompanied paraplegics who have been "trained", to the extent that they can provide for their personal needs, and who have a "stable" physical condition, in the sense of that condition not being degenerative.

I am certain you recognize that questions of policy interpretation still may arise from time to time, and some airline personnel occasionally, out of the best intentions for the welfare of handicapped passengers, may appear to be more conservative than necessary in the application of established policy. In order to minimize any potential problem which might result from questions of interpretation, the ATA Medical Committee has developed a list of physicians who are available on a round-the-clock basis to answer any inquiries from airline personnel regarding the ability of a physically handicapped person to travel on an unaccompanied basis.

Consistent with our policies, practices, and precautions, we wish to maintain a continuing review program in order to minimize the possibility of inconveniencing any physically handicapped passenger. According-

ly, we are considering the possibility of a joint meeting of members of the ATA Medical Committee and other related airline industry groups with representatives of the various interests and concerns involved, and to assure that the airlines provide the most convenient, safe, and comfortable service possible.

I shall be pleased to keep you advised of developments in the event you would wish to have a representative of your subcommittee attend such a meeting. Again, I wish to express appreciation for your interest in helping us to serve the travel needs of the handicapped.

Sincerely,

PAUL R. IGNATIUS.

May 17, 1973.

Hon. ROBERT TIMM,
Chairman, Civil Aeronautics Board, Washington, D.C.

DEAR MR. CHAIRMAN: The Civil Aeronautics Board has had before it for a considerable length of time a Notice of Proposed Rulemaking concerning air transportation of handicapped individuals. Your predecessor, Secor Browne, indicated in a letter to Senator Vance Hartke more than *nine months* ago that he hoped soon to decide upon a mutually satisfactory procedure" with the Federal Aviation Administration on safety questions related to air transportation of the handicapped.

To the date of this writing, it is my understanding that no such procedure has been developed and that the Civil Aeronautics Board's Notice of Proposed Rulemaking, issued in 1971, continues to be undecided.

I strongly urge you to bring this matter to a prompt and satisfactory conclusion. The handicapped citizens of America have waited far too long for a proper resolution of their right to air transportation.

In this connection I am attaching for your consideration an excellent statement which was presented to the Civil Aeronautics Board by the Paralyzed Veterans of America. That statement contains guidelines and recommendations with respect to airline carriage of the handicapped, which are in my opinion eminently sensible and appropriate.

Please let me hear from you in this matter at your earliest opportunity.

With best wishes, I am

Truly,

JENNINGS RANDOLPH.

STATEMENT OF THE PARALYZED VETERANS OF AMERICA TO THE CIVIL AERONAUTICS BOARD ON DOCKET NO. 23904 TRANSPORTATION OF PHYSICALLY DISABLED PERSONS

Mr. Chairman and Members of the Board: Once again the Paralyzed Veterans of America hopes to correct, by presentation of the facts in true perspective, the inadequacies and injustices perpetrated by certain air carriers in the transportation of disabled and handicapped individuals aboard their aircraft. It must be "once again" because it seems that the leaders of this organization have been engaged almost continuously with the problem since the early days of its existence in 1946; and the undersigned can attest to this having been directly and personally involved since that date.

It must also be made a matter of record that PVA can only speak for its members and others who suffer similar disabilities involving traumatic injury or disease of the spinal cord. (1) The term *Paraplegia* is usually used in reference to all spinal cord disabilities. But in simple nonmedical terms it refers to those whose paralysis extends generally from the waist down, leaving the upper extremities unaffected. The greater disability of *Quadriplegia* must also be noted. This type of disability results from a neck injury and ranges from the person with no function from the point of injury down, to one with greater return of normal function.

The organized efforts of PVA to obtain liberalized rules of air transportation for the disabled started in 1946. This was possible because of the special medical care programs of the Veterans Administration which grouped veterans with spinal cord injuries in certain hospitals across the country. Yet the problem of air transportation for the disabled did, in fact, pre-date World War II because Rule 6, Tariff C.A.B., No. 43 was adopted in 1938 and just about prohibited all air travel for the ill, deformed, or disabled.

According to our files, United Air Lines was the first carrier to give special consideration to paraplegics. In December of 1946 it set forth specific criteria for the transportation of these veterans from VA hospitals to their homes and return. (3) The airline's experience must have been good, for it has been the only air carrier which has carried forth its most liberal program for the disabled until this day.

During the subsequent years PVA and its individual chapters carried on attempts to liberalize the air transportation laws by appealing to airlines individually, and to the Civil Aeronautics Board and the Air Traffic Conference of America. A resolution unanimously endorsed by the Twelfth National Convention of PVA in 1958 (3) led to a crash program by PVA to urge these essential changes. During September and October of that year, a special letter and a copy of the resolution was sent to each carrier in the United States. Contact was also established with the Civil Aeronautics Board and the Air Traffic Conference of America. (4) There were some immediate beneficial results from this appeal. TWA set down some ground rules for transportation of paraplegics without attendants on flights of four hours or less duration, but required an attendant on longer flights. UAL went to bat for us and requested ATC of A to place the subject on its agenda. The President's Committee on Employment of the Handicapped [PCEH] joined the fight. And the ATC of A finally considered the subject at a meeting held in November of 1958 and referred the matter to the ATA Medical Committee.

During the next few years PVA continued its unilateral pressure for change in rules, but the appeal of the President's Committee, representing the interests of all the disabled, was perhaps the more compelling. In November of 1960, acting on a resolution by the Executive Committee, the staff of PCEH began discussions with the airlines to bring about a uniformity of regulations and equity in air travel. An Ad Hoc Committee was appointed to carry out this work.

In April of 1961, in reply to a PVA letter, the ATC of A indicated that the subject of air travel for the disabled was referred to the Ticketing of Baggage Committee. (5) Over a year later, a further response was finally obtained reporting the findings of that Committee. (6) Noting that further exploration of the question was necessary, the President of ATA appointed an Ad Hoc Committee.

The first indication that a set of criteria had at last been developed by the medical committee, to which the subject had been assigned in 1958, was an article printed in the February 1961 issue of Archives of Environmental Health. Entitled "Medical Criteria for Passenger Flying," the article also appeared in the March 4, 1961, issue of the Journal of the American Medical Association, and the May 1961 issue of Aerospace Medicine. This publication marked the first time that the airlines and their medical directors had actually set forth a description of who should or should not fly, and under what controls those with crippling diseases or conditions should use commercial air transportation.

In October of 1962, members of the President's Committee [PCEH] met with a committee of the ATA to discuss amendments to the ATC of A Trade Practice Manual. The meeting ended with the adoption of Resolution No. 10.6—"Carriage of the Physically Handicapped"—which became effective December 19, 1962. CAB Agreement 16614, approved in order E–19154, December 31, 1962, in effect approved the resolution but lent no enforcement to it.

For several years, the Criteria and the resolution relieved a lot of the questions which arose on the subject to transporting the disabled. It was far from universally accepted, however, and a large number of airlines continued their absolute prohibition to fly any disabled person in a wheelchair without an attendant. As the years progressed, the rules became more and more restrictive and widespread.

Now another round begins.

In his letter of June 12, 1970, to the Chairman of PCEH (7) the Executive Secretary of ATC of A indicated that another study was necessary, and a report would be made in November of that same year. If such a report was made, this office has no knowledge of it. The only hopeful move since 1962 has been the pending Notice of Rule Making by the Civil Aeronautics Board.

The introductory part of this statement, Mr. Chairman, has been long. It has been done for a purpose, and that purpose is to show that without more definitive rules on the air transportation of the disabled, and without some type of enforcing legislation by your department, our disabled and handicapped citizens will face continuing harassment and rejection by too many commercial airlines licensed by these United States.

RIGHTS OF THE DISABLED

In the old days, many of the aged, infirm, and oppressive, were confined to back rooms, asylums, or ovens. Thanks to modern technology and advanced medicine, the numbers of the elderly and disabled not only have increased, but have been promised longer, healthier, and fuller lives. And the increasing libertarianism of our people and our courts will soon see that all of the pleasures of the American way of life shall in no way be denied any citizen, be he aged, infirm, or "oppressive."

During the nineteenth Century, the far greater majority of the disabled were in the lowest income category. That is no longer so, for the texture of society has changed. The disabled from the Vietnam war have the highest education of any soldier in history. Increasing numbers of severe disabilities are resulting from today's greater mobility, higher speeds, and increased leisure. Therefore a rising number of these severely disabled are among the skilled and well-educated, whose pursuit of their trades are unimpeded by their disabilities—but greatly hampered by the lack of usable public transportation.

Jacobus Ten Broek (8) has written extensively and authoritatively about the application of tort law to the disabled, and what he calls their "right to live in the world." That right—the legal right to be abroad—demands special protection in the case of the disabled, including enactment of . . . appropriate legislation, and forthright judicial opinions on tort cases upholding the right of the crippled, the blind, and the infirm, to use the streets and sidewalks and places of public accommodation in reasonable reliance on their safety, and without being deemed contributorily negligent for having the temerity to make use of them.

Most states of the Nation have enacted laws to provide penalties for discrimination against sightless persons accompanied by seeing-eye dogs. The Legislature of the State of New York has seen bills introduced each

year since 1967 to amend the State Civil Rights Law. The amending legislation seeks to provide that "No person shall, because of race, color, creed, religion, national origin, age, sex, or physical or mental handicap, be subjected to any discrimination in his civil rights by the State or any subdivision, agency, or instrumentality thereof, or any person, corporation, or unincorporated association, public or private." The city of New York did in fact enact such legislation in 1968.

During that same year of 1968, a piece of landmark legislation was passed by Congress concerning the rights of the disabled. It was Public Law 90-480 which required that public buildings financed with Federal funds shall be so designed and constructed as to be (made) accessible to the physically handicapped. Let me note, at this time, that this law applies fully to airport facilities.

The godfather of that law was the late Senator E. L. "Bob" Bartlett of Alaska, who said in his introductory statement: "The physically handicapped of this country are citizens of this country—just as others of us are. They pay taxes and contribute to the economy of the country—just as others of us do; and they deserve access to their public buildings on an equal basis with the rest of us . . ."

The most recent addition to this growing list of evidence supporting the rights of the disabled was Public Law 91-453, enacted on October 15, 1970.(9) While this law declared that the elderly and handicapped have the same right as other persons to utilize *MASS* transportation, surely the intent of that law can also be applied to all other forms of transportation.

Present day rules [there apparently are no laws] governing air transportation of the disabled are extremely contradictory and highly impractical. Section 104 of Federal Aviation Act of 1958(10) starts it all by asserting the public right of *any* citizen to freedom of transit through the navigable airspace of the United States. Section 404 of the same Act(11) goes further and states that it shall be the "duty of every air carrier to provide and furnish . . . air transportation . . . upon reasonable request. . . ." The only section of the Act which gives the air carrier authority to refuse transport of any person or property is Section 1111(12) which limits this authority to cases which may be "inimical to [the] safety of such flight." That can be easily understood. But where can it apply to the disabled person?

The notice from the Board in the Federal Register served to compound this contradiction. It notes that "while certified air carriers have a duty to furnish air transportation to all persons upon reasonable request therefore, that duty is not absolute. Thus the courts have long recognized that a carrier may refuse to receive as passengers persons who are sick or infirm unless they are accompanied by someone competent to afford them the required assistance in case of need." It must be agreed that the "Medical Criteria for Passenger Flying" was a monumental stride in describing ailments which might be affected by flying. It was also a monument to negativism. It cleared no one who was less than perfect. Its net effect was perhaps to scare the hell out of airlines personnel and surety groups. No wonder so many individual interpretations follow its negativistic approach and are so stringent and varied!

Even the courts are contradictory. In some instances they assert the rights of the disabled(8) and in others, as noted in the CAB notice, they deny that right.(13) It appears that some type of definitive law governing air transportation is long overdue, and at long last so necessary. The denial of public transportation to the disabled by reason of structural design and/or prohibitive ruling can no longer be tolerated.

SOME PROBLEMS PRESENTED

1. Do or should air carriers and foreign air carriers have a duty to provide transportation to physically disabled persons whether or not that person is accompanied by an attendant?

This organization is on record as fully supporting the right of the disabled to use public transportation whether it be air, land, or water. Were that transportation constructed so as to be accessible to and usable by the disabled, many of them would need no help whatsoever.

In airports where jetways exist, the paraplegic and others with similar disability, would need no help getting to or from his seat were it not for an air carrier rule which requires the wheelchair to be stored in cargo. Consequently, he needs someone only to store his wheelchair upon emplaning and returning it to him for deplaning. Aboard the aircraft he looks for no other assistance than those courtesies which are extended to every passenger.

It would be avoiding the truth not to recognize that there are some disabled who require some physical help to board or deplane, such as the person who may have lost all functional use of his four limbs. At airports where there are no jetways even the paraplegic will require the use of a lifting device or portable escalator to board and deplane.

I would suggest the following guidelines for these situations:

a. Where the disabled individual is physically independent, with the exception of the need of wheelchair for mobility, he shall be accepted as a passenger and be furnished all assistance to board and deplane.

b. Where the disabled individual is in need of any type of extended personal assistance, such as lifting, feeding, or the administration of medicines, he shall be accepted for transport so long as these needs are provided by a second person who is not an employee of the air carrier [e.g., a volunteer who may be a passenger, or a special attendant]. The evaluation of the need for this unusual care should not be left to the indiscriminate judgment of inexperienced airline personnel, however.

2. How can a carrier distinguish between a disabled person able to travel independently and a person not able to do so?

Admittedly, it would be extremely difficult, if not impossible, to distinguish one from the other by casual observation. If it can be determined that the person's obvious disability is all that he has, and is medically stable, then visual observation could determine if he is capable of caring for himself to the extent outlined in paragraph 1(a), and acceptable without attendant care. If he is not capable of pushing his own wheelchair, or of transferring from wheelchair to plane seat and back, then obviously he might require the extent of physical help outlined in 1(b), and acceptable as a passenger under those conditions.

It has been our experience, however, that far too many airline personnel prejudge an obvious physical disability negatively. For example, the attitude is rampant that a person in a wheelchair certainly cannot take care of himself. On the other hand, anyone without any apparent disability is accepted without question. How much better—and safer—it would be for the airline and the other passengers if the reverse were true!

The number of illnesses and disabilities which would suffer adversely from air travel, or require unreasonable assistance from airline personnel, is far too great for us to comment on individually. We make the following suggestions which may tend to alleviate the problems of judgment in this area.

a. Many of the physically disabled, including those confined to wheelchairs, have in their possession licenses for the operation of different vehicles for various purposes. One is the simple driver's license for the passenger car. Some have licenses for the operation of commercial vehicles such as taxicabs, farm equipment, and trucks. Others have flying licenses for small planes. The individual to whom such license, or licenses, have been issued has been required to pass rigid medical requirements, and tests of skill and coordination. This must unquestionably prove his independence, and it is our firm belief that the presentation of any such license shall be sufficient authorization for his acceptance as a passenger without further question.

b. Where the individual does not have such license, it is suggested that any other identification in his possession, which positively identifies his medical physical condition, and qualifies him as being otherwise stable, and independent be recognized and accepted by the air carrier. The possession of medical identification card such as those issued by groups such as Medic-Alert may also be acceptable.

c. Where there is no such easy identification, and where the medical/physical condition is stabilized, that a doctor's certificate be acceptable and permanent.

d. It would certainly simplify matters if the individual airlines, which seem to code everything, could code the individual who has previously been cleared to travel on that airline. This code number could be imprinted on the airline ticket, and the individual so informed. For future travel the passenger's receipted part of the airline ticket, with the coded number, could be accepted on any subsequent flight as sufficient clearance for transport.

3. May or should a carrier require a medical release from a disabled person prior to accepting him for carriage?

It has been shown that in some instances, even where the independence of the disabled person has been proved, except for his dependence upon the wheelchair for mobility, a pilot may use his prerogative to refuse to carry such individual. In the first place we believe this to be an utter abrogation of that person's right to public transportation. In the second place, there is an alternative to such arbitrary action.

Usually the disabled person, in boarding a plane, selects a window seat so as to avoid having people step over him. In so doing, he removes himself as an obstacle. Where any emergency situation occurs, it seems that he would be much less of a hazard to all other passengers than they would be to themselves. Many of the disabled themselves have said that if their own safety is the dominant factor underlying refusal to tranport, then they would sign any waiver for the privilege to fly.

It is our opinion, therefore, in any situation where such action will offset any outright decision not to transport, that the disabled individual be extended the choice to sign a medical release and/or waiver of liability with such form(s) being furnished by the airline immediately prior to flight.

4. Do air carriers have a duty to provide stretcher passenger service?

The members of this organization, with large numbers resulting from the war in Vietnam are acutely aware of the need for immediate and total medicare. The Medivac program of the Armed Forces, providing airlift service from combat areas to field hospitals to the United States, saved untold lives which otherwise would have been lost. Our experiences in this field has compelled us to promote such expedient means for treatment of the injured here in the United States. This includes airlifts from the scenes of injury to local hospitals. It would most assuredly include long flights by means of any aircraft available, whether it be military or commercial, on a high priority basis.

5. Should a carrier be permitted to limit the number of disabled passengers on any given flight?

It is the feeling of this organization that the air carrier should have the right to limit the number of disabled aboard any single carrier consonant with the safety and comfort of other passengers, and the facility of airline personnel.

6. What fare or charges should be paid for the air transportation of the disabled?

The premise that attendant care for the severely disabled should not be charged to the passenger is one with which we cannot fully agree. It is not economically fair to the airline, yet it would place financial hardship on the disabled. There must be some place between. We therefore propose the following suggestions:

a. For the services required to board and deplane the paraplegic, which may require the use of a fork lift or other lifting technique at airports not using jetways, there should be no charge.

b. In the event that the disabled passenger requires extra services to the extent described in paragraph 1(b) the air carrier may charge not more than one half the air fare for this full time attendant.

c. The question of air carrier tariffs, or the charging of multiple fares for transporting stretcher cases will have to be let to further study. There should be no question that every human being has the right to the best and fastest emergency medical care available, and air transportation provides exactly that. What other rules must be applied to assure that no disruption of schedule ensures, must also be left to others. However, this organization must also state its firm opinion that in the case of such medical emergency, the "reasonable safety or comfort of other passengers." has a lower priority than the life of that seriously ill or injured patient.

It may be that these extraordinary charges for the stretcher case, and his attending personnel, could be met through a Federal catastrophic illness law, such as now being considered by Congress, or through some type of tax deduction or tax credit for the air carrier.

In addition to the above suggestions, this organization wishes to express its opinion on certain other questions which have been introduced by airline personnel, or other sources, at some time throughout this contraposition.

OTHER QUESTIONS

A. Ability to move about the plane unassisted.

If this relates to the fact that the paraplegic passenger is expected to utilize the lavatory, it does not apply. In his rehabilitation process, either professionally taught or learned by experience, the paraplegic develops an excellent—and usually infallible—sense of timing. He carefully guards his intake of food and fluids, thereby nullifying the need for use of the lavatory while aboard the aircraft.

If this relates to the safety factor expressed so often, then we must look at it from two directions:

If it is in the interest of the safety and comfort of the paraplegic as a passenger, I must point out that the paraplegic seeks air transportation because of its comfort, safety and speed in relation to the auto. He seeks it because surface transportation is not at all accessible to him, and when used exposes him to multiple physical hazards *excluding* any external occurrences such as traffic accidents.

If it is because of the hazard he may present to the other passengers, it is unreasonable. Because of his limited mobility while on board, the paraplegic presents far less hazard to the nondisabled passengers than they do to each other. And this applies whether or not there is a serious air emergency.

B. Duration of flight:

Somewhere in the days of DC–3's and DC–4's, some desk pilot decided that no disabled person should be accepted for flights exceeding four hours in duration. Apparently that rule was made in the 1940's when it took four hours to fly from Chicago to New York, and sometimes up to sixteen hours to get from New York to California. But what is the justification for that ruling to persist in today's JET AGE? In those days it might have been the concern for patients who were still hospitalized. In today's world the paraplegic, in the pursuit of his vocation or avocation sits in his wheelchair, automobile, or elsewhere, for up to eighteen hours a day—or from the time he gets out of bed until the time he gets back in.

Assuredly a plan's most comfortable seats offer no hazard to him! We feel this time limitation to be archaic and obsolete, and therefor should be completely eliminated.

C. Untoward effects upon the sensibilities of other passengers:

If this has been given as a reason, then there is more sickness and disability in the world than is represented by persons in wheelchairs. Surely there are many persons who become upset by seeing a disability or disfigurement. I've been in a wheelchair for twenty-five years, and I've been associated with all types of disabilities during that time. Bu I still get upset when I see a disabled child or woman. What about the bodies beautiful who smoke too much—drink too much—use too much perfume, to mention a few. Our opinion regarding the "reasonable safety or comfort of other passengers" has been stated before. Sometimes the disabled *passenger* [not patient!] is the "other passenger."

D. Overflight of destination:

Some twenty years ago, the excuse of at least one airline not to accept a disabled person was the probability of overflight of a scheduled destination in case of bad weather. It has occurred to this writer, but I would suggest that such an occurrence is rare in this day of instrument flight. Yet, if it did happen, the disabled expect no special consideration other than that given by the airline to alleviate the inconvenience experienced by any other passenger.

SUMMARY

In summary, Mr. Chairman, the Paralyzed Veterans of America urges that the Civil Aeronautics Board take positive and favorable action on the following recommendations:

1. That the disabled person who is physically independent, with the exception of his need for a wheelchair for mobility, be extended the right to air transportation and be furnished such help as he may need to board and deplane.

2. That the disabled person who is in need of any type of extended personal assistance, such as lifting, feeding, or the administration of medicines, be extended the right to air transportation so long as those personal needs are provided for by a person not employed by the air carrier.

3. That where a special attendant is maintained by the disabled individual to administer to his personal needs, his air fare shall be one-half the usual rate.

4. Where question exists as to the physical independence of the disabled individual, that a license to operate any motor vehicle shall constitute prima facie evidence as to the independence of that disabled person.

5. Where other medical evidence exists as to the stability and extent of the disabled individual, that it be accepted in lieu of any other required medical certificate and/or waiver.

6. Where a medical certificate is required, that such certificate be considered permanent when the disability is certified stable.

7. That the air carrier be required to develop a coded system for the identification of the frequent air passenger who is physically disabled.

8. Where question exists as to the propriety of furnishing air transportation to any disabled person in the area of personal risk, that such person be extended the right to waiver rather than be denied air transportation.

9. That all air carriers be required to furnish transportation to stretcher cases, on a high priority basis, when advised by competent medical authority.

10. That the air carrier be extended the right to limit the number of disabled persons aboard any single carrier.

Respectfully submitted,

HARRY A. SCHWEIKERT, Jr.,
Administrative Assistant.

ADDENDUM/1

(1) "Paraplegia" is defined as organic, chronic, rather stable lesions of the spinal cord and/or intra-spinal nerve roots, sustained as a result of either injury or chronic degenerative, inflammatory or benign neoplastic disease causing practical loss of neurological functions of more than one limb." [Erich Krueger, M.D., Director, Spinal Cord Injury Service, Veterans Administration.]

(2) Paraplegic Passengers: (The following was excerpted from a letter dated December 2, 1946, to K. E. Dowd, Chief Medical Officer, Trans-Canada Airlines, from W. A. Bock, Assistant to Medical Director, United Air Lines.)

UAL has been requested by the American Red Cross to carry as passengers the paraplegic veterans of World Wars I and II for whom they are trying to arrange a trip to their homes.

The agreement reached the American Red Cross and United to date is as follows:

1. The anticipated flights for these paraplegics will not be of over 4 hours duration and primarily constitute trips for the veterans to their homes, convalescent furloughs and convalescent leaves.

2. The American Red Cross has agreed that it will convoy the veteran to the airport and take adequate care of all of his requirements right up to the minute of the plane departure.

3. The American Red Cross will place the veteran in his seat and provide him with all of the necessities that he is accustomed to during any 4-hour period while he 's hospitalized. The steel chair, a folding type, is to be brought aboard the plane and placed in the cloak room compartment by the American Red Cross attendants.

4. At the termination of the flight, the American Red Cross agrees to make arrangements whereby either members of the local Red Cross or the Veterans family will meet him and assist him off the plane and transport him to his home. All arrangements for passage will be made by the Red Cross, depending, of course, upon the availability of space.

(3) [See page 20]
(4) [See pages 21–24]
(5) [See page 25]
(6) [See pages 26–27]
(7) [See page 28]
(8) The Right to Live in the World; the Disabled in the Law of Torts. Jacobus Ten Broek. 54 California Law Review, 842–919. 1966.
(9) [See page 29]
(10) Section 104, Federal Aviation Act of 1958 [72 Stat. 740, 49 U.S.C. 1304].
(11) Section 404, Federal Aviation Act of 1958 [72 Stat. 760, 49 U.S.C. 1374].
(12) Section 1111, Federal Aviation Act of 1958 [72 Stat. 800, 49 U.S.C. 1511].
(13) Casteel v. American Airways, Inc., 88 S.W. 2d 976 (1935), Croom v. Chicago M. & St. P. RR. Co., 53 N.W. 1128 (1893) and Yazoo & M. Valley RR. Co. v. Littleton, 5 S.W. 2d 930 (1928).

CIVIL AERONAUTICS BOARD,
Washington, D.C., June 4, 1973.

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

DEAR MR. CHAIRMAN: Thank you for your letter of May 17, 1973, inquiring as to the status of the Board's rule making proceeding with respect to the problem of air transportation of physically handicapped persons (PSDR-33/EDR-215, October 14, 1971, a copy of which is enclosed). You also urge the Board to consider the matters set forth in the statement filed in this proceeding by the Paralyzed Veterans of America (PVA).

Through an exchange of correspondence between the Board and the Secretary of Transportation, the Department of Transportation (DOT) undertook some time ago to institute action looking toward the issuance of safety regulations dealing with this most pressing problem. Toward this end, we understand that the FAA intends to issue shortly an advance notice of proposed rule making which will be designed to elicit information with respect to the question of what percentage of an aircraft's available passenger capacity may safely be occupied by physically handicapped individuals. We also understand that representatives of the Civil Aeronautics Medical Institute (CAMI), in conjunction with FAA safety engineers, expect to issue an interim report on a study which they have been conducting with respect to the probable impact which the transportation of handicapped persons may have on flight safety, particularly where emergency evacuation of aircraft is necessary. If the report finds that further facts are necessary to ascertain such impact, the CAMI group expects to conduct such tests as may be appropriate to gather these facts, and to in time issue another report containing its final findings and conclusions on the matter. It is anticipated that any final safety regulations issued by the FAA will be based, in part, on the CAMI group's report.

The Board intends to fashion regulations with respect to the economic aspects of the problem only after DOT has issued regulations with respect to its safety aspects, which are of course central to any appropriate regulatory action in this area.

While the present posture of the proceeding makes it inappropriate for us to comment on the merits of the views expressed in PVA's statement, you may be assured that they will be carefully considered by the Board before it takes further action. For your information, a copy of the PVA statement, as well as copies of all of the other public comments which were filed with the Board in response to the enclosed notice of rule making, have been sent to the FAA for use in connection with their rule making.

Because of your interest in this matter, the Docket Section has been requested to send you copies of any further notices, rules or other documents which the Board may issue in this proceedings.

Sincerely,

ROBERT D. TIMM,
Chairman.

[Policy Statements—Economic Regulations—Docket No. 23904]

CIVIL AERONAUTICS BOARD,
Washington, D.C., October 14, 1971.

PART 399—STATEMENTS OF GENERAL POLICY—PART 221—CONSTRUCTION, PUBLICATION, FILING AND POSTING OF TARIFFS OF AIR CARRIERS AND FOREIGN AIR CARRIERS

TRANSPORTATION OF PHYSICALLY DISABLED PERSONS—ADVANCE NOTICE OF PROPOSED RULE MAKING

Notice is hereby given that the Civil Aeronautics Board has under consideration rule making action to amend Parts 399 and 221 of the regulations of the Board (14 CFR Parts 399 and 221) so as to provide for terms and conditions governing air transportation of physically disabled persons.

This advance notice of proposed rule making is being issued to invite participation by the industry, interested governmental agencies, physically disabled passengers and their indivdual or organizational representatives, as well as the general public, in the Board's efforts to determine the scope of the problem, to decide whether the promulgation of rules is appropriate, and, if so, the curtent of such rules. If, in the Board's view, comments received indicate that further action is warranted, the Board may then pursue one or more of several alternatives courses of action, including (1) issuing a supplemental notice of rule making with proposed rules, (2) reopening the proceeding in which it approved the ATC agreement dealing with interline acceptance criteria for disabled persons under section 412 of the Act, (3) instituting evidentiary proceedings under section 1002(b) of the Act, and (4) referring the matter to the Department of Transportation under section 1111 of the Act.

Interested persons may participate in this rule making proceeding by submitting twelve (12) copies of written data, vews or arguments pertaining thereto addressed to the Docket Section, Civil Aeronautics Board, Washington, D.C. 20428. All relevant material received on or before December 20, 1971, will be considered by the Board before taking final action on this proposal. Copies of such communications will be available for examination by interested persons in the Docket Section, Room 712 Universal Building, 1825 Connecticut Avenue, N.W., Washintgon, D.C., upon receipt thereof.

By the Civil Aeronautics Board:

HARRY J. ZINK,
Secretary.

