SENATE—*Tuesday, November 10, 1987*

The Senate met at 9 a.m., and was called to order by the Honorable BOB GRAHAM, a Senator from the State of Florida.

PRAYER

The Chaplain, the Reverend Richard C. Halverson, D.D., offered the following prayer:

Let us pray:

*Blessed are they which do hunger and thirst after righteousness: for they shall be filled * * *. Blessed are the pure in heart; for they shall see God.* Matthew 5:6 and 8.

Mighty God, perfect in holiness, purity of heart has gone out of style in our culture. Having forsaken the absolute moral law which You gave Moses and engraved on the human conscience, we now have become arbiters of morality and ethics. Each decides what is moral and in the process we transpose values, making evil good and good evil. We have become a society of moral and ethical anarchy. How long O Lord—how long will You withhold Judgment?

Gracious loving Father, we seem to have lost our way. Help us to return to You—to a hunger and thirst for righteousness that will heal our land and restore our strength as a people. Humbly we ask this in the name of the Righteous One, Jesus. Amen.

APPOINTMENT OF ACTING PRESIDENT PRO TEMPORE

The PRESIDING OFFICER. The clerk will please read a communication to the Senate from the President pro tempore [Mr. STENNIS].

The legislative clerk read the following letter:

U.S. SENATE,
PRESIDENT PRO TEMPORE,
Washington, DC, November 10, 1987.

To the Senate:

Under the provisions of rule I, section 3, of the Standing Rules of the Senate, I hereby appoint the Honorable BOB GRAHAM, a Senator from the State of Florida, to perform the duties of the Chair.

JOHN C. STENNIS,
President pro tempore.

Mr. GRAHAM thereupon assumed the chair as Acting President pro tempore.

THE JOURNAL

Mr. BYRD. Mr. President, I ask unanimous consent that the Journal of the proceedings be approved to date.

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

Mr. BYRD. Mr. President, I yield my 5 minutes to the distinguished Senator from Wisconsin [Mr. PROXMIRE].

The ACTING PRESIDENT pro tempore. The Senator from Wisconsin.

THE AMERICAN PEOPLE WANT A NUCLEAR TEST BAN TREATY—THEY'RE RIGHT

Mr. PROXMIRE. Mr. President, recently I spoke on the floor of the Senate about the relationship between the crucial decisions we make as Members of the Congress and the public opinion that should play a major, if not always a decisive role in this great democracy. When any of us disagree with our ultimate bosses, the public, we should, in the judgment of this Senator, follow our conscience not the latest public opinion poll. On the other hand as Senators elected to represent our constituents, we should pay very close attention to the opinion of the people we represent. We should never forget that we act as representatives of those who elect us to office. If we disagree with the views of the people who elect us, who pay our salaries, with their taxes and in whose interest we serve, we should be very sure that we are right in our opinion and they are wrong in theirs.

With this in mind, consider the response of the public to a poll conducted by the respected professional polling organization Cambridge Reports. This was a poll conducted between last February 11 and February 23. Cambridge Reports asked the following question of 1,500 persons scientifically selected nationwide to provide an accurate representation of the Nation's opinion. Here was the question:

"Do you favor the United States stopping nuclear weapons testing as long as the Soviet Union also stops, or not?"

The results: Yes—78 percent; no—18 percent; not sure—4 percent.

Mr. President, it would be hard to find any controversial issue on which we would find such an overwhelming, emphatic agreement. This is particularly true when we recognize that the answer to this question flatly contradicts the present policy of our country and of a President who has been elected twice by landslide margins. President Reagan and his administration have made it emphatically clear that they intend to continue nuclear weapon testing. It is crystal clear that the President has no intention of even considering negotiations with the Soviet Union on the subject. This is true although the President of the United States, President Kennedy, in 1963 signed the Limited Test Ban Treaty that promised that this country would negotiate a comprehensive agreement to ban all nuclear weapons testing with the Soviet Union. This body, the U.S. Senate, overwhelmingly ratified that treaty. In doing so, it ratified our promise to negotiate a comprehensive end to nuclear testing. Our country has refused to stop testing in spite of the fact that the Soviet Union has repeatedly asserted its willingness to negotiate such a treaty.

We have refused to consider negotiations although our ablest scientists overwhelmingly tell us that we can adopt monitoring techniques that would assure our ability to verify the compliance of the Soviet Union with the agreement. We have refused to consider such an agreement although the Soviets have indicated their willingness to permit the location of monitoring stations within the Soviet Union that could detect any explosions sufficiently large to have military significance. We have refused to negotiate although it is clear that the one and only way to stop the technological nuclear arms race is to stop testing. It will avail the cause of peace little to reduce or eliminate intermediate nuclear weapons in Europe as we will do in the INF Treaty that the superpower leaders will sign on December 7, if the technology of nuclear destruction races ahead with the development of ever newer and more destructive weapons. It will avail the cause of peace little if both superpowers agree to destroy half their strategic nuclear arsenal if they can come on with even more devastating, more accurate weapons that will emerge from the continued testing of nuclear weapons. The technological nuclear weapons race will make meaningless any treaty reducing the number of nuclear weapons or eliminating certain classes of nuclear weapons.

Think of it. Over the past 27 years both the Soviet Union and the United States have reduced the megatonnage of their nuclear arsenals by up to 75 percent. And yet we all know that the Soviet and the United States nuclear arsenals are more powerful than ever. Why? Because the steady testing of nuclear weapons has enabled both countries to build more devastating nuclear weapons with far smaller megatonnage. It is the technological progress in nuclear weapons that can and will undermine any arms control progress we may make in reducing the nuclear weapon numbers.

● This "bullet" symbol identifies statements or insertions which are not spoken by a Member of the Senate on the floor.

AUTHENTICATED U.S. GOVERNMENT INFORMATION GPO

The fact is, Mr. President, that this emphatic 78 to 18 percent public support for a superpower agreement to stop nuclear weapons testing is a clear mandate for action by the Federal Government. Only this time the scientific experts join the overwhelming majority of our constitutents. We should do what is right in conscience as well as right in public opinion. That means we should negotiate the treaty to stop all nuclear weapons testing. Our country solemnly promised to negotiate such an agreement in 1963, when our President signed and this U.S. Senate ratified that treaty.

Mr. President, I thank, once again, the majority leader, and I yield the floor.

The ACTING PRESIDENT pro tempore. The Senator from Wisconsin has yielded the floor.

RESERVATION OF TIME OF REPUBLICAN LEADER

Mr. BYRD. Mr. President, I ask that the Republican leader's time be reserved.

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

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS ACT, 1988

The ACTING PRESIDENT pro tempore. Under the previous order, the time until 9:30 will be equally divided and controlled by the Senator from Louisiana, Senator JOHNSTON, and the Senators from Washington and Nevada, Senators ADAMS and REID.

The Senate resumed consideration of H.R. 2700, a bill making appropriations for energy and water development for the fiscal year ending September 30, 1988, and for other purposes.

Pending:

JOHNSTON modified amendment No. 1125 (to the first committee amendment), of a perfecting nature.

Who yields time?

Mr. BYRD. Mr. President, I ask unanimous consent that I may speak for not to exceed 5 minutes, without the time being charged.

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

TRADE AND THE FUTURE

Mr. BYRD. Mr. President, month after month we have had bad news on the trade front. Some of our best economists have taken a look at the future and see years of trade trouble ahead.

Last week the Joint Economic Committee took testimony on our trade future. What they heard is not reassuring. Mr. Roger Bird of Wharton Econometrics foresees only limited improvement in the trade deficit over the next 5 years. Stephen Roach of Morgan Stanley & Co. predicted that it would take 6 to 9 years to bring our trade deficit back into balance.

Mr. Roach may have been optimistic. The Acting Director of the Congressional Budget Office, Mr. Ed Gramlich, also put some hard numbers to the trade challenge we face over the next few years. CBO looked at the potential impact of faster growth abroad, a recession at home, and sharp dollar depreciation. By themselves, none of the factors promised future trade balance. Only in combination did they eliminate the trade deficit—and even then it will take until the end of this decade.

Mr. President, I have talked to some specialists who expect a recession to eliminate our trade problem. I don't like that approach myself—it is a little like losing your job so you can cut spending. CBO found that the short-term impact of a recession is lost when the economy recovers. In effect, the diet doesn't work unless you change your habits.

I am not going through these dour predictions to cast a shadow over our work today, Mr. President. But it is long past time we came to grips with the challenges that threaten our economic future.

Mr. President, last week I spoke about the need to move forward on trade just as we work hard at bringing down the fiscal deficit. Reaching agreement on the budget will show the markets that the Democrats and the Republicans, the President and the Congress, can work together for the national interest.

But effective Government is not a one-time response to a stock market crash. Nothing, Mr. President, nothing, could send a more positive signal to the markets than the Congress and the President working together to craft a trade bill. The numbers coming from the Joint Economic Committee are a reminder that we had better start solving the trade problem now—we have a long way to go.

Mr. President, I yield the floor.

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS ACT, 1988

(The Senate continued with consideration of the bill.)

The ACTING PRESIDENT pro tempore. Who yields time?

Mr. REID addressed the Chair.

The ACTING PRESIDENT pro tempore. The Senator from Nevada.

Mr. REID. Mr. President, I yield myself 5 minutes. Mr. President, a cloture motion is pending. I intend to vote for it.

I will cast that vote not from any sudden conversion to support for the addition of S. 1668 to the energy and water appropriations bill. Rather, because those of us who oppose that addition have now had some opportunity to marshal our facts and discuss the arguments, I think the time has come to move to a new stage of opposition.

We have explained our rationale at length; you have heard why the addition of this act is unacceptable as a matter of procedure and substance. The time allowed by cloture was used to make that case, and we see no need to extend the argument further on the Johnston amendment.

Rather, after cloture, we will take a reasonable time to sum up the facts we have presented, the facts and precedents which we believe mandate the defeat of this act, and certainly prohibit its passage in this manner.

For now, I want to abandon the cold logic of science, of probabilities, of cost versus risk analysis. Instead, let me speak to you from the heart.