EXPLANATORY STATEMENT

It has been some time since the Board reviewed carrier tariff rules and practices with respect to the transportation of physically disabled persons. In 1962, the Board approved an agreement among various air carriers which provides certain criteria for the interline transportation of physically handicapped persons.[1] In approving the agreement, the Board found that formulation of uniform criteria of acceptability would tend to diminish the problems previously encountered by interline physically handicapped persons. However, the Board expressed no view on the lawfulness of the carriers' governing tariff rule under which certificated air carriers and foreign air carriers may refuse to accept any person whose conduct, status, age, or mental or physical condition is such as to render him incapable of caring for himself without assistance, unless the person is accompanied by an attendant for the duration of the flight.[2]

During the past several months, however, the Board has received an increasing volume of letters from disabled persons, disabled veterans' groups and other organizations, which express dissatisfaction with the carriers' handling of paraplegics, quadraplegics, and other classifications of disabled persons, including in particular several informal complaints reciting incidents where the alleged refusals by air carriers to accept disabled persons for carriage would appear to have been unjustified under a reasonable interpretation and application of the existing tariff rule.

While some of the complaints and letters received raise issues of unjust discrimination and undue prejudice under the Federal Aviation Act of 1958, it is not really clear whether the problems encountered by handicapped persons in arranging air travel stem principally from the existing tariff rule itself or from the lack of uniformity in its interpretation and application by different carriers, and even by different employees of the same carrier, resulting from the absence of reasonably clear standards to govern the acceptability of disabled passengers. Certainly the text of the joint tariff rule and the criteria set forth in the interline agreement make it very difficult for the originating air carrier to avoid subjective decisions as to whether a disabled person is, in fact, able to travel unattended or whether such person will require special in-flight attention. Moreover, in light of the major achievements in therapy and training of physically handicapped persons, enabling many disabled persons to function independently and with a high degree of physical dexterity, it is indeed—and might inevitably continue to be—a formidable task to fashion precise rules covering air transportation of disabled persons by category of disability. We therefore think it appropriate at this time for the Board to reexamine the subject of air transportation for physically handicapped persons, in order to attempt to determine whether rule making in this area is warranted and, if so, the content and scope of any such proposed rules.

We have also received a petition for rule making filed by the Aviation Consumer Action Project (ACAP), a consumer group. The petition requests amendment of the Board's regulations to "prohibit discrimination in air transportation against physically disabled and crippled persons" and includes a set of proposed rules which petitioner asserts will achieve this purpose.[3] In support of its petition, ACAP asserts, *inter alia*, (1) that the carriers' tariff rules concerning air transportation of disabled persons are arbitrary and unjustly discriminatory under the terms of the Act, (2) the assessment of a "double fare" against a disabled person is discriminatory because a disabled passenger alone does not occupy more space in the aircraft than any other passenger, (3) air carriers have no right to require a disabled person to have an attendant, particularly where fellow passengers offer to aid the disabled person during the flight and (4) there is no rational basis for a carrier to refuse transportation to a disabled person on the ground of "comfort" to other passengers.[4]

Although the petition of ACAP raises some very fundamental questions with regard to the duty of air carriers to provide transportation for disabled persons and the appropriate fares or other charges which should be levied for such transportation, it is not clear that the petition makes a prima facie showing of unjust discrimination. To begin with while certificated air carriers have a duty to furnish air transportation to all persons upon reasonable request therefor, that duty is not absolute. Thus, the courts have long recognized that a carrier may refuse to receive as passengers persons who are sick or infirm unless they are accompanied by someone competent to afford them the required assistance in case of need.[5] The policy of this rule is intended not only to assure the health and safety of other passengers but to protect the disabled persons against the risk of serious injury while in transit. Moreover, there are safety problems unique to air travel, particularly with regard to emergency evacuation of the aircraft. For example, in a crash emergency, a sick or infirm passenger might not be able to follow the procedures established for the expeditious evacuation of the aircraft, thus placing his own life in danger and imperiling the lives of other passengers as well. For these reasons, the Board has not heretofore challenged the judgment of those carriers which have declined to carry disabled passengers without an attendant.[6]

As previously indicated, the Board intends hereby to undertake exploratory evaluation of the subject of air travel by disabled persons. Recognizing the numerous and complex is-

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Footnotes at end of article.

sues involved in fashioning a rule adequately to deal with the subject, we have decided to approach the matter by the more preliminary procedure of an advance notice of rule making. For the same reason we have not proposed any specific rules, but would invite comment on any or all of the following questions.

1. Do or should air carriers and foreign air carriers have a duty to provide transportation to physically disabled persons, whether or not that person is accompanied by an attendant?

2. What conditions may or should a carrier reasonably impose on the transportation of physically disabled persons? In this connection:

(a) How should "disabled person" be defined?

(b) Are there paraplegics, quadraplegics and other classifications of disabled persons who are able to travel by air without an attendant?

(c) How can a carrier distinguish between a disabled person able to travel independently and a person not able to do so?

(d) May or should a carrier require a medical release from a disabled person prior to accepting him for carriage?

(e) Should a carrier be permitted to limit the number of disabled passengers on any given flight?

3. Is the charging of a full fare to an attendant accompanying a disabled person unreasonable or unjustly discriminatory, and if so, what fare or charge should be paid by such attendant? In this connection, how should "attendant" be defined?

4. Do air carriers have a duty to provide stretcher passenger service?

5. Are the current air carrier tariffs, which provide for the charging of multiple for a stretcher passenger, unreasonable or unjustly discriminatory, and if so, what fare or charge should be paid by such passenger?

FOOTNOTES

[1] Agreement C.A.B. 16614, approved in Order E–19154, December 31, 1962. The agreement states, *inter alia*, that acceptance of physically handicapped passengers for air transportation by the parties to the agreement will be determined in accordance with certain "lay criteria" and, in particular circumstances, "medical criteria" as set forth therein. In brief, the "lay criteria" provide that a member carrier will not accept as passengers persons who have "malodorous conditions, gross disfigurement, or contagious diseases, or persons who cannot take care of the physical needs without an attendant." The "medical criteria" are stated to be those criteria contained in a report entitled "Medical Criteria for Passenger Flying" published in certain periodicals and incorporated therein by reference. The agreement also classifies the physically handicapped and indicates by class which criteria are to be used in gauging acceptability.

[2] Airline Tariff Publishers, Inc., Agent, Rules Tariff, PB–6, C.A.B. 142, Rule 15(a)(2).

[3] The rules proposed by ACAP would among other things require all certificated air carriers and foreign air carriers (1) to furnish air transportation to all physically disabled persons, whether or not such persons are accompanied by an attendant and (2) where an attendant does accompany a disabled person, to provide transportation to such attendant at a charge of one-half the fare paid by the disabled passenger.

[4] ACAP also contends that the carriers' tariff rules arbitrarily disqualify disabled persons from the benefits of "denied boarding" compensation under Part 250 of the Board's regulations. However, Part 250 does not seem to be apposite. Under Part 250 (14 CFR Part 250) carriers are required to pay denied boarding compensation only where a passenger holding confirmed reserve space on a flight is denied boarding because the flight is oversold and certain other criteria, not relevant here, are satisfied.

[5] See, *e.g.*, Casteel v. American Airways, Inc. 88 S.W. 2d 976 (1935), Croom v. Chicago M. & St. P. RR Co., 53 N.W. 1128 (1893) and Yazoo & M. Valley RR. Co. v. Littleton, 5 S.W. 2d 930 (1928).

[6] Indeed, section 1111 of the Federal Aviation Act expressly provides: "Subject to reasonable rules and regulations prescribed by the Secretary of Transportation, any air carrier is authorized to refuse transportation to a passenger or to refuse to transport property when, in the opinion of the air carrier, such transportation would or might be inimical to safety of flight."

FEDERAL AVIATION ADMINISTRATION,
Washington, D.C., June 5, 1973.

FAA RULEMAKING TO FACILITATE AIR TRANSPORTATION OF PHYSICALLY HANDICAPPED

The Federal Aviation Administration of the Department of Transportation is considering rule making to assure more equitable treatment of physically handicapped persons in air transportation, FAA Administrator Alexander P. Butterfield announced today.

"The physically handicapped are one of our most neglected minorities," Butterfield said. "As the victims of a great deal of indifference, as well as a certain amount of prejudice, their special needs have been ignored far too long by society as a whole. I think all of us have a responsibility to do everything in our power to correct this situation."

In issuing an advance notice of proposed rule making, FAA pointed out that the most significant problems associated with transporting the physically handicapped by air are those relating to evacuation of an aircraft in an emergency. This becomes especially critical in survivable accidents involving fire after impact or ditching at sea.

FAA noted that there is currently a lack of uniformity among airlines and air taxi operators with respect to the carriage of handicapped persons. Normally, they will not accept persons who cannot take care of their physical needs without assistance unless they are accompanied by an attendant.

The purpose of the advance notice is to solicit public participation in developing an operational standard "by which the acceptance of a maximum number and type of handicapped passengers, commensurate with an acceptable level of safety may be achieved.

In addition to soliciting general comments, the advance notice poses specific questions concerning the types and numbers of physical or functional disabilities that can be accommodated in air transportation, consistent with present evacuation criteria both with and without an attendant. It also asks whether the present emergency evacuation criteria should be changed to reflect the carriage of the physically handicapped, what special measures might be taken to accommodate large groups of such persons and if identification cards might be used to certify the ability of these individuals to perform certain functions.

FAA said it is particularly interested in receiving the views of handicapped persons on emergency evacuation procedures and how they might be improved to accommodate them.

The advance notice is not addressed to the problems of individuals afflicted with certain ailments that require them to carry a personal oxygen supply. Because this is presently inconsistent with the regulations governing the transportation of dangerous articles, FAA is undertaking separate rulemaking action to resolve this matter.

The full text of the advance notice of proposed rule making (Notice No. 73–16; Docket No. 12881) is printed in the June 5 Federal Register. All comments received through August 6 will be considered by FAA in formulating a notice of proposed rule making. Comments should be submitted in duplicate to the FAA Office of General Counsel Attention: Rules Docket, AGC–24, 800 Independence Avenue, S.W., Washington, D.C. 20591.

JAMES A. FARLEY

Mr. WILLIAMS. Mr. President, on May 30, a dear friend of mine and of many of the Members of this body celebrated his 85th birthday. Jim Farley played a pivotal role in helping to fashion American society as we know it today. I have been fortunate to have spent time with Jim on numerous occasions and I have always marvelled at his insights into American life.

A man who knows Jim Farley better than I, Ernest Cuneo, recently devoted his newspaper column to some reminiscences about Jim's life and philosophy. This column does not tell it all, but it tells a lot and I think that it is well worth my colleagues' attention.

I ask unanimous consent that this article which appeared in the Paterson, N.J., News be included in the RECORD.

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

JIM FARLEY AT 85: NEVER TAKE A DIME, NEVER TELL A LIE

(By Ernest Cuneo)

WASHINGTON.—The Hon. James A. Farley will honor his 85th birthday tomorrow in a manner he has been observing since he was 15 years old, namely, by a full day's work.

Probably no American success legend since Abe Lincoln's childhood in a log cabin is so imbedded in American folklore as the rise of Stony Point's town clerk, James A., to the pinnacle of American political power.

This is of particular interest now, since both the goal and the method of obtaining them are now under intellectual attack.

The American goal of those times was covered by the blanket word success. The accepted method was the work ethic; poor boys didn't drop out, they dug in. They went to work and tried to improve their lot by improving themselves.

James A. Farley went to two schools; the one was to learn bookkeeping and the other was the Democratic clubhouse.

While no classification has ever been attempted on Big Jim's bookkeeping abilities, it is generally conceded that he emerges as the past master of the structure, dynamics and nuances of American politics. His plain advice now to young men and women entering politics is his life story; never take a dime and never tell a lie.

Though he is now the patriarch of the Democratic party, the leaders and presidents of both parties have not only been proud to call him friend, but have called upon him for advice and comfort in the cloudiest days of their administrations.

For he is the Honorable James A. Farley, with emphasis on the Honorable. A sportsman in his heart since he played first base for the Grassy Point and Haverstraw nines, the ex-postmaster general is as regular an attendant at his box on the Yankee first base line as the Yankee coach.

A sportsman against his Republican opponents, from Pres. Herbert Hoover through Ike, they would be the first to declare that Big Jim was incapable of even a mean trick. On the other hand, the Democrat never lived who flailed a heavier political shilelagh on behalf of his party and it is doubtful if one will ever live who enjoys it more.

Somewhat alarmingly for the rest of us

ordinary mortals, James A. attributes his disgracefully good health to the fact that he neither smokes nor drinks. To add to the general discomfiture, he doesn't swear, either. Yet, from coast to coast, no man is more widely recognized in the masculine world as a regular fellow.

Whether it's Toots Shors in New York or the Garden in Paris, the liveliest table in the joint is invariably that of the Hon. James A. His secret, if secret it is, is that of Teddy Roosevelt's; everybody likes him because he likes just about everybody.

Moreover, he is an optimist's optimist and an enthusiast. Interestingly enough, he offers the American history he has witnessed as evidence for his unbounded faith in the future of America. He reminds his listener that when he was born, three months after the Great Blizzard of 1888, the country had yet to see its first automobile factories and neither the airplane nor the wireless had been invented. Tuberculosis, pneumonia, malaria, diptheria and smallpox were dreaded diseases, scourges in fact.

On a broader base, the supermarket today offers 50 different varieties of superior food for every one offered by the old general stores; and the plumbing—here Big Jim just waved an expressive hand.

But, Farley predicted, these are just forerunners of greater things to come—a fuller life not only for Americans, but for the world. He says he sees the growth all over the world, and outside of the State Department couriers, few men visit more countries in a year than the aforesaid James A.

"Then you think J. P. Morgan was correct when he said, 'Never sell America short?' " he was asked. "He was always a man given to understatement," Big Jim grinned.

The Hon. James A. has a problem. It is his mail, which peaks at Christmas and on his birthday. "It takes three weeks after Christmas and another three weeks after my birthday," said Big Jim. "Six weeks in all. That's a lot of time. So I'm thinking of not sending out Christmas cards. What do you think?"

"At a time when every institution in the country is being challenged," he was told, "this is no time to abandon national institutions. The card with the signature in green ink over the fireplace is as much a part of Christmas for thousands of American families as the Christmas tree itself."

Some years ago, Defense Secretary Robert McNamara in a speech said, "The worst of the homely old school-book maxims is that they are true." Never were truer words spoken.

As the twig is bent so shall it grow and Jim was brought up on the straight and narrow. Also, as ye sow, so shall ye reap, at 85, Gen. James A. Farley, continues to reap the respect and affection of a whole nation to which he has rendered several lifetimes of devotion and service.

On his birthday, there'll be thousands of cards from all over the globe telling him so. He's a great American.

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 804 (b), title 8, Public Law 91–452, the Speaker had appointed Mr. HANLEY, Mr. CARNEY of Ohio, Mr. HOGAN, and Mr. HUNT as members of the Commission on the Review of the National Policy Toward Gambling, on the part of the House.

The message announced that the House had agreed to the 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. 5293) to authorize additional appropriations to carry out the Peace Corps Act, and for other purposes.

RECESS TO 1:45 P.M.

Mr. GRIFFIN. Mr. President, with the authorization of the distinguished majority leader and the assistant majority leader, I move that the Senate stand in recess until 1:45 p.m. today.

The motion was agreed to; and at 12:40 p.m. the Senate took a recess until 1:45 p.m.; whereupon, the Senate reassembled when called to order by the Presiding Officer (Mr. TUNNEY).

CONCLUSION OF MORNING BUSINESS

The PRESIDING OFFICER (Mr. TUNNEY). Is there further morning business? If not, morning business is concluded.

ORDER FOR CONSIDERATION OF AND VOTE ON NOMINATION OF ROBERT H. MORRIS TOMORROW

Mr. ROBERT C. BYRD. Mr. President, I am authorized by the distinguished majority leader to propose the following unanimous-consent request, as in executive session. This matter has been cleared with the distinguished senior Senator from Washington (Mr. MAGNUSON), the distinguished junior Senator from Utah (Mr. Moss), the distinguished junior Senator from South Carolina (Mr. HOLLINGS), and the distinguished senior Senator from Michigan (Mr. HART). It has been discussed with the other side of the aisle, and I believe that it meets with approval there.

Mr. President, I ask unanimous consent that at 2:30 p.m. tomorrow the Senate go into executive session to consider the nomination of Mr. Robert H. Morris to be a member of the Federal Power Commission for the remainder of the term expiring June 22, 1973, and that a vote in relation to the nomination occur at no later than the hour of 4:30 p.m. tomorrow.

The PRESIDING OFFICER. Is there objection to the request of the Senator from West Virginia?

Mr. GRIFFIN. Mr. President, reserving the right to object, and I shall not object, Is it the intention of the majority whip to divide the time?

Mr. ROBERT C. BYRD. Mr. President, I thank the distinguished assistant Republican leader.

I ask unanimous consent that the time for debate with respect to the nomination be equally divided between and controlled by the distinguished senior Senator from Washington (Mr. MAGNUSON) and the distinguished senior Senator from New Hampshire (Mr. COTTON).

The PRESIDING OFFICER. Is there objection to the request of the Senator from West Virginia? The Chair hears none, and it is so ordered.

DEPARTMENT OF STATE APPROPRIATIONS AUTHORIZATION ACT OF 1973

The PRESIDING OFFICER. Under the previous order, the Senate will now resume the consideration of the unfinished business, S. 1248, which the clerk will report.

The legislative clerk read as follows:

A bill (S. 1248) to authorize appropriations for the Department of State, and for other purposes.

The PRESIDING OFFICER. The pending business is Proxmire amendment No. 218.

Mr. ROBERT C. BYRD. 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. PROXMIRE. 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. PROXMIRE. Mr. President, I understand the pending business before the Senate is my amendment No. 218 on the wage-price control program.

The PRESIDING OFFICER. The Senator is correct.

Mr. PROXMIRE, Mr. President, I ask unanimous consent that the names of the Senator from Delaware (Mr. BIDEN) and the Senator from New Jersey (Mr. WILLIAMS) be added as cosponsors of the amendment.

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

Mr. PROXMIRE. I also ask unanimous consent that Kenneth McLean of the staff of the Committee on Banking, Housing and Urban Affairs and James Verdiere of Senator MONDALE'S staff be permitted to remain in the Chamber during the rollcall vote on this amendment.

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

Mr. PROXMIRE. Mr. President, before I get into the amendment, let me say that I understand there are Members of the Senate who feel that we should give the President every opportunity to act on this matter, and I agree. I am perfectly frank to say that one of the principal reasons I am pushing the amendment is so that the President will act. I think it would be better if the President acted as he acted on August 15, 1971, in what, at least at the beginning, was a very successful proposal. We did freeze prices, as the Chair will recall, for 90 days. At that time, we had a very low rate of inflation, and our action gave him an opportunity to put into effect a wage-price control program.

Mr. President, if the President will act on his own, I will support him wholeheartedly. I have no pride of authorship, and would be happy to have the President take it away from us.

This amendment provides several things, including a 90-day freeze on wages, prices, rents, interest rates, dividends, and profits. The freeze would apply as of June 4, the date of the Sen-

ate Democratic caucus resolution calling for a 90-day freeze. Under my amendment, all prices would be frozen with the exception of prices for raw agricultural products at the wholesale level. In addition, the ceiling on interest rates would apply only to mortgage loans, consumer loans, family farm loans, and small business loans.

Most important—and this is generally neglected in discussing this proposal—following the expiration of the freeze, the President is directed to put into place a tougher and more equitable program for halting inflation. In so doing, he is required to consult with Congress, with business, with labor and with consumer groups. In addition, he is required to submit the details of his proposal to Congress 30 days before it goes into effect. This will give the Congress an opportunity to review the President's programs and to mandate such additional changes as may be necessary.

Needless to say, if the President should, in the next few days, annouce a program which many of us felt was inadequate, then we can proceed with this proposal even though the President might act very shortly after the Senate had adopted this amendment.

At this critical juncture in our economic history, the American people are demanding decisive action to halt inflation. The administration's phase III program has been a colossal and costly failure. Only George Shultz still believes in phase III and I sometimes wonder whether even he does not see the need for stronger action.

Let us briefly examine the record on inflation over the past several years. During the first 8 months of 1971, the consumer price index was rising at an annual rate of 3.8 percent, which was somewhat of an improvement over 1969 and 1970, but still unsatisfactory. This is when the President acted. During the next 3 months of phase I, the rate of inflation in consumer prices fell to 1.9 percent, a dramatic improvement and by far the best 3 months in recent history. In the first 7 months of phase II, consumer prices rose at an annual rate of 3.1 percent, not satisfactory, but still better than the 3.8 percent experienced immediately prior to phase II. However, during the last 7 months of phase II, consumer prices rose at an annual rate of 4.2 percent. In other words, inflation grew to be a worse problem under phase II than it was before price controls were adopted.

Given the trend in price increases during the last half of phase II, the administration should have recognized that stronger measures were required to deal with the persistent inflation which has plagued our economy over the last 4 years. Instead, the administration did just the opposite. It virtually abandoned the phase II controls when they should have been strengthened.

Since phase III was put into effect, consumer prices have been rising at an annual rate of 9.2 percent.

Let me repeat that. Since phase III was put into effect on January 13, consumer prices have been rising at the rate of more than 9.2 percent.

Wholesale industrial prices have risen at an annual rate of 14.8 percent. That is not food prices but wholesale industrial prices. Wholesale food prices skyrocketed at an annual rate of 37.3 percent.

The sharp rise in wholesale industrial prices is particularly disturbing since these prices generally precede increases in the consumer price index.

I might point out that wholesale prices have, traditionally, throughout our long economic history, been more stable than consumer prices historically. To the extent that wholesale prices have gone up, consumer prices have gone up more, in addition they have also preceded—foreshadowed—an increase in consumer prices. That is not a happenstance or a coincidence, but it is for the obvious reason that if the wholesale price goes up, the businessman who sells at retail has very little choice except to reflect the increased cost in his price. Either that, or he will go out of business.

Moreover, the increase is spread throughout many industries and is not merely confined to a few short supply industries such as oil and lumber.

Corporate profits also rose sharply following the abandonment of price controls. Corporate profits in the first quarter were more than 25 percent higher than the comparable figure a year ago. How long can we expect labor unions to settle for the 5.5 percent wage guideline when corporate profits are soaring up 5 times faster than wages?

The investment community accurately foresaw the weakness of the phase III program and, as a result, the stock market took a nosedive. It is no mere accident that stock prices reached an all-time peak on January 10, 1973, 1 day before the phase III program was announced. It is sometimes difficult to decipher the messages given by professional economists. However, the judgment of the market is unmistakable. The investment community has given a resounding vote of no confidence in the administration's phase III program.

The dollar also came under heavy attack because of doubts about the effectiveness of the phase III program. After phase III, we were forced into another devaluation of the dollar and we may even be heading for a third devaluation. Any parliamentary government would surely have fallen by now, had it committed similar economic blunders.

Despite the clear evidence that the phase III program has been a dismal failure, the administration still has not acted to reverse its error. The administration seems paralyzed—unable to act decisively. Under these circumstances, only the Congress can take the action which is so badly needed to halt inflation.

Given the failure of phase III to do the job, I believe a comprehensive, across the board freeze of the type contemplated in my amendment would be fair to everyone, because it covers everything. Of course, in providing for the freezing of retail food prices, it would have an indirect but at least an effective control on farm prices, too, the only kind of control which, on the basis of testimony before the committee, is likely to be capable of effective administration.

Here is why I think this amendment is exactly the right medicine for our troubled economy.

First, a wage-price freeze will give the administration some breathing room to work out a more effective program for controlling inflation.

Many Senators have talked about how they do not want to go quite so far as the phase I program, that phase II would be wiser. That makes sense, of course, that is true. We need something like that now. We do not want to put the economy in a straitjacket indefinitely. Phase I gives us the opportunity for some elbow room to make the decisions and to make the decisions in an atmosphere in which prices are not going out of sight while we are discussing them in anticipation that we will act.

A new control program cannot be developed overnight. Moreover, even the very suspicion that the administration might be working on a stronger program might send prices skyrocketing even higher. Therefore, we need a freeze while a better program is being developed.

Second, we need a freeze to purge the economy of some of the inflationary momentum which it has picked up since phase III was adopted. Once businessmen and labor leaders begin to anticipate an increase in the rate of inflation, their actions become a self-fulfilling prophecy. In a very short period of time, the inflationary psychology can spread throughout the whole economy.

The best example, of course, is what has happened in phase II. Edwin Dale, the very able economic reporter for the New York Times, wrote an article on Sunday in which he said that many of the economists that he talked to do not understand why we should have had such a sharp and sustained inflation. He goes through all the points that have been responsible for the inflation, the untimely move to phase III, the devaluation, the fiscal and monetary stimulation of the economy. All of these things, he admits, contributed to it, but he says that we should not have had an inflation of this dimension.

I think that Mr. Dale does not give sufficient emphasis to the psychological factors feeding on these elements. They have been the principal cause, and what the freeze does is to bite directly into that psychological anticipation of higher prices. It prevents the self-fulfilling prophecy from working out.

The phase I freeze was relatively effective in halting this psychology, at least for a period of time. Unfortunately, the phase II controls were too weak to have any lasting effect on prices.

Third, an immediate wage-price freeze can stop foreign speculation against the dollar and achieve a measure of monetary stability. Even the vaguest rumor that the administration is considering some changes in the control program has strengthened the dollar on foreign exchange markets. Decisive action by the Congress can rescue the dollar before we are faced with the need for a third devaluation.

Fourth, a wage-price freeze will take

some of the pressure off fiscal and monetary policy with respect to fighting inflation.

As we know, we now have the highest level discount rate since 1921, the highest in more than 50 years. What that means is that interest rates across the board will be going up. Almost every edition of the newspapers in the past few days have carried articles about increasing mortgage interest rates. That means that tens of thousands of Americans are being priced out of buying their own homes. It means that people of modest incomes who have looked forward for many years to buying their own homes cannot do it.

One of the advantages of the freeze is that monetary policy, tight money, now the exclusive means of fighting inflation, will have some help, and it will no longer be necessary to have a policy to force up interest rates, which is the only method the Government is now using to hold down prices.

Monetary policy has a particularly disastrous effect on housing, on State and local government borrowing, on small business and on agriculture. If Congress does not act decisively to stop inflation, the Board will be forced to tighten up on the money supply and thus create another credit crunch. In addition, the freeze could obviate the need for another tax increase to slow the economy.

Many people argue that we should have a tax increase now, but I think anybody who has talked to Members of the House or Senate, anybody who has talked to people out in the country, knows that the likelihood that we are going to use the tax increase to stop inflation this year or in the next couple of months is absolutely zero. There is no chance at all. Conceivably, we could have a tax increase later, but I think that is unlikely, and it is overwhelmingly opposed by the people of this country.

Fifth, even if the freeze is not successful in bringing about a stronger long-term control program, the American people will at least have some relief from inflation during the freeze period. Prices have been going up much faster than wages, and the standard of living of the American worker has been on the decline. A freeze will halt this deterioration, at least for 3 months, and permit workers and others to hold their own. The experience with the phase I freeze indicates that it was relatively successful in holding down price increases.

There are some who say the President needs time and flexibility and that he should not be directed to impose a freeze by Congress. The argument for Presidential supremacy may have some validity in the foreign policy area, where the President has access to information which Congress does not have, and where he obviously has to act as one man and to act with great speed for the country.

But the same cannot be said for the economy; we have as much knowledge as the President. In fact, I think that, in the aggregate, we have more.

Members of Congress actually get out and meet the people. They go back home and talk with their constituents. They observe at firsthand the real condition of our economy. By way of contrast, the President—any President—is a prisoner in the Oval Office. He rarely gets out to meet the people. His information is carefully filtered by his staff. Moreover, his mind has obviously been preoccupied on other matters.

For all of these reasons, I think Congress is in a much better position to make the basic economic decision as to whether a freeze is needed. I know there are some Members who agree privately that a freeze is the right answer, but who, because of loyalty to the administration, are prepared to vote against my amendment. I say to them that the American people are sick and tired of inflation and want it stopped now. They want action, not excuses. The Senate has an opportunity to take decisive action. Those who vote against a freeze may console themselves with the belief that the administration will act on its own.

Mr. President, I hope it does, and I hope it acts soon. There are indications that it may. But it seems to me that this amendment is the best, most effective way to persuade the administration to act—for the Senate to act and to act on the basis of a decisive, broad decision across party lines.

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

Mr. PROXMIRE. I yield.

Mr. MONDALE. I think the point the Senator from Wisconsin makes about the difficulty of getting this administration to act in a way which will dampen these incredible inflationary forces is well taken.

I think we have now had 5 years of pretty sad history of inattentiveness by this administration to this Nation's real economic problems. It began with the disastrous policies of 1969 and 1970; that led us into a recession and inflation, with rising unemployment and rising prices, both at the same time.

Then, finally, as the President neared his own reelection compaign, along came August 1971 and finally we got a system of controls. I think those controls operated unfairly in many respects against the poor and against working Americans, but at least there was some evidence that inflation was beginning to abate, that jobs and unemployment were beginning to build again; and then, suddenly, we had phase III.

To my knowledge, it is very hard to find any economist in the country—I am sure we can always find some—but it is practically universally condemned as a colossal mistake.

The ending of phase II was taken by American business to mean that the lid was off, that prices could be raised; and they were raised. As the Senator has pointed out, we are now in probably the worst inflationary cycle in the peacetime history of the country. Just a few days ago, the wholesale price index reflected a 24-percent annual rate of increase. The latest Consumer Price Index rate of increase is 9 percent. We find that same pattern month after month. The administration is putting out rhetoric in which it, in effect, is saying that things are getting better, but it is not working to improve them. Once again, we see the cycle we saw back in 1969—tight credit, rising interest rates, the highest official prime rate——

Mr. PROXMIRE. Discount rate.

Mr. MONDALE. Discount rate, in 50 years.

The same pattern is being followed. Unless we stop the rising unemployment quickly, we will see economic stagnation and inflation all at the same time. That is why I believe Congress has no choice, but to try to do something to act in the midst of this incredible economic mess.

Mr. PROXMIRE. I think that everything the Senator from Minnesota has said, I can support with enthusiasm. What we must appreciate is that if we do not supply some control system to supplement the present economic policy of relying exclusive on tight money, inflation will be sure to follow. A stringent monetary policy will push the economy down into a serious recession and will increase unemployment. During the period when unemployment is increasing, there will still be a lag in prices. So there must be an alternative approach, another approach, an approach which is not based on pushing us into a depression in order to cure inflation; an approach to provide for a price freeze, during which a control program can be worked out and then put into effect.

The program could be submitted by the President to Congress for discussion, and to labor, management, and other people in the economy, so that we can understand it, have confidence in it, and make suggestions as to how to strengthen it, before it goes into effect.

Mr. MONDALE. I thank the Senator. I should like to discuss at the appropriate time the problem of the poorest families, the problem of workers, because while we have seen a dramatic pattern of rising executive salaries—last year they rose an average of 13.5 percent—while we have seen a drastic increase in corporate profits, the average family has less purchasing power than it had 6 months ago.

Mr. PROXMIRE. Yes; we have had hearings before the *Joint* Economic Committee on executive compensation. The Senator is correct. The best statistics we can get on Executive salaries—presidents and chief executive officers—is that the average increase has been 13½ percent, or about 3 times the guidelines for wage earners.

As the Senator has pointed out, there are a number of instances where the increase has been a 100-percent increase or more.

When Cost of Living Council Director John Dunlop appeared before our committee, he agreed that the present system did not work; that it must be changed.

The Senator from Minnesota has made an excellent point concerning profits. They always do go up in a period of recovery; but they have been going up far more than usual in the last 6 months, and the rise has been consistent across the board.

Mr. MONDALE. As the Senator knows, in 1972, and he just used this figure, executive compensation rose by 13.5 percent. If one picks up the papers, he hears

that the president of this corporation or the president of that corporation got a $50,000, $60,000, or $100,000 salary increase. Not only is that unjust, it seems to me, at a time when we are supposed to be controlling inflation, but the average worker is trying to get a $200 or $300 increase in a year, and he is told that he cannot have it. He cannot keep up with inflation, but right alongside of that he sees the Government condoning these fantastic salary increases.

Mr. PROXMIRE. The Senator is correct. Mr. Gerstenberg, chief executive officer of GM, got an increase of $400,000 in his salary last year. Dr. Dunlop conceded that was legal and in accordance with regulations. What kind of regulations are these to permit that kind of increase?

Mr. MONDALE. Just the other day the administration mounted all of its forces to resist a one-dime-an-hour increase in the minimum wage needed to help working Americans trying to make enough at the end of the year to keep their families together and to get up to the minimum poverty line, based on the statistics of BLS, yet they remain silent when these fantastic increases occur in corporate salaries. In the first quarter corporate profits rose by 26 percent over the comparable period last year, which raised them to the highest levels in American history.

While all this has been going on, real spendable income for workers, real wages, are lower now than they were 6 months ago.

Mr. PROXMIRE. If the Senator will yield for a moment, I wish to point out one example of this abuse. The steel profit increase this year is 80 percent. This is a bellwether industry that affects many other industries. And they are on the verge of asking for a substantial price increase. This is the kind of thing that must be controlled, and this freeze, the pending amendment, would authorize, would provide that control.

Mr. MONDALE. At the proper time I would like to discuss the Senator's understanding and intent in terms of the application of his amendment to any increases that might be ordered in minimum wages, and any application it might have to the Proxmire amendment which exempted wages of $3.50 an hour or less from controls, because I believe that at the lowest level they must be protected against a freeze. I believe that is the intention of the Senator.

Mr. PROXMIRE. I agree with that, and I agree wholeheartedly. We passed it and the House adopted it. We enacted into law, the President signed the law that those with poverty incomes, that is, less than $3.50 an hour, should be exempt from control. I do have the intention here that that exemption carry over. To be frank about it, these people are overwhelmingly not organized, and they have been in a position where their wages are peculiarly subject to the discipline of management determination. It is very unlikely their wages would be increased very much. But it would not be my purpose or the purpose of the Senator from Minnesota, or the Senate to see that we froze wages of people at the poverty level so they could not negotiate for improvement as long as their wages were that low.

Mr. MONDALE. The Senator's amendment does not place a ceiling on increases in minimum wages nor does it affect the applicability of the $3.50 an hour amendment which was adopted on the Economic Stabilization Act.

Mr. PROXMIRE. The Senator is correct.

Mr. MONDALE. So that would be exempt from the operation of this act.

Mr. PROXMIRE. The Senator is correct.

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

Mr. PROXMIRE. I yield.

Mr. AIKEN. My question is: Do the major labor organizations support this amendment?

Mr. PROXMIRE. No. I am frank to say that the labor organizations not only do not support this amendment, but they vehemently oppose it. I just talked to the principal legislative representative of one organization and not only do they not support it, but they are very angry about it.

Mr. AIKEN. I thought the Senator said he was offering an amendment for one reason to bring the income of the laboring man up to where it should be.

Mr. PROXMIRE. We cannot do that in the freeze.

Mr. AIKEN. That answers my question.

Mr. PROXMIRE. The point of the freeze is the labor objection. They do not want wages frozen for even 90 days. My argument is that if you are going to have good faith, across the board action, you have to freeze wages, although I think labor makes a very strong case. They are right. As I and the Senator from Minnesota (Mr. MONDALE) pointed out, real wages, that is, wages corrected for inflation, have declined in the last 6 months while profits have gone up.

Mr. AIKEN. I thank the Senator for giving me the information, because I have not heard from the labor organizations myself.

Mr. PROXMIRE. Their position is negative.

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

Mr. PROXMIRE. I yield.

Mr. BIDEN. Mr. President, I rise to join with the Senator from Wisconsin in asking the Members of this body to support the legislation that he has proposed. As a member of the Senate Banking, Housing, and Urban Affairs Committee which held 2 weeks of hearings in January and February on wage and price controls, I consistently voted in support of those amendments which would have tightened phase III in the direction of the more effective phase II. The amendments would have had the effect of taking the administration's stick out of the closet.

Last April the Senator from Wisconsin offered an amendment similar to the one he proposes today. I supported it then as I do now. At that time, the amendment was ruled out of order by the Chair. I think we would be better off today, however, if the amendment had passed in April and was already in effect.

A 90-day ceiling is a strong measure, but one which is needed to reduce the severe inflation plaguing our Nation. The wholesale price index has soared at an annual rate of over 23 percent during the past 3 months. That is a jump of nearly 6 percent over the preceding 3 months and 13 percent higher than a year ago. Last month alone, wholesale prices increased at a 2.1-percent rate—only slightly less than the 2.3-percent rate in March which was the largest monthly increase since 1951.

While we are all aware of the particularly high food prices prompted by many natural as well as economic factors, the most alarming statistic is the reported rise in industrial prices—a 1.1-percent increase during May.

But we do not have to be economists armed with statistics to know what is happening, we experience it daily in the grocery and department stores across the country.

Our purchasing power is rapidly eroding, in fact, it is being washed away. In order to stem the tide, we should take immediate action to restrain the price spiral.

In this respect, phase III has not worked. It has failed to direct our economy fairly and effectively. Prices and profits have skyrocketed while wages have been held down. Labor has shown admirable restraint, but we cannot expect unending sacrifices from one sector if the others are left unrestrained.

In the absence of effective price and wage controls, fiscal and monetary policies have been left to control the inflation.

By and large, the Congress and the Executive have cooperated to limit expenditures. Similarly, the Federal Reserve Board has increased the bank discount rate to 6½ percent, the highest since 1921, in an effort to restrict the money supply. The impact of these efforts falls unevenly on the American public, however, because they have most severely hit the low- and moderate-income families which need Federal assistance and are also the least able to gain the credit they need to make important purchases for their homes and children.

In an address before the International Monetary Conference last week, Dr. Arthur Burns, Chairman of the Federal Reserve Board, assessed the current policies and said that he would like to see stronger measures to control inflation than have been taken. He added that monetary policy has carried too much of a burden. I concur with his evaluation.

In summary, Mr. President, our Nation needs an effective program now to control inflation and develop long-term economic stability.

The 90-day ceiling proposed by this amendment would give the American people—labor and industry alike—immediate relief from the inflationary spiral and give the President and the Congress time to put an anti-inflationary program into effect which will give more lasting economic stability and security.

The question is, in my opinion, Are we going to wait and listen to hear if the administration's stick is rattling in

the closet or will we fulfill our responsibility and exercise our authority to bring the present inflationary nightmare to an end?

I agree wholeheartedly with the statements made by the Senators from Wisconsin and Minnesota, and I am pleased to join in support of the amendment. I hope the remainder of the Senators will see fit to do likewise.

Mr. TUNNEY. Mr. President, will the Senator yield for a question?

Mr. PROXMIRE. I am happy to yield to the Senator from California for a question.

Mr. TUNNEY. One of the things that has deeply troubled me is the skyrocketing public utility rates, and one of the elements that relates to it is the fact that many public utilities are substantially increasing their advertising and then coming before the Public Utilities Commission in California, and I am sure elsewhere, and asking for a significant increase in rates, which increase, in part, is to make up for the additional cost in advertising. I happen personally to believe that this is an outrage. I do not know how one can justify, at a time when we have such a significant inflation, a rate increase based on an increase in advertising.

I would like to know how the Senator's amendment would affect that practice, which is going on in my State, and perhaps in other States as well.

Mr. PROXMIRE. May I say to the Senator from California that we do provide for a price freeze, including a freeze on prices charged by utilities. We go further than that by providing that the President shall, by order, require reductions in the ceiling with respect to particular prices, rents, or interest rates wherever the President determines that such reductions are necessary to rescind price, rent, or rate increases that are in violation of the phase III guidelines.

I think in some of these cases utility prices may very well have been in violation. I, too, have been outraged by the price increases by the utilities. As I understand it, the administration has delegated substantial authority to local public service commissions. Of course, all utilities are under some kind of regulation, but the ultimate authority lies in the administration in this bill, and they would have the right to prohibit a cost pass-through of advertising costs by utilities.

Frankly, I think the time to deal with this problem would be after it goes into effect and has been in effect for 60 days and the President sends to us his proposed long-range program. After he makes this proposal to Congress, we have a right to consider it. During the freeze period the utilities could not increase their prices. They could after the freeze period had ended, but then we would be apprised of what the President intended to do, and if at that time we considered the proposed controls to be inadequate, we would be in a position to take action.

Mr. TUNNEY. I have been thinking in terms of offering an amendment to the Economic Stabilization Act which would prevent the regulatory commissions from granting an increase on the ground that there may have been advertising increases and passing the increase in the cost of advertising on to the consumers, but as I understand what the Senator is saying, he feels similarly offended, as do I, by this escalation in cost, and he feels the appropriate time to address this matter would be after the freeze has terminated and subsequent to the time that the President would have made a proposal to the country for a permanent stabilization program.

Mr. PROXMIRE. Yes. That would be during the last 30 days. The freeze would still be in effect when he made his proposal. I would agree enthusiastically with the Senator from California.

Mr. TUNNEY. I thank the Senator for his answer to that question. I will at that time approach this matter with perhaps an amendment to the Economic Stabilization Act, or perhaps amending what the President offers to the Congress if it requires congressional approval. I thank the Senator from Wisconsin.

Mr. PROXMIRE. I thank the Senator from California.

Mr. HASKELL. Mr. President, will the Senator yield for a question?

Mr. PROXMIRE. I yield.

Mr. HASKELL. One thing that occurs to me, I may say to the Senator, is that although we have the highest corporate profits this year, before that the next highest corporate profits were in the first quarter of 1972, at a time when wage and price stabilization was in effect.

For that reason, I wonder if the Senator would consider an amendment to his amendment which would ask the President, in addition to giving thought to, and giving Congress a program for stabilization of, wages, salaries, and prices, also to propose a program for preventing what might be called excess or windfall profits.

These would not be profits generated by an increase in productivity, nor would they be profits derived from a new process, but they would be strictly windfall profits that might occur because of a shortage of a product, increased sales, increased volume of sales, without any countervailing increase in true productivity.

For that reason, I ask the Senator his attitude toward an amendment which would seek from the Executive, as part of the long-range program, a proposal dealing not only with a stabilization of wages, salaries, and prices, but also a stabilization and prevention of windfall profits.

Mr. PROXMIRE. I think that is very useful. May I say a similar provision is in the law now. I think it would be useful to reinforce it. The law provides that in developing standards which shall be generally fair and equitable, the President shall prevent, and then it gives a series of gross inequities, hardships, and so forth, and then appear the words "and windfall profits."

So the Senator is proposing something we have acted on, that is in the law, but which certainly should be reinforced in view of our experience in the last year. The Senator says profits were high last year, and this year profits are up about 25 percent. The Senator from Minnesota (Mr. MONDALE) contrasted that with the fact that wages went up only 5 percent. So profits were up five times as fast. Something of the kind proposed by Senator HASKELL would be a useful reminder and would reinforce the law.

Mr. HASKELL. I am glad the Senator agrees, because this is asking for an overall program.

Mr. PROXMIRE. Yes. It is not forcing a specific kind of proposal by the President, but indicates that this is something he should consider and have in mind when he sends us his proposal, so we have a report on that as well as other matters.

Mr. HASKELL. Under the circumstances, I was thinking of offering an amendment to the Senator's amendment, on page 3, line 14, following the word "salaries", the amendment being ", and prevent excess or windfall corporate profits,".

This would merely ask the Executive as part of the overall program to address itself to this particular program.

Mr. PROXMIRE. The Senator is correct. That would reinforce this right in the law and state that he shall prevent windfall profits. The Senator would have similar language on page 3, line 14 of my amendment so as to prevent windfall profits.

Mr. HASKELL. The Senator is correct.

Mr. PROXMIRE. Mr. President, does the Senator want to put that language in writing?

Mr. HASKELL. Mr. President, I have that language in writing.

Mr. PROXMIRE. Mr. President, we have that language in writing. The yeas and nays have been ordered on my amendment and it would therefore require unanimous consent.

Mr. President, I ask unanimous consent that on line 14, page 3 of my amendment, after the word "salaries" there be added "and prevent excess or windfall corporate profits."

The PRESIDING OFFICER. Is there objection to the request of the Senator to modify his amendment?

Mr. TOWER. Mr. President, I object.

The PRESIDING OFFICER. Objection is heard.

Mr. AIKEN. Mr. President, if the Senator will yield, as the Senator knows, the maple sirup season is very important to my State. Most of it is sold in the month of May and the price normally increases then. I was wondering about the 90-day period. And maple sirup is only one item.

Mr. PROXMIRE. Mr. President, this amendment has been criticized by labor. One of the reasons is that raw agricultural products are exempt. They are covered by the freeze at the retail level. And when the wholesaler buys from the farmers, they are not controlled.

I think the Senator would agree with me. All of the testimony from all outside witnesses is that we cannot have an effective control program at the farm level. It would be counterproductive. And after the freeze period, prices go much higher than they would otherwise.

Mr. AIKEN. Would this result in holding products from the market?

Mr. PROXMIRE. It would not be effective during the 90-day period. My amendment does not touch maple sirup,

milk, or the price of other raw agricultural products at the farm level.

Mr. AIKEN. The Senator realizes that a large percentage of this product is sold at retail. Customers come to the farm and buy it in pint and quart containers. Anyway, I realize that the Senator cannot have answers for all of these questions at one time.

Mr. PROXMIRE. There is a hardship exemption provision in the amendment to provide greater flexibility. This may or may not be that kind of a situation. However, there would be discretion. On page 3, line 6, we state, "The President may, by written order stating in full the considerations for his actions, make such exceptions and variations to the orders required under this section as may be necessary to prevent gross inequities and hardships."

I would think that in a season situation, a crop of this kind might very well meet the exemption covered by gross inequities and hardships.

Mr. AIKEN. Mr. President, I understand that price controls do not work perfectly and probably never will. However, I understand the Senator's intention is to check inflation and keep prices from going out of sight. A year ago we were asking for an increase in the price of these commodities and claiming a hardship for producers because they did not increase. Now they have increased. It is pretty hard to satisfy all the people all of the time.

Mr. PROXMIRE. I thank the Senator.

Mr. AIKEN. I think that the Senator from Wisconsin has good intentions. However, that does not mean that I will support the amendment.

Mr. PROXMIRE. Mr. President, I appreciate the sentiment, but not the statement about not supporting the amendment.

Mr. HASKELL. Mr. President, was there objection to the modification of the amendment?

Mr. PROXMIRE. The Senator from Texas objected.

Mr. HASKELL. Mr. President, on page 3, line 12, the Senator from Wisconsin has the words "with a firm, fair, and equitable long-run control program."

Mr. President, in view of the fact that the modification of the amendment would address itself to windfall profits, would it be the Senator's intention to come forward with a firm, fair, and equitable long-run control program, and if so would not windfall profits be one of those things to be considered by the Executive?

Mr. PROXMIRE. That would be my intention, absolutely. The Senator has made a helpful and excellent point. As the Senator has pointed out, this is in the law. If the President is going to make any kind of useful proposal, it would have to include windfall profits under the controls.

Mr. HASKELL. Mr. President, under those circumstances, I withdraw my suggested modification to the amendment.

The PRESIDING OFFICER. The modification is withdrawn.

Mr. GRAVEL. Mr. President, would the Senator yield for a question?

Mr. PROXMIRE. I yield.

Mr. GRAVEL. Mr. President, the FHA has raised the rent of people anywhere from 4 to 30 percent. That, in my mind, is quite unconscionable.

I am very sympathetic with and will support the amendment of the Senator from Wisconsin. I praise him for his effort.

I would like to ask him a question to see if this would cover this specific area. The Senator has terminology concerning "business enterprise or other person." And I would like to know if this "business enterprise or other person," both of which terms are used in the amendment, would also include the Federal Government in the freeze.

I find it odd that we will not permit the private sector to engage in any of these rent increases which aggravate inflation and yet do permit the Federal Government to engage in rent increases and aggravate inflation to the tune of 30 percent.

If it is in a small, remote area, or anywhere else, a person suffers from inflation. Would the terminology cover the Federal Government?

Mr. PROXMIRE. Yes, indeed. The Senator is referring to page 2, line 1, where the term "other person" is used. It is certainly my understanding that would include the Federal Government. The thrust of this is to stop the burden of inflation. And certainly many, many people have been adversely affected by units of government, including the Federal Government. The example of the Senator from Alaska is very helpful.

Mr. GRAVEL. Mr. President, I thank the Senator from Wisconsin. I will support the amendment.

Mr. AIKEN. Mr. President, I send to the desk an amendment and ask that it be stated.

The PRESIDING OFFICER. The amendment is not in order.

Mr. PROXMIRE. Mr. President, I have no objection to laying aside briefly and I mean briefly my amendment and having the amendment of the Senator from Vermont called up.

Mr. AIKEN. Mr. President, I understood the Senator from Wisconsin to say that he withdrew his amendment.

Mr. PROXMIRE. No. The suggested modification of my amendment was withdrawn by the Senator from Colorado. I do not intend to withdraw mine. However, I would be happy to lay aside temporarily my amendment to allow the Senator from Vermont to proceed.

Mr. AIKEN. Mr. President, with that understanding, we will proceed with the consideration of an amendment offered on behalf of the Senator from Alabama (Mr. SPARKMAN) and myself.

The PRESIDING OFFICER (Mr. HELMS). The clerk will report the amendment.

The assistant legislative clerk read as follows:

On page 11, strike out lines 11 through 18.

On page 11, line 21, strike out "Sec. 16" and insert in lieu thereof "Sec. 15".

On page 12, line 23, strike out "Sec. 17" and insert in lieu thereof "Sec. 16".

On page 13, line 2, strike out "Sec. 18" and insert in lieu thereof "Sec. 17".

Mr. AIKEN. Mr. President, in brief, this amendment would strike from the bill section 15, which would terminate U.S. contributions to SEATO as of July 1, 1974.

The reason for such action is this: SEATO was organized in 1954. It had eight members. One of those members, Pakistan, has withdrawn. France promises to withdraw now, I believe, or at least not pay her dues.

Whenever one of the others withdraws, the additional cost of maintaining the treaty falls on the United States, and the remaining members. Three other members have shown very lukewarm interest in SEATO, leaving only the Philippines, Thailand, and the United States showing a real interest in the original purpose of the SEATO treaty.

We are committed to pay dues as long as we are a member of the SEATO treaty organization. We can withdraw on a year's notice. Dues amount to $466,000, this year, or approximately that amount, and we can give notice, if we want to withdraw from this obligation, and then make whatever arrangements we may see fit to make with the other two countries which are interested in it.

It seems to me, Mr. President, that we have a commitment here which must be met if we are to maintain the respect of other members not only of SEATO, but of other organizations in which we have membership and with which we have commitments to pay a part of the cost. I do not believe that we should go back on a commitment, even though I realize there are many members of this body who wish we were not now members of SEATO, and would be glad to take us out of that organization.

Let us do it in an orderly fashion. Let us give the year's notice which is required for our withdrawal, and then let Congress decide what we want to do about it. That, in substance, is the reason for offering the amendment. I am not ardently supporting the SEATO treaty itself, but I am ardently supporting the obligation of the United States, once it make a commitment, to carry out that commitment. In this case, the amount involved is less than $500,000.

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

Mr. AIKEN. I yield to the Senator from Alabama.

Mr. SPARKMAN. Mr. President, I want to endorse just exactly what the Senator from Vermont has said. As a matter of fact, this is a treaty, and we have given no notice of withdrawing. We can withdraw within a year's time.

As a matter of fact, I have felt that as soon as things are brought to somewhat normal conditions in Southeast Asia, we ought to give notice of withdrawal from SEATO. I remember when the SEATO Treaty was promulgated and when we joined it. It was Secretary of State John Foster Dulles who, together with others, dreamed up the idea of the Southeast Asia Treaty Organization, following pretty much the line of NATO and agreements that we had worked out with other nations for security purposes.

I felt when SEATO was organized that it was not adequate, and I told Mr. Dulles at the time that I had this objection to the Southeast Asia Treaty Organization: that it purported to be a Southeast Asia

Organization, and yet there were very few Asian nations in it, and that I did not see how it could do the good that he anticipated as long as that was the case.

In spite of what I felt about it at that time, we did agree to the treaty, with the provision in it that we would support it until we gave notice of withdrawal. We have not given that notice. We can do it at any time, but it takes a year for it to become effective. Until that time, under the treaty, we are bound, as I see it, to help support the headquarters in Bangkok.

That is what we owe this sum of some $466,000 for. I think we are committed to it and we ought to abide by that commitment. If we want to pull out, let us give notice as soon as we can, and in a year's time we will be relieved from any further obligation under SEATO.

I believe it is just a matter of our fulfilling our commitment under the treaty. I think perhaps the beneficiary country that needs SEATO more than any other is Thailand. Thailand has been a friendly nation to us. The SEATO headquarters are in Thailand, at Bangkok. We are committed to make this payment, and I think we ought to meet it. The way to meet it would be to agree to the amendment.

Mr. AIKEN. I believe, Mr. President, that there is sufficient sentiment for abrogating this treaty, and I rather expect that if an appropriate resolution is introduced, it would get a prompt hearing before the Committee on Foreign Relations, and my opinion is that it would be reported to the Senate rather promptly.

I do not like the idea of including all these amendments which might stir up some controversy in the State Department authorization bill. I would like to have this bill go through as soon as we can, and without controversial provisions so that we can get the State Department legislation through before the first of July, and that very important agency of Government will not have to depend upon continuing resolutions to keep in business.

That is about all I have to say.

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

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

Mr. CHURCH. Mr. President, I have listened to the words of the distinguished senior Senator from Vermont (Mr. AIKEN) in connection with the amendment that he would strike from the pending bill. It seems to me that, although a strong case can be made for the action taken by the Foreign Relations Committee signaling an impending end to the obligation of the United States to contribute to the maintenance of a rather elaborate permanent headquarters for SEATO in Bangkok, a statement in support of which I have prepared, the need for delivering the statement has been largely removed by virtue of the thrust of the argument made by the Senator from Vermont.

I think it is generally conceded that SEATO is a moribund treaty. It has been observed only in the breach, apart from the role that has been played by the United States. Even now, the treaty, long since dead, is slowly being interred by the action of its members. Most recently, France has notified SEATO that it is no longer prepared to contribute any further to the maintenance of the headquarters in Bangkok.

The amendment that I originally sponsored, which was approved by the Foreign Relations Committee, was meant to give notice that the United States was not prepared indefinitely to pay for the headquarters in Bangkok, in light of the attitude and conduct of the other principal members of the SEATO Alliance.

Now the Senator from Vermont suggests that the best way for the Foreign Relations Committee to proceed is to undertake a thorough review of the treaty, itself, in view of changing circumstances, and determine whether it is any longer in the national interest of the United States to maintain our membership in that treaty.

I agree with the Senator from Vermont.

This is the preferable way to proceed. If we could have an understanding that the Senate Foreign Relations Committee will move forward with a thorough inquiry into this whole question of the continuing efficacy of the treaty, I would be satisfied to let this particular amendment be struck from the pending bill. Then we can examine the whole context of the treaty, and American membership in it, and make the proper determination with respect to the future.

I want the Senator from Vermont to know that if we can proceed along that course, I would be satisfied to let his proposal to strike this amendment from the bill be approved by a voice vote.

I commend the distinguished Senator from Vermont on the approach that he takes to this important question.

Mr. AIKEN. I thank the Senator from Idaho for his cooperative statement and I can assure him that I, for one, and I am sure the rest of the committee, will also cooperate and hold hearings on the SEATO treaty just as soon as we have an appropriate resolution.

When we have reached the point where five of the original eight members of SEATO are fed up with it or have only lukewarm interest in it, leaving only Thailand and the Philippines showing any real interest, then I think it is time to consider how we should cooperate with those two countries. That, of course, may necessitate new understandings or new arrangements which would come back to the Senate for approval, if appropriate.

Mr. CHURCH. We certainly should reexamine the treaty to determine whether it any longer serves the national interest of the United States. I would like to join the Senator from Vermont in cosponsoring the resolution which would form the basis for appropriate hearings by the Foreign Relations Committee.

Mr. AIKEN. Very well. I would be glad to do everything I can to get the hearing, and I am sure the rest of the committee will agree to it. The distinguished Senator from Alabama (Mr. SPARKMAN) is now in the Chamber, and I know that he will agree.

Mr. SPARKMAN. Mr. President, I surely join the proposal made. As a matter of fact, before the Senator came in, I made a few remarks on this subject and suggested that the time is probably near when we should withdraw. I have felt that SEATO could perform some useful service while things are still unsettled there, but the orderly way to do this thing is to give notice of our withdrawal, take our year, and after that we have no commitment.

Mr. CHURCH. I agree with the Senator from Alabama. If the committee does decide on a hearing and an appropriate resolution is introduced, I would like to cosponsor it.

Mr. President, I ask unanimous consent that remarks I had prepared in support of the amendment now to be stricken from the bill, may be printed in the RECORD at this point; also four articles pertinent to this debate concerning SEATO which recently appeared in the press.

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

CUT U.S. FUNDS FOR SEATO HEADQUARTERS: FLOOR STATEMENT BY SENATOR FRANK CHURCH

Mr. President, as we try to move away from war, we must not overlook a standing commitment which could lead us once again to become mired down in Indochina.

The Southeast Asia Collective Defense treaty binds the United States with six other nations—Thailand, the Philippines, Australia, the United Kingdom, New Zealand and France—to act, in accordance with constitutional processes, to stop Communist armed attack against two members of SEATO, Thailand and the Philippines. The same protection is available to the three protocol states, Laos, Cambodia and South Vietnam, if they request it. In the event of Communist insurgency or non-Communist armed attack, we are obligated to consult with the other signers.

We may believe that it is unlikely that the United States would be asked to join in countering a Communist armed attack or in coping with still more insurgencies. But the executive branch has made it very clear before that the U.S. interprets the treaty as a basis for unilateral action upon request. At the least, SEATO remains a latent commitment and a possible portent of continuing U.S. involvement in Southeast Asia.

The relevance of SEATO at this point is demonstrated in the attitude of others toward it. Of the non-regional members, only we really support it. The French have said they will stop paying their dues. The British choose to stick with SEATO, rather than shake things up. But the British have also stayed well clear of military involvement in the treaty area. The Australians and New Zealanders are staying with us for the moment, but with evident misgivings.

Of the regional members, Pakistan lost Bangladesh and is leaving SEATO. Thailand and the Philippines are supporting SEATO for reasons of self-interest. Two of the three nations afforded SEATO protection by protocol—Laos and Cambodia—have made it clear

that they have no interest in SEATO or its protection. And the third nation—South Vietnam—has received what we had to give and more.

I believe we should begin to move away from SEATO now. I have offered an amendment to S. 1248, the State Department authorization bill, that would cut off all funding to the Secretary General's office and the military Planning office of the Southeast Asia Collective Defense Treaty Organization on or after July 1, 1974.

If my amendment is enacted into law, I would expect that the other partners to the treaty, most of whom also have misgivings about SEATO, would also withdraw funding, and that the headquarters would be closed. However, the treaty would remain in force, and we and our other SEATO partners would remain obligated by the treaty. Our relationship to SEATO would be similar to our relationship to ANZUS, the mutual defense treaty binding Australia, New Zealand and the United States in common defense. In the case of ANZUS, there is no need for any organization at all. The ministers and military representatives of the nations involved get together when convenient. That is all that seems to be necessary.

For an interim time, I believe SEATO could be operated in that fashion. In the longer run, I hope the United States will move to get completely out of SEATO. The treaty is a prime example of misguided paternalism—a paternalism that is out of step with the changed world situation and with America's national interests.

The SEATO headquarters in Bangkok employs about 270 persons and spends in excess of a million and a half dollars every year. Expenditures range from the curious—as in the backing for an annual film festival in Bangkok—to the ominous, such as the Seminars on Village Defense, or the Expert Study Groups to explore means of coping with insurgency. There are other small expenditures for possibly useful programs, such as the medical laboratory, technical training, pilot economic programs, and well-drilling.