There is more to the question of nuclear waste than pure science, although science mandated the act's defeat. Rather, I want to ask you to stop and think for a moment about what you are being asked to do.

This bill should be called the Nuclear Waste Terror Act of 1987, because that is what it really does. It mandates fear and legislates fright.

I am speaking now for the ordinary citizen. The family which bought its farm by the railroad in Illinois, the small businessman off the highway in Ohio, the mother who sends her children to school by bus down the interstate in Colorado, and yes, the men, and women and children who live, and work and play in my own State.

Without sufficient knowledge, against sound and educated advice of experts in and out of government you are being asked to choose a dump site and send the beast of plutonium stalking down the Nation's rails and roads.

You can expect only one result if this body passes the Johnston amendment. The people of this Nation will be subjected to a pervasive fear, whose very existence represents reality, and a terror as real as any fear of war or famine or disease.

I ask you to pause and reflect. Think for a moment, if you will, my friends, about a very real nuclear accident.

Two months ago scavengers in Goiana, Brazil, broke open a radiotherapy machine. Several ounces of cesium-137 were released. Four persons have died, and hundreds others are at risk. Their tragedy is real, but it is only part of the drama.

All over Brazil today buyers are shunning goods from the state where Goiana is located. Sales of cattle, crops, and manufactured products are down almost 50 percent. Residents cannot obtain hotel rooms in other

parts of the country; trade fair exhibits from the state have been rejected.

My learned friends would tell you that fear is irrational. It may well be. Irrational though it is perhaps, it is nonetheless very real.

People line up to be screened by monitors so they can receive a certificate of nonradioactivity. Let me quote from the Post:

> As the nozzle of the sensor passes slowly over chests, backs, arms and legs, quiet fright registers in many eyes. Breaths go short, in the tense hope that the machine's sensitive needle will show movement.

My friends, each of us owes a duty to the people of this Nation to assure them that the safest possible procedures are being followed. To do less is to invite terror into the homes and hearths of each of our constituents.

We will discuss the facts again, before we vote, but for now, let me ask of you again that you stop and think of the very real fear that passage of this bill in this way will generate in America's heart. Stop and imagined the farmer from Iowa whose products will not sell because of nuclear terror; think about the businessman whose shops fails in Kansas because of nuclear terror; remember the young mother whose children are shunned because of nuclear terror.

Pause for a moment to empathize with the people of this Nation and I am convinced that when the time comes, the Johnston amendment will not be passed as a part of this bill.

I yield back the remainder of my time.

The ACTING PRESIDENT pro tempore. The Senator from Nevada yields back the remainder of his time. Who yields time?

Mr. ADAMS addressed the Chair.

The ACTING PRESIDENT pro tempore. The Senator from Washington.

Mr. ADAMS. Mr. President, I want to make a few points about the pending amendment of Senator JOHNSTON. They are points that Senator REID and I have made over the last few days, but I think it is very important as this cloture vote and potentially other votes on this bill appear that our colleagues know precisely not only what the vote situation will be but what it is that this Senator and other Senators are attempting to accomplish with this debate.

First, this Senator is not opposed to attempts to fix the nuclear waste program. Quite the contrary, this Senator has an impelling interest in seeing that that program gets back on track. Washington State already stores more nuclear waste than any other area of the country.

Second, I do not honestly believe the approach contained in this amendment. I want to stress, Mr. President, that this morning the cloture vote occurs on an amendment, not on the bill. After this vote takes place, no matter which way it goes, the bill will continue to be debated unless we can remove from this bill the nuclear waste program. This is an appropriations bill. We have at all times not objected to the portions of the bill dealing with appropriations, but to the nuclear waste portions. In fact, and I want to stress, Mr. President, this amendment has now been divided into three parts. The three parts are the amendments that the committee has made prior to the nuclear waste amendments as division I; the nuclear waste bill, S. 1668 as division II; and the remaining amendments to this bill that were made by the committee as division III.

Division II is the one that we want a no vote on at such time as that may come before the Senate.

The basic problem with this bill, as I have indicated before, is that we have tried very hard to obtain the changes necessary to make the bill acceptable, to bring the nuclear waste program back on track.

But now we are preparing for a cloture vote, and, Mr. President, on this cloture vote we have three points on which, if they could be solved, we might be able to avoid a continuing filibuster during this week and during next week. Those three points were not to have a lameduck administration decide this January 1, 1989; second, to look at all three sites with a surface characterization to be sure we have the correct one and; third, to be certain that DOE alone does not make the decisions on the characterization since they have lost the confidence of the American people.

We can keep many of the other things in the bill—the sequential characterization and many other points that have been brought forth. But, Mr. President, it was a political decision that was made in the selection of the three. We are concerned about a political selection being made in the characterization of one of the three.

The unilateral authority of DOE is something we do not want. In short, Mr. President—and there is a very deep purpose for the continued talk and examination we have had of this—this approach in this amendment is flawed.

There are four authorizing committees with jurisdiction over nuclear waste. Three have finished producing legislation and the fourth is in the process. The Senate Energy Committee, the Senate Environment and Public Works Committee, and the House Interior Committee have reported. The fourth committee, the House Energy Committee, is expected to act very soon. Two of the three committees have adopted approaches which differ significantly with the amendment that is attempted to be put on this appropriation bill. Two of the three have reported reforms which I can support, with which my State can live. Two of the three agree with the criticisms I have made, which leads me to the third and final point on cloture. The point involves a procedural concern I have attempted to raise over the past 3 or 4 days.

I certainly do not relish fighting the Appropriations Committee. None of us ever do. But in this situation, Mr. President, it is not a case of individual Senators opposing the Appropriations Committee. It is a case where the authorizing committees are opposing an appropriations fait accompli. They are willing to oppose this bill in an effort to preserve their jurisdiction, in an effort to protect their right and, yes, their duty, to be involved in the final resolution of this issue. All that we are asking is that the Senate consider this issue on a vehicle and in a forum that will involve the authorizing committees.

The ACTING PRESIDENT pro tempore. The time of the Senator from Washington has expired.

Mr. ADAMS. Mr. President, I intend this morning to vote for cloture in order to give my colleagues a clean vote on division II of the pending amendment. Therefore, I will take no more time and I thank the Chair.

The ACTING PRESIDENT pro tempore. The Senator from Washington has yielded the floor. Who yields time?

Mr. JOHNSTON addressed the Chair.

The ACTING PRESIDENT pro tempore. The Senator from Louisiana.

Mr. JOHNSTON. Mr. President, it is a bit amusing to me that those who are conducting the filibuster have now decided to vote for cloture. After all these hours of filibuster, now they join in the desire to terminate the filibuster, and I am glad for that.

What it means, Mr. President, is that we have the votes. The Senate is awakening from its slumber on the question of nuclear waste, coming to its senses in trying to resolve the problem.

Mr. President, I just came from a room off the majority leader's office, where Senators are meeting to try to resolve the question of the deficit—the economic summit they call it. We are going through a lot of painful gyrations, Mr. President, in trying to figure out how to cut money from the budget of the United States, to cut the deficit. We are trying, for example, on domestic spending to cut between $2 and $3 billion, something in that order of magnitude, and it is very, very difficult—programs being examined one by one, a feeding program here, a medical program there—to cut that budget.

What is involved today, Mr. President, would save more money than all of the domestic cuts that we can make in an entire year. We would save $3.9

billion by going from three characterizations to one characterization. That is what is involved. I said the other day, Mr. President, that the waste involved in the nuclear program is scandalous—$485 million spent last year on paper studies, and so what are we asked to do? We are asked to have more studies, more paper, more hundreds of millions of dollars down the rathole of the nuclear waste program and let it go on year after year after year. The fact is, Mr. President, the purpose of the opponents is very clear.

In this morning's paper, you read this:

> Groups Urge Phasing Out Nuclear Power. Nearly 50 consumer groups called yesterday for a rapid phaseout of nuclear power
> • • •

saying that we ought to go back and utilize the oil-burning, electric generating utilities.

Mr. President, I ask unanimous consent that this article from the Washington Post of today, November 10, be printed in the RECORD.

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

GROUPS URGE PHASING OUT NUCLEAR POWER

Nearly 50 consumer groups called yesterday for a rapid phaseout of nuclear power, saying the industry has vastly understated costs that amount to a "ball and chain" on the economy.

Public Citizen, the self-styled consumer group founded by Ralph Nader, and related organizations in 30 states said in a report that it costs $15 billion to $21 billion per year to keep the nation's 108 nuclear power plants operating, compared to the industry's estimate of $8 billion.

The report, title "Too Costly to Continue," concluded that the nation's energy needs could be met far less expensively through alternative fuels and improved conservation.

It said that last year, there was enough surplus generating capacity available to close 85 percent of nuclear capacity while still maintaining a 20 percent electrical reserve in every region.

Don Winston, a spokesman for the U.S. Council for Energy Awareness, an industry group, said that more than 90 percent of the surplus capacity cited by the consumer groups was in the form of retired, oil-burning plants. "What we have here is a recipe for once again making ourselves terribly dependent on foreign oil," he said. "It's totally unrealistic."

Mr. JOHNSTON. Mr. President, it is very plain that some of these groups want to get rid of nuclear power. They want to go back to the old oil-burning facilities. They do not care about the public. They do not care about the cost. They do not care about the ratepayer. They want to get rid of nuclear power and go back to the good old sulfurous oil-burning, expensive, Middle East-dependent oil-burning utilities.

Now, that is plainly what this involves. It is not about whether these studies are sufficient. The National Academy of Sciences has certified that what they have done is proper. The NRC has said, "We are ready to characterize."

We do not need further paper studies at $480 million a year. We need to get on with this, Mr. President; we need to save the taxpayers of this country $3.9 billion. That is a lot of money even when you say it fast, and it is a heck of a lot of money to waste. That is what we would do if we delayed this program further.

I am pleased, Mr. President, that those who are conducting this filibuster are ready to join us now that they have recognized the votes are not there. I hope we can get the votes to resolve the question today. I am told that they need more time, they need at least until Thursday to let the question come up. Well, if they think there has not been enough debate on this matter yet, let the filibuster continue.