Most of the money goes merely to keep the headquarters organization going. Of the FY 1973 budget of $1,687,932, nearly a million was required simply for salaries and allowances.

As is too often the case, the U.S. is paying the largest share of the cost. We will contribute an estimated $288,317 this year and cover the $143,000 cost of American citizens loaned to SEATO to work for its Secretary General.

The United States is also sharing about $72,000 of the costs of the military planning office, plus another $29,000 in costs on the scene to support the U.S. military contingent at SEATO. The pay and allowances of 11 U.S. military officers at the SEATO office add another $242,000, according to the Pentagon.

Thus, the direct costs to the United States in FY 1973 of SEATO activities are approximately $775,000. There are also travel expenses, plus the cost of support by the Embassy in Bangkok, the Commander-in-Chief, Pacific, and the State and Defense Departments. There are also the expenses incurred by the United States for participation in the annual command post exercises on land or the annual maneuvers at sea.

Currently, the United States covers 25 percent of the costs of the SEATO operation. Because Pakistan is getting out, the United States' share will go to 26 percent. If France stops paying, we will be asked for still more. I believe much of our spending is wasted now. I do not want to waste more.

The recipients of SEATO largesse, Thailand and the Philippines, already receive substantial direct aid from the United States. The loss of money through SEATO would hardly be felt in either country.

Some say that an abrupt break of the tie with SEATO would cause great alarm in Southeast Asia and consternation elsewhere in the Pacific. I doubt that. The United States has moved to a much more realistic attitude toward China without throwing other Asian nations into panic. I suspect that a withdrawal of further contributions to SEATO, as distinct from the treaty, would be interpreted intelligently for just what it would be—a discarding of an headquarters organization that has outlived its time and usefulness.

The departure of the United States from its support of the SEATO headquarters structure would leave no vacuum in Asia. Other organizations such as the Asian Development Bank, the World Bank and UNESCO are active in Southeast Asia. The Association of Southeast Asian Nations—ASEAN—is flourishing and may be expanded to include South Vietnam, North Vietnam, Laos and Cambodia if the conflict ends in Indochina.

It seems to me that an organization such as ASEAN, which already included the Philippines, Malaysia, Indonesia, Singapore and Thailand, is the sort of venture the United States should favor. It is far better to help those who are working collectively on their own behalf than to hang onto an organization such as SEATO, which perpetuates the paternalism of the past.

Just how irrelevant SEATO has become was indicated by Thanat Khoman, the former Foreign Minister of Thailand, in an article in the Thursday, June 7, New York Times. Mr. Thanat argued, speaking of U.S. forces in Thailand:

"Their threatening presence and air operations call for reprisals and counter-attacks that endanger our well-being. In fact, by embroiling relations with our neighbors, Thailand's position is unfavorably affected without effective help from allies, since existing treaty obligations provide only for 'consultation' which may or may not lead to any concrete action."

Mr. Thanat went on to argue.

"In my opinion, now is the time for both the United States and Thailand to cast off the cold war shackles and look ahead into the new world of coexistence and peaceful cooperation. Indeed, our two countries have much worthier objectives to work for than just one using the other as a launching pad for dropping bombs or recruiting 'mercenaries' for fighting proxy wars."

Others in Thailand want us to at least reduce our forces in that country. There are indications now that there soon may be large student protests against our presence.

Mr. President, we should not cling tenaciously to static positions conceived 20 years ago in far different circumstances. We must find new approaches which better serve a greatly changed world situation. We must move away from outward policies devoid of reality.

[From the New York Times, June 10, 1973]

FRANCE TO STOP PAYING DUES TO SEATO IN JUNE 1974

BANGKOK, THAILAND, June 9.—France has given notice that she will stop paying dues to the Southeast Asia Treaty Organization after June 30, 1974, SEATO has announced.

Secretary General Sunthorn Hongladarom of Thailand said, however, that France did not indicate that she was withdrawing from the orgnization. The Paris Government pays about $1.7-million, to SEATO annually.

France stopped participating in SEATO's military activities and has limited her participation in civic activities since 1967.

Despite the development, Mr. Sunthorn said he was confident that the alliance, formed in 1954, would remain an effective instrument in promoting development, stability and security of the Southeast Asian region.

[From the New York Times, June 7, 1973]

INDOCHINA: THE MORAL DIFFICULTIES

(By Thanat Kohman)

BANGKOK, THAILAND.—While Europe basks in the sun of detente and, in the United States, people breathe more easily after the rapprochement with the People's Republic of China and improved Soviet relations—developments which led to the halt of hostilities in Vietnam—Thailand still remains bogged down, neck-deep, in the cold war quagmire because of a massive American military presence and unwarranted use of Thai territory for war operations in Indochina.

Why? Despite the cease-fire in Vietnam and the return of the American prisoners of war, the United States claims that its continued military presence in Thailand and air attacks launched from Thai territory are necessary to ensure strict observance of the cease-fire agreements. This explanation is likewise dutifully echoed by Thai official circles. The question is whether this contention is admissible on legal, moral and practical grounds.

Under the cease-fire agreements, it behooves the signatories, including the United States, to use the peace-keeping machinery, notably the International Commission for Control and Supervision. Or, violations may be referred to a reconvened peace conference.

By any legal standard, cease-fire violations cannot justify, still less exonerate, international law violations. These have been caused by aerial bombings originating from Thailand by American forces. This matter becomes even more serious for my country since it was not party either to the cease-fire agreements or the Paris conference. The fact that the United States armed forces have been admitted by the Thai authorities on a verbal basis, without written official agreements specifiying the purposes, duration and other conditions of their stay, does not entitle them to commit acts of war against third parties with which Thailand is not in conflict. By so doing, they implicate the host country in a de facto state of war without its consent or approval.

Legally, therefore, the United States authorities will probably have to face responsibility for multiple violations, first, against the agreements they have voluntarily signed and, second, for perpetrating acts of war from a neutral state without its approval.

Morally, it is difficult to find valid explanations. American prisoners of war have been safely repatriated. By signing the cease-fire and withdrawing its troops, the United States explicitly recognized the end of its military role in Vietnam and Indochina. This would conform to the policy of disengagement enunciated at Guam. Now the United States can hardly invoke the right of self-defense. No American nationals are in danger. How, then, can the United States justify its current actions, particularly in Cambodia? Nowhere does the American Constitution provide that the United States is duty-bound to ensure the survival or maintenance in power of generals and marshals in various parts of the world. Obviously, the moral basis is sadly lacking.

From the practical standpoint, long years of intensive employment of air power, exceeding even the tonnage of World War II, should clearly indicate that man-made weapons alone are insufficient to decide the outcome of a war in which human beings play a major part. Instead of continuing bombing, the United States could more usefully provide assistance to those willing to fight for their survival and independence. If people lack that will, no amount of bombs can save them. In Cambodia, despite sustained bomb-

ings, Communist forces are ever closer to their objectives.

As for Thailand, it stands to gain little, if anything, politically, economically or in security. Serving as a launching pad for air war casts a distinct opprobrium on the entire nation. Financially, the figure of $200 million cited without details as American annual military expenditures here is doubtful, to say the least. Anyhow, there are better ways to earn a living than depending on foreign soldiers' spending which brings a sequel of social ills, moral deteriortaion and economic disturbances.

From the security standpoint, since United States forces play no role in our insurgency problem, they do not enhance our security. On the contrary, their threatening presence and air operations call for reprisals and counterattacks that endanger our well-being. In fact, by embroiling relations with our neighbors, Thailand's position is unfavorably affected without effective help from allies, since existing treaty obligations provide only for "consultation" which may or may not lead to any concrete action. Concerning regional security, if any other country feels that its security is served by having foreign forces stationed on its territory, Thailand should promptly concede the honor.

In my opinion, now is the time for both the United States and Thailand to cast off the cold war shackles and look ahead into the new world of coexistence and peaceful cooperation. Indeed, our two countries have much worthier objectives to work for than just one using the other as launching pad for dropping bombs or recruiting "mercenaries" for fighting proxy wars. That is why the American Congress, thinking as many of us do in Thailand, adopted resolutions unmistakably expressing views and aspirations which are fortunately shared by a large number of the Thai people.

[From the Far Eastern Economic Review, May 28, 1973]

OUT OF THE SHELL

(By Norman Peagam)

BANGKOK.—A nationwide protest movement against the American military presence in Thailand is likely to begin in July when Thai students return from vacation. The possibility of demonstrations at U.S. bases is not ruled out.

Thirayudh Boonmee, General Secretary of the National Student Centre of Thailand (NSCT), emphasises that no plans can be made until the majority view is heard at a meeting of student representatives in July. But the expectation, he says, is that a protest movement against the bases will develop, as radical elements in the NSCT hope.

There are now about 45,000 U.S. troops stationed in Thailand, mostly at seven large airbases around the country. Thailand is the main centre of U.S. military operations in Southeast Asia, and in particular the home base for jets bombing Cambodia. Thailand has served as an American forward base area since at least 1964, and at one time, thousands of GIs on leave from Vietnam filled the streets and bars of Bangkok. But no anti-war movement ever developed here. When asked why they are only now voicing disapproval of the American presence, Thai students reply rather defensively that until the NSCT was formed, in November 1972, it was not possible to mobilise opinion and organise students across the country; now, they say, Thai student opinion has "climbed out of its shell."

Nevertheless, in talking with students, it soon becomes clear that most are far from radical at present; their style is "respectable," their ideas moderate. When asked why they object to U.S. bases in Thailand, some say it is because of the American troops' behaviour, especially their encouragement of prostitution, which has become something of a major industry in Thailand. Others say an independent country should not allow foreign troops on its soil. All seem to fear that "the line of fire" may spill over into Thailand unless the U.S. bases are removed. They stress that Thailand should live in peace, and develop in cooperation with its neighbours.

This is not a blanket anti-Americanism. The student leaders I spoke to believe that U.S. and ($650 million economic aid since 1950; perhaps $250 million current private investment) has helped Thailand develop. They want friendly relations with the U.S.; some even hope to study there. They say they do not support the Thai Patriotic Front, which since 1965 has organised small-scale armed resistance and propaganda activities in outlying provinces, and they show no enthusiasm for Asian communism.

In Boonmee's words, "We are a quite united country; we have had the same ideology for a long time; we have our King, who is the pillar of our country; we can go on quite well with our present system."

Since the NSCT was formed six months ago, there has been a remarkable surge of Thai student activity, directed against various targets, and not confined to Bangkok. An anti-Japanese goods campaign (the Thai market is flooded with Japanese imports of every variety, and Japanese investment in and control over the Thai economy is rapidly outpacing all competitors), attracted much publicity and, it is fair to say, reflected a growing concern among the Thais over Japan's dominating economic presence. However, it had no immediate tangible effect. Thammasat University student President Samphan Settaphorn even claims with some bitterness that Japanese imports increased after it ended.

Other student protests coordinated by the NSCT have been directed against the "Judiciary Decree" (which gives the Minister of Justice powers over the Supreme Court); the Miss Thailand beauty contest; the relegation of teacher training colleges to sub-university status; the proliferation of luxury goods; and the U.S. Government's attempts to obtain privileges for American businessmen contrary to the recently-passed Alien Business Law. In addition, there have been exam walk-outs and demonstrations against school conditions, such as instructors' behaviour and too-strict college rules (Phra Chomklao Institute of Technology); the alleged corruption of the Rector (Khon Khaen University, where the students' demand for his resignation led to temporary closure of the campus); and dictatorial administration and the disturbance caused by U.S. jet overflights (Udorn Teacher Training College). Contrary to their apparent outward conformity and docility, Thai students are clearly becoming more independent and outspoken.

Not surprisingly, there have been rumours that the Thai authorities will move to disband the NSCT, currently centered at Chulalongkorn University in Bangkok but claiming to represent 100,000 students at seventeen higher educational institutions throughout Thailand. Such a move could come with the demonstrations against the US bases, since US military aid (around $600 million since 1964) is the life-blood of the armed forces, upon which the Thai Government is based, and it is given so freely and so plentifully in return for American use of Thai airbases, ports and communications facilities, and Thai cooperation in Laos and Cambodia.

However, the NSCT is only reflecting views held by many Thais, being expressed more openly since the Vietnam ceasefire agreement. One of the loudest critics of the American presence is none other than Dr. Thanat Khoman, the former foreign minister, who acquiesced in the US military build-up until his ouster from the Government in November 1971. He has "disclosed" that the first US troops in Thailand came in 1961 at Washington's request—not, as the Kennedy Administration maintained, at the Thai Government's request.

Meanwhile, an "Indochina War Exhibition" has been visiting Thai universities; a booklet on Americans in Thailand, "The White Devils," is being read; and preparations are underway for the largest student protest yet. But whether it is likely to have any effect on the US military presence in Thailand is doubtful. The Thai military junta knows that without the bases, and reciprocal US military aid, its own power and position would be fatally undermined.

[From the Christian Science Monitor, May 19, 1973]

U.S. WITHDRAWAL PLANS TAKEN IN STRIDE—THAI LEADERS READY TO DEAL WITH CHINA

(By Saville R. Davis)

BANGKOK, THAILAND.—Contrary to what was expected in American circles, it has not been difficult for Thailand to begin preparing for a separation, if not a divorce, from Washington and to start a flirtation with Peking.

"Separation from what?" asked a Thai official. "We have always been independent."

The Thai leaders are very sensitive about the public view of their relationship to the United States. They put up with a good deal of criticism on domestic matters, but they suppress publicity on the American bases and military units here. They do not tolerate suggestions that Thailand is an instrument of American military power or dependent on it.

From the start of the American presence in Southeast Asia, the Thais have gladly accepted the bounty of weapons and dollars that has flooded their country and insisted that they were doing the Americans a favor.

This image of independence, as carefully nurtured as any creation of Madison Avenue, has eased the transition from a peculiar type of limited involvement in an American war to the prospect of American withdrawal.

The small degree of Thai involvement, as it is seen here, was defined by Prime Minister Thanom Kittikachorn to President Nixon himself.

When the American President came to Bangkok after announcing the Nixon doctrine, he seemed nervous as if the Thai leaders might panic because of his announced intention to withdraw American forces from the area. Publicly, he sought to reassure them. At a ceremony on his arrival here he said firmly that the United States would honor its "commitment" to Thailand.

But when he spoke privately, later on, he did not talk in terms of a commitment. Four persons were present, Prime Minister Thanom and his foreign minister, Mr. Nixon and Dr. Henry A. Kissinger. As the story is told by impartial source, Mr. Nixon seemed to assume that the plan for an American exit when the fighting was over would be a blow to the Thais. He explained at length why it was necessary to remove the American forces.

"We are the ones who invited them to come here," replied the Thai Prime Minister. "But they are not here to defend Thailand. They are here to fight your war."

Having asserted this independence in the proud Thai tradition, it was not too difficult for the Thai rulers to face the end, in principle, of a lucrative and useful relationship that seemed likely in the long run to end anyway.

They applied to the new situation at the realism which is another carefully cultivated aspect of the Thai image and tradition.

In Bangkok there are two schools of thought inside the government about the new American policy.

One, unofficial, holds that President Nixon does not intend to give military support to Thailand after the shooting in Indo-China quiets down. He should be taken at his word.

The other, official, holds that Mr. Nixon does want to defend Thailand if necessary, since it is the bastion of the areas further south; but American public opinion would not let him do it.

So the two opinions, in Thai realism, add up to the same set of conclusions:

In the long run Thailand cannot depend on the United States for its military defense. It has to stand on its own with whatever regional help it can muster.

It cannot continue to take a hard line toward Communist China. That would be an obvious bluff without a firm American guarantee.

Therefore, it is concluded, Thailand has to veer around and take its chances in the new direction, dealing warily but honorably with Peking, not capitulating or letting its guard down, but avoiding offense and provocation.

The American pipeline will be milked as long as it lasts, and that could be a long while. But the military men who run Thailand are already looking north.

Mr. AIKEN. Mr. President, let me say, finally, that the staff of the Foreign Relations Committee is drafting a resolution concerning a hearing, and while it is not concerning a hearing, on the SEATO Treaty and while it is not quite ready to offer it at this time, it will be very shortly.

Mr. JAVITS. Mr. President, I ask unanimous consent that during debate on the Proxmire amendment relating to the 90-day freeze, Leslie Bander may have the privilege of the floor.

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

Mr. AIKEN. Mr. President, I have no further comments to make. I am ready to vote.

Mr. HUMPHREY. Mr. President, will the Senator from Idaho yield?

Mr. CHURCH. I yield.

Mr. HUMPHREY. I happened to be in the Chamber during this discussion between the Senator from Vermont and the Senator from Idaho and I think the resolution of this difficulty would be highly appropriate and helpful. I believe that, as has been stated here, the SEATO Treaty has come to the point now where its reevaluation by the Foreign Relations Committee is not only desirable but also essential.

Whether we need a resolution to do so, I think, is not really so important as the fact that we proceed with a full understanding that we are looking at its relevancy to the present situation in Southeast Asia and in light of our pending relationships with China and the Soviet Union.

I want to compliment and commend the Senator from Idaho for his reasonableness in working out this amendment. It will be very helpful.

Mr. CHURCH. I thank the Senator from Minnesota very much. Let me add that the reason I offered the amendment to the pending bill and, in my judgment, the reason that the committee supported it, was to bring into focus the need to reappraise the entire SEATO Treaty. Having accomplished that, I am happy to acquiesce in striking the amendment from the bill, with the understanding that the committee will proceed to hold hearings on the SEATO agreement.

Mr. MONDALE. Mr. President, I rise in support of the motion to strike section 15, which would prohibit payment of the U.S. assessment to SEATO. I support this motion not because of my support of SEATO, but because of my support for proper Senate procedures which require that such major changes in U.S. policy be subject to the established hearing process. I do not believe that the Senate should set a precedent of the United States being a member of an international organization but in default of its dues.

Mr. President, I call upon the chairman of the Foreign Relations Committee to begin a full-scale and comprehensive review of our commitment to SEATO to determine whether it accurately represents our national interest in Southeast Asia. It is clear that SEATO has become a weak and impotent organization and, through its 19-year history, has only served to justify the tragedy of Vietnam. When crisis has occurred, SEATO has failed. Recent events have given further indication of the precariousness of SEATO's existence. In 1972, Pakistan presented official notice that it was disassociating itself from the Manila Pact. Just 3 days ago, France gave notice that she will stop paying dues after June 30, 1974. The Philippines has called for a more pragmatic organization of the SEATO countries.

And the newly elected governments in Australia and New Zealand strongly criticized SEATO during their election campaigns and now appear to be reluctant members.

Indeed, in his famous 1967 article in Foreign Affairs, even Richard Nixon terms SEATO "a somewhat anachronistic relic."

Mr. President, as this Nation hopefully withdraws from military involvement in Southeast Asia under a general policy of handing security responsibility over to the nations directly involved, I believe that SEATO has indeed outlived its usefulness. But I think that if we withdraw from our treaty commitment, it should be after ample time has been given to the proper discussions and not through an arbitrary approach such as in section 15 S. 1248.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Vermont (Mr. AIKEN).

The amendment was agreed to.

Mr. SPARKMAN. Mr. President, I move to reconsider the vote by which the amendment was agreed to.

Mr. AIKEN. Mr. President, I move to lay that motion on the table.

CAMBODIA

Mr. TAFT. Mr. President, it is obvious that the issue raised with regard to U.S. air power use in Cambodia is about to come up again on this State Department authorization bill. In that discussion it may be of some help to consider a letter I have received from a Vietnam veteran. I ask that it be printed herewith.

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

WALTER REED ARMY INSTITUTE OF RESEARCH,
Washington, D.C., June 7, 1973.

Senator ROBERT TAFT, Jr.,
U.S. Senate,
Washington, D.C.

DEAR SENATOR: I am a resident of Ohio currently serving in the Army in Washington. I recently arrived here after an 8-month tour in South Viet Nam.

This letter is to express my support of your stand to limit the Senate's efforts to restrict U.S. involvement (specifically aerial bombing) in Cambodia.

I desire to see peace in Southeast Asia as much as anyone, and, just about like everyone else, I am not sure how best to achieve and preserve peace in that area. It seems to me that the entire future of peace in Indochina would be jeopardized if the Communists were allowed to topple the current Cambodian government. I thus believe the present American involvement in Cambodia is a logical and necessary extension of our policy in Indochina and of our commitments to South Viet Nam and other Asian countries.

The Constitution clearly gives war-making powers to the President. I strongly disagree with Senators and Congressmen trying to inject power into their lackluster foreign policy record by limiting the President at this late stage of the Indochina conflict.

I realize that your amendment to the bombing ban bill was unpopular and may have cost you votes among your constituency. It took courage to take the stand that you did. I applaud your efforts.

Sincerely yours,
JAY ABERCROMBIE, Ph. D., CPT, MSC,
Entomologist.

Mr. HUMPHREY. Mr. President——

The PRESIDING OFFICER. The question recurs on agreeing to the amendment of the Senator from Wisconsin (Mr. PROXMIRE).

Mr. HUMPHREY. Mr. President, I wonder whether the Senator from Wisconsin would yield to me for the purpose of proposing an amendment that is directly related to the substance of the Department of State Authorization Act of 1973. I believe the amendment will not take undue time, and I think we can dispose of it rather quickly.

Mr. PROXMIRE. May I say, Mr. President, that I am very anxious to accommodate the Senator from Minnesota. He has always accommodated me, and he has been very courteous. But I do want to proceed as rapidly as we can with my pending amendment. I would be willing to do this if we could have a time limitation, so that I would be protected and be sure that I can press this amendment, if possible, to a vote this afternoon.

Mr. HUMPHREY. I would urge the acting majority leader to seek that time limitation. I am prepared to adjust my efforts in this matter to a limitation of time that would permit, let us say, 15 minutes on each side.

Mr. JAVITS. Mr. President, may we know what the amendment is, before we agree to a time?

Mr. HUMPHREY. If the Senator from Wisconsin will yield for the purpose of information, my amendment No. 217 is headed "Mutual Restraint on Military Expenditures." Let me read it for the notification of the Senate. It would add a new section to the bill before the Senate:

on page 14, after line 8, add the following new section:

MUTUAL RESTRAINT ON MILITARY EXPENDITURES

SEC. 19. It is the sense of the Congress that the United States and the Union of Soviet Social Republics should, on an urgent basis and in their mutual interests, seek agreement on specific mutual reduction in their respective expenditures for military purposes so that both nations can devote a greater proportion of their available resources to the domestic needs of their respective peoples; and, the President of the United States is—

I modify my amendment here to read "requested" instead of "directed"——

to seek such agreements for the mutual reduction of armament and other military expenditures in the course of all discussions and negotiations in extending guaranties, credits, or other forms of direct or indirect assistance to the Soviet Union.

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

Mr. HUMPHREY. I yield.

Mr. TOWER. Would this be applicable to the ongoing talks with respect to mutual and balanced force reductions and the strategic arms limitation?

Mr. HUMPHREY. That is correct; and the discussions Mr. Brezhnev will be having with the President of the United States in the forthcoming talks.

Mr. TOWER. I am curious as to the reason for the amendment, considering that we are currently engaged in strategic arms limitation talks and the matter of mutual and balanced force reductions.

Mr. HUMPHREY. Because it seems to me that at a time when the Soviets will be asking the Export-Import Bank and will be asking the Commodity Credit Corporation for credits, I believe that the conditions may very well merit it. It appears to me that at least it is wise for us to pursue, over and beyond mutual force reductions, every possible means we can of mutual reductions—not unilateral—and the expenditure of armaments. I do not want to see us financing, through our credits for the domestic needs of the Soviet Union, the armament industry of that country.

Mr. TOWER. Would the Senator regard his amendment as being inconsistent with existing administration foreign policy or consistent with it?

Mr. HUMPHREY. Consistent.

Might I say that I believe from my discussions with the Assistant Secretary of State for Congressional Affairs, the amendment, as I modified it, striking the word "directed" and inserting in lieu thereof the word "requested," would have the support of the administration and would be looked upon with favor as a further expression of congressional attitude on arms control.

Mr. ROBERT C. BYRD. Mr. President, will the Senator yield?

Mr. PROXMIRE. I yield.

Mr. ROBERT C. BYRD. Mr. President, I have discussed the following request with the distinguished Republican leader and with the distinguished Senator from Texas (Mr. TOWER) and other Senators.

I ask unanimous consent that the amendment by the distinguished Senator from Wisconsin (Mr. PROXMIRE) be temporily laid aside; that the distinguished Senator from Minnesota (Mr. HUMPHREY) be recognized to call up an amendment on which there be a time limitation of 20 minutes, to be equally divided between and controlled by the distinguished mover of the amendment, Mr. HUMPHREY, and the distinguished Senator from Texas (Mr. TOWER) or his designee.

Mr. PROXMIRE. Is the Senator proposing a limitation of 20 minutes overall, 10 minutes to a side?

Mr. ROBERT C. BYRD. The Senator is correct.

Mr. PROXMIRE. Under those circumstances, I will be happy to yield, but I do want to get on with my amendment as quickly as possible.

Mr. ROBERT C. BYRD. I thank the Senator.

The PRESIDING OFFICER. Is there objection to the unanimous-consent request of the assistant majority leader? The Chair hears none, and it is so ordered.

Mr. HUMPHREY. Mr. President, I now formally request that my amendment No. 217 be made the pending business.

The PRESIDING OFFICER. The amendment, as modified, will be stated.

The amendment, as modified, was read, as follows:

On page 14, after line 8, add the following new section:

MUTUAL RESTRAINT ON MILITARY EXPENDITURES

SEC. 19. It is the sense of the Congress that the United States and the Union of Soviet Socialist Republics should, on an urgent basis and in their mutual interests, seek agreement on specific mutual reductions in their respective expenditures for military purposes so that both nations can devote a greater proportion of their available resources to the domestic needs of their respective people; and, the President of the United States is requested to seek such agreements for the mutual reduction of armament and other military expenditures in the course of all discussions and negotiations in extending guaranties, credits, or other forms of direct or indirect assistance to the Soviet Union.

Mr. HUMPHREY. Mr. President, I have previously read the text of the amendment. Let me give the rationale for my proposal.

I happen to believe that it is in the interests of world peace for the relationships between the United States and the Soviet Union to be on a most constructive and responsible basis. I fully recognize that there are great differences in our respective systems of government and economic structure. I am fully aware that there are long-term differences in the field of international policy. But, having recognized this, it appears that we have now entered a period in which we are attempting to diminish confrontation and to accentuate negotiation and cooperation.

In saying this, I do not blind myself to the realities of the power struggle that exists in the world, nor am I unaware of the fact that the Soviet Union may very well want to take advantage of any weakness they see in our policy or in our security system. But it is my judgment that we have now come to a point where the American public and the Government of the United States are prepared to at least open lines of commercial contact as well as broaden scientific, educational, and cultural relationships with the Soviet Union.

Mr. President, in less than 1 week Secretary Leonid Brezhnev will begin his first visit to the United States.

This visit is an historic one.

It comes at an important moment in an era of lessening tensions between the United States and the Soviet Union.

Secretary Brezhnev's visit is occurring 13 months after the President's visit to Moscow and the signing of the ABM Treaty and the Interim Agreement on Offensive Nuclear Weapons.

The atmosphere of growing detente produced by the official end of our involvement in Vietnam and the developing Soviet-American economic relationships should provide an excellent setting for a series of very constructive summit meetings next week.

I have offered an amendment concerning mutual restraint on military expenditures because it is critical that President Nixon use every opportunity at his disposal to achieve a mutual reduction in military and armament expenditures with the Soviet Union.

The amendment I am offering today directs the President to seek such agreements with the Soviet Union in the course of any and all negotiations related to expanded trade and commercial relations. The goal of such mutual agreements is the commitment of a greater proportion of government resources to the domestic needs of both the American and Soviet peoples.

Few would deny the interrelated nature of government spending for defense and domestic needs. Whether in a Communist or capitalist system, there is an ever present conflict between these two sectors of resource allocation. We see it in the continued work of the Congress and it is clearly visible in the development of 5-year plans in the Soviet Union.

The resources of any government are limited. Their division among competing interests is a political as well as an economic decision.

It is clear that the United States now has an unparalleled opportunity to urge the Soviet Union to embark upon a program of reduced defense spending which would also enable the United States to reduce proportionally its military budget.

This is not a pious hope. There are numerous indications that the Soviet Union is in the midst of reassessing its economic and political priorities.

First. Experts have stated that the priorities in the Ninth Five Year Plan adopted in April 1971 and which are designed to modernize the civilian economy, improve the quality of living, raise the efficiency of planning and management imply a shift in allocation of resources from military to civilian investment and consumption.

Second. The detailed and public elaboration of these planned targets in the Five Year Plan indicates the desire to attain this shift in priorities.

Third. There are strong indications that Secretary Brezhnev is able and willing to convince the more conservative

members of the party and government that a shift from military output to civilian investment should occur.

Fourth. There is repeated evidence that western technology is highly valued and desired as a necessary ingredient for completion of civilian oriented programs.

Fifth. Lastly, the very specific Soviet goals for increased production of energy in the west Siberian oil and gas complex provide evidence of a reordering of priorities.

I strongly believe that the United States can influence this shift of priorities which is now occurring in the Soviet Union. It can do so openly and our willingness to make this a mutual process can only speed developments along.

The forum for reaching mutual reductions in arms spending is not only the SALT talks now in progress. The upcoming Nixon-Brezhnev summit and any other high level negotiations are suitable places for such discussions.

It is clear that we have great leverage at our disposal in the form of various types of technology needed by the Soviet Union. It is, of course, true that we have also expressed a need for Soviet energy resources as seen in last week's announcement of the intention by private U.S. corporations and the Soviet Government to develop Siberian natural gas resources.