I think the Senators will recognize that you have to do one of two things. Either you offer an amendment and seriously try to get the Senate to vote with you or you filibuster. The filibuster is the substitute for reason, for logic, for argument, for support for a position. You cannot have it both ways.

So if my friends wish to continue the filibuster, then they are going to be stuck with the same result that they have today, an overwhelming Senate mandate against their position.

I hope that the Senate will be united in approving the cloture motion.

The ACTING PRESIDENT pro tempore. The Senator from Louisiana has yielded the floor?

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

The ACTING PRESIDENT pro tempore. The Senator yields back the remainder of his time. The time of the Senators from Washington and Nevada has expired. The Senator from Louisiana has yielded back the remainder of his time.

CLOTURE MOTION

Mr. BYRD. I ask unanimous consent that the vote begin on cloture.

The ACTING PRESIDENT pro tempore. Without objection, by unanimous consent, under the previous order, the clerk will report the motion to invoke cloture.

The legislative clerk read as follows:

CLOTURE MOTION

We, the undersigned Senators, in accordance with the provisions of Rule XXII of the Standing Rules of the Senate, hereby move to bring to a close debate on the modified Johnston amendment No. 1125 to the first committee amendment to H.R. 2700, an act making appropriations for energy and water development for the fiscal year ending September 30, 1988, and for other purposes.

Senators J. Bennett Johnston, Dale Bumpers, James A. McClure, John Heinz, Mark O. Hatfield, J.J. Exon, Bill Armstrong, Howell Heflin, Jeff Bingaman, Alan J. Dixon, Steven Symms, Robert C. Byrd, Jake Garn, Robert Dole, John Glenn, Warren B. Rudman, Lowell Weicker, Sam Nunn, Daniel J. Evans, and Nancy L. Kassebaum.

VOTE

The ACTING PRESIDENT pro tempore. By unanimous consent, the quorum call has been waived. The question is, Is it the sense of the Senate debate on the modified Johnston amendment No. 1125 to the first committee amendment to H.R. 2700, an act making appropriations for energy and water development for the fiscal year ending September 30, 1988, and for other purposes, shall be brought to a close? The yeas and nays are ordered. The clerk will call the roll.

The legislative clerk called the roll.

Mr. CRANSTON. I announce that the Senator from Oklahoma [Mr. BOREN], the Senator from South Dakota [Mr. DASCHLE], the Senator from Tennessee [Mr. GORE], the Senator from Ohio [Mr. METZENBAUM], the Senator from West Virginia [Mr. ROCKEFELLER], the Senator from Tennessee [Mr. SASSER], and the Senator from Illinois [Mr. SIMON] are necessarily absent.

I further announce that, if present and voting, the Senator from West Virginia [Mr. ROCKEFELLER] would vote "yea."

Mr. SIMPSON. I announce that the Senator from Mississippi [Mr. COCHRAN], the Senator from Kansas [Mr. DOLE], the Senator from New Mexico [Mr. DOMENICI], the Senator from Nebraska [Mr. KARNES], the Senator from Kentucky [Mr. MCCONNELL], and the Senator from New Hampshire [Mr. RUDMAN] are necessarily absent.

The ACTING PRESIDENT pro tempore. Are there any other Senators in the Chamber who desire to vote?

The result was announced—yeas 87, nays 0, as follows:

[Rollcall Vote No. 372 Leg.]

YEAS—87

Adams	Evans	Lautenberg
Armstrong	Exon	Leahy
Baucus	Ford	Levin
Bentsen	Fowler	Lugar
Biden	Garn	Matsunaga
Bingaman	Glenn	McCain
Bond	Graham	McClure
Boschwitz	Gramm	Melcher
Bradley	Grassley	Mikulski
Breaux	Harkin	Mitchell
Bumpers	Hatch	Moynihan
Burdick	Hatfield	Murkowski
Byrd	Hecht	Nickles
Chafee	Heflin	Nunn
Chiles	Heinz	Packwood
Cohen	Helms	Pell
Conrad	Hollings	Pressler
Cranston	Humphrey	Proxmire
D'Amato	Inouye	Pryor
Danforth	Johnston	Quayle
DeConcini	Kassebaum	Reid
Dixon	Kasten	Riegle
Dodd	Kennedy	Roth
Durenberger	Kerry	Sanford

Sarbanes	Stennis	Wallop
Shelby	Stevens	Warner
Simpson	Symms	Weicker
Specter	Thurmond	Wilson
Stafford	Trible	Wirth

NAYS—0

NOT VOTING—13

Boren	Gore	Rudman
Cochran	Karnes	Sasser
Daschle	McConnell	Simon
Dole	Metzenbaum	
Domenici	Rockefeller	

So the motion was agreed to.

The ACTING PRESIDENT pro tempore. On this vote, the yeas are 87, the nays are zero, three-fifths of the Senators duly chosen and sworn having voted in the affirmative, the motion is agreed to.

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS ACT, 1988

Mr. BYRD. Mr. President, I wonder if we could now hear from the managers of the bill and the Senators who are opposing the matter as to how they see the program for the next several hours.

(Mr. SHELBY assumed the chair.)

Mr. ADAMS. Mr. President, we would be happy to hear from the managers of the bill. I can say to those who wish to have discussion during the 30 hours that this Senator and a number of others intend to speak on the amendment and to continue to speak on the amendment during the 30-hour period unless there is some offer from the managers or the majority leader wishes to make any kind of a request on time for a vote on the amendment, which is divided into three parts—division I, division II, division III. The yeas and nays have been ordered on all three divisions.

I do not know what the intention of the manager is as to votes. We will request and insist upon a vote on division II, which is the nuclear waste amendment of the committee. It is the Nuclear Waste Policy Act that we have been objecting to. That is the second part of the amendment. So on that we would be insisting upon a vote.

I am perfectly willing to vote on the other three divisions, depending upon what the manager indicates. We do expect a number of Senators to speak during the 30 hours and a great portion of it will be used. We could shorten those if we could obtain a potential agreement as to a time for the vote which would accommodate Senators because tomorrow is the Veterans Day holiday.

So, in fact, if there is a wish on the part of the manager or of the majority leader to set a time for a vote on this amendment, that is fine. If they would rather we talk, that is fine, and then this would go over until Thursday. Then I assume there will be a cloture motion on the bill or on the amendment; that I would leave to the manager to comment on because, of course, I have no knowledge about that. And then we are prepared to hear what the leadership wishes to consider in terms of votes on the first-degree amendment and on the bill itself.

But it is our intention to continue using the 30 hours today and on into Thursday and then have an amendment. We will ask for a vote only on the second division of the amendment of the distinguished Senator from Louisiana, but we are prepared to vote on all three if he wishes to do so.

I thank the majority leader.

Mr. JOHNSTON. Mr. President, I have heard a very encouraging comment that is presently only a rumor but I hope it rises to the dignity of fact, and that is that perhaps we can get a time agreement on the whole bill, allowing for robust debate on this amendment or such amendment as the Senator would like, and then we could get on with the business. And I would urge my colleagues to do that.

This question is vitally important to the Senator from Washington, I know that, and vitally important to the Senator from Nevada. But the issue will not go away. It is simply not going to go away and a filibuster simply cannot be successful. I mean if it is successful on this bill, it will come up on the CR and it is in December and everybody wants to get home. But we cannot submit; we cannot give up. If the Senate wishes to vote it down, that is the will of the Senate. But it is just too important, I think, for the country.

So what I hope we could do is have whatever kind of robust debate that the Senators desire. Any amendment will be in order that they wish, if we can do it by agreement; in fact, any will be anyway on the bill itself.

But I hope we can avoid having these late night sessions, coming into session tomorrow and all of that. I mean, you know, it is painful and we are going to end up in the same place, which is finally having to vote, because we have got to. We cannot afford to sweep this thing under the rug year after year. So I hope my dear friends and colleagues will say; "Let's have a debate. Lets debate the question of whether the DOE was wrong or, if they were wrong, what we should do about it," all of those myriad questions, vital questions, and let us debate them and decide, because we have got to decide this year. It is just not going to go away.

So I hope that that rumor is a correct one and that we can get some kind of a time agreement.

Mr. ADAMS. Mr. President, will the majority leader yield?

Mr. BYRD. I do not have the floor.

The PRESIDING OFFICER. The Senator from Louisiana has the floor.

Mr. JOHNSTON. I yield the floor.

Mr. ADAMS. I might say to the Senator from Louisiana that this Senator and, I think, my other colleagues would certainly be willing to discuss with the manager a vote on this amendment at a time certain on Thursday. We will discuss and would be happy to get back to you and discuss with you a potential time for a vote on the entire bill.

But I might state that it does not have to come up on the CR. We are not trying to sweep this under the table. We would like to have the authorizing committees in the reconciliation bill, which the distinguished Senator from Louisiana has this bill in the reconciliation bill; so that the distinguished Environment and Public Works Committee has it in there and, on the House side, both of those committees have it. We want it in that forum and not in the appropriation forum. That is what we have been tryng to accomplish. So the purpose has been very clear: not to stop the matter from being decided, but to stop it from being decided, but to stop it from being decided in this forum and in this type of bill.

So if the Senator wishes to discuss a time to vote with the majority leader and us on Thursday, I think we can accommodate that. And then we can discuss the amendments that we may have to the bill after this amendment is disposed of and potentially agree to a time to vote next week, depending upon the schedule of the majority leader.

We know that the distinguished Senator from Louisiana is deeply involved in the negotiations at the economic summit. So we simply try to accommodate a time next week when we might be able to do that.

Does that answer the Senator's inquiry? We would be pleased to try to get an agreement on the amendment time now, vote on Thursday, and then would discuss with you potentially a vote on the entire bill next week.

Mr. REID. Will the Senator from Louisiana yield?

Mr. JOHNSTON. Yes.

Mr. REID. I confirm the statements of my friend from Washington. I would state to the Senator from Louisiana we, those of us that oppose S. 1668, are not trying to sweep it under the rug. I think the discussion during these past few days has been meaningful. We, in good faith, would like to try to work something out so that there can be an ultimate vote to get rid of this matter.

As the Senator from Louisiana knows, the vote on S. 1668 is very important to both the proponents and opponents of this. However, we, in good faith, would like to be able to, when that is disposed of one way or the other, work toward finalizing the bill. So the Senator has our good faith

and we will try to work something out with you and your staff and the majority leader to working on a time for this sometime next week. We just want to make sure that there is enough time to complete the discussion, and I am sure that the Senator understands that.

Mr. JOHNSTON. Mr. President, I appreciate the cooperative attitude of my colleagues and let me say that, as far as the authorizing committees in the House are concerned, that it was always my intention to work with them. I have already met with TOM BEVILL—Congressman TOM BEVILL, who is chairman of the Energy and Water Subcommittee in the House and we have already gotten an arrangement where we will have Congressman MO UDALL, chairman of the Interior Committee, conduct—perhaps not as a formally named conferee but it will amount to the same thing—a negotiation which will be suitable to him. After all, MO UDALL is the chairman of the authorizing committee in the House.

Now, with respect to the input of Energy and Environment and Public Works in the Senate, we can certainly allow for full debate. That is allowed for now on any amendments which they would like to consider.

We could not agree to take this bill and put it back in the Environment and Public Works Committee. I mean time is wasting. We need to get on with this matter. This bill has been up for 6 weeks. We did not know about the Environment and Public Works amendments until the eve of their passage. So we cannot now send it back to that committee.

In the first place, the jurisdiction lies with the Energy Committee in the first instance and with the Energy and Water Appropriations Subcommittee in the second instance. That does not mean that we are not anxious to work it out, to have the debate, to consider the amendments, to do whatever is necessary. But if you are asking us to say give up your jurisdiction, send it back to another committee that does not have jurisdiction, we cannot do that. We just do not have time to do it. But as far as working out an accommodation to vote next week, of course we can. Of course we can. And I would welcome that.

There is no problem with it, if the Senator will tell me that the filibuster will not proceed and then it is just a question of when it is convenient with the Senators.

Mr. ADAMS. If the Senator will yield, we can, I think, discuss and agree on a time on Thursday, as the Senator says, to vote on this amendment. We need to have a discussion with the distinguished Senator from Louisiana with regard to a time of vote, if there were to be one next week. We have not had a chance to talk with all the people that are involved in this with regard to that.

But I might state to the Senator from Louisiana we were not suggesting that the bill be sent back to the Environment and Public Works Committee. They have a bill; the Energy and Water Committee has a bill; the Appropriations Subcommittee has a bill.

We wish to have those placed in the reconciliation, as I have indicated during the debate, so the subcommittees were there as full participants, as they had been.

I have also talked with Congressman BEVILL. He is the Appropriations Subcommittee chairman. I would like to state to the majority leader, and to the manager of the bill, that if at the time—if we should lose this, and I do not think we will, but if we should then at the time conferees were appointed we would be moving to have conferees added; not just to be consulted but added.

I am very fond of the Senator from Louisiana and certainly Congressman BEVILL from the House; they are both very old friends of mine going back 25 years. But they are the Appropriations Committee and we feel that full participation should be in the other committees that happen to divide jurisdiction.

I am not saying that Energy and Water does not have jurisdiction in this area; so does Environment and Public Works. We wish to place them in one forum. We stated before we would agree to a time agreement and there is already a statutory time agreement in reconciliation and all bills would be there.

I might state to the Senator from Louisiana I think his activities have pressed the other committees to come forth with their proposals and I think that that is a positive step. We now have these proposals all in hand, and, therefore, the purpose of our discussing this at length has been with a definite goal in mind. Not to just say that we would talk from now until New Years to see that there was no waste program at all, but to have one put on the proper track and in the proper forum. Therefore, we would be happy to discuss with the chairman a time of vote on the amendment on Thursday and then, after that, a discussion of a vote next week where perhaps the majority leader or some others may wish to call us together so we could see if we could agree as to a time, as to length of time we would spend on amendments that we would offer in addition to the amendment that the distinguished Senator from Louisiana has offered and what time would be necessary in order to debate those amendments before final passage of the bill.

Mr. JOHNSTON. Mr. President, this is a very constructive conversation and I would hope we could accommodate Senators by agreeing to a time certain for the vote for all of these votes.

I think, perhaps, an off-the-floor discussion at this time would be fruitful, if the Senator thinks so, and with the majority leader. He will have to set the schedule. So, Mr. President, I think that that might be very helpful.

The PRESIDING OFFICER. The Senator from Maine.

Mr. COHEN. Mr. President, I ask unanimous consent that I may be permitted to speak out of turn.

The PRESIDING OFFICER. Without objection, the Senator from Maine is recognized.

IN DEFENSE OF HOWARD BAKER

Mr. COHEN. Mr. President, we have slipped through a tunnel and tumbled into a land of distortion and fantasy.

Howard Baker is now the target of conservative discontent. His brand of mischievous moderation, his dreadful inclination to seek areas of agreement, consensus, and compromise have caused President Reagan to take a pratfall in full view of the world. Judge Douglas Ginsburg is but the latest example of his alleged ineptitude.

I can only say, what a difference a year makes. A year ago, the administration was reeling from shock waves generated by disclosures that the President had yielded to the importunings of William Casey, Colonel North, Attorney General Meese, Admiral Poindexter, Bud McFarlane—conservatives all—and agreed to sell weapons to the Iranians to help get the release of hostages being held in Lebanon.

The ship of state was in danger of being swamped. Official documents had been altered, shredded, and smuggled. False chronologies had been constructed. Lies had been told. The President was reduced to asking Congress to tell him what the NSC staff had done in his name. Active military officers who had served in the White House were invoking the fifth amendment to protect their rights against self-incrimination.

Amid the turmoil, Howard Baker was asked to lay aside his intentions to pursue a campaign for the Presidency in order to preserve that of Ronald Reagan. He did so with characteristic grace and generosity. He was selected not because of his administrative skills, but because he was held in high regard—for his intelligence, and insight into the congressional process. And most importantly, because he possessed credibility—something the White House was in desperate need of at that time.

He fulfilled his mission. The waters calmed. The ship of state stabilized.

Changes in personnel were made. Confrontation yielded to cooperation.

It should be recalled that at that time, the foreign policy fiasco was being blamed upon Secretary of State George Shultz and Secretary of Defense Weinberger. They, it is argued, had not been vigorous enough in overriding what the President clearly wanted to do. It was argued that these Secretaries should have submitted their resignations to shake the President from this folly.

But the tide turns quickly on the Potomac. The focus for the President's recent fall from grace has now shifted to the very man who rescued him from disaster—Howard Baker.

In a classic display of "what-have-you-done-for-me-lately" gratitude, the negativists whose voices are louder than their influence, have charged that Howard Baker and George Shultz have somehow conspired in a Presidential mind-bending plot to trick him into signing a treaty with the Soviets.

Moreover, Howard Baker is now being blamed for failing to ring the alarm bells to rally the activists early enough to save Robert Bork's nomination to the Supreme Court while the President vacationed on his ranch in California. He undermined Judge Bork when he and his aides suggested that Judge Bork moderate ever so slightly what was seen as a refusal to look at the new moon out of loyalty to the old.

And now, the most reprehensible thing of all, he failed to lock Attorney General Meese in the basement of the Justice Department so Mr. Meese could not foist a law and order judge upon a law and order President at the last moment.

The truth is that Howard Baker was shoved overboard by the ideologically pure because he was recommending a "confirmable conservative." That phrase suggested compromise or, worse, appeasement. "Never," cried the stalwarts. "We've got a man who will make the Bork haters beg for a chance to recant."

In the wake of Judge Ginsburg's withdrawal of his nomination, Howard Baker is being blamed for letting Reagan be Reagan in the first instance, and then not pulling the President over the edge of the cliff in Judge Ginsburg's defense in the second.

Now, Howard Baker is being charged with cutting a profile in cowardice, that he should have been willing to fight to the last heartbeat of every Republican on behalf of Judge Ginsburg.

First, I am compelled to point out that when BOB DOLE announced Judge Ginsburg's statement concerning his prior drug use to the Senate last Thursday evening, it was a group of conservatives who gathered on the floor and came to the conclusion that Ginsburg had to go, not any liberals or moderates.

Second, if Howard Baker had urged the President to fight for Ginsburg's nomination to the very end and then the vote was lost sometime in late December or early next year, his critics would have then blamed him for not advising the President to cut his losses quickly.

Mr. President, these attacks only confirm the fact that you can get mugged more easily on the back stairs of the White House than you can on the streets of any urban ghetto.

There are those who are determined to scuttle the proposed INF Treaty even before it is signed and to sabotage any responsible attempt to strike a compromise with Congress in reducing the deficit. Letting the Gramm-Rudman-Hollings guillotine fall is preferable in their eyes because there can be no new taxes. While this will cut $11.5 billion from our defense needs, the President need only send up a supplemental request for defense and then challenge the Congress with Churchillian fire to refuse to fund it.

This strategy is similar to a plan proposed once within the NSC staff. It had been suggested that the heavily outnumbered Contras seize territory inside Nicaragua and dare the Sandinistas to take it back militarily. Then with a stand reminiscent of the Alamo, the Contras would rally the American people to their cause so that we would turn on the Sandinistas and perhaps even send in the Marines to the rescue. Fortunately, the plan was rejected as being creative but crazy.

Mr. President, I recognize it is essential for party activists and Presidential candidates to draw their visions for the future as simply and boldly as possible. But simplistic sloaganeering cannot long succeed in governing a nation as diverse and complicated as our own. Children of scorn are always more eager to find fault than to seek constructive solutions. But the vast majority of the American people realize that the goal of Government is the resolution of conflict and dispute rather than the thriving on it.

It will fall to the Howard Bakers of this Nation to hold up the governmental firmament while bearing the blame for not catching all of the falling stars. Right now, that is Howard Baker's fate. And, right now, it is also Ronald Reagan's and our good fortune.

ENERGY AND WATER DEVELOPMENT APPROPRIATION ACT, 1988

The Senate continued with the consideration of the bill (H.R. 2700).

Mr. BREAUX addressed the Chair.

The PRESIDING OFFICER. The Senator from Louisiana.