U.S. Government approval will be needed for this $10 billion gas deal and for many other similar ventures. It is at this point in the negotiating process that we must press our desire to seek specific mutual reductions in military expenditures.

We must do this not to encumber or confuse the process of negotiation, but to take advantage of a great opportunity.

We can look forward to Soviet commercial interest in five key areas where the United States has a clear lead in the development of technologies needed by the Soviet Union.

First. Large scale petroleum and gas extraction, transmission and distribution systems.

Second. Management control systems utilizing computers.

Third. Mass production machinery output—such as trucks and cars.

Fourth. U.S. agricultural commodities needed for the development of Soviet animal husbandry.

Fifth. Tourist systems including hotels, transport and packaged tours.

It will be in these areas that the bulk of Soviet-American trade and commercial relations will be occurring between now and the end of the decade. And it will be in these transfers of American technology that the Soviet Union will need Export-Import Bank financing, direct loans and loan guarantees and other forms of financial assistance.

I do not believe we should extend this vast financial and technological assistance to the Soviet Union without asking for something in return besides full payment under the terms of the contracts and agreements. We would be foolish to miss such opportunities.

This amendment will require that the President not lose sight of these opportunities. Implied in this amendment is the willingness of the Congress to work in a creative partnership with the President toward the mutual reduction of arms and defense spending. We are not asking him to walk down this difficult road alone. We are not asking him to limit the extension of credits or any other type of economic assistance to the Soviet Union. We are stating simply that with the economic benefits the Soviet Government will be receiving from us, we in turn should attempt to secure from our trading partners, with a reasonable degree of assurance, benefits which will enhance our mutual security.

Mr. President, Members of Congress, continually read that the expanding trade and commercial relations between the United States and the Soviet Union are the vehicle of detente—that expanded Soviet-American trade will result in a mutual economic interdependence that can only decrease tensions. I believe in these economic and political "linkages" which are so widely discussed.

However, true detente means more than an absence of tension or cold war rhetoric. It means more than a growing amount of economic interdependence. True detente means that both nations are willing to take the necessary steps to limit their capabilities to make war. This, of course, should be a mutual process reached through careful negotiations. And true Soviet-American detente will come when a greater share of the energies of our respective governments are turned away from military expenditures and are allocated for the domestic needs of the peoples of both nations. This is the goal of my amendment.

Mr. President, to put it precisely, when President Nixon confers with Mr. Brezhnev I want both of these gentlemen to agree that one way to make these credits for domestic use much more effective is to cut back on military expenditures, and not unilaterally; we are not going to do it alone—asking the President to emphasize the importance of mutual reductions, not only of troops in Europe, and not only the offensive weaponry, but in all military expenditures. In this way the Soviet Union will have much more capital to develop its country and we will have much more in the way of resources to care for the needs of our country.

This amendment gives discussions and negotiations a credibility and acceptance which the American people deserve, need, and want, and that is why I offer the amendment.

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

The PRESIDING OFFICER. The Senator from Texas is recognized.

Mr. TOWER. Mr. President, I think the Senator made a good point. I think I would want to emphasize in my support of his amendment that I believe it is already the desire of 100 Members of this body and certainly of virtually everybody in the United States, and it is regarded as in the national interest that we secure an end to the arms race. I think we all believe that. I think the problem is convincing the Soviets that it is in their interest to do so.

What the Senator said is correct. There are so many resources they are devoting to military purposes. They spend a higher percentage of their gross national product and national budget, much higher, than we on armaments. The fact of the matter is that the Soviet consumer is not one-half as well off as the American consumer.

It should occur to the Soviets and they should understand that the United States does not choose to initiate war as an instrument of national policy. It is not necessary for them to build a huge military establishment to defend themselves. We do not have a first strike mentality and we do not have a first strike capability. They could dismantle a great deal of that military establishment of theirs and still have enough to maintain their position over the captive nations of Eastern Europe, and get on with the business of becoming a full partner with the rest of the world.

The real influence of the Soviets could be better felt if they devoted their technology and resources to economic development. Of course, right now they have an influence based on fear. But it seems to me they would be better off for the long run, and their economy would flourish if they follow this urging, as I know the President will do. And it is in their national interest. We already know that. I wish we could get through to the Soviets and tell them.

Mr. FULBRIGHT. Will the Senator yield? Does the Senator control all the time?

Mr. HUMPHREY. There is not much time remaining. There was only 10 minutes to a side.

Mr. FULBRIGHT. I just wish to say a word or two. I am going to take this amendment to conference. I do not know of anyone who opposes the amendment. I will be glad to take it.

I must observe that this is a general statement. We all agree to it. But when something specific comes up, like saving a little money, just as in the SEATO agreement or the Azores amendment, then we all vote against it. This way we can vote for the sentiment. We can be good boys and say we want reductions. But every time we have a specific amendment to save money, we will vote the other way, I predict, on most of the amendments. We are all for the sentiment, but we are not for the specifics. But certainly I do not intend to object to this amendment.

Mr. HUMPHREY. Mr. President, when I had the privilege to be in the Soviet Union last December, I had a visit with Mr. Kosygin. I also had a visit with the Chairman of the Council of Ministers. I discussed with Mr. Kosygin the importance of proceeding on the basis of a reduction of military expenditures.

I said, in this instance, to Mr. Kosygin—

> It is going to be exceedingly difficult for the American people to understand why we should pour in all this money in a situation where our dollar is in difficulty, where our balance of payments plague us, where our trade problems are difficult, unless we have some feeling that the Soviet Union itself is cutting back on unnecessary and oppressive military expenditures.

Mr. Kosygin reminded me, with complete candor, that that sentiment applied

to the United States. With that I could not help agreeing.

I say to the chairman (Mr. FULBRIGHT) that we will be making, hopefully, some reductions in our military assistance as we go along, and some reductions in the budget; but I am for arms control on a mutual basis. I believe it is imperative that we simply bear down on every occasion.

I want us to keep after the Soviet Union on the subject of arms reduction. Let us stay with it, day after day, year after year, when they are asking us for credits.

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

Mr. HUMPHREY. Mr. President, I ask for the yeas and nays.

The yeas and nays were ordered.

Mr. TOWER. Mr. President, if there are no other speakers, I am prepared to yield back the remainder of my time.

The PRESIDING OFFICER. All time has been yielded back. The question is on agreeing to the amendment of the Senator from Minnesota (Mr. HUMPHREY). The clerk will call the roll.

The legislative clerk called the roll.

Mr. ROBERT C. BYRD. I announce that the Senator from Kentucky (Mr. HUDDLESTON) and the Senator from Montana (Mr. METCALF) are necessarily absent.

I also announce that the Senator from Mississippi (Mr. STENNIS) is absent because of illness.

Mr. GRIFFIN. I announce that the Senator from Oklahoma (Mr. BELLMON) and the Senator from Ohio (Mr. SAXBE) are necessarily absent.

The result was announced—yeas 95, nays 0, as follows:

[No. 192 Leg.]

YEAS—95

Abourezk	Ervin	McIntyre
Aiken	Fannin	Mondale
Allen	Fong	Montoya
Baker	Fulbright	Moss
Bartlett	Goldwater	Muskie
Bayh	Gravel	Nelson
Beall	Griffin	Nunn
Bennett	Gurney	Packwood
Bentsen	Hansen	Pastore
Bible	Hart	Pearson
Biden	Hartke	Pell
Brock	Haskell	Percy
Brooke	Hatfield	Proxmire
Buckley	Hathaway	Randolph
Burdick	Helms	Ribicoff
Byrd, Harry F., Jr.	Hollings	Roth
	Hruska	Schweiker
Byrd, Robert C.	Hughes	Scott, Pa.
Cannon	Humphrey	Scott, Va.
Case	Inouye	Sparkman
Chiles	Jackson	Stafford
Church	Javits	Stevens
Clark	Johnston	Stevenson
Cook	Kennedy	Symington
Cotton	Long	Taft
Cranston	Magnuson	Talmadge
Curtis	Mansfield	Thurmond
Dole	Mathias	Tower
Domenici	McClellan	Tunney
Dominick	McClure	Weicker
Eagleton	McGee	Williams
Eastland	McGovern	Young

NAYS—0

NOT VOTING—5

Bellmon	Metcalf	Stennis
Huddleston	Saxbe	

So Mr. HUMPHREY's amendment was agreed to.

FAILURE OF PHASE 3

Mr. MOSS. Mr. President, for several months now, one paramount economic fact has been painfully clear to everyone in the country outside of the White House: Phase 3 is a full-fledged, unmitigated disaster.

In the first quarter of this year, the Consumer Price Index rose at an annual rate of 8.8 percent, which is the sharpest rise since the Korean war inflation of the early fifties. When the American housewife goes to the supermarket these days she finds that food prices are more than 12 percent higher than they were a year ago. And despite repeated assurances from the White House, the end to the price spiral is still not in sight. Last month, wholesale prices rose at the astounding annual rate of 24 percent. Unless forceful action is taken soon, these increases in wholesale prices will be reflected in still higher consumer prices.

The beginning of this rampant inflation coincides with the President's announcement in January that he was abandoning the mandatory controls of phase 2 in favor of the voluntary phase 3 program. Unfortunately, the President chose to lift mandatory controls at the worst possible time. In early January, the tempo of demand was increasing and corporate profits were on the way up. The corporate profit rate for the last quarter of 1972 had been a recordbreaking $57.2 billion. In addition, more than $6 billion in tax refunds were due in the first 4 months of 1973, which would further stimulate the already rising level of demand. Quite clearly, the President's shift to phase 3 in January was one of the worst regulatory decisions since the government of George III imposed a duty on the tea entering Boston harbor.

Even if we grant that it is possible to judge wrongly in the first instance in the complex field of economics, we are still left with the question of why the President has grimly stuck by his phase 3 plan as prices have continued to climb into the stratosphere. Whatever illusory justification there may have been for phase 3 in January has long since completely evaporated as prices have skyrocketed throughout February, March, April, May, and June.

The President and his advisers have been denying the evidence of their senses. They have talked about the much heralded "stick in the closet," but from the way the situation has gone from bad to worse, we can only conclude that it is the President himself who has been in the closet for the past 5 months.

Mr. President, I strongly support the amendment proposed by the Senator from Wisconsin calling for a comprehensive, 90-day freeze. It is a stringent measure, but I am afraid that Presidential paralysis has now left Congress with no other choice.

But in addition to this measure, I would like to present another, more modest recommendation that is related to inflation and Presidential secrecy. As the Watergate scandal continues to mount, a number of proposals are being put forward that would force the President to abandon his seclusion and come out into the open. It is a shame that Mr. Nixon has not heeded these suggestions, for clearly the main vices of his administration have been secrecy, aloofness, and contempt for the best instincts of the American people.

But even though Mr. Nixon has chosen to ignore every good piece of advice that has been heretofor advanced, I still would like to offer a suggestion of my own. I believe that Presidential acceptance of this recommendation would help counter inflation and would bring Mr. Nixon back into touch with the problems of ordinary Americans.

Once a month, the President should go shopping. I realize that Mr. Nixon has many demands on his time, but perhaps Mr. Nixon's cook and valet could expedite these monthly excursions by preparing shopping lists. There are many other busy Americans, and yet many of them manage to go shopping several times a week.

The effect of these Presidential expeditions to the marketplace would surely be salubrious, for anyone who has been to the supermarket, the hardware store, or the gas station in the past 5 months is acutely aware of how prices have been going up. In fact, Mr. Nixon is apparently the only one in the Nation who is not aware of the severe problems caused by rampant inflation. I believe that if Mr. Nixon had emerged from his seclusion just occasionally in recent months to glimpse the problems confronted daily by the average American citizen, we surely would not be in the midst of our current inflationary crisis.

The PRESIDING OFFICER. The question occurs on the amendment of the Senator from Wisconsin.

Mr. MANSFIELD. 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. PROXMIRE. 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. PROXMIRE. Mr. President, the distinguished majority leader has asked me to set aside my amendment temporarily. However, before we discuss that, I would like to say that I am very anxious to get a vote on this amendment. Perhaps some Members of the Senate would like to prevent a vote on my amendment. However, I point out that on tomorrow, the time between the hours of 2:30 and 4:30 p.m. has been set aside by the Senate to debate the nomination of Mr. Robert H. Morris to be a member of the Federal Power Commission.

That means that if we set this amendment aside much longer, we will have great difficulty in coming to a vote today or tomorrow.

There is no issue on which the people are more anxious for action than the issue of inflation. I think the Senate is prepared to act, and I hope this action is not stalled by continuing to lay aside temporarily this amendment. While I am happy to accommodate the leadership to the fullest extent I can, I understand that there has been a tentative agreement that will allow probably 40 minutes' time, 20 minutes to the side. We will go that far, but no farther. After that, I think we should come to a vote, and today if possible.

Mr. SCOTT of Pennsylvania. Mr. President, I hope that the Senator

would arrive at a frame of mind that would allow our consideration of this measure on tomorrow, because we have the question of possible alternatives to the Senator's amendment, which we do not have tonight but might have at some time tomorrow.

It would be unfortunate if the other body were unable to consider the administrative viewpoints which would be denied to the Senate simply because of a time situation. I do not want to say too much here. However, I want to assure the Senator that I think more information will be available to the Senator tomorrow as to various possibilities having to do with the control of inflation than is available tonight.

Mr. PROXMIRE. Mr. President, would the distinguished minority leader consider an agreement that would permit us to vote on this amendment at a particular time tomorrow when we would have the material before us and could be assured that we could act? I would be accommodated under those circumstances. Otherwise, I fear that this amendment will be put off indefinitely and we will not be able to come to a conclusion on it.

Mr. SCOTT of Pennsylvania. I think we ought to try to arrive at a time agreement tomorrow, rather than today. I would then have all of the information I myself need. I have asked for it several times today. I cannot speak for any other Senators. However, by the time we have this matter up for consideration on tomorrow, I think that we can discuss a vote on the amendment. There is no desire to prevent our having a vote. However, there is a fear that the vote would have the elements of precipitancy, if I have the right word. And on tomorrow we would be discussing this, not in a vacuum, and not in a take-it-or-leave-it situation, but we would be in a better position in which to consider whether alternatives are available for the consideration of the Senate. I am speaking not alone for myself here, but for several Senators who feel that we should not get an agreement until tomorrow.

I assure the Senator that my best information—which is not always accurate—is that at some time on tomorrow there will be some additional assistance come to this side of the aisle. The 10th Cavalry is over the hill. A column of dust has been observed. I hope it will materialize in time for us to arrive at a rational understanding of this matter.

Mr. PROXMIRE. Mr. President, would the distinguished Senator from Pennsylvania, the minority leader, consider a time certain tomorrow for a vote on my amendment? We have been through this. Very similar amendments have been offered. Two or three times before, the Senate has discussed the matter. There have been exhaustive discussions before the Committee on Banking, Housing and Urban Affairs.

The issue is well understood. The alternatives are understood. So I hope we can come to a vote. Maybe we can discuss this issue—I understand the matter is to be laid aside now for 40 minutes; perhaps we can discuss it informally while the pending amendment is coming up, and arrive at a unanimous-consent agreement.

Mr. SCOTT of Pennsylvania. Mr. President, I want the Senator to know that I do not want to do anything which would prevent the Senator from arriving at a vote. I am aware of the fact that there was a meeting at the White House sometime recently with representatives of the AFL–CIO and others, and there are people in the trade union movement who are very much concerned about certain aspects of this amendment in its present form, which they regard as a rather raw form, and there is hope that we will be able to consider some alternatives which would be more satisfactory to labor and to business.

I assure the Senator that when I say that, I really know what I am talking about with regard to the viewpoint of many people very high in the trade union movement.

Mr. PROXMIRE. The Senator is absolutely correct; there is no question about it. I have discussed this with people in the labor movement as well. They do not want the amendment at all. They want an amendment that provides for a freeze on prices period. They do not think wages ought to be frozen. But I think we all recognize that is impossible. We cannot pass that kind of amendment; it would be economically ridiculous and grossly unfair, and the Senator from Pennsylvania understands that, although as shown by the earlier colloquy we had there is no question that the working people have been hurt and discriminated against very badly by the control program since the first of the year.

Mr. SCOTT of Pennsylvania. I thought I was being subtle, but the Senator's candor has overwhelmed that. That is exactly the meaning I meant to convey.

Mr. PROXMIRE. The Senator is absolutely correct.

Mr. SCOTT of Pennsylvania. They do not like it a bit.

Mr. PROXMIRE. There is no question about it. And we have been petitioned by labor very effectively.

Mr. SCOTT of Pennsylvania. We welcome that, I understand, from any source.

Mr. PROXMIRE. We do indeed. That is a part of the democratic process.

Mr. SCOTT of Pennsylvania. I hope the Senator will bear with us. We are seeking more information. If he will give our Tenth Cavalry time to advance until they are well within sight, we would appreciate it.

Mr. PROXMIRE. I do hope we can arrive at a time to vote. Perhaps after the Morris nomination is voted on tomorrow, or perhaps by 6 o'clock tomorrow, or some such time.

Mr. SCOTT of Pennsylvania. Let us go ahead and reason together during tomorrow, then.

Mr. PROXMIRE. Let us reason together during the coming 40 minutes, and maybe tomorrow.

Mr. SCOTT of Pennsylvania. During the coming 40 minutes I am offering an amendment with the Senator from Alabama (Mr. SPARKMAN). After that, let us see what we can do. I shall need to devote my entire time to the amendment for 40 minutes, because I want it prepared. Maybe that is not the way to do it.

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

Mr. SCOTT of Pennsylvania. I am glad to yield to the distinguished Senator from Texas.

Mr. TOWER. I would be glad to serve as the Senator's designee in reasoning together with my colleague from Wisconsin.

Mr. SCOTT of Pennsylvania. Mr. President, I am glad to designate the amiable and infinitely reasonable Senator from Texas to pursue with the amiable and infinitely reasonable Senator from Wisconsin that course by which they may arrive at some substitute result.

Mr. PASTORE. Here we go again.

Mr. PROXMIRE. Mr. President, I am sure the Senator from Texas will represent the AFL–CIO version of this matter as only he can. [Laughter.]

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

Mr. SCOTT of Pennsylvania. I am glad to yield to the Senator from Arizona.

Mr. GOLDWATER. I would just like to inform my leader that I will object to any time certain for a vote on this amendment.

Mr. SCOTT of Pennsylvania. I thank the distinguished Senator from Arizona. Perhaps the distinguished Senator from Wisconsin and the distinguished Senator from Texas can, in lieu thereof, go out and have a cup of coffee.

Mr. RANDOLPH. Mr. President, will the able Senator yield?

Mr. SCOTT of Pennsylvania. I am glad to yield to the distinguished Senator from West Virginia.

Mr. RANDOLPH. Mr. President, I know that we have enjoyed the delightful reference to the cavalry and the delightful cavalry charge.

Mr. PASTORE. And the dust.

Mr. RANDOLPH. And the dust, of course.

Mr. SCOTT of Pennsylvania. I will throw in the marines for good measure.

Mr. RANDOLPH. In the War Between the States, there was a general, I will not say in whose Army, who massed his troops to repel the enemy. He called his fellow officers about him, and said, "We cannot hold against the forces of the enemy; they are too strong, and I shall in 15 minutes ask the bugler to sound retreat." He added, "You all know I have a bad leg, so I will start now." Our colleague seems to be amassing a formidable force to destroy the amendment of the diligent Senator from Wisconsin. The Wisconsin Senator has not admitted that he has a bad amendment. I know his daily jogging keeps his body in fine fettle for the forthcoming argumentative fray. It is apparent, however, that as he has admitted there are heavy opposing reinforcements which may not permit him to hold his ground. I join him in the appeal that we start moving, either backward or forward that the result can be known in the immediate future. The Senator urges us to move. To this admonition I say amen.

Mr. SCOTT of Pennsylvania. The distinguished Senator from West Virginia is

quite correct. However, there was another story of the War Between the States where a young bugler was summoned by the battalion commander to move forward to rescue the flag of the regiment. He said, "Son, go and bring the colors back to the regiment."

But the regimental commander, as the Senator well knows, said, "No, bring the regiment up to the colors."

That is what I hope we can do tomorrow.

Mr. SPARKMAN. Mr. President, I send to the desk an amendment and ask for its immediate consideration.

The PRESIDING OFFICER (Mr. McCLURE). The Chair advises the Senator that it will require unanimous consent to set aside the amendment of the Senator from Wisconsin.

Mr. MANSFIELD. Mr. President, I make that request.

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

Mr. PROXMIRE. Mr. President, do I correctly understand that the amendment is set aside for 40 minutes?

The PRESIDING OFFICER. The Senator is correct.

The amendment will be stated.

The assistant legislative clerk read as follows:

On page 6, line 12, strike out all through line 19 and renumber the succeeding sections.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that there be a time limitation of 40 minutes on the pending amendment, the time to be equally divided between the distinguished Senators from Pennsylvania and Arkansas and the manager of the bill, or whomever he may designate.

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

Mr. SCOTT of Pennsylvania. Mr. President, on this amendment I demand the yeas and nays.

The yeas and nays were ordered.

Mr. MANSFIELD. Mr. President, I ask unaminous consent that there may be a quorum call without the time being charged against either side.

The PRESIDING OFFICER. Without objection, it is so ordered. The clerk will call the roll.

The second assistant legislative clerk proceeded to call the roll.

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

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

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

Mr. ROBERT C. BYRD. I yield.

Mr. CASE. Mr. President, I ask unanimous consent that my assistant, Mr. John Marks, be permitted the privilege of the floor during the consideration of this bill and during any votes with respect thereto.

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

Who yields time?

Mr. ROBERT C. BYRD. Mr. President, what amendment is now pending before the Senate?

The PRESIDING OFFICER. The amendment offered by the Senator from Alabama and the Senator from Pennsylvania (Mr. SCOTT).

Mr. ROBERT C. BYRD. I thank the Chair.

Mr. President, what is the time limitation agreement on that amendment?

The PRESIDING OFFICER. Twenty minutes to each side.

Mr. ROBERT C. BYRD. I ask unanimous consent that the time be allocated as follows: 30 minutes under the control of the distinguished Senator from New Jersey (Mr. CASE) and 10 minutes under the control of the distinguished Senator from Alabama (Mr. SPARKMAN) and the distinguished Senator from Pennsylvania (Mr. SCOTT).

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

Who yields time?

Mr. SPARKMAN. I yield myself 3 minutes.

Mr. President, this amendment is rather simple. It seeks to strike section 7 of the bill. That provision in the bill is to the effect that 30 days after the enactment of this act, no funds may be obligated or expended to carry out the agreement signed by the United States with Portugal relating to the use by the United States of military bases in the Azores until the agreement with respect to which the obligation or expenditure is to be made is submitted to the Senate as a treaty for its advice and consent.

Mr. President, if the time were up under the agreement that has been solemnly entered into, I would not object to requiring it to be a treaty. I would favor its being a treaty. But here is an agreement that has been made, solemnly entered into, and certainly we ought not break into it at this time and declare it void and require the formality of a treaty.

We have been using the Azores under this kind of agreement ever since 1951, but we have been using the Azores since the early days of World War II. We use it as a base. It certainly has served its purpose well. Under the agreement that has been in effect since 1951, which has been renewed from time to time, we have continued to have the use of it as a base. It is important as a part of our defense in that part of the world, and I do not believe that the requirement that is written into the bill should be allowed to stand.

I yield to the Senator from Pennsylvania such time as he may require.

Mr. SCOTT of Pennsylvania. Mr. President, I support the motion to strike the provision approved by the Foreign Relations Committee relating to the Azores agreement. Section 7 would cut off assistance to Portugal, including Eximbank credits, unless the extension of our Azores base rights is ratified by the Senate.

While the intent of this section may be to put pressure on the executive branch to consult more closely with the legislative branch in the foreign affairs field, the effect may be quite different. It is very likely that this would be taken as a gratuitous insult by Portugal. There is, therefore, a very real danger that by forcing a confrontation with the executive branch in this case, we could be faced with the loss of the military facilities in the Azores, a situation which I am sure my colleagues are not seeking. From the Azores, U.S. forces are carrying out vital maritime surveillance activities over a vast area of the mid-Atlantic. There has been ample testimony from the Navy to indicate that the Azores base is essential to its antisubmarine warfare operations.

The prohibition of assistance or expenditure of moneys for Portugal would also cause the loss of substantial business for U.S. firms. Portugal has agreed to buy $30 million worth of U.S. corn under the Public Law 480 program, $15 million of which has not yet been purchased. This corn is to be carried to Portugal in American-flag ships. The committee bill, as it now stands, would block this sale, to the detriment of American farmers, shipowners, seamen. The bill would also deny American exporters and contractors access to Export-Import Bank facilities for doing business in Portugal. Without any exaggeration, this could cause American firms to lose hundreds of millions of dollars of business to their European and Japanese competitors, who can count on export financing from their governments.

It seems clear to me, therefore, that it is not worth damaging U.S. commercial and strategic interests in order to make an issue with the executive branch over the form in which we continue a 20-year arrangement.

Mr. President, I yield back the remainder of my time to the distinguished Senator from Alabama.

The PRESIDING OFFICER. Who yields time?

Mr. CASE. I believe I have time in opposition, and I yield myself such time as I may require.

The PRESIDING OFFICER. The Senator has 30 minutes.

Mr. CASE. Mr. President, I do not expect that I shall take that time, at least in my own right. Some of my colleagues may want to add something.

This is not a new issue. Twice last year, the Senate approved this proposition. The sky did not fall; Portugal did not declare war on us; it did not even break off diplomatic relations. The Azores bases remained in operation, so far as I know.

I ask the Senator from Alabama, is that true?

Mr. SPARKMAN. I think that is true If I recall correctly, the provision was in the bill as it passed the Senate. The House, if I recall correctly, did not go along with it, but in the conference we agreed with the House.

Mr. CASE. Yes, that did happen. As a matter of fact——

Mr. SPARKMAN. I am wrong. That bill died.

Mr. CASE. That conference never came to a conclusion.

Mr. SPARKMAN. That is correct.

Mr. CASE. Many good things died with that bill, Mr. President, and this was one of them.

As the Senator from Alabama said, this is an important agreement. Who could agree more? It is terribly important. It seems only unimportant agreements are considered as treaties. The very fact that this is an important agree-

ment is the strongest and most compelling reason this should have been treated as a treaty.

The Senator from Pennsylvania makes much of the importance of the sale of grain. He is concerned about the plight of the American farmer losing sales of grain. I call to the attention of the Senator from Pennsylvania and my colleagues generally that I have offered to accept an amendment stating that nothing in my proposal shall interfere with the normal financing of these matters by the Export-Import Bank.

The specific issue before us concerns the December 1971 agreement with Portugal. But beyond this important pact is the question of what is a treaty. Does an agreement with a foreign country become a treaty only when the executive branch tells us this is the case? I think not.

Yet, at the end of 1971, the Executive told us that the important agreement with Portugal for military bases in the Azores was an Executive agreement and hence not subject to Senate approval. The Senate thought otherwise, however, and on March 3, 1972, it voted 50 to 6 in favor of my resolution (S. Res. 214) which stated the administration should submit the agreement to the Senate as a treaty. Despite this overwhelming vote, the administration chose only to "note" the sense of the Senate and still refused to submit the agreement.

I realized all too well that there was no way the Senate could compel the Executive to submit the agreement, but that, by the same token, the Senate did not have to provide the funds to pay for the agreement.

Therefore, last year I introduced legislation which would cut off all funds for the implementation of the Azores agreement until the administration submitted it to the Senate as a treaty.

And twice last year, the Senate approved my proposal—once by a 41 to 36 vote and once without opposition.

This legislation died in conference with the House last year, but it is now included in the bill before us as section 7. And passage of the amendment to strike section 7 now before the Senate would be a backward step for the Senate in its efforts to reassert its authority in the foreign policy area.

The power of the purse is our ultimate weapon, and one, albeit, which should be used sparingly. I introduced legislation for the Portuguese Azores fund cutoff with the greatest reluctance, but I did so because a fundamental constitutional question is involved.

Under the last six Presidents, the executive agreement has gradually but steadily replaced the treaty as the principal means of making agreements with foreign governments. Land-lease and destroyers-for-bases have led to Korean mercenaries for Vietnam, secret military bases in Ethiopia and Morocco, and even a secret war in Laos.

It was to avoid just such unilateral entanglements that the Founding Fathers wrote into the Constitution the requirement for Senate advice and consent to treaties. They felt that if a particular agreement could stand up to senatorial scrutiny, it was much more likely to involve the United States in a beneficial course of action. I am not saying that any of the agreements I have mentioned necessarily were not beneficial to our country. But I am saying that we have a Constitution; that ours is a system of laws; and that we should follow this Constitution in our foreign as well as domestic policies.

I would like to emphasize that I have in no way taken a position on the substance of the agreement with Portugal. It may well be a perfectly good arrangement which is in the national interest of the United States. That is for the Senate to decide when it is submitted as a treaty. It is not for the executive branch to decide on its own.

Opponents of section 7 have raised several arguments about the importance to the United States of military bases in the Azores. I do not dispute these arguments, but I believe them to be irrelevant to the central issue of whether or not the American constitutional process has been followed in the administration's use of executive agreements. I would remind my colleagues that the executive agreement is nowhere even mentioned in the Constitution, and I cannot conceive that the Founding Fathers would not have included arrangements for foreign military bases in their definition of a treaty.

It is also argued that to submit the Azores agreement to the Senate for advice and consent would give the agreement a formality which might imply some new type of American commitment to Portugal.

I would say to this that executive agreements have the same force in international law as treaties, and the Portuguese pact could be redrafted as a treaty which grants no greater and no less commitment than the present executive agreement. If this somehow were not considered to be enough, then a simple declarative sentence could be added which stated that nothing in the agreement should be interpreted to imply a new commitment.

Another argument being heard is that the 1971 agreement with Portugal simply implements the NATO Treaty of 1949. If that position is accepted, then the Senate will be agreeing to the notion that by having approved a general defense pact with 14 other countries 24 years ago, we somehow forfeited the right to pass a future agreements concerning military matters with any of these countries. To me, this is an unacceptable proposition.

As for the argument that the United States would lose grain exports through a lack of credit facilities, last year I accepted a qualifying amendment—and would be glad to do so this year—stating that nothing in my amendment should be construed to interfere with the normal functioning of the Export-Import Bank.

I might add, somewhat parenthetically, that the Portuguese Prime Minister last year referred publicly to the Azores agreement as a treaty, so the fine distinction between an Executive agreement and a treaty would seem clearer to our own Government than to the parties we are dealing with.

In conclusion, let me say that the Azores agreement concerns the stationing of American troops overseas, and that this is simply too important a matter to be left to an Executive agreement. We have seen how in recent years the presence of our soldiers in a foreign country can lead to a commitment toward the host country and ultimately to war. For both practical and constitutional reasons, the Senate should participate in making a decision of this sort.

And if the Senate does not start to take action now, then we shall only have ourselves to blame for our own impotence.

Mr. President, without beating a dead horse, I do not think there is much more I can say. I understand my chairman would like to put in a word at this time. I yield to him such time as he may desire.

The PRESIDING OFFICER. The Senator from Arkansas is recognized.

Mr. FULBRIGHT. I thank the Senator for yielding.

This is the fifth time the Committee on Foreign Relations has approved the principle involved here. The Senate has voted on the issue three times, twice in foreign aid bills and once as a resolution.

This amendment would have the effect of reversing two specific votes by the Senate one a vote of 50 to 6, and the other a vote of 41 to 36. In both cases the Senate went on record as saying this agreement was of such significance that it should be submitted as a treaty.

This provision does not say the agreement should not be carried out. It only says this agreement should be submitted as a treaty. This is consistent with what I thought was considered to be the role of the Senate in making foreign policy. The argument that we need this in order to give a market to our corn seems untimely in view of the present market situation for corn, soybeans, rice, and so on. Soybeans, as we know, have been hitting a high of $12 a bushel. Corn is well over parity prices and so is wheat.

If the Senate is a responsible body it should have the opportunity to have hearings to develop the justification for this agreement and to expose it to the usual examination of our committee procedure. Under proper constitutional processes it should be submitted as a treaty. But under the impact of the executive dominance of our Government, nearly all agreements with foreign countries are handled as executive agreements which denies any examination by Congress, particularly by the Senate.

The State Department says that in 1972 there were 282 executive agreements and 21 treaties. That shows how the usual procedure has been reversed.

Of those executive agreements, only one, the agreement with Russia, was submitted to the Senate for approval. Many of the treaties that were submitted were quite insignificant. Many important matters were handled through an executive agreement without the examination or approval of the Senate.

If the Senate wishes to decline to take responsibility for giving away our resources, it has that privilege. But I think it would be a great mistake to do it.

I wish to call to the attention of the

Senate a few aspects of the Azores agreement. Under Public Law 480, there are credits of $30 million, equally divided between the fiscal years 1972 and 1973 at 1½ percent interest. Think of it, Mr. President; interest of 1½ percent. I think the interest rate the Government is paying on Treasury bills is now at 7¾ percent. If that is not a substantial grant I do not know what is.

The Export-Import Bank financing is under what is called usual terms, which are considerably better than the commercial bank rate.

There is the loan of a U.S. hydrographic vessel to Portugal on a no-cost basis; a grant of $1 million for educational projects to be funded by the Department of Defense; a $5 million in drawing rights of nonmilitary Pentagon excess equipment, which figure may be exceeded if desired.

It is incredible to me that such resources should be given away on the decision of someone on the staff of the executive department, without any right of the Senate or Congress to examine and approve the proposal.

I would not prophesy that if the agreement were submitted as a treaty that it would be turned down. I would suspect that Portugal, which, as far as I know, has as good or better fiscal situation in its treasury as we do, would be expected to pay a little more interest, somewhat comparable to what we pay for money we borrow. A few things like that would probably result, if it had to be submitted for approval.

I think I can understand why the executive department does not want to have a partnership. But why a Member of the Senate wishes to say, "No, we do not want to know about these things, go ahead and continue to handle these matters through executive agreements," when every one of them costs a great deal of money, is beyond my comprehension.

We have argued about this a great many times. The Senate is already on record in favor of this procedure. To reverse this now would be a big disappointment when the people of this country expect Congress to begin playing a more responsible role.

The Senator from Alabama calls attention to the fact that the Azores base was activated in World War II. He is correct. In World War II it had some justification. In those days there were short-range planes and it was necessary perhaps for them to stop there to refuel and for the crew to be refreshed. I stopped there once in order to refuel. I did not intend to go there, but that is the way we went. There is a delightful officers' club there. I can understand why any military man would enjoy it. But that has nothing to do with the responsibility of Congress, which is to examine these agreements to see if they are in the national interest. This agreement originated 22 years ago and after all these years it is questionable whether it still has a significant function to play today. I do not think it has a significant function. A Senator can rise here and say the base is for exercising surveillance over Russian subs. That argument is like the famous dog of Pavlov. If the base has any relation to surveillance of Russia we say that is in the national interest. I do not think that necessarily follows.

I do not think the base plays any significant function in our national defense. With nuclear submarines, the Russians do not have to go near the Azores. I do not think it is seriously considered as having that function these days.

The other argument made is that it is significant in the defense of Israel. That is about as potent an argument in this body as it is to say it is designed to keep an eye on Russia. But it is very remote indeed to any useful function in protecting Israel. It is not a relevant argument at all. It is not needed for any purpose of that kind. But it is a pleasant spot for a nice tour of duty for military people.

I will end by reiterating an argument which has been heard before. We have over 1,900 bases abroad. This is one of them. They cost enormous amounts of money. They contribute very substantially to our imbalance of payments. Defense Department spending abroad is about $5 billion a year. And the imbalance in payments is running this year at the highest rate in our history.

I do not understand why Congress is not more determined to try to bring back into balance our foreign commitments. We complain. We read daily about the weakness of the dollar. The dollar, as Senators know, has been extremely weak. We have had two formal devaluations of the dollar, and now an informal one is taking place. Maintaining these many useless bases abroad contributes a great deal to the pressures on the dollar. It is a further drain on us.

When we look at these items individually, it may be said, "Only a few million dollars are involved." In this case, it is quite a bit. We are told that it is not significant; that it is too small. But when these are added, they constitute, as I said, an impact of approximately $5 billion upon our balance of payments.

The point is that this type of agreement is so important and involves so much money and there is so much question about its justification that the least we can do is subject it to a hearing and make a record, so that those who are interested may read it.

We have never had a formal, thorough justification of this agreement. The administration has said why it did not want to go the treaty route, but there has been no real justification for it in the sense that would be required or a domestic project. If a Senator wants a project in his State, if he wants a development of any kind, he goes before the appropriate committee and makes a record. Witnesses are called. The matter is subjected to hearings. Questions are asked. A case is made for or against it. I do not think a case has been made for this matter.

I am not saying that the Senate should reject the agreement but only that the executive branch be required to formally justify it to the Senate.

Mr. GOLDWATER. Mr. President, will the Senator from Alabama yield me some time?

Mr. SPARKMAN. Mr. President, I yield 5 minutes to the Senator from Arizona.

Mr. GOLDWATER. Mr. President, I oppose the language of the bill not because of the Azores per se, but because of the fundamental, underlying threat that I see in it to undermine the powers of the President—the historic, constitutional powers of the President—in this general field. I might be persuaded to agree with the estimate of the Committee on Foreign Relations relative to the importance of the Azores, only I did not share the enjoyment of the officers' club when I was stationed there, in 3 feet of mud.

However, executive agreements are not new, as this body knows. Between 1946 and the present time, 5,500 executive agreements have been made by the President, and 99 percent of those agreements have received previous or subsequent ratification by Congress.

For example, more than 1,000 of the present executive agreements deal with the disposition of surplus commodities pursuant to Federal statute. Even the category of foreign military base agreements, which are the concern of sections 7 and 8 of the bill, themselves may properly be considered to be specifically provided for in the annual Military Construction Authorization and Appropriation Acts.

This availability on our part to provide funds or not to provide funds for these various purposes gives us, I feel, congressional control over these agreements made in these general fields. I think it points to the proper role of Congress to review base agreements, which should not be an attack on the President's authority to enter into such agreements, but a determination by Congress of whether or not it shall appropriate the moneys required to fully implement such agreements.

My basic objection to sections 7 and 8 is that they do not primarily involve the merits of the particular agreement. In fact, under section 8 no one knows what country we will be dealing with or what circumstances might necessitate the agreement, so these provisions thereby constitute a direct challenge to the fundamental power of the President to enter into these kinds of agreements with any foreign countries without going through the process of a treaty.

In other words, I feel that Congress has more than adequate power to control anything—I will not say "anything," but almost anything—that the President might do through the so-called Executive agreements. In fact, I do not know how this country could set any foreign policy if this body had to approve every single agreement that was entered into by the President, treating it as a treaty.

That gets back to my own conviction that the Constitution gave the power to conduct foreign policy to the President. It gave the power to advise and consent to this body. I think the founders of the Constitution, the founders of our country, very rightly put this power in the hands of one man, with the advice and consent of the many, the many constituting the Senate. I think the language of the bill is just an effort to chop away at

the powers of the President given him by the Constitution.

I will reiterate what I have said before the committee, on the floor of the Senate: That if it is the desire of the members of the Committee on Foreign Relations, I think we should submit an amendment to the people of the United States and not attempt to do these things piecemeal, by little changes in the language here and little changes in the language there that will result in a change of the war powers of the President and in the foreign relations powers.

Mr. President, I may be wrong in this assumption. I have reported upon the changes in many articles I have prepared for publication across the country. The President has these powers. If we want to change them, they must be changed by constitutional amendment.

I will support the amendment of the Senators from Alabama and Pennsylvania, because I sense a little devilment here that is not directed solely at the Azores and Portugal which have no bearing on my position. However, they do get to the powers of the President.

The PRESIDING OFFICER (Mr. McCLURE). The Senator's time has expired.

Mr. CASE. Mr. President, how much time do I have remaining?

The PRESIDING OFFICER. The Senator from New Jersey has 12 minutes remaining.

Mr. CASE. Mr. President, I think that there is one argument in favor of the amendment offered by the Senator from Pennsylvania and the Senator from Alabama and only one. It was suggested by the Senator from Arizona, by something he said. Maybe this agreement is a fait accompli. Because this point might have some influence with some people, I want to bring it out in the open and object to it. It is not our fault. It is not the fault of the Committee on Foreign Relations.

Last year the Committee on Foreign Relations proposed and the Senate agreed by a 50 to 6 vote to a sense of the Senate resolution that this agreement should be considered as a treaty and sent up to the Congress. It was because the executive branch ignored that advice which the Senate gave it that we find that we have to resort to this rather abrupt action of saying that no funds shall be used.

The power of the purse is the only sanction that the legislative body has in this regard. Because we want to use this sanction from time to time does not mean that we are engaged in a confrontation with the executive that is putting the cart before the horse.

Mr. FULBRIGHT. Not only that, Mr. President, but it is a clear indication that we tried. While it did not result in its being submitted as a treaty, the fact that we had acted in the matter, although it was not submitted to us, resulted in rather substantial savings in this matter.

When it started out, we heard that it was going to cost several hundred million dollars. And after we had the hearings, we were able by persuasion to substantially reduce that amount, to about $50 million, I believe. It was a rather substantial savings.

Mr. CASE. The Senator is absolutely correct.

Mr. FULBRIGHT. Mr. President, it was not anything new. The Senator from New Jersey is absolutely correct on constitutional grounds and also on the ground of trying to be provident with our funds and not give them away heedlessly to every country that comes along. I commend the Senator. It has been a frustrating battle for him.

The Senate has voted several times for this principle. It would be very odd if the Senate were to reverse itself now and say that it did not want to do this.

Mr. CASE. Mr. President, I thank the Senator from Arkansas. Everything he has said is absolutely right. We should maintain the position this year that we maintained so correctly and so strongly in the last session of the Congress.

Mr. President, if nobody else has any desire to discuss this matter, I shall be happy to yield back the remainder of my time.

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

The PRESIDING OFFICER. All time has been yielded back. The question is on agreeing to the amendment of the Senator from Alabama. On this question the yeas and nays have been ordered, and the clerk will call the roll.

The assistant legislative clerk called the roll.

The PRESIDING OFFICER (Mr. McCLURE). On this vote the yeas are 46, the nays are——

Mr. BROOKE. Mr. President——

The PRESIDING OFFICER. The Senator from Massachusetts.

Mr. BROOKE. I vote "nay."

Mr. SCOTT of Pennsylvania. Mr. President, a point of order.

SEVERAL SENATORS. Regular order, Mr. President.

Mr. SCOTT of Pennsylvania. Mr. President, I raise a point of order which can be raised at this time.

The PRESIDING OFFICER. The Chair would advise the Senator from Pennsylvania that it cannot be raised at this time.

Mr. FULBRIGHT. Regular order, Mr. President.

The PRESIDING OFFICER. A point of order cannot be raised at this time. The yeas are 46, and the nays are 46, and the amendment is not agreed to.

Mr. ROBERT C. BYRD. I announce that the Senator from Kentucky (Mr. HUDDLESTON), the Senator from Massachusetts (Mr. KENNEDY), the Senator from Montana (Mr. METCALF), and the Senator from Utah (Mr. Moss) are necessarily absent.

I also announce that the Senator from Mississippi (Mr. STENNIS) is absent because of illness.

I further announce that, if present and voting, the Senator from Massachusetts (Mr. KENNEDY) would vote "nay."

Mr. GRIFFIN. I announce that the Senator from Oklahoma (Mr. BELLMON), the Senator from New York (Mr. JAVITS), and the Senator from Ohio (Mr. SAXBE) are necessarily absent.

If present and voting, the Senator from New York (Mr. JAVITS) would vote "nay."

The yeas and nays resulted—yeas 46, nays 46, as follows:

[No. 193 Leg.]

YEAS—46

Aiken	Dominick	McIntyre
Allen	Eastland	Montoya
Baker	Ervin	Nunn
Bartlett	Fannin	Percy
Beall	Fong	Schweiker
Bennett	Goldwater	Scott, Pa.
Brock	Griffin	Scott, Va.
Buckley	Gurney	Sparkman
Byrd, Harry F., Jr.	Hansen	Stafford
Cannon	Helms	Stevens
Cook	Hruska	Taft
Cotton	Jackson	Thurmond
Curtis	Johnston	Tower
Dole	Long	Weicker
Domenici	McClure	Young
	McGee	

NAYS—46

Abourezk	Hart	Nelson
Bayh	Hartke	Packwood
Bentsen	Haskell	Pastore
Bible	Hatfield	Pearson
Biden	Hathaway	Pell
Brooke	Hollings	Proxmire
Burdick	Hughes	Randolph
Byrd, Robert C.	Humphrey	Ribicoff
Case	Inouye	Roth
Chiles	Magnuson	Stevenson
Church	Mansfield	Symington
Clark	Mathias	Talmadge
Cranston	McClellan	Tunney
Eagleton	McGovern	Williams
Fulbright	Mondale	
Gravel	Muskie	

NOT VOTING—8

Bellmon	Kennedy	Saxbe
Huddleston	Metcalf	Stennis
Javits	Moss	

The PRESIDING OFFICER. On this vote the yeas are 46 and the nays are 46 and the amendment is rejected.

Mr. CASE. Mr. President, I move that the vote by which the amendment was rejected be reconsidered.

Mr. SCOTT of Pennsylvania. A point of information. Had the result been announced prior to the casting of the one additional vote?

The PRESIDING OFFICER. The Chair would say that he had not concluded the announcement at the time the one remaining vote was cast.

Mr. SCOTT of Pennsylvania. Mr. President——

Mr. CASE. Mr. President, I move that the vote by which the amendment was rejected be reconsidered.

Mr. SCOTT of Pennsylvania. Mr. President, I ask for the yeas and nays on the motion to reconsider.

The PRESIDING OFFICER. There is a sufficient second. The yeas and nays have been ordered and the clerk will call the roll.

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

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

ORDER FOR ADJOURNMENT

Mr. MANSFIELD. Mr. President, I ask unanimous consent that when the Senate completes its business today, it stand in

adjournment until 11 o'clock tomorrow morning.

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

(Subsequently, this order was modified to provide for the Senate to convene at 12 o'clock noon tomorrow.)

DEPARTMENT OF STATE APPROPRIATIONS AUTHORIZATION ACT OF 1973

The Senate continued with the consideration of the bill (S. 1248) to authorize appropriations for the Department of State, and for other purposes.

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the vote on the motion to reconsider occur at the hour of 11:30 tomorrow morning.

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

Mr. MANSFIELD. Mr. President, I withhold that request.

Mr. SCOTT of Pennsylvania. Mr. President, I make the point of order that a quorum is not present.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

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

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

ORDER FOR ADJOURNMENT

Mr. MANSFIELD. Mr. President, I ask unanimous consent that when the Senate completes its business today it stand in adjournment until the hour of 12 noon tomorrow.

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

UNANIMOUS-CONSENT AGREEMENT DEBATE AND VOTE ON MORRIS NOMINATION AND VOTES ON S. 1248 TOMORROW

Mr. MANSFIELD. Mr. President, I ask unanimous consent that the debate on the Morris nomination begin at 2 o'clock tomorrow and that the vote be taken not later than 4:30 p.m.

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

Mr. MANSFIELD. Mr. President, I ask unanimous consent that at the hour of 3 p.m. the vote on the pending motion to reconsider occur.

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

Mr. MANSFIELD. I ask unanimous consent that there be a time limitation of 20 minutes on that particular vote, because of circumstances over which none of us has any control.

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

Mr. MANSFIELD. The vote to start at 3 o'clock.

Mr. SCOTT of Pennsylvania. I have no objection.

The PRESIDING OFFICER. The Chair is not clear. The vote will occur at 3 o'clock or debate will start at 3 o'clock?

Mr. MANSFIELD. No; there will be no debate on the pending motion to reconsider. The vote will occur at 3 o'clock without debate. The debate on the Morris nomination will begin at 2 p.m. and go up to 4:30 p.m.

Mr. TOWER. The time to be 20 minutes. Is that what the Senator referred to?

Mr. MANSFIELD. The Senator is correct.

Mr. SCOTT of Pennsylvania. Mr. President, reserving the right to object, what happens if the vote to reconsider shall carry? Is there a time agreement, say 5 minutes on a side prior to the vote?

Mr. MANSFIELD. I think the issue is pretty clear.

Mr. SCOTT of Pennsylvania. All right, I will go along with that.

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

Mr. MANSFIELD. Mr. President, it is my understanding that this vote on the pending motion will be an up and down vote, on the motion to reconsider.

The PRESIDING OFFICER. The Senator is correct.

Mr. MANSFIELD. And that a motion to table is precluded.

The PRESIDING OFFICER. That is correct.

The Chair understands that if the motion to reconsider carries there would be an immediate vote on the amendment itself.

Mr. MANSFIELD. On the motion to consider?

The PRESIDING OFFICER. No. If the motion to reconsider carries there will be a vote immediately thereafter on the amendment itself.

Mr. MANSFIELD. That is correct.

Mr. ROBERT C. BYRD. Mr. President, in the event the outcome of such vote on the amendment is the opposite of the vote today, another motion to reconsider would be in order.

The PRESIDING OFFICER. That is correct.

Mr. ROBERT C. BYRD. In which case the majority leader intends such votes to occur in rapid succession without debate.

The PRESIDING OFFICER. That is correct.

Mr. SCOTT of Pennsylvania. Mr. President, I ask unanimous consent that the vote tomorrow on the pending business consume 10 minutes.

Mr. MANSFIELD. Well, Mr. President, I ask unanimous consent that the vote tomorrow on the pending motion to reconsider take not less than 15 minutes.

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

ORDER OF BUSINESS

Mr. FULBRIGHT. Mr. President, is the distinguished majority leader finished?

Mr. MANSFIELD. Yes.

Mr. FULBRIGHT. I would like to submit a conference report.

Mr. ROBERT C. BYRD. Mr. President, the Senate is not in order.

The PRESIDING OFFICER. The Senate is not in order. The Senator will suspend until the Senate is in order.

The Senator may proceed.

AUTHORIZATION OF ADDITIONAL APPROPRIATIONS FOR THE PEACE CORPS—CONFERENCE REPORT

Mr. FULBRIGHT. Mr. President, I submit a report of the committee of conference on H.R. 5293, and ask for its immediate consideration.

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

The legislative clerk read as follows:

The committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 5293) authorizing additional appropriations for the Peace Corps, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses this report, signed by all the conferees.

The PRESIDING OFFICER. Is there objection to the consideration of the conference report?

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

(The conference report is printed in the House proceedings of the CONGRESSIONAL RECORD of June 6, 1973, at p. 18334.)

Mr. FULBRIGHT. Mr. President, this is the conference report on the bill (H.R. 5293) authorizing additional appropriations for the Peace Corps. The final agreed text of this legislation contains a 1-year authorization of $77,001,000 to carry out the operations of the Peace Corps program for fiscal year 1974.

In addition to this authorization, the bill contains a provision which would place the Peace Corps under existing Federal procurement law.

The PRESIDING OFFICER. The question is on agreeing to the conference report.

The report was agreed to.

AMENDMENT TO FOREIGN SERVICE BUILDINGS ACT—CONFERENCE REPORT

Mr. FULBRIGHT. Mr. President I submit a report of the committee of conference on H.R. 5610, and ask for its immediate consideration.

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

The legislative clerk read as follows:

The committee of conference on the disagreeing votes of the two Houses on the amendments of the Senate to the bill (H.R. 5610) to amend the Foreign Service Buildings Act, 1926, to authorize additional appropriations, and for other purposes, having met, after full and free conference, have agreed to recommend and do recommend to their respective Houses this report, signed by all the conferees.

The PRESIDING OFFICER. Is there objection to the consideration of the conference report?

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

(The conference report is printed in the House proceedings of the CONGRES-

SIONAL RECORD of June 6, 1973, at p. 18333.)

Mr. FULBRIGHT. Mr. President, briefly, the Senate conferees receded on their amendment. The substance of the Senate amendment was twofold. In the first place, the Senate amendment limited the authorization of appropriations to fiscal year 1974 and eliminated the sums requested for fiscal year 1975. In the second place, the Senate amendment included authorization for additional appropriations for nondiscretionary costs, such as pay raises and those resulting from exchange rate alinements. The House bill, in lieu thereof, obtained estimates of these costs and added them to the amounts requested by the administration.

As the Senate can tell, these differences were technical, rather than substantive. I urge the adoption of the conference report.

The PRESIDING OFFICER. The question is on agreeing to the conference report.

The report was agreed to.

DEPARTMENT OF STATE APPROPRIATIONS AUTHORIZATION ACT OF 1973

The Senate resumed the consideration of the bill (S. 1248) to authorize appropriations for the Department of State, and for other purposes.

Mr. FULBRIGHT. Mr. President, I have a very simple amendment which I have discussed with the distinguished Senator from Vermont (Mr. AIKEN), which I submit as an amendment to the bill.

The PRESIDING OFFICER. Does the Senator ask unanimous consent that the amendment be considered?

Mr. FULBRIGHT. I ask unanimous consent. I understood we were not going to have anything else today. This is a minor amendment.

The PRESIDING OFFICER. Is there objection?

Mr. PROXMIRE. I do not have an objection. I do not want to be precluded. I understood there was no question about it.

The PRESIDING OFFICER. The clerk will read the amendment.

The legislative clerk read the amendment, as follows:

On page 14, after line 8, add the following new section:

EXPRESSION OF INDIVIDUAL VIEWS TO CONGRESS

SEC. 19. Section 502 of the Foreign Relations Authorization Act of 1972 is amended by striking out "appointed by the President, by and with the advice and consent of the Senate, to a position in" and inserting in lieu thereof "or employee of".

Mr. FULBRIGHT. Mr. President, the effect of the amendment is as follows: The existing law limits the application of the expression of individual views to any officer appointed by the President. All we wish to do is leave in any officer, but add "employee." It would cover our civil service and reserve officers, persons who are not subject to confirmation by the Senate. It broadens the applicability of the provision relating to expression of individual views. I do not consider it to be of major importance, but it does make it easier for hearing purposes.

If there is any objection to it, I shall not press it.

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

Mr. FULBRIGHT. I yield.

Mr. AIKEN I do not feel there is anything in the amendment offered by my chairman that is objectionable, but if there is, I am sure it can be taken care of in conference.

Mr. FULBRIGHT. I do not think there is anything objectionable in it

Mr. President, it is a simple amendment to encourage more candid testimony by State Department and other witnesses from foreign affairs agencies who appear before congressional committees.

Last year, at the initiative of the Foreign Relations Committee, Congress approved a provision which became section 502 of the Foreign Relations Authorization Act of 1972, that was designed to encourage witnesses from the foreign affairs agencies to give their personal views when requested to do so. During the year the provision has been in effect the provision has proven to be quite useful. Some witnesses have, indeed, given their personal views when requested, which differed from the executive branch witnesses. However, the provision does not cover many government witnesses who regularly come before the Committee since it covers only officials who are appointed by the President and confirmed by the Senate. It does not cover Civil Service employees of the foreign affairs agencies or Foreign Service Reserve and Staff personnel.

This amendment will make the provision applicable to any employee of the foreign affairs agencies. It is but another step to try to reestablish a proper relationship between Congress and the President on foreign policy matters and, in general, to enhance the effectiveness of the congressional hearing process.

I hope the amendment will be adopted.

The PRESIDING OFFICER. The question is on agreeing to the amendment of the Senator from Arkansas.

The amendment was agreed to.

Mr. PROXMIRE. Mr. President, I understand the pending question is the amendment on the wage and price control program. Is that correct?

The PRESIDING OFFICER. The Senator is correct.

Mr. PROXMIRE. I just want to say that I have finished my presentation on the amendment. As far as I am concerned, I am willing to vote on it now, or to vote on it as soon as possible. I hope the vote will not be delayed. We now have scheduled something before the Senate tomorrow between 2 and 4:30. It means that if the amendment is delayed much longer, we will not be able to vote on it until late tomorrow, or after that.

As I have said, the amendment proposes action on an issue on which the people of the country want action, and want action now, and that is on the issue of inflation. That is why I have offered it to this bill, even though the bill would not be an appropriate vehicle for the amendment under ordinary circumstances.

I may join in argument with other Senators, but I would hope we could come to a vote as soon as possible.

Mr. McGOVERN. Mr. President, my colleague from Wisconsin (Mr. PROXMIRE) has offered an amendment with which I generally agree, although with some reservations. His amendment, which is based upon a resolution unanimously adopted by the Democratic caucus, would require the President to impose a 90-day freeze on prices, wages, salaries, rents, interest rate, and dividends.

I think it is clear that the administration's phase III program——

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

Mr. McGOVERN. I yield.

Mr. PROXMIRE. It is on profits.

Mr. McGOVERN. Has it been modified? I think the original amendment showed dividends rather than profits.

Mr. PROXMIRE. The reason I say that is that it requires price rollbacks to freeze profits at the prefreeze level. At any rate, the general description is correct.

Mr. McGOVERN. Mr. President, I think it is clear that the administration's phase 3 economic program has been an unmitigated failure. And the evidence that the economy is now out of control is undeniable: Since the President relaxed the phase II controls we have seen the worst inflation in 22 years—wholesale prices have shot up at an annual rate of 21.1 percent—consumer prices have increased 8.6 percent, interest rates have soared to levels beyond the reach of the average family.

Investors at home and abroad have lost confidence in the Government's capacity to meet the crisis. Our twice devalued dollar continues to fall while the value of gold remains in a serious decline.

Despite this evidence, the President has resisted the advice of once trusted advisers and in a recent speech again expressed optimism that things would soon get better. He said that only minor adjustments in his existing economic program is necessary.

But economists are virtually unanimous in their disagreement with this assessment. Business Week magazine, usually a staunch supporter of the President's policies, in a recent editorial issued "An Urgent Plea for a New Economic Policy—Now." I ask unanimous consent that a copy of that editorial be inserted at this point in the RECORD.

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

AN URGENT PLEA FOR NEW ECONOMIC POLICY—NOW

President Nixon ended his Watergate speech two weeks ago with a reference to the great national and international issues that demand his attention. Among them, none is more urgent than the mounting threat of a violent boom-bust explosion in the U.S. economy.

Absorbed with Watergate and stubbornly hoping that the situation will right itself, the Administration has lost its grip on the economy. The President's advisers are clutching at scraps of favorable news and ignoring

the evidence that their economic policies are not working.

This is worse than wishful thinking. It is willful denial of obvious facts. And it is driving the U.S. into a superheated boom that inevitably will end with a paralyzing recession.

Here are the facts:

The U.S. economy is expanding at a pace that cannot be sustained. It is capable of long-term growth at a rate of about 4% a year. For the past two quarters, it has expanded at a rate of 8%, and instead of slowing down, it is, if anything, picking up speed.

Every sector of the economy has picked up the beat. Retail sales, powered by a swift increase of installment debt, increased at a smashing annual rate of 24% in the first quarter of 1973. Automobiles are selling at the rate of over 12-million a year. Homebuilding, which had been expected to turn down this year, is still plunging ahead. Manufacturers' orders are rising twice as fast as they were in 1972, and because shipments cannot keep up, backlogs are building rapidly. Business is programming capital spending at a rate that cannot be achieved.

Inflation has exploded again. It hit a 6% rate in the first quarter, and it is going strong in the second. April wholesale prices were climbing at a 12% annual rate, with the industrial sector gaining at a rate of 15.6%. The showing would have been far worse if farm prices had not taken a temporary breather after increasing at a 60% annual rate in March. Phase III is manifestly a failure, and minor changes—such as last week's order requiring large companies to give advance notice of price increases—will not save it.