AMENDMENTS TO THE NUCLEAR WASTE POLICY ACT

Mr. JOHNSTON. Mr. President, this morning my colleagues from the Environment and Public Works Committee talked about the major differences between their proposed amendments to the Nuclear Waste Policy Act and the pending legislation. My colleague from Louisiana, Mr. BREAUX, described the two proposals as not being that far apart. He talked further about the so-called safeguards included in the Environment and Public Works Committee proposals that will ensure that the Department of Energy has sufficient information to make the selection of a preferred site for detailed characterization. My colleague also talked about the Nuclear Regulatory Commission's views of the pending legislation.

Let me now say a few words about what I believe are the major differences between the two proposals. On their face, perhaps these differences seem minor, and I am sure that the intent of my colleagues on the Environment and Public Works Committee is simply to improve the process of sequential site characterization that is laid out in the pending amendment. But, make no mistake, these differences are significant. They are subtle, but they are significant. The proposals put forth by my colleagues, Mr. BREAUX and Mr. SIMPSON, would be what I would call "killer amendments" to the pending legislation.

Let me explain why I believe these so-called minor differences are really "killer amendments" to the pending legislation.

First, the Breaux-Simpson proposal would delay selection of a preferred site for characterization until 1991 or beyond. Between now and that selection date, the Breaux-Simpson proposal would require surface-based testing at all three of the candidate sites—in Washington, Nevada, and Texas. In addition to delaying the selection unnecessarily, it would also minimize substantially the benefits to be gained from selecting a preferred site and concentrating technical expertise on that one site. According to the Department of Energy, such a surface-based testing program could take as long as 3 years and would be in addition to the 5- to 7-year test program already envisioned that would involve the drilling of an exploratory shaft for at-depth characterization. The Breaux-Simpson proposal would virtually eliminate the estimated $3.9 billion savings from the pending legislation.

Second, the Breaux-Simpson proposal would require the Department of Energy to prepare a full-scale environmental impact statement at the point of selection of the preferred site. The Breaux-Simpson provision states simply that the requirements of the National Environmental Policy Act will apply, leaving it up to the Department of Energy—and ultimately the courts—to determine whether this decision point is a major Federal action

requiring preparation of an EIS. An EIS at this point will simply cause delay and new opportunities for extended litigation.

I do not believe that an EIS should be required at the time of selection of a preferred site. The NEPA "roadmap" contained in the Nuclear Waste Policy Act of 1982 required preparation of environmental assessments at the time that candidate sites were selected for characterization. These environmental assessments were completed in May 1986. Under existing provisions of the 1982 act, and the NEPA "roadmap" incorporated in it, preparation of an EIS is required after site characterization is successfully completed at the time a license application is submitted to NRC. It is at that point that the major decision is made, when a site is found suitable by DOE and it is then subjected to the NRC's rigorous licensing process.

An EIS at the time of selection of a preferred site would be premature. Let me emphasize that all three of the candidate sites—in Washington, in Nevada, and in Texas—have already been selected for site characterization. We can already go ahead with detailed testing at all three sites. That testing—without the pending amendments—will lead to the drilling of exploratory shafts at all three sites. That activity is already contemplated and anticipated under the provisions of current law. The provisions of S. 1668 would simply direct the Secretary to select only one of the three candidate sites at which this work would be conducted.

The application of NEPA proposed by the Breaux-Simpson approach would essentially duplicate the environmental assessment process completed in 1986, at the time the candidate sites were selected for characterization. There is nothing new contemplated by the selection of a preferred site for characterization that would require preparation of an EIS at this decision point.

The Breaux-Simpson approach, however, establishes an artificial distinction between "surface-based testing" and at-depth testing, with the implication that surface-based testing must always precede at-depth characterization. This simply has no basis in fact. Site characterization, by definition, involves surface-based testing, drilling of near-surface boreholes, laboratory testing, and testing in an exploratory shaft facility at the proposed depth of the repository. There is simply no basis for the assertion that one part of this testing must precede the other part. Some data can be obtained strictly through surface-based testing, but essential information on the suitability of a site for development as a repository must be collected below the surface. All parts of this testing program must be allowed to proceed in parallel.

Let me now elaborate for a minute on this artificial distinction between surface-based testing and testing in an exploratory shaft facility at the proposed depth of a repository. In the last several weeks, the term "surface-based testing" seems to have taken on a life of its own. Just a few weeks ago, surface-based testing was simply one part of the detailed testing to be carried out during site characterization. Some of that surface-based testing would be conducted prior to sinking of an exploratory shaft and some of that surface-based testing would necessarily be conducted in parallel with at-depth testing in an exploratory shaft facility.

I think it would be helpful to clear up some confusion over the genesis of this new term, "surface-based testing." In June, following a hearing before the Committee on Energy and Natural Resources, I asked the Nuclear Regulatory Commission to give me an opinion on what types of information about site suitability could be gathered from above-ground, surface-based, testing. In response to that request, I learned from NRC that while some information could be gathered through surface-based testing, at-depth testing would be required to resolve all of the major issues related to site suitability.

Since the time of my June request to the Commission, there has been increased attention paid to this notion of conducting surface-based testing prior to the sinking of an exploratory shaft. Unfortunately, there has also been a great deal of misinterpretation of this information provided to me by the Commission.

Contrary to what my colleagues stated this morning, the NRC Commissioners have not stated that surface-based testing should be conducted prior to the point at which a preferred site is selected on January 1, 1989. Furthermore, the NRC Commissioners have not stated that the Department of Energy will not have sufficient data available to make an informed decision on a preferred site by January 1, 1989. What the NRC Commissioners have stated is that some surface-based testing would be required—and should be carried out—prior to the time that an exploratory shaft is drilled.

There is a subtle, but important, distinction that must be made. The NRC Commissioners have said that some surface-based testing should be conducted prior to the sinking of an exploratory shaft, but that surface-based testing is not required prior to the selection of a preferred site on January 1, 1989.

I have asked the Nuclear Regulatory Commission this question myself. Let me quote from an October 2 letter from NRC Chairman Lando Zech:

> The Commission does not oppose legislation that would require that only one site undergo at-depth characterization. The Commission does not believe that simultaneous characterization of three sites is necessary to ensure the public health and safety. * * * The staff has not identified any technical reason to preclude sequential site characterization.

While the NRC staff suggested in August that a period of surface-based testing should be conducted prior to the selection of a preferred site, the NRC Commissioners specifically rejected this suggestion in their position as stated in this October 2 letter.

I am aware that the NRC Commissioners were asked about this issue at an October 29 hearing before the Committee on Environment and Public Works. I have read the transcript from that hearing. Unfortunately, I believe that the NRC Commissioners' statements before the Committee on Environment and Public Works have been misunderstood. The statements attributed to the Commissioners this morning were not consistent with what I read in the transcript.

The Commissioners' position has not changed—it is the same as that so stated in Chairman Zech's October 2 letter to me. First, the NRC Commissioners do not oppose sequential site characterization. Second, the NRC Commissioners do not have a position on whether the selection of a preferred site can or should be made by January 1, 1989. And third, while the NRC Commissioners believe that some surface-based testing should be conducted prior to the drilling of an exploratory shaft, they do not believe this testing should be required prior to the selection of a preferred site.

Let me state again what I said at the outset. There are more than just slight differences between the pending legislation and the Breaux-Simpson approach. The provisions included in the Breaux-Simpson proposal—delay in selection of a preferred site until 1991, required surface-based testing prior to that selection, and required preparation of an EIS at the time of selection of a preferred site—are killer amendments. Instead of streamlining the process along a course of sequential characterization, the provisions of the Breaux-Simpson proposal would impose new burdens and create additional delays that are unnecessary.

I ask unanimous consent that the text of the following correspondence related to the pending legislation be included in the RECORD: A September 14 letter from NRC Chairman Lando Zech to Senator JOHN BREAUX, my September 30 letter to Chairman Zech and the October 2 response, and an October 28 letter from Secretary of Energy John Herrington to Senator QUENTIN BURDICK.

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

THE SECRETARY OF ENERGY,
Washington, DC, October 28, 1987.

Hon. QUENTIN N. BURDICK,
Chairman, Committee on Environment and Public Works, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: I have been following the actions of the Senate Environment Committee regarding the nuclear waste issue and wanted to discuss with you some particular concerns that have arisen in response to the Committee's proposal.

The various House and Senate committees have invested substantial time to address key issues in the nuclear waste area and the Department continues to stand ready to assist these efforts in any way possible. We remain convinced that an established program for the safe and effective disposal of nuclear waste is essential not only for the public interest but also for the future viability of the nuclear industry in this country. It is crucial that we move forward with the program and do so with a minimum amount of delay.

The proposal drafted recently by the Senate Environment Committee as part of its reconciliation package addresses several critical aspects of the program. I am concerned, however, that the approach set forth in the proposal may impose new burdens and create additional delays in the management of the waste program which are not necessary to ensure that the program is conducted in a safe and effective manner.

Specifically, we are concerned that the proposal would require a minimum two-year delay in the program prior to selection of a preferred site and create other scheduling requirements which could further push back the date when waste could be accepted at a repository site. Under this proposal, the Department would be unable to accept spent fuel by 1998, leaving unfulfilled the Department's established commitment to begin accepting waste by that date.

In addition, we believe the Environment Committee's proposal would fundamentally change the program in a way that would entail substantially greater costs and burdens for the program's operation. By requiring intermediate findings as part of the site characterization process, the proposal would inject into the program an entirely new source of uncertainty with respect to overall program costs and scheduling. This requirement, including a mandate for surface-based testing of three sites, would impose new costs and delays in an effort to obtain information and data which can be acquired more accurately and efficiently through full characterization.

Further, we are concerned that the proposal may refashion the program in a manner requiring the consideration of potential repository sites in 23 states. By incorporating into the proposal the National Environmental Policy Act and its requirement of reasonable alternatives, the proposal could effectively repeal current numerical limits on such alternative sites. We are concerned that this requirement, along with several other provisions, such as the imposition of surface-based testing and the preservation of pending Court challenges to the program, may constitute, in the aggregate, rejection by the Congress of the bases for major decisions previously made in this program. Such retrenchment, embodying new ground rules for analyzing potential sites, inevitably risks the consequence of the Department being required to examine anew all locations whose geology, based upon our knowledge to date, renders them potential candidates for a repository. For your review, I have enclosed a list of the potentially affected states.

Finally, I believe it is important to express the Department's concern not only with respect to what the Environment Committee proposal would require, but also what the proposal would not require. Specifically, it would leave out incentives for the host state and would fail to authorize a Monitored Retrievable Storage facility. In our view, provisions in these areas would contribute significantly to the fulfillment of the program's objectives and enable them to be accomplished on a more efficient and reliable schedule. As you know, we have supported efforts to establish these provisions and have specifically voiced our support for S. 1668, sponsored by Senators Johnston and McClure, which contains them. It is our hope that the Senate will fashion a legislative package that will incorporate such features and place the program on a track that will minimize delays. In our view, the continued implementation of the current Act would be preferable to legislation that falls short of these objectives.

Again, I appreciate the work of the Environment Committee with respect to the waste issue, and look forward to continued cooperation with the Congress toward the development of a final legislative package.

Yours truly.

JOHN S. HERRINGTON.

POTENTIALLY AFFECTED STATES

Washington, Nevada, Texas, Utah, Mississippi, Louisiana, Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania, Maryland, Virginia, North Carolina, South Carolina, Georgia, Michigan, Wisconsin, and Minnesota.

NUCLEAR REGULATORY COMMISSION,
Washington, DC, October 2, 1987.

Hon. J. BENNETT JOHNSTON,
Chairman, Committee on Energy and Natural Resources, Senate, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: I am writing in response to your letter dated September 30, 1987 in which you requested clarification of the Commission's position on S. 1668, the Nuclear Waste Policy Act Amendments Act of 1987. The agency's position is set forth in the enclosure to the letter of September 14th to Senator John B. Breaux. The Commission does not oppose legislation which would require that only one site undergo at-depth characterization. The Commission does not believe that simultaneous characterization of three sites is necessary to ensure the public health and safety. The Commission expressed the concern, however, that sequential site characterization could considerably delay the schedule for opening a repository if the preferred site is found to be unlicensable.

Mr. Hugh Thompson, Director of the NRC Office of Nuclear Material Safety and Safeguards, reflected our specific concerns regarding a potential for delay in testimony before the Committee on April 28, 1987. We would refer you to page 6 of his statement in which he said:

"One of our principal concerns is that, considering the first-of-a-kind nature of this effort, selection of only one site for detailed site characterization runs a risk of resulting in a site which may ultimately prove to be unlicensable. If, after suspending characterization of other sites, DOE were to find its initially-chosen site inadequate, or if it could not provide assurance in a licensing proceeding that the site met NRC technical requirements, there could be considerable delay while characterization was completed on another site or slate of sites, with a consequent loss of momentum. The impacts of such a delay on NRC's stated belief that there is reasonable assurance that methods of safe permanent disposal of high level waste would be available when they are needed, would have to be carefully evaluated."

The staff has not identified any technical reason to preclude sequential site characterization. Thus, like the Commission, the staff does not identify any regulatory health and safety requirement for characterizing three sites in parallel.

The Commission believes that, under the Nuclear Waste Policy Act, the site selection process is the responsibility of the U.S. Department of Energy. The adequacy of the site will ultimately be determined by the NRC in a licensing proceeding. Although the NRC will be mindful of scheduling considerations, we will only license a site which satisfies our licensing requirements.

I hope that this letter clarifies the Commission's position on S. 1668. Please contact me if we can be of further assistance.

Sincerely,

LANDO W. ZECH, Jr.

COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC, September 30, 1987.

Hon. LANDO W. ZECH, Jr.,
Chairman, U.S. Nuclear Regulatory Commission, Washington, DC.

DEAR MR. CHAIRMAN: I am writing in the hope that you can clarify some apparent misunderstanding over the Commission's position on S. 1668, the Nuclear Waste Policy Act Amendments Act of 1987. This legislation was reported to the Senate by the Committee on Energy and Natural Resources on September 1.

On September 14, the Commission provided written comments on S. 1668 to the Senate Committee on Environment and Public Works. I am particularly concerned about the interpretation of the Commission's comments related to the selection of single candidate site for characterization for a repository.

I read your comments to say that the Commission generally supports legislation to characterize candidate repository sites sequentially and, thus, to select a single site for characterization by January 1, 1989. As I understand it, the Commission's main concern with S. 1668 is the potential for considerable delay in the schedule for opening of a repository if the selected site is not ultimately found to be licensable by NRC. It is my understanding, however, that while the Commission may have concerns about the potential for schedule delays, the Commission does not believe there is any public health and safety reason to characterize three candidate sites in parallel.

As I recall, Mr. Hugh Thompson, of the NRC staff, testified before our Committee in April that the Commission's main concern about sequential site characterization was that this would somehow force NRC to license a site that it did not feel was licensable in order for the Department of Energy to meet the 1998 contractual obligation to take spent fuel from utilities. Mr. Thomp-

son testified further, in response to questioning, that the Commission's concerns about sequential site characterization would be mitigated so long as there were assurances that the opening of a repository would be driven by its licensability and not by schedule considerations.

It would be helpful if you could clarify the Commission's position on sequential characterization of candidate repository sites as contemplated in S. 1668. Thank you for your assistance in this matter.

Sincerely,

J. BENNETT JOHNSTON,
Chairman.

NUCLEAR REGULATORY COMMISSION,
Washington, DC, September 14, 1987.

Hon. JOHN B. BREAUX,
Chairman, Subcommittee on Nuclear Regulation, Committee on Environment and Public Works, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: In the June 18, 1987 hearing on the U.S. Department of Energy's proposal for authorization of a monitored retrievable storage facility (MRS) for spent nuclear fuel, you requested the U.S. Nuclear Regulatory Commission to supplement our testimony with comments on portions of three pending bills, S. 839, S. 1141 and S. 1266. Subsequently, your staff has requested the Commission to provide comments on S. 1668. The Nuclear Waste Policy Act Amendments Act of 1987, in lieu of the above three bills. The enclosed comments are in response to that request.

I trust this information is responsive to your needs. If my office can be of further help, please do not hesitate to contact me.

Sincerely,

LANDO W. ZECH, Jr.

NRC COMMENTS ON "NUCLEAR WASTE POLICY ACT AMENDMENTS ACT OF 1987"

SECTION 402: FIRST REPOSITORY SITE CHARACTERIZATION

Under section 402(a)(1), the Department of Energy ("DOE") must select a preferred site for the first repository on or before January 1, 1989. That will be the only site that undergoes at-depth site characterization, assuming the site is ultimately licensed. During the period before DOE selects its preferred site, there would be no requirement that it conduct surface-based testing at the three current candidate sites. This would be left to DOE's discretions. The Commission believes that DOE should be required to conduct additional surface-based testing at the three current candidate sites during this period in order to obtain further information as a basis for the selection of the preferred site for at depth characterization as a repository. As the NRC staff testified in hearings on April 28, 1987 and June 28, 1987 before the Senate Committee on Energy and Natural Resources, the existing data base for the three current candidate sites is limited.

The Commission does not oppose legislation which would require that only one site undergo at-depth characterization. However, it must be recognized that under such an approach there may be a greater potential for delay of ultimate operation of a repository than there is under the current regime where three sites will undergo at-depth characterization before a site is selected. If DOE were to find its chosen site to be inadequate, or if it could not demonstrate in a licensing proceeding that the site satisfied NRC regulatory requirements, there could be a considerable delay while characterization is started and carried out at another site. Also substantial delays in repository licensing would require the Commission to reevaluate its Waste Confidence Decision of 1984.[1]

The Commission believes that because of this uncertainty, it may be prudent and in the national interest to require DOE to continue surface-based testing both at the preferred site and at other candidate sites after selection of a preferred site. Such testing could provide additional information useful to DOE in evaluating the suitability of the remaining sites should the first site prove inadequate for licensing. This testing would likely provide sufficient geologic, hydrologic, and engineering data to evaluate potential disqualifying factors and develop a basic understanding of each site's characteristics so that more informed judgments could be made on the selection of a site for shaft sinking. DOE's surface characterization plans for all sites should be made available to the NRC and other interested parties.

The approach we are proposing should provide sufficient information about the two sites not selected for characterization, so that if the initial site selected turns out to be unsuitable for licensing, there would be less delay in selecting a second site. Minimization of potential delays is important, particularly if the licensing of construction of the repository and operation of the monitored retrievable storage facility ("MRS") are linked, as DOE has proposed to Congress. (The NRC staff testified before your Subcommittee on June 18, 1987, that the Commission opposes such linkage.)

To provide greater assurance that the chosen site would eventually be licensable, we also recommend that the legislation require that NRC and other concerned persons be given an opportunity to review and comment on the site which DOE choses for characterization before sinking of an exploratory shaft, and on the DOE plan for at-depth site characterization.

Our last comment with respect to this section relates to Section 402(f)(3). That section requires that DOE preserve all documents relating to selection of a preferred site and completion of the environmental evaluation for two years after the selection of the preferred site. The NCR is concerned that it could be inferred that these records may be destroyed after the required period of retention. Some of this material may be relevant during the licensing process and its absence could complicate our licensing proceeding. DOE and NRC are currently working on an information management system, known as the licensing support system to manage and provide ready access to all relevant licensing information and to be used as the sole information base during the discovery stage of the licensing proceeding. Any records related to the selection of the preferred site should be a part of the licensing support system and should be available throughout the licensing process. We would therefore recommend that the 2-year limit in this provision be deleted.

SECTION 403: SITING OF MONITORED RETRIEVABLE STORAGE FACILITIES

The Commission takes no position regarding whether there is a need for an MRS. As the NRC staff testified in hearings before your Subcommittee on June 18, 1987, the matter of need is regarded as primarily a business decision within the overall waste management system. Notwithstanding this view, the Commission understands that there may be operational regulatory benefits to be gained by providing an MRS as part of an integrated high level waste disposal system.