In short, the U.S. is launched on another round of boom and bust. It was fed too much monetary and fiscal stimulation in 1971 and 1972. Phase II controls were lifted too soon. Inflationary expectations were fanned by too much talk about voluntarism and self-policing controls in Phase III.

CONTROLS WITH TEETH

The problem that faces President Nixon now is to bring the boom under control before it turns into an inflationary explosion. This does not mean penitently acknowledging past mistakes, as the President's advisers seem to believe. It means taking a realistic measure of the situation and devising measures to restrain the breakneck pace of the economic expansion.

There is an alternative to standing pat and letting the economy rush ahead into disaster. It consists of a combination of new, tough wage-price controls and strict fiscal and monetary discipline. It is a painful answer, and it involves some risk. But it is the course the Administration should take.

The first step should be to scrap Phase III and go back to wage-price controls at least as tough as Phase II and considerably broader in scope. Price controls should apply to all farm and food products—not just at retail but far enough back down the line of distribution and production to put effective pressure on prices at the point of first sale. The rules on passing through cost increases should be tightened. The merry game of taking a markup for profit on cost increases should stop.

With the new controls must go a strict program of enforcement. The big trouble with Phase III has not been its rules but the way the rules have been ignored. Enforcement must apply to small companies as well as large. The U.S. economy is too big and too diverse to be managed by passing the word to a few giant corporations and depending on them to police the markets. The worst mistake of Phase III was to let a large number of medium-sized companies think that controls no longer applied to them.

NOW IS THE TIME

Wage-price controls, however, are essentially a short-term device. They can curb inflationary expectations—which is important—and they can keep the inflation process from feeding on itself. But they cannot bring the economic system into balance. That is a job for fiscal and monetary policy.

The $20-billion deficit the federal government is running in the fiscal year ending next June obviously is more stimulation than the economy should be getting as it comes up toward the peak of an expansion. To plan on top of that for a deficit in fiscal 1974 is planning for a calamity. At this point, the budget should be balanced. If the President and Congress cannot agree on spending cuts, they should be ready to close the budget gap with an emergency surtax.

Meanwhile, the Federal Reserve must move in aggressively to tighten money. It should back up its traditional policy of managing money supply by applying selective controls on credit. Where this takes new legislation, the Fed should ask for it promptly. Consumer credit is expanding too fast; too much money is going into real estate speculation; too many bank loans are financing mergers and acquisitions. The flow of credit must be channeled to the points where it will do the most good and cause the least inflation.

Above all, the Administration must act now. There is always a lag between the time a policy is adopted and the time it takes effect. If the Administration waits, it will find itself in the fatal position of having its toughest restraints start to bite at the worst possible moment—after the economy has gone over the top and started down the slope into recession.

Mr. McGOVERN. The Business Week editorial concluded that—

President Nixon is so preoccupied with the Watergate scandal that he is unwilling to take broad, decisive action on economic policy.

I do not know whether that is true or not. But I do know that unless prompt action is taken consumer price and interest rates will continue to rise and the dollar and the stockmarket will continue to fall. So I support the major thrust of the Democratic Caucus' resolution and urge my colleagues to vote for this amendment in the national interest.

But there is one in which I think the amendment is unfair and can be improved. The amendment would require the wages of working people to be frozen at a point that does not reflect increased cost of living. In the months when consumer prices have escalated wages have remained stable, resulting in a decline of 10 percent in the value of the average family's paycheck.

This decline in "real income," has not been true of all sections of the economy:

Corporate profits have shot up at an even more rapid rate than inflation itself, increasing on the average 25.9 percent above the comparable level of last year,

And executive salaries which went up on 13.5 percent last year have gone up further under phase III.

It is the worker who has paid the price of the inflation so far this year. The average family has in effect lost 10 percent of its paycheck while more affluent citizens have more or less kept pace with inflation. And, if the present language of the amendment is adopted this inequity would be frozen into law.

So what I suggest is that we give the worker the chance to restore the loss of his purchasing power, to come back to where he was when phase III went into effect.

Mr. President, I have at the desk an amendment to the pending amendment which would accomplish just that. It provides that wages would be permitted to increase in an amount equal to the increase in the cost of living since phase III went into effect.

The pending amendment provides for a freeze on dividends, and as the Senator has explained, apparently on profits which have gone up at least in part because of inflation. What my amendment would accomplish is to redistribute some of those inflated profits to working people and thus restore the status quo between management and labor which existed at the beginning of this year. As such my amendment would not be inflationary; it would merely recognize the inequity between wages and profits which now exists.

Mr. President, I am very hopeful that when and if we call this amendment up for consideration, the Senator from Wisconsin will see fit to accept it as an improvement on his otherwise excellent proposal.

Mr. PROXMIRE. Mr. President, may I say to the distinguished Senator from South Dakota that there is great merit in his proposal. There is no question that the facts he states are correct. There is no question that phase III has badly hurt the workingmen in this country. There has been bad erosion of their wages. The cost of living has gone up faster than their income. The workingmen are taking home less wages than they did before. So, they are being hurt.

The Senator would provide a catch-up in the first year which would mean that we would have about a 10-percent guideline with no reflection of wage increases or costs and prices. This would mean another serious increase in prices, or it would mean that some small businessmen or some businessmen who are on the margin would suffer serious losses.

The Senator is so right in his argument. If we could only return to that kind of a situation, it would serve justice.

I point out that two provisions in the amendment he has drafted do provide for selective rollbacks in the prices in those areas where there has been a violation of phase III guidelines. There is no question that there has been a violation. That is the only way we can explain the immense increases across the board in industrial prices and the tremendous increase in prices.

Phase III guidelines also provide that price increases should be limited to an annual rate of 1.5 percent without specific approval, and the specific approval would only be given where cost increases have forced big increases.

There is no way in which we can have price increases justified on the basis of cost increases when we have the big profits that the corporations have enjoyed.

At the end of my amendment, on page 3, starting at line 22, it reads:

"(g) The long-run control program required under subsection (d) shall take into account the fact that workers' wages have fallen behind in the inflationary cycle."

I have in mind that the freeze is only 90 days, and the subsequent period which would last only months, perhaps no more than a year, is the more important period. And during this period, the administration would be asked to provide guidelines that would work out equitably. Those guidelines would have to be made available to Congress 30 days before the end of the freeze. We would have an opportunity to act at that time to amend the guidelines or change the law so that we could have a more equitable situation.

Under these circumstances, I would hope that the Senator from South Dakota would reconsider the amendment.

As I say, the amendment does have merit. However, I am very concerned that this kind of proposal could result in guidelines that would be clearly inflationary.

Mr. McGOVERN. Mr. President, I appreciate the Senator's response. I have not yet decided whether we ought to press the amendment to a vote. I think it would perhaps be a wise thing to let it lie overnight and get some reaction on it and reconsider it further tomorrow.

I do think—and I want the Senator to know this—that this amendment points up what is an obvious inequity. There is no question—and the Senator has agreed—that there is a timelag; that wage increases simply have not kept pace with the increase in prices and profits. So even though there is a provision in his amendment for a rollback in some selected prices, there is no provision for a rollback in profits; and some of the profits that have been made have gone far beyond the wages, which have lagged behind the price increases that have been in effect over the last few months.

Mr. PROXMIRE. The Senator is correct. This is the first proposal I have seen that comes to grips, at least, with profits and exploitation by requiring that there be a rollback in those prices, which have exceeded those of the base period. In other words, there cannot be exploitation during the 90-day period.

Mr. McGOVERN. Yes. As the Senator knows, I intend to support his amendment. I think we can give some thought to its possible modification.

Mr. President, I yield the floor.

Mr. PROXMIRE. Mr. President, as I said, I am hopeful that we can return to this amendment tomorrow just as soon as possible. I am ready to vote on it right now.

Mr. ROBERT C. BYRD. Mr. President, will the Senator yield?

Mr. PROXMIRE. I yield.

Mr. ROBERT C. BYRD. The leadership is constrained to state that there will not, in all likelihood, be any more yea-and-nay votes today. However, the amendment of the Senator from Wisconsin will be the pending business when the Senate meets tomorrow. I believe the yeas and nays have been ordered thereon.

Mr. PROXMIRE. Yes. I know that the leadership is in a very difficult position. It is my understanding that the leadership will support my amendment. This is a situation in which we have to face realities. There are Senators who are determined that we shall not come to a vote on the amendment. We could remain in session, but there would be no way we could come to a vote. I think there is no way we can escape that reality.

Mr. ROBERT C. BYRD. Mr. President, the leadership wishes to thank the distinguished Senator from Wisconsin for his usual consideration, courtesy, cooperation, and understanding. I know that he would like to have a vote this afternoon and that he has been ready to vote at all times during the afternoon. He has been cooperative with the leadership in setting the amendment aside from time to time to enable the leadership to move the bill along and have other amendments acted upon, recognizing that there were Senators who were ready to talk at length to keep the amendment of the senior Senator from Wisconsin from coming to a vote today. So the Senator has been most cooperative in this regard, and I wish to express to him my appreciation on behalf of the leadership. I, too, wish the Senate would vote on his amendment yet today, because I want to vote for his amendment if Senators will let it come to a vote.

ORDER FOR TRANSACTION OF ROUTINE BUSINESS TOMORROW

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that after the two leaders or their designees have been recognized tomorrow, there be a period for the transaction of routine morning business of not to exceed 15 minutes, with statements therein limited to 3 minutes each.

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

ORDER TO RESUME CONSIDERATION OF S. 1248 TOMORROW

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that at the conclusion of routine morning business tomorrow, the Senate resume the consideration of S. 1248, the unfinished business.

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

ORDER FOR COMMITTEE ON INTERIOR AND INSULAR AFFAIRS TO FILE REPORT

Mr. ROBERT C. BYRD. Mr. President, I ask unanimous consent that the Committee on Interior and Insular Affairs may have until midnight tonight to file reports.

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

EXECUTIVE SESSION TOMORROW

Mr. ROBERT C. BYRD. Mr. President, a parliamentary inquiry.

The PRESIDING OFFICER. Without objection, the Senator from West Virginia will state it.

Mr. ROBERT C. BYRD. Under the orders previously entered, will the Senate automatically go into and come out of executive session tomorrow at appropriate times to accommodate the yea-and-nay votes scheduled?

The PRESIDING OFFICER. Yes; the Senator is correct.

Mr. ROBERT C. BYRD. Without any further consent order.

APPOINTMENTS BY THE VICE PRESIDENT

The PRESIDING OFFICER (Mr. HATHAWAY). The Chair, on behalf of the Vice President, in accordance with Public Law 90–351, as amended by Public Law 91–644, appoints the following Senators to the National Commission for the Review of Federal and State Laws Relating to Wiretapping and Electronic Surveillance: The Senator from Arkansas (Mr. McCLELLAN), the Senator from South Dakota (Mr. ABOUREZK), the Senator from Nebraska (Mr. HRUSKA), and the Senator from Ohio (Mr. TAFT).

THE PROGRAM

Mr. ROBERT C. BYRD. Mr. President, the program for tomorrow is as follows:

The Senate will convene at 12 o'clock noon.

After the two leaders or their designees have been recognized under the standing order, there will be a period for the transaction of routine morning business of not to exceed 15 minutes, with statements therein limited to 3 minutes each.

At the conclusion of the period for the transaction of routine morning business, the Senate will resume its consideration of the unfinished business, S. 1248, a bill to authorize appropriations for the Department of State, and for other purposes.

The question at that time will be on agreeing to the amendment of the distinguished Senator from Wisconsin (Mr. PROXMIRE), on which the yeas and nays have already been ordered.

At 2 p.m. the Senate will go into executive session and debate will be resumed on the nomination of Mr. Robert H. Morris to be a member of the Federal Power Commission.

At the hour of 3 p.m. the Senate will resume legislative business, and the vote will occur on the motion to reconsider the amendment by Mr. SCOTT and Mr. SPARKMAN striking section 7 on page 6 of the bill. Section 7 deals with the Azores agreement. That vote will be a yea and nay vote, the yeas and nays having already been ordered.

Should the motion to reconsider fail, the Senate will resume the consideration of the Morris nomination immediately, in executive session. Should the motion to reconsider carry, the vote on the Sparkman-Scott amendment would recur immediately, and the yea and nay vote thereon would be automatic.

A vote will occur with relation to the nomination of Mr. Robert H. Morris at no later than 4:30 p.m. tomorrow. That vote may very well occur on a motion to recommit. The Senate will then resume its consideration of legislative business.

The unfinished business, S. 1248, the State Department authorization bill, presumably will still be before the Senate at that time.

Hence, Mr. President, there will be at least two yea-and-nay votes tomorrow afternoon, and in all probability there will be additional yea-and-nay votes.

ADJOURNMENT

Mr. ROBERT C. BYRD. Mr. President, if there be no further business to come before the Senate, I move, in accordance with the previous order, that the Senate stand in adjournment until 12 o'clock noon tomorrow.

The motion was agreed to; and at 5:53 p.m. the Senate adjourned until tomorrow, Wednesday, June 13, 1973, at 12 noon.

NOMINATIONS

Executive nominations received by the Senate June 12, 1973:

IN THE AIR FORCE

The following officer to be placed on the retired list in the grade indicated under the provisions of section 8962, title 10, of the United States Code:

To be lieutenant general

Lt. Gen. Eugene B. LeBailly, [redacted] FR (major general, Regular Air Force) U.S. Air Force.

IN THE ARMY

The following-named officer to be placed on the retired list in grade indicated under the provisions of title 10, United States Code, section 3962:

To be lieutenant general

Lt. Gen. Charles A. Corcoran, [redacted], Army of the United States (major general, U.S. Army).

The following-named officer under the provisions of title 10, United States Code, section 3066, to be assigned to a position of importance and responsibility designated by the President under subsection (a) of section 3066, in grade as follows:

To be lieutenant general

Maj. Gen. James Francis Hollingsworth, [redacted] U.S. Army.

IN THE AIR FORCE

The following-named officers for promotion in the Regular Air Force, under the appropriate provisions of chapter 835, title 10, United States Code, as amended. All officers are subject to physical examination required by law:

LINE OF THE AIR FORCE

First lieutenant to captain

Kloss, Terry P., [redacted].

Major to lieutenant colonel

Stanley, Thomas M., [redacted].

The following-named Air Force officers for reappointment to the active list of the Regular Air Force, in the grade indicated, under the provisions of sections 1210 and 1211, title 10, United States Code:

LINE OF AIR FORCE

To be lieutenant colonel

Brown, Russell F., Jr., [redacted].

To be colonel

Steck, Willard D., [redacted].

The following officers for appointment in the regular Air Force. In the grades indicated, under the provisions of section 8284, title 10, United States Code, with dates of rank to be determined by the Secretary of the Air Force.

To be major

Abel, Jerry L., [redacted].
Adams, Lewis R., [redacted].
Anderson, David L., [redacted].
Anderson, Francis B., [redacted].
Baird, George F., [redacted].
Barton, George C., [redacted].
Bellion, Clement E., Jr., [redacted].
Boots, Thomas E., [redacted].
Ebner, Stanley G., [redacted].
Husak, Johnny R., [redacted].
Kemmerling, Paul T., Jr., [redacted].
Launikitis, William J., [redacted].
McKenzie, Michael G., [redacted].
Ottea, Marion A., [redacted].
Rubeor, Russell G., [redacted].
Thomas, Robert J., [redacted].
Turner, Thomas H., [redacted].
Williams, Arthur B., Jr., [redacted].
Willingham, Frank D., [redacted].
Zdeb, Paul D., [redacted].

To be captain

Abbott, Frank D., Jr., [redacted].
Abbott, Mary N., [redacted].
Adams, Robert A., [redacted].
Adkins, John B., [redacted].
Adubato, Barry T., [redacted].
Ajygin, Victor E., [redacted].
Allen, Edward S., [redacted].
Alley, Ali A., [redacted].
Andrews, John W., III, [redacted].
Archibald, Harold A., [redacted].
Aulbach, Albert E., [redacted].
Bail, Philip G., Jr., [redacted].
Ball, David C., [redacted].
Barbeau, Jack W., [redacted].
Bauer, George R., [redacted].
Baumgardner, Kenneth, Jr., [redacted].
Bavera, Barbara H., [redacted].
Bergeson, Michael B., [redacted].
Bigoni, Robert A., [redacted].
Blankenship, Franklin D., [redacted].
Blockhus, David E., [redacted].
Boaman, Richard A., Jr., [redacted].
Bodem, Robert A., [redacted].
Bodkin, Thomas B., [redacted].
Bohaboy, William R., [redacted].
Boniface, George B., Jr., [redacted].
Bottomley, James A., [redacted].
Brady, James R., [redacted].
Bragg, James J., [redacted].
Branham, Orville M., [redacted].
Brown, Herbert D., [redacted].
Brown, Kenneth N., Jr., [redacted].
Burdick, Kenneth L., [redacted].
Burk, Thomas T., [redacted].
Buttross, David A., [redacted].
Calabrese, Louis, [redacted].
Cantrell, Ronald L., [redacted].
Cappone, Mark W., Jr., [redacted].
Catherwood, Michael I., [redacted].
Cecchini, Maurice J., [redacted].
Childers, Harold D., [redacted].
Chumbley, George W., [redacted].
Clark, John E., [redacted].
Clonch, Herbert L., [redacted].
Couch, Ronald C., [redacted].
Craig, Lamar P., [redacted].
Craig, William R., III, [redacted].
Crump, Ronald S., [redacted].
Cummings, Allan V., [redacted].
Davis, Marcus M., Jr., [redacted].
Day, David A., [redacted].
Decker, Ronald C., [redacted].
Dimaria, Rosario R., [redacted].
Dimity, Charles F., [redacted].
Dove, Timothy H., [redacted].
Dwyer, John F., [redacted].
Edwards, John R., [redacted].
Eichenseer, John C., Jr., [redacted].
Eikerenkotter, Thomas H., [redacted].
Emerson, Robert H., [redacted].
Enos, Zimri A., [redacted].
Erwin, David W., [redacted].
Evans, William A., Jr., [redacted].
Fett, Frederick J., [redacted].
Fiebig, Robert R., Jr., [redacted].
Fields, Willie L., Jr., [redacted].
Flentje, John M., [redacted].
Ford, Walter D., [redacted].
Gamble, Billy R., [redacted].
Gehlhaar, Gert U., [redacted].
Gillis, Charles P., [redacted].
Glatz, Jack A., [redacted].
Graham, Oliver E., III, [redacted].
Grayson, John C., [redacted].
Gruender, Joseph J., Jr., [redacted].
Haakenson, Terrence E., [redacted].
Harrell, Larry J., [redacted].
Hatch, Everette A., III, [redacted].
Hawkins, Lowell F., [redacted].
Hayes, Charles D., [redacted].
Hayes, William A., Jr., [redacted].
Head, James W., [redacted].
Helfeldt, Carl W., [redacted].
Henton, Larry D., [redacted].
Hess, Leon E., [redacted].
Heuer, Gerald R. J., [redacted].
Highfill, Larry G., [redacted].
Hollers, Arthur D., [redacted].
Howard, Jerome R., [redacted].
Howley, Michael J., [redacted].
Hoyer, Gustave R., [redacted].
Hubert, Charles R., [redacted].
Huffman, Melvin E., [redacted].
Hughes, Richard S., [redacted].
Hunter, Stephen A., [redacted].
Hutt, Melvyn D., [redacted].
Inzana, Anthony L., [redacted].
Ivy, James E., [redacted].
Jensen, Phillip E., [redacted].
Jester, Clifton J., [redacted].
Johnson, Franklyn R., [redacted].
Jones, William T., Jr., [redacted].
Jordan, Marcelite C., [redacted].
Kabler, Paul W., [redacted].
Kampe, Arnold J., [redacted].
Knarr, John J., [redacted].
Krzykoski, Stephen H., [redacted].
Kurinec, Ronald G., [redacted].
Lang, Kenneth J., [redacted].
Latham, Rodney H., [redacted].
Lentz, David H., [redacted].
Lestourgeon, Dale S., [redacted].
Lill, Anthony A., [redacted].
Lohse, David L., [redacted].
Lukens, Robert P., [redacted].
Malone, Thomas M., [redacted].
Mannen, James T., [redacted].
Marvin, Bernard D., [redacted].
Massie, Raymond P., Jr., [redacted].
Masten, William A., Jr., [redacted].
McCulley, Rosemary, [redacted].
Medlock, Ronald W., [redacted].
Merchent, Kenneth N., [redacted].
Merritt, Ray L., Jr., [redacted].
Mills, James E., Jr., [redacted].
Mitchell, David E., [redacted].
Morton, David D., [redacted].
Mouw, Daryl J., [redacted].
Murphy, Terrence M., [redacted].
Nagy, Peter J., [redacted].
Nakunz, Martin W., [redacted].
Nutter, Vernon D., [redacted].
O'Hara, Joseph, III, [redacted].
Pahls, George A., [redacted].
Parrish, James E., [redacted].
Parrott, Robert H., [redacted].
Patterson, William W., [redacted].
Patton, Paul G., [redacted].
Peacock, Mark D., [redacted].
Pearsall, Charles E., Jr., [redacted].
Perry, Kenneth, [redacted].
Peterson, Henry R., [redacted].
Peterson, Joel G., [redacted].
Phillips, Leon D., [redacted].
Piker, John T., [redacted].
Pomranka, Carl F., [redacted].
Poole, Luther A., [redacted].
Pope, Larry E., [redacted].
Pope, Ross G., Jr., [redacted].
Powell, George M., IV, [redacted].
Proctor, Ronald L., [redacted].
Pugh, Lorenzo, [redacted].
Quijada, Frank S., [redacted].
Raudenbush, Donald G., [redacted].
Redman, Theodore C., [redacted].
Reed, Perry A., Jr., [redacted].
Reid, James R., [redacted].
Reighn, Oliver C., Jr., [redacted].

Rhode, Raymond H., Jr., xxx-xx-xxxx
Rhode, Storm C., III, xxx-xx-xxxx
Rhodes, Ronald M., xxx-xx-xxxx
Rice, David C., xxx-xx-xxxx
Rice, Robert J., Jr., xxx-xx-xxxx
Rider, Edwin W., xxx-xx-xxxx
Rowland, Robert L., xxx-xx-xxxx
Sadler, Charles D., xxx-xx-xxxx
Sanders, Fred R., Jr., xxx-xx-xxxx
Schantz, Bruce M., xxx-xx-xxxx
Scharf, Richard L., xxx-xx-xxxx
Schimmel, Robert E., xxx-xx-xxxx
Schwenke, Richard T., xxx-xx-xxxx
Sears, Hayden A., Jr., xxx-xx-xxxx
Shirley, Jerry D., xxx-xx-xxxx
Shriver, Arthur D., xxx-xx-xxxx
Simmons, Richard E., xxx-xx-xxxx
Sindt, Linda K., xxx-xx-xxxx
Singleton, Barry A., xxx-xx-xxxx
Small, Dennis E., xxx-xx-xxxx
Smith, Dee R., xxx-xx-xxxx
Smith, Dwight D., xxx-xx-xxxx
Smith, E. C., xxx-xx-xxxx
Smith, Jeremy F., xxx-xx-xxxx
Smith, Richard P., xxx-xx-xxxx
Smith, Steve R., xxx-xx-xxxx
Snyder, John D., xxx-xx-xxxx
Snyder, Richard A., xxx-xx-xxxx
Sonnenfeld, Robert E., xxx-xx-xxxx
Stepetic, Thomas J., Jr., xxx-xx-xxxx
Stout, Charles R., xxx-xx-xxxx
Sutherlin, Lorne D., xxx-xx-xxxx
Talbot, Ferrell L., xxx-xx-xxxx
Tannehill, James, II, xxx-xx-xxxx
Tate, James W., xxx-xx-xxxx
Tate, Jillian D., xxx-xx-xxxx
Taylor, Philip R., xxx-xx-xxxx
Taylor, Terry N., xxx-xx-xxxx
Tepfer, Daniel, xxx-xx-xxxx
Thomas, Austin K., Jr., xxx-xx-xxxx
Thompson, Charles A., xxx-xx-xxxx
Tonner, Robert W., xxx-xx-xxxx
Tripp, Roger C., xxx-xx-xxxx
Tucker, Jackie R., xxx-xx-xxxx
Umberger, John H., xxx-xx-xxxx
Vasilopoulos, John A., xxx-xx-xxxx
Venglar, Patrick W., xxx-xx-xxxx
Ventress, John D., xxx-xx-xxxx
Vriezelaar, Donald W., xxx-xx-xxxx
Wade, James T., xxx-xx-xxxx
Walker, Duncan E., xxx-xx-xxxx
Wally, William M., xxx-xx-xxxx
Walsh, Richard N., xxx-xx-xxxx
Walter, Louis P., xxx-xx-xxxx
Ward, George H., xxx-xx-xxxx
Ward, Larry G., xxx-xx-xxxx
Wardlaw, John W., Jr., xxx-xx-xxxx
Weisinger, William S., Jr., xxx-xx-xxxx
Weitzel, Eilert R., II, xxx-xx-xxxx
White, Henry A., Jr., xxx-xx-xxxx
Wickstrom, Clifton D., xxx-xx-xxxx
Wiggins, Ellsworth E., xxx-xx-xxxx
Wilcoxon, James F., xxx-xx-xxxx
Winters, Henry, Jr., xxx-xx-xxxx
Wodarczyk, Ronald S., xxx-xx-xxxx
Woods, Gary K., xxx-xx-xxxx
Wyspianski, Stanley A., xxx-xx-xxxx
Yahn, David R., xxx-xx-xxxx
Yaunches, George J., xxx-xx-xxxx
Yonke, Gary L., xxx-xx-xxxx
York, James H., xxx-xx-xxxx
Young, Ronald E., xxx-xx-xxxx
Zadareky, Joseph T., II, xxx-xx-xxxx

The following persons for appointment in the Regular Air Force, in the grades indicated, under the provisions of section 8284, title 10, United States Code, with a view to designation under the provisions of section 8067, title 10, United States Code, to perform the duties indicated, and with dates of rank to be determined by the Secretary of the Air Force:

To be major (chaplain)

Lengel, Stuart H., Jr. xxx-xx-xxxx

To be captain (chaplain)

Black, Vernon R., xxx-xx-xxxx
Cathy, Richard J., xxx-xx-xxxx
Eustes, Alfred W., Jr., xxx-xx-xxxx
Frissell, Charles R., xxx-xx-xxxx
Jahren, John C., xxx-xx-xxxx
Kirk, David, xxx-xx-xxxx
McAllister, Robert L., xxx-xx-xxxx
McGuffey, Kenneth D., xxx-xx-xxxx
Nadine, Jerome E., xxx-xx-xxxx
Pressley, Clyde F., Jr., xxx-xx-xxxx
Rowell, Albert J., xxx-xx-xxxx
Sazy, Michael J., Jr., xxx-xx-xxxx
Tipton, Harry S., xxx-xx-xxxx

To be first lieutenant (chaplain)

Bohush, John D., xxx-xx-xxxx
Booke, Peter W., xxx-xx-xxxx
Donahugh, Donald E., xxx-xx-xxxx
Dzik, Richard F., xxx-xx-xxxx
Galloway, Edward E., xxx-xx-xxxx
Hancock, Jimmie L., xxx-xx-xxxx
Hendry, Owen J., xxx-xx-xxxx
Hubbard, Beryl T., xxx-xx-xxxx
Knapp, Lawrence E., xxx-xx-xxxx
Macrander, Charles W., xxx-xx-xxxx
Mayotte, Allan J., xxx-xx-xxxx
Moffitt, Robert E., xxx-xx-xxxx
Nicita, Vincent R., xxx-xx-xxxx
Richter, John F., xxx-xx-xxxx
Riza, Bradford L., xxx-xx-xxxx
Shepanski, Donatus C., xxx-xx-xxxx
Singletary, John D., xxx-xx-xxxx

To be major (judge advocate)

Ambelang, Richard L., xxx-xx-xxxx
Langdell, Samuel F., Jr., xxx-xx-xxxx
Smith, Earl C., xxx-xx-xxxx

To be captain (judge advocate)

Angelides, Nicholas J., xxx-xx-xxxx
Beal, John R., xxx-xx-xxxx
Christo, Thomas A., xxx-xx-xxxx
Cole, Charles R., xxx-xx-xxxx
Dearborn, Oris D. Jr., xxx-xx-xxxx
Eliasen, Lyle D., xxx-xx-xxxx
Forbes, Stuart R., xxx-xx-xxxx
Graham, James H. Jr., xxx-xx-xxxx
Keeshan, James H. Jr., xxx-xx-xxxx
Lingo, Robert S., xxx-xx-xxxx
Loy, William A., xxx-xx-xxxx
Martin, Donald J., xxx-xx-xxxx
Nunn, Leslie E., xxx-xx-xxxx
Page, Joseph F., III, xxx-xx-xxxx
Palochak, John B., xxx-xx-xxxx
Robinson, Jack R., xxx-xx-xxxx
Rothenburg, Richard F., xxx-xx-xxxx
Sasadu, Chester J. Jr., xxx-xx-xxxx
Schmidt, James L., xxx-xx-xxxx
Spillman, Barton L., xxx-xx-xxxx
Stewart, Robert B., xxx-xx-xxxx
Sullivan, David F. Jr., xxx-xx-xxxx
Warren, Keith A., xxx-xx-xxxx

To be first lieutenant (judge advocate)