We note that under Section 141(b)(3) of the Nuclear Waste Policy Act, the Commission was afforded an opportunity to comment on DOE's initial proposal for an MRS facility. In this proposed legislation, there is no provision for the NRC to comment on the DOE MRS proposal. We believe that the legislation should provide for such comment because it would ensure early identification of potential MRS licensing issues and provide some assurance that the site selected by DOE can meet NRC licensing requirements.

Section 403(f)(1) requires DOE to conduct a study of the need for and feasibility of multiple MRS facilities. From a regulatory perspective we see no basis for more than a single MRS facility, however, we have no objection to such a study.

Section 403(j)(1) requires DOE to submit to Congress a report evaluating the benefits of storing spent nuclear fuel for at least 50 years before it is placed in a repository. The Commission believes that while there may be some benefit to repository design resulting from lower heat generation rates in spent fuel after long term storage, the technical basis for requiring spent fuel storage for 50 years has not been established.

We believe that spent fuel storage should not be relied upon indefinitely as a substitute for eventual disposal. We have a concern that a requirement for 50-year storage period may be interpreted as suggesting a lack of national resolve to develop a geologic repository for waste disposal.

SECTION 404: BENEFITS AGREEMENTS

The Commission takes no position on the issues raised by this section, as the presence or absence of financial incentives is not directly related to NRC's health, safety, and environmental responsibilities or to our repository or MRS licensing process.

SECTION 406: REVIEW PANEL

This section establishes an advisory panel to review DOE's activities relating to the waste repository and the MRS. Because it would not be subject to the Federal Advisory Committee Act, its meetings would not have to be open to the public. The Commission is concerned that this arrangement could lead to instances where the Review Panel raises significant issues relating to the licensability of the repository or the MRS, but the NRC does not learn of these concerns in a timely fashion. We believe this provision should be revised to ensure that pertinent concerns of the Review Board are promptly transmitted to the NRC.

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[1] Over the years in licensing the operation of commercial power reactors, the Commission has been confident that from a public health and safety and environmental protection perspective, safe waste storage and disposal would be available when needed. In its Waste Confidence Decision, the Commission addressed this issue at great length. The Commission concluded that, if necessary, spent fuel could be safely stored either at the reactor where it was generated or in an independent spent fuel storage installation for at least 30 years beyond the expiration of a facility's operating license. The Commission also found that it had reasonable assurance that one or more mined geologic repositories for high-level radioactive waste and spent fuel would be available by the years 2007-2009. Based on these findings the Commisison concluded that it had reasonable assurance that a disposal facility would be available when needed.

SECTION 410: AUTHORIZATION OF APPROPRIATIONS

This section would, among other things, add a section 126 to the NPWA relating to the transportation of spent nuclear fuel and high-level radioactive waste. The Commission has no objection to section 126(a), which would require that all spent nuclear fuel and high-level radioactive waste be transported in packages certified by the Commission. DOE has long been committed to such an approach.

We have concerns, however, with Section 126(d) which provides that the Commission shall require actual tests on a sample full-scale package as part of the certification process. The NRC staff considers actual full-scale package tests to be unnecessary from a technical perspective. It believes that DOE could demonstrate that its transportation packages meet NRC requirements using computer simulations and/or scale model tests. We further note that the section as currently drafted is ambiguous. It is unclear whether the NRC is to require an actual full-scale test for each package design or whether such a test would be required only for a sample cask of a single representative design. Also, if Congress requires actual full-scale testing, the extent of this testing should be clarified.

Finally, we note that Section 126(e) requires the NRC to conduct a survey of packages for transportation or disposal of spent nuclear fuel or high-level radioactive waste used or intended to be used by other nations and report its findings to Congress. In its report the NRC would be required to comment on whether the designs evaluated meet or exceeded applicable Commission regulations for such transportation, storage, or disposal.

The Commission requests that Section 126(e) be deleted. The NRC does not have the authority or a mechanism to require the owners of foreign designs to provide the extensive technical information that would be needed. However, such an NRC evaluation could adversely impact U.S. relations with affected countries. Any finding by the NRC that a specific design that had been approved by a foreign government did not meet NRC safety requirements, could be regarded as questioning the effectiveness of foreign regulatory authority. We further note that such an evaluation would require extensive funding and technical resources and the end result would seem to be of limited regulatory value. Finally, we note that if Congress desires to retain this provision in some form, the responsibility for conducting the survey and performing the evaluation should be assigned to DOE rather than to the NRC. DOE is the agency responsible for repository technology development.

NUCLEAR REGULATORY COMMISSION,
Washington, DC, November 10, 1987.

Hon. J. BENNETT JOHNSTON,
Chairman, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: This responds to your letter of November 9, 1987, in which you requested the Nuclear Regulatory Commission's views on legislation that would require the Secretary of Energy to select by January 1, 1989, a single preferred site for characterization as a repository from among the three current candidate sites.

The Commission's views continue to be those that we expressed in an October 2, 1987 letter to you. Simply put, the Commission does not oppose legislation that would require the Secretary of Energy to select one site for at-depth characterization. Simultaneous characterization of three sites is not necessary to protect the public health and safety. The Commission takes no position concerning the date for selecting a preferred site for characterization. However, it should be recognized that sequential site characterization could delay the schedule for opening a repository if the preferred site is subsequently found to be unlicensable. To mitigate this concern we have suggested that surface-based testing continue at the two sites not selected for at-depth characterization. This is the approach reflected in your amendment to S. 1668. Please contact me if we can be of further assistance.

Sincerely,

LANDO W. ZECH, Jr.

AMENDMENTS TO THE NUCLEAR WASTE POLICY ACT—MONITORED RETRIEVABLE STORAGE

Mr. JOHNSTON. Mr. President, last week there was extensive debate on the nuclear waste legislation incorporated in H.R. 2700, the energy and water development appropriation bill for fiscal year 1988. One of the issues debated was the authorization for a monitored retrievable storage facility, or interim storage, that is included in the nuclear waste legislation. Some of my colleagues stated last week their belief that the MRS is not needed, or worse, that it is not wanted by the utilities.

Mr. President, I believe that the MRS is an essential part of an integrated waste management system. The MRS is a facility that can serve both as a packaging and handling facility during repository operation and as a interim, or backup, storage facility prior to the operation of a repository.

The MRS is not an alternative to at-reactor storage, and it is not a substitute for a repository. Utilities are required to take care of their own storage needs until 1998, but the Federal Government has a contractual commitment to take title to spent fuel beginning in 1998. An MRS will better ensure that the Department is able to meet this contractual commitment to accept spent fuel beginning in 1998. The MRS will allow greater efficiency in the packaging and handling of spent fuel prior to permanent disposal in a geologic repository. It will allow for greater flexibility and efficiency in operation of the overall system.

All in all, MRS is proven technology, it is something we know how to do, and it is something that we should get on with. It is a far superior approach to continued onsite storage at the 68 reactor sites in 31 States around the country.

There has been a great deal of debate about the need for the MRS. Critics have charged that the Department of Energy has not demonstrated the need for the facility. Critics have charged that the utilities do not support the MRS. But I do not believe this is the case. The record of hearings held by the Committee on Energy and Natural Resources has indicated that the facility is needed and that the utilities do support it. I have also received recent correspondence from the Edison Electric Institute to this effect.

At this time, I ask unanimous consent that the text of a November 9 letter to me from Thomas Kuhn, executive vice president of the Edison Electric Institute, be printed in the RECORD. I also ask unanimous consent that the executive summary of a recently completed report by the Department of Energy on the need for the MRS be printed in the RECORD.

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

EDISON ELECTRIC INSTITUTE,
Washington, DC, November 9, 1987.

Re Edison Electric Institute support for the Monitored Retrievable Storage (MRS) facility.

Hon. J. BENNETT JOHNSTON,
Chairman, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR MR. CHAIRMAN: During the on-going Senate floor debate on the FY 1988 Energy and Water Development Appropriations Bill, questions are being raised regarding the electric utility industry's position on the MRS. I want to make it clear that the Edison Electric Institute supports the MRS, as well as the rest of the Johnston/McClure language contained in the Appropriations bill. EEI's support for the MRS was originally decided by its Board of Directors on March 12, 1986 and was reconfirmed on March 13, 1987.

Of specific interest is Senator Sanford's inclusion of internal Tennessee Valley Authority memoranda in the November 5 Congressional Record (at 15869ff). These memoranda indicate internal TVA discussions over the need for the MRS and were prepared, in part, in response to inquiries from EEI regarding S. 1481. While these discussions are interesting, they are only that—discussions. When TVA Chairman Dean responded to our request, he stated that TVA's position remained neutral on the MRS. This was reiterated by Chairman Dean in his statement quoted in *The Knoxville Journal* of October 26, 1987 (copy enclosed).

We have reviewed Mr. White's memorandum, as printed in the RECORD. It is unfortunate that his review of the MRS focuses only on the additional storage aspect of the MRS and not on its overall functions as an integral part of the waste disposal program. He indicates that TVA is planning upon life-to-plant storage at its reactors, concluding that the MRS is not necessary for TVA. There are several points worth making with regard to the internal TVA memoranda. First, at-reactor spent fuel storage may or may not be less costly than centralized storage at the MRS, but performing the MRS function of preparing high integrity waste disposal packages at the seventy-plus reactor sites does not appear practical. Enclosed is a brief discussion of comparative storage economics. Second, given the current status of TVA's licensed reactors, its needs may be significantly different than the rest of the electric utility industry. Third, and most important, is that Mr. White does not include in his discussion the strategic value the MRS holds for the nuclear waste program.

After many years of experience in designing, constructing, licensing and operating over 100 nuclear generating stations, electric utilities have concluded that there are distinct advantages to separating difficult tasks into more manageable projects as opposed to one large project. This is precisely the concept that, in response to DOE's first draft *Mission Plan*, lead to our recommendation that DOE seek parallel paths for the large repository-only project. This would lead to separate, more manageable components, and a high-level radioactive waste disposal system where successes would be achieved at a date earlier than would be possible with a repository-only system. Earlier successes would provide learning opportunities for all concerned and would benefit the repository activities that follow the MRS activities. Furthermore, once the MRS is included in the high-level waste disposal system, the overall system could be designed and operated on a more flexible and efficient basis. Enclosed is a copy of a paper presented this past January by a member of the EEI staff discussing the strategic value of the MRS in greater detail.