Aaron, Richard J., xxx-xx-xxxx
Alpern, Howard J., xxx-xx-xxxx
Amyx, Clyde H., II, xxx-xx-xxxx
Anderson, Michael J., xxx-xx-xxxx
Blue, Robert C. Jr., xxx-xx-xxxx
Bourland, Michael V., xxx-xx-xxxx
Bradley, Richard C., III, xxx-xx-xxxx
Brandt, Larry C., xxx-xx-xxxx
Burns, Harry A., III, xxx-xx-xxxx
Buynak, Stephen T., Jr., xxx-xx-xxxx
Caputo, Leonard M., xxx-xx-xxxx
Carpenter, Joseph T., xxx-xx-xxxx
Cary, Curtis W., xxx-xx-xxxx
Christian, Thomas R., xxx-xx-xxxx
Cregar, William C., xxx-xx-xxxx
Damante, Raymond P., xxx-xx-xxxx
Dawson, Richard T., xxx-xx-xxxx
Donovan, James P., xxx-xx-xxxx
Forbes, David P., xxx-xx-xxxx
Gann, Tom R., xxx-xx-xxxx
Greer, David E., xxx-xx-xxxx
Hall, Richard F., xxx-xx-xxxx
Harrell, Robison R., xxx-xx-xxxx
Hermann, Dale M., xxx-xx-xxxx
Higgins, Robert F., xxx-xx-xxxx
Hoofnagle, William H., III, xxx-xx-xxxx
Jackson, William L., xxx-xx-xxxx
Jeppe, Gerald L., xxx-xx-xxxx
Johns, Kenneth E., Jr., xxx-xx-xxxx
Jones, Thomas H., xxx-xx-xxxx
Kampschroeder, Halley E., xxx-xx-xxxx
Kardys, Richard, xxx-xx-xxxx
King, Arthur J., xxx-xx-xxxx
Lahmann, Robert C., xxx-xx-xxxx
Landrey, David R., xxx-xx-xxxx
Lopez, Daniel F., xxx-xx-xxxx
Mayes, Robert J., xxx-xx-xxxx
McCarty, Bryan K., xxx-xx-xxxx
Moran, Francis S., Jr., xxx-xx-xxxx
Nicol, Danny F., xxx-xx-xxxx
Partridge, William F., Jr., xxx-xx-xxxx
Peak, John A., xxx-xx-xxxx
Pent, Michael R., xxx-xx-xxxx
Petrowski, Lawrence C., xxx-xx-xxxx
Pettway, James R., xxx-xx-xxxx
Pierce, David M., xxx-xx-xxxx
Porter, Charles A., Jr., xxx-xx-xxxx
Powers, Kenneth R., xxx-xx-xxxx
Prutzman, Peter K., xxx-xx-xxxx
Query, Bryan L., xxx-xx-xxxx
Regan, Gilbert J., xxx-xx-xxxx
Rodriguez, Edward F., Jr., xxx-xx-xxxx
Schumann, Ronald G., xxx-xx-xxxx
Schunke, John H., Jr., xxx-xx-xxxx
Shawver, Norman T., xxx-xx-xxxx
Sherman, Wiliam E., xxx-xx-xxxx
Silvey, Charles D., Jr., xxx-xx-xxxx
Simonton, Stephen L., xxx-xx-xxxx
Smigel, Leroy, xxx-xx-xxxx
Sollner, Richard H., xxx-xx-xxxx
Southam, Lynn W., xxx-xx-xxxx
Stewart, John C., Jr., xxx-xx-xxxx
Teeter, Dennis D., xxx-xx-xxxx
Thompkins, Stephen R., xxx-xx-xxxx
Thompson, James D., III, xxx-xx-xxxx
Walker, Joseph A., xxx-xx-xxxx
Wilhelm, Joseph A., III, xxx-xx-xxxx
Wilson, Charles R., Jr., xxx-xx-xxxx

To be major (medical)

Rickel, Rudolf G., xxx-xx-xxxx
Burns, John B., xxx-xx-xxxx
Kaminski, Paul F., xxx-xx-xxxx
Ramey, Ralph, Jr., xxx-xx-xxxx
Reay, Donald T., xxx-xx-xxxx
Shacklett, David E., xxx-xx-xxxx

To be captain (medical)

Alexander, Johnny B., xxx-xx-xxxx
Anderson, Robert, Jr., xxx-xx-xxxx
Barrocas, Albert, xxx-xx-xxxx
Baskin, Harold F., xxx-xx-xxxx
Baxter, Thomas L., III, xxx-xx-xxxx
Bedingfield, John R., Jr., xxx-xx-xxxx
Beineke, Daniel D., xxx-xx-xxxx
Bills, Gary L., xxx-xx-xxxx
Blumberg, Lawrence B., xxx-xx-xxxx
Boddie, Arthur W., Jr., xxx-xx-xxxx
Bohnenkamp, Ronald F., xxx-xx-xxxx
Britt, Darryl B., xxx-xx-xxxx
Buchanan, James R., xxx-xx-xxxx
Campbell, John S., xxx-xx-xxxx
Carroll, Herman G., Jr., xxx-xx-xxxx
Carter, Gary D., xxx-xx-xxxx
Castaneda, Tristan A., xxx-xx-xxxx
Christman, James E., xxx-xx-xxxx
Cole, Richard F., xxx-xx-xxxx
Couch, Ellis P., xxx-xx-xxxx
Coudon, Wilson L., xxx-xx-xxxx
Crouch, Edward E., xxx-xx-xxxx
Crute, James A., xxx-xx-xxxx
Cwazka, Walter F., xxx-xx-xxxx
Daniels, David H., Jr., xxx-xx-xxxx
Davis, Jeffrey G., xxx-xx-xxxx
Davis, William M., xxx-xx-xxxx
Derickson, James L., xxx-xx-xxxx
Douglas, Glen A., xxx-xx-xxxx
Dugger, David L., xxx-xx-xxxx
Duncan, Roy D., xxx-xx-xxxx
Feray, Cotton D. E., xxx-xx-xxxx
Fielding, Steven L., xxx-xx-xxxx
Fisher, George H., xxx-xx-xxxx
Foshee, William S., xxx-xx-xxxx
Foster, James E., xxx-xx-xxxx
Foster, William P., xxx-xx-xxxx
Garcia, Raymond L., xxx-xx-xxxx
Gardner, Albert E., xxx-xx-xxxx
Garrott, Thomas C., xxx-xx-xxxx
Gehring, Gordon G., xxx-xx-xxxx
Genrich, John H., xxx-xx-xxxx
Gibb, Paul D., xxx-xx-xxxx
Girod, Marvin G., xxx-xx-xxxx

Graham, Robert J., xxx-xx-xxxx
Gralino, Bernard J., Jr., xxx-xx-xxxx
Greene, Jerry W., xxx-xx-xxxx
Griffin, John J., xxx-xx-xxxx
Guise, Charles W., xxx-xx-xxxx
Gutierrez, Armando N., xxx-xx-xxxx
Hafermann, David R., xxx-xx-xxxx
Halverson, James L., xxx-xx-xxxx
Hammonds, Max W., xxx-xx-xxxx
Hampton, John R., III, xxx-xx-xxxx
Harasimowicz, Joseph A., xxx-xx-xxxx
Harper, William F., xxx-xx-xxxx
Harris, Melvin E., xxx-xx-xxxx
Harris, Walter D., xxx-xx-xxxx
Hayes, Vernon J., xxx-xx-xxxx
Heimburger, Steven L., xxx-xx-xxxx
Hendlick, Richard M., xxx-xx-xxxx
Henrikson, Ronald A., xxx-xx-xxxx
Herpin, Daniel A., xxx-xx-xxxx
Hightower, Leroy W., Jr., xxx-xx-xxxx
Hoberman, Lawrence J., xxx-xx-xxxx
Hoffman, Gerald E., xxx-xx-xxxx
Hood, Royce E., Jr., xxx-xx-xxxx
Horvath, Robert A., xxx-xx-xxxx
Howiler, William E., Jr., xxx-xx-xxxx
Isernamaral, Jesus H., xxx-xx-xxxx
Jackson, Bruce G., xxx-xx-xxxx
Jacobs, Robert L., Jr., xxx-xx-xxxx
James, Richard E., xxx-xx-xxxx
Jernigan, John F., xxx-xx-xxxx
Johnson, Benny D., xxx-xx-xxxx
Johnson, Sherman B., xxx-xx-xxxx
Johnstone, Robert W., xxx-xx-xxxx
Jones, Dennis S., xxx-xx-xxxx
Kane, Daniel D., xxx-xx-xxxx
Kaplan, Peter D., xxx-xx-xxxx
Kee, Jimmy W., xxx-xx-xxxx
Kennedy, James J., III, xxx-xx-xxxx
Kercher, Eugene E., xxx-xx-xxxx
Kippel, Eugene J., xxx-xx-xxxx
Kish, Karl K., xxx-xx-xxxx
Koop, Lamonte P., xxx-xx-xxxx
Kunitz, Saul N., xxx-xx-xxxx
Lee, Dennis R., xxx-xx-xxxx
Legowik, John T., xxx-xx-xxxx
Lehman, Craig A., xxx-xx-xxxx
Lindley, Ancil L., III, xxx-xx-xxxx
Linehan, Timothy E., xxx-xx-xxxx
Loftus, Paul M., xxx-xx-xxxx
Longo, Michael R., Jr., xxx-xx-xxxx
Lonon, Robert W., Jr., xxx-xx-xxxx
Lorenz, Kenneth A., xxx-xx-xxxx
Luetje, Charles M., II, xxx-xx-xxxx
Lyle, Russell R., xxx-xx-xxxx
Mack, Leo W., Jr., xxx-xx-xxxx
Magill, Hubert L., xxx-xx-xxxx
Martin, William C., xxx-xx-xxxx
Martindale, Richard E., Jr., xxx-xx-xxxx
Martineztirado, Jose L., xxx-xx-xxxx
Masters, Charles J., xxx-xx-xxxx
McCluskey, Oliver E., xxx-xx-xxxx
McCollum, Ronald J., xxx-xx-xxxx
McGee, James W. IV, xxx-xx-xxxx
McLaughlin, Gary W., xxx-xx-xxxx
Mead, Philip J., xxx-xx-xxxx
Miller, James B., xxx-xx-xxxx
Miller, John D., xxx-xx-xxxx
Moon, Michael R., xxx-xx-xxxx
Moore, Terence N., xxx-xx-xxxx
Morrow, Robert L., Jr., xxx-xx-xxxx
Mueller, Kenneth H., xxx-xx-xxxx
Mullins, James D., xxx-xx-xxxx
Murray, Harry M., Jr., xxx-xx-xxxx
Orrison, William G., xxx-xx-xxxx
Osteen, Frank B., xxx-xx-xxxx
Patton, Clifton M., Jr., xxx-xx-xxxx
Paullus, Wayne S., Jr., xxx-xx-xxxx
Pedro, Steven D., xxx-xx-xxxx
Perezfigaredo, Rafael A., xxx-xx-xxxx
Pickett, James D., xxx-xx-xxxx
Plager, Stephan D., xxx-xx-xxxx
Player, David M., xxx-xx-xxxx
Pletincks, John R., III, xxx-xx-xxxx
Podoloff, Donald A., xxx-xx-xxxx
Pritchett, Paul E., xxx-xx-xxxx
Prochazka, James V., xxx-xx-xxxx
Randall, Eugene H., xxx-xx-xxxx
Rasmussen, Reed C., xxx-xx-xxxx
Reider, Daner R., xxx-xx-xxxx
Rettig, Kenneth R., xxx-xx-xxxx
Richmond, David R., xxx-xx-xxxx
Rist, Toivo E., xxx-xx-xxxx
Robinson, David L., xxx-xx-xxxx
Rogers, William D., Jr., xxx-xx-xxxx
Russell, David A., xxx-xx-xxxx
Rutland, Andrew, xxx-xx-xxxx
Saalwaechter, John J., xxx-xx-xxxx
Sanwick, Steven H., xxx-xx-xxxx
Savran, Stephen V., xxx-xx-xxxx
Schull, Jerry L., xxx-xx-xxxx
Shaw, Jonathan K., xxx-xx-xxxx
Shepard, Martin J., xxx-xx-xxxx
Sill, William F., xxx-xx-xxxx
Singal, Sheldon, xxx-xx-xxxx
Singer, Karl L., xxx-xx-xxxx
Smiley, William H., xxx-xx-xxxx
Smith, Wayne E., xxx-xx-xxxx
Snider, William J., xxx-xx-xxxx
Sox, David W., xxx-xx-xxxx
Spence, Michael B., xxx-xx-xxxx
Stewart, Ralph W., xxx-xx-xxxx
Stroble, Charles P., xxx-xx-xxxx
Stronach, Neil, xxx-xx-xxxx
Stump, Alfred L., xxx-xx-xxxx
Stuteville, Joseph E., xxx-xx-xxxx
Sykes, James D., xxx-xx-xxxx
Taylor, William M., xxx-xx-xxxx
Thomas, Robert F., xxx-xx-xxxx
Tremblay, Normand F., xxx-xx-xxxx
Trent, William G., xxx-xx-xxxx
Trevino, Saul G., xxx-xx-xxxx
Trick, Lorence W., xxx-xx-xxxx
Trunk, Gary, xxx-xx-xxxx
Tuggle, Allen O., xxx-xx-xxxx
Vandersarl, Jules V., xxx-xx-xxxx
Vicik, Gary J., xxx-xx-xxxx
Vonvalkingburg, Earl J., xxx-xx-xxxx
Wardinsky, Terrance D., xxx-xx-xxxx
Wellman, John, xxx-xx-xxxx
Wells, Thomas T., xxx-xx-xxxx
Welsh, George F., xxx-xx-xxxx
Wertz, Andrew W., xxx-xx-xxxx
Westra, John P., xxx-xx-xxxx
Wheeler, Ralph A., xxx-xx-xxxx
Wilder, Thomas C, Jr., xxx-xx-xxxx
Wilson, James M., xxx-xx-xxxx
Wilson, Robert O., xxx-xx-xxxx
Wooddell, William J., xxx-xx-xxxx
Wright, Dennis O., xxx-xx-xxxx
Yrizarryyunque, Jose M., xxx-xx-xxxx

To be first lieutenant (medical)

Adams, John A., xxx-xx-xxxx
Anderson, George K., xxx-xx-xxxx
Bellas, Richard C., xxx-xx-xxxx
Biehl, Albert G. III, xxx-xx-xxxx
Bishop, John A., xxx-xx-xxxx
Buckley, Robert L., Jr., xxx-xx-xxxx
Charlesworth, Ernest N., xxx-xx-xxxx
Coburn, Ernest L., Jr., xxx-xx-xxxx
Crawford, Raymond S. III, xxx-xx-xxxx
Davis, David L., xxx-xx-xxxx
Dees, James G., xxx-xx-xxxx
Delp, Glenn R., xxx-xx-xxxx
Evans, Richard M., xxx-xx-xxxx
Evans, William M., xxx-xx-xxxx
Ferguson, Peter E., xxx-xx-xxxx
Gregory, James F., xxx-xx-xxxx
Hall, Ronald R., xxx-xx-xxxx
Hensley, Michael F., xxx-xx-xxxx
Keller, Harrison B., xxx-xx-xxxx
Lanier, Bobby 0., xxx-xx-xxxx
Lockman, David S., xxx-xx-xxxx
Maceluch, John J., xxx-xx-xxxx
Meier, Walter L., xxx-xx-xxxx
Neumann, James F., xxx-xx-xxxx
Newland, Earl F., xxx-xx-xxxx
Owens, Carol A., xxx-xx-xxxx
Owens, Louis F., Jr., xxx-xx-xxxx
Perry, Byron L., xxx-xx-xxxx
Reeves, Jerry D., xxx-xx-xxxx
Rose, Donald D., xxx-xx-xxxx
Shelley, James M., Jr., xxx-xx-xxxx
Shirley, Douglas P., xxx-xx-xxxx
Skiwski, Jacob, xxx-xx-xxxx
Strauss, David D., xxx-xx-xxxx
Sturgeon, Carl L., Jr., xxx-xx-xxxx
Sullivan, Richard J., xxx-xx-xxxx
Trainor, Michael P., xxx-xx-xxxx

To be major (dental)

Block, Philip L., xxx-xx-xxxx

To be captain (dental)

Anderson, Paul E., xxx-xx-xxxx
Ayres, Randall W., xxx-xx-xxxx
Balzer, Richard R., xxx-xx-xxxx
Barkmeier, Wayne W., xxx-xx-xxxx
Began, Thomas J., xxx-xx-xxxx
Bergman, Dennis W., xxx-xx-xxxx
Blaser, Paul K., xxx-xx-xxxx
Coleman, Robert M., xxx-xx-xxxx
Colvin, John A., III, xxx-xx-xxxx
Domine, Patrick L., xxx-xx-xxxx
Farmer, Richard B., III, xxx-xx-xxxx
Gecsek, Edward P., xxx-xx-xxxx
Gieser, Dennis P., xxx-xx-xxxx
Giles, Joseph E., xxx-xx-xxxx
Gross, Stephen, xxx-xx-xxxx
Haberman, Thomas J., xxx-xx-xxxx
Hager, Ronald C., xxx-xx-xxxx
Harmison, Elmer D., xxx-xx-xxxx
Haveman, Carl W., xxx-xx-xxxx
Igo, Robert M., xxx-xx-xxxx
James, Lawrence D., xxx-xx-xxxx
Landers, Sam R., xxx-xx-xxxx
Lauder, Keith F., xxx-xx-xxxx
Lawless, John E., xxx-xx-xxxx
Lubow, Richard M., xxx-xx-xxxx
Maki, Karl A., xxx-xx-xxxx
O'Connor, John T., Jr., xxx-xx-xxxx
Otto, Paul W., xxx-xx-xxxx
Ray, Daniel W., xxx-xx-xxxx
Sandusky, William J., xxx-xx-xxxx
Scott, George W., xxx-xx-xxxx
Scott, James R., xxx-xx-xxxx
Staab, Robert G., xxx-xx-xxxx
Staley, Jon E., xxx-xx-xxxx
Stormo, Gary C., xxx-xx-xxxx
Swain, Dennis M., xxx-xx-xxxx
Swan, Richard H., xxx-xx-xxxx
Szana, James C., xxx-xx-xxxx
Takesono, Satoru, xxx-xx-xxxx
Thurmond, John W., xxx-xx-xxxx
Voss, James E., xxx-xx-xxxx
Winland, Roger D., xxx-xx-xxxx

To be first lieutenant (dental)

Abrahams, Lewis J., xxx-xx-xxxx
Altschuler, Bruce R., xxx-xx-xxxx
Arnold, Philip K., xxx-xx-xxxx
Berkley, Thomas S., xxx-xx-xxxx
Boyd, Douglas C., xxx-xx-xxxx
Bravin, Robert V., xxx-xx-xxxx
Cable, Steven G., xxx-xx-xxxx
Caldwell, Joseph L., xxx-xx-xxxx
Green, Barry L., xxx-xx-xxxx
Hagelin, David C., xxx-xx-xxxx
High, Curtis L., xxx-xx-xxxx
Kendig, Robert L., xxx-xx-xxxx
McGhee, Barton L., Jr., xxx-xx-xxxx
Millar, Leslie C., xxx-xx-xxxx
Neale, William S., Jr., xxx-xx-xxxx
Oesterle, Larry J., xxx-xx-xxxx
Otis, David B., xxx-xx-xxxx
Pearson, Kenneth W., xxx-xx-xxxx
Porter, James F., xxx-xx-xxxx
Quinley, Philip D., xxx-xx-xxxx
Resch, Gary K., xxx-xx-xxxx
Roach, Pat H., xxx-xx-xxxx
Snell, Gerald M., xxx-xx-xxxx
Tebrock, Otto C., xxx-xx-xxxx
Thomas, Lloyd G., Jr., xxx-xx-xxxx
Tobias, Richard T., xxx-xx-xxxx
Vrona, Douglas G., xxx-xx-xxxx
Weiner, Bruce H., xxx-xx-xxxx
Williams, Larry S., xxx-xx-xxxx
Wilmert, Wilbur J., xxx-xx-xxxx

To be first lieutenant (nurse)

Allison, Linda K., xxx-xx-xxxx
Anderson, Ingrid L., xxx-xx-xxxx
Annie, Mary V., xxx-xx-xxxx
Ashbrook, Kay A., xxx-xx-xxxx
Bailey, Nilda R., xxx-xx-xxxx
Bailey, Raynelle, xxx-xx-xxxx
Barbi, Susan J. F., xxx-xx-xxxx
Barlik, Sharyn L., xxx-xx-xxxx
Barry, Margaret J., xxx-xx-xxxx
Baumann, William E., xxx-xx-xxxx
Beadle, Claudia S., xxx-xx-xxxx
Beam r, Laura M., xxx-xx-xxxx

Beausang, Linda S., xxx-xx-xxxx
Bergquist, Sandra L., xxx-xx-xxxx
Bigelow, Jane A., xxx-xx-xxxx
Blanco, Barbara A., xxx-xx-xxxx
Bloomquist, Martha M., xxx-xx-xxxx
Booker, Marjorie O., xxx-xx-xxxx
Boothe, James F., xxx-xx-xxxx
Bordas, Carl, xxx-xx-xxxx
Bourdo, Christine A., xxx-xx-xxxx
Boyd, Marjorie S., xxx-xx-xxxx
Bozeman, Ruby A., xxx-xx-xxxx
Bramble, Elizabeth A., xxx-xx-xxxx
Braswell, Alice H., xxx-xx-xxxx
Broadwater, Linda W., xxx-xx-xxxx
Brooks, Mary A., xxx-xx-xxxx
Butler, Nettie L., xxx-xx-xxxx
Butterfield, Ruth A., xxx-xx-xxxx
Campbell, Patricia E., xxx-xx-xxxx
Cantrell, Sandra E., xxx-xx-xxxx
Cardonaserrano, Angeles J., xxx-xx-xxxx
Cauthen, Faye L., xxx-xx-xxxx
Chalmers, Kathleen A., xxx-xx-xxxx
Champion, Sharon A., xxx-xx-xxxx
Chandler, Merry J., xxx-xx-xxxx
Cleveland, Suzann J., xxx-xx-xxxx
Cole, Bobbie L., xxx-xx-xxxx
Cole, Margaret A., xxx-xx-xxxx
Cookson, Grace E., xxx-xx-xxxx
Corley, Linda L., xxx-xx-xxxx
Cox, Catherine G., xxx-xx-xxxx
Daniel, Warren S., xxx-xx-xxxx
Daniels, Martha S., xxx-xx-xxxx
Dascalos, Stephanie J., xxx-xx-xxxx
Delbene, Susan C., xxx-xx-xxxx
Depaola, Maryanne, xxx-xx-xxxx
Derrick, Karen A., xxx-xx-xxxx
Devries, Elwayne L., xxx-xx-xxxx
Dicke, Marilyn A., xxx-xx-xxxx
Dicier, Larry A., xxx-xx-xxxx
Doerrer, Nancy A., xxx-xx-xxxx
Dohany, Darlene S., xxx-xx-xxxx
Douglass, Cheryl A., xxx-xx-xxxx
Eeckhoudt, Barbara A., xxx-xx-xxxx
Eichin, Jane H., xxx-xx-xxxx
Elliott, Barbara A., xxx-xx-xxxx
Ellison, Barbara L., xxx-xx-xxxx
Fennell, Karen S., xxx-xx-xxxx
Ferris, Sandra L., xxx-xx-xxxx
Fettig, Lawrence J., xxx-xx-xxxx
Frain, Patricia E., xxx-xx-xxxx
Gallo, Agatha M., xxx-xx-xxxx
Gans, Genevieve A., xxx-xx-xxxx
Gardner, Marsha, xxx-xx-xxxx
Garnett, Helen A., xxx-xx-xxxx
Gath, Jane E., xxx-xx-xxxx
George, Sharon R., xxx-xx-xxxx
Gould, Roberta L., xxx-xx-xxxx
Gregory, Patricia D., xxx-xx-xxxx
Groth, Nancy E., xxx-xx-xxxx
Grubor, Darlene A. M., xxx-xx-xxxx
Gruenwald, Margaret E., xxx-xx-xxxx
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Febuary, Richard J., Jr., xxx-xx-xxxx
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Biron, Laurent J., xxx-xx-xxxx
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To be captain (*biomedical science*)

Blochberger, Charles W., Jr., xxx-xx-xxxx
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Carter, John S., xxx-xx-xxxx
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Martone, Joseph A., xxx-xx-xxxx
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Bolerjack, Thomas G., xxx-xx-xxxx
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To be captain (*veterinary*)

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Atkinson, George W., xxx-xx-xxxx
Badertscher, Robert R. II, xxx-xx-xxxx
Beach, Ronald T., xxx-xx-xxxx
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Warner, Ronald D., xxx-xx-xxxx.
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To be first lieutenant (medical specialist)

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HOUSE OF REPRESENTATIVES—*Tuesday, June 12, 1973*

The House met at 12 o'clock noon.

Rev. A. Dickerson Salmon, Jr., All Saints' Parish, Frederick, Md., offered the following prayer:

Almighty God, under whose protection and guidance our fathers founded this Republic, grant us, we pray, Your continuing help, that we may counsel together, ever mindful that all wisdom, sound judgments, and right actions come from You. Grant to the Members of this House and all others in authority the knowledge that they are Your servants in all their deliberations for our beloved country.

Grant to each of us a renewed vision of Your goodness and love, that all our actions begun, continued, and ended in You may be guided by compassion to control ambition; by truth to overcome evil and strife; and by faith to know and to do Your holy will until our life's end, through Jesus Christ our Lord. Amen.

THE JOURNAL

The SPEAKER. The Chair has examined the Journal of the last day's proceedings and announces to the House his approval thereof.

Without objection, the Journal stands approved.

There was no objection.

MESSAGE FROM THE SENATE

A message from the Senate by Mr. Arrington, one of its clerks, announced that the Senate had passed bills of the following titles, in which the concurrence of the House is requested:

S. 978. An act to amend the Federal Trade Commission Act (15 U.S.C. 45) to provide that under certain circumstances exclusive territorial arrangements shall not be deemed unlawful; and

S. 1888. An act to extend and amend the Agricultural Act of 1970 for the purpose of assuring consumers of plentiful supplies of food and fiber at reasonable prices.

WELCOME TO REV. A. DICKERSON SALMON, JR.

(Mr. BYRON asked and was given permission to address the House for 1 minute.)

Mr. BYRON. Mr. Speaker, it is a pleasure to welcome the Reverend A. Dickerson Salmon, of Frederick, Md., rector of the All Saints Parish. I am a member of that body, and it is a pleasure to welcome him here this morning.

APPOINTMENT AS MEMBERS OF COMMISSION ON REVIEW OF NATIONAL POLICY TOWARD GAMBLING

The SPEAKER. Pursuant to the provisions of section 804(b), title 8, Public Law 91–452, the Chair appoints as members of the Commission on the Review of the National Policy Toward Gambling the following Members on the part of the House: Mr. HANLEY, of New York; Mr. CARNEY of Ohio; Mr. HOGAN, of Maryland; and Mr. HUNT, of New Jersey.

THE HUD NEW COMMUNITIES PROGRAM

(Mr. BARRETT asked and was given permission to address the House for 1 minute, to revise and extend his remarks and include extraneous matter.)

Mr. BARRETT. Mr. Speaker, the Subcommittee on Housing held 2 days of oversight hearings during the last week of May on the new communities development program administered by the Department of Housing and Urban Development.

As Members know, this is one of the few HUD programs which was not devastated by the President's fiscal year 1974 budget. This program, in fact, is expanded by the budget, which calls for an additional 10 new community project approvals.

Despite this general commitment, however, there have been widespread reports of inadequate staffing, which has led to long processing delays, bureaucratic second-guessing of project decisions, and, in general, a lack of a real commitment by the administration to the program. As a result, the program's image is now a generally negative one with private developers and the investment community.

The subcommittee's oversight hearings generally confirmed these reports of inadequate staffing, leading to long processing periods and substantial losses of time and money for private developers. The Secretary of HUD, on the other hand, minimized the staffing problems, asserting that the overall complexity of projects, combined with the need to implement such time-consuming Federal requirements as the submission of environmental impact statements, are the principal cause of program delays.

In order to resolve these conflicting views of the program's difficulties, the subcommittee will continue its oversight activities with respect to the administration of the new communities program. I plan to ask several of our subcommittee members to visit three or four new-town project sites, interview the developers' staffs and HUD personnel assigned to these projects, and report to me the results of their investigation. In this way I hope the subcommittee can offer HUD some constructive suggestions for improved administration of this excellent program.

MAJORITY LEADER THOMAS P. O'NEILL, JR., SAYS IMPOUNDMENT AND SPENDING CEILING BILL IS AN INITIATIVE AGAINST INFLATION

(Mr. O'NEILL asked and was given permission to address the House for 1 minute, to revise and extend his remarks, and include extraneous matter.)

Mr. O'NEILL. Mr. Speaker, I commend to the House bill No. H.R. 8480, the legislation setting up impoundment review procedures and fixing a spending ceiling for fiscal 1974.

Members of the House should be prepared to consider the legislation in the near future.

The bill demonstrates the intent of Congress to pursue a policy of fiscal responsibility without sacrificing our constitutional role in the ordering of national priorities.

The bill deals with the long-range question by setting up a permament mechanism for impoundment review. The procedure is similar to that long established for congressional review of executive reorganization plans.

H.R. 8480 deals with the immediate problem of inflation by fixing a spending ceiling of $267.1 billion for fiscal 1974. That is $1.6 billion less than the administration wants to spend. The bill requires impoundment—on an equitable, across-the-board basis—if necessary to stay below the spending ceiling for fiscal 1974.

This bill shows that Congress, at least, wants action on inflation. H.R. 8480 is an important step by the Congress in behalf of a comprehensive economic program to combat inflation.

CONFERENCE REPORT ON H.R. 5293, PEACE CORPS AUTHORIZATION

Mr. MORGAN. Mr. Speaker, I call up the conference report on the bill (H.R. 5293) authorizing additional appropriations for the Peace Corps, and ask unani-