Lastly, the issue of transportation has been discussed during the current debate. Our view is that transportation will be made more efficient by including an MRS in the system, but that overall transportation impacts on the general public will be largely uneffected by the MRS. The important point, however, is that the effects on the general public due to nuclear materials transportation are very small, with or without the MRS, and the MRS issue should turn on other matters, such as those discussed above. Enclosed are two fact sheets on nuclear transportation that discuss the subject in greater detail.

I hope you find this information useful as the Senate debate on the Appropriations bill continues. We greatly appreciate your efforts and hard work toward getting the nuclear waste program back on track. Please do not hesitate to let us know if we can be of further assistance.

Sincerely,

THOMAS R. KUHN,
Executive Vice President.

EXECUTIVE SUMMARY

On March 31, 1987, the Department of Energy (DOE) submitted to the Congress, in response to Section 141 of the Nuclear Waste Policy Act of 1982 (the Act), a proposal for the construction of a facility for monitored retrievable storage (MRS). The proposed MRS facility would be fully integrated into the overall waste-management system to serve as a centralized facility for receiving spent fuel from commercial reactors, for preparing spent fuel for permanent disposal in a geologic repository, and for temporarily storing a limited amount of the prepared waste pending shipment to the repository.

The integrated MRS facility offers important advantages that would benefit both development and operation of the overall waste management system. The MRS facility would *improve system development* by providing a stepwise approach to moving from the current state of experience to full-scale operation of a disposal system including a repository. It would allow DOE to proceed immediately to plan for, and implement a major part of, the waste-management system independent of the remaining issues to be resolved about the repository. The siting and construction of an MRS facility would also yield *major institutional benefits* by making a significant step forward that would give added momentum for implementing the entire system and provide experience at interactions with a host State and local community that would benefit later relations with the repository host.

The MRS facility would enhance the operation of the waste-management system in several important ways. it would *accelerate waste acceptance*, thus reducing the need for new temporary storage facilities at reactors and the attendant spent-fuel-handling operations, licensing efforts, and costs. The buffer-storage capacity of the MRS facility would provide *improved system reliability and flexibility* by allowing the functions of spent-fuel acceptance from reactors and spent-fuel emplacement in the repository to proceed independently, so that interruptions in one would not affect the other. It would *simplify facilities and operations at the repository* by shifting a major part of waste-package preparation to another site. Finally, it would *improve transportation* by allowing the longest leg of the journey from the reactor to the repository to take place in very large casks on dedicated trains moving on a single transportation corridor, thereby reducing the costs and impacts of waste transportation.

These benefits can be obtained at a reasonable cost. Recent estimates show that the overall cost for the development and operation of a waste-management system that includes an MRS facility would be approximately $1.5 to $1.6 billion higher than that for a system without an MRS facility. This difference is less than 5 percent of the total-system life-cycle costs for the current reference system without an MRS facility.

Since the DOE developed the MRS proposal for the Congress, a number of questions have been raised by the General Accounting Office (GAO), the State of Tennessee, and others concerning the need for the MRS facility and the feasibility of achieving comparable performance for the overall waste-management system without an MRS facility. This report was prepared to provide additional information to address these questions.

This report reviews potential modifications to the currently authorized system (the "reference no-MRs system"); describes and compares alternative no-MRS systems that incorporate these potential modifications to varying degrees; and provides a summary comparison of a modified no-MRS system with a similar system that includes an MRS facility. Also included are a summary of the views of some U.S. utilities on the need for the MRS facility and preliminary estimates of institutional costs identified but not quantified in the DOE's proposal to the Congress.

Nothing in this analysis indicates the need for any substantive changes in the conclusions reached in the DOE's proposal about the system benefits and costs of an integrated MRS facility. The research and development programs described in the DOE's proposal to the Congress may yield technological advances that can improve the waste-management system with or without an integrated MRS facility. However, none of these advances appears likely to significantly alter the net relative advantages offered by the MRS facility or the relative costs of adding that facility to the system.

In particular, the system-development and institutional benefits of the MRS facility can best be obtained by the construction and operation of a large-scale centralized waste-management facility—the MRS facility—several years before the first geologic repository. Without an MRS facility, many of the first-of-a-kind technical and institutional challenges of waste management and disposal will be faced at the first repository. With the MRS facility in the system, many of the pertinent issues, except for the issue of long-term disposal, will have been addressed before the final development efforts for the first repository.

Of the operational benefits identified for the MRS facility, it would appear that only the transportation improvements can be obtained by modifications to the no-MRS system, and then only to a lesser degree that would be possible if the same modifications are applied to the system that includes an MRS facility.

The views of the utility industry—as represented by testimony before the Congress and determined in a limited DOE study of several utilities—indicate strong support for an MRS facility and similarly strong opposition to performing at reactor sites several waste-preparation operations that would be performed at the MRS facility.

The discussions that follow briefly describe the evaluations performed in this study and summarize the results.

ACHIEVING COMPARABLE PERFORMANCE WITHOUT THE MRS FACILITY

The GAO and others have contended that the MRS proposal to the Congress does not compare an improved waste-management system without an MRS facility with a system that includes an MRS facility. According to these commenters, such a comparison is needed to determine the true value of an MRS facility to the system.

Assessment of alternative no-MRS cases. This report presents the benefits and costs associated with five alternative modifications to the reference no-MRS system that incorporate various combinations of technologies. The technological options considered include large-capacity transportation casks; dual-purpose storage-and-transportation casks for the at-reactor storage of spent fuel; at-reactor preparation of spent-fuel canisters that are compatible with the rest of the waste-management system; and at-reactor spent-fuel consolidation. The alternatives evaluated represent increasing degrees of transfer of waste-management activities from the Federal waste-management system to reactor sites. They range from an alternative system that involves only modifications to the Federal waste-management system to one in which the preparation of repository-ready disposal canister—a key function planned for the MRS facility—is performed at reactor sites instead.

The evaluation of the five no-MRS alternatives identified one option that has significant advantages over the current reference no-MRS system and all of the other options. This option—alternative 1—involves the use of large-capacity transportation casks and DOE guidance and advice to encourage utilities who chose to consolidate fuel to use a canister that is compatible with the rest of the waste-management system. These modifications can be implemented in the Federal waste-management system with little intrusion into utility activities. They would reduce overall system costs by $400–$500 million and also reduce the occupational and public risk of radiation exposure, primarily as a result of the transportation improvements resulting from the use of large-capacity casks.

The comparison indicates that involvement by the utilities in waste-preparation

activities beyond those they would voluntarily undertake to deal with their own storage problems would lead to cost impacts that range from only minor cost reductions to substantial cost increases compared with performing those activities at the repository. For example, the analysis indicates that DOE action to encourage or require the consolidation of spent fuel at reactors (a function now planned for the MRS facility or for a repository if an MRS facility is not authorized) would have at most a marginal cost benefit. Furthermore, once the large-capacity transportation casks are employed, at-reactor consolidation yields only minimum additional reductions in transportation costs. In sum, the small net cost benefits resulting from the promotion of at-reactor consolidation would not offset the negative impacts associated with the increased Federal intrusion into utility operations and the associated risks of interference with reactor operations.

The evaluation of cases involving differing degrees of preparation of disposal-ready waste packages at the reactors showed the same results for each case: overall system costs would increase; significant institutional and utility opposition to widespread utility involvement in spent-fuel preparation would be expected; and substantial technical feasibility issues would need to be resolved. In fact, the alternatives involving the performance of most or all MRS functions at reactor sites have costs that are comparable to, or higher than, the costs of the system with an MRS facility and provide none of the substantial system-development benefits of the MRS facility.

Comparison of no-MRS and MRS cases. The no-MRS case that was identified as having advantages compared to the current reference no-MRS system was compared with an updated MRS case that incorporates the same improvements made in the no-MRS case. The comparison showed that the only significant change from the analysis presented in the MRS proposal is the large reduction in transportation costs and impacts resulting from the use of large-capacity transportation casks for shipments from the reactors to the MRS facility or the repository. While the large-capacity transportation casks do improve transportation substantially in the MRS case, the benefit is greater in the no-MRS case because in the latter case the benefits accrue over the entire distance from the reactors to the repository.

The larger reduction in transportation costs for the no-MRS case compared with the MRS case increases the calculated cost difference between the two cases to $1.6–$1.9 billion (about 13 percent higher than previous estimates), although the absolute cost of both cases is reduced. However, the updated MRS case still shows net improvements in transportation compared with all of the no-MRS cases simply because the 150-ton casks that will be used to ship from the reaction to the repository—the longest portion of the journey from the MRS facility to the repository—have a substantially larger capacity than the largest rail cask that can be used at a reactor. Furthermore, the MRS case will reduce the number of separate jurisdictions affected by transportation by restricting shipments to a single cross-country route rather than the several that would be involved in the no-MRS case.

In summary, a qualitative examination of various modifications to the no-MRS system shows that no realistic combination of technological modifications and varying degrees of shift of waste-preparation functions from the DOE to the utilities will result in equivalent advantages or in any substantive way alter the advantages that would accrue to the waste-management system as a result of the MRS facility. Many of the major advantages of the MRS facility can be obtained only by the construction and operation of a central waste-management facility before the repository—so that no conceivable improvements to a no-MRS option, in which activities are performed instead at separate reactor sites, can provide comparable benefits.

VIEWS OF THE UTILITY INDUSTRY ON THE NEED FOR THE MRS FACILITY

The benefits of an MRS facility are considered to be sufficient to warrant the small percentage increase in the overall system cost. This conclusion has been endorsed by the utility industry. From the testimony of utility representatives before the Congress, the GAO findings, and the results of a limited DOE study, the following conclusions about the views of the utility industry can be made:

The nuclear utility industry supports the addition of an MRS facility to the waste-management system.

The utility industry can and will implement technological solutions to the problem of spent-fuel management until the fuel is transferred under the Act to the Federal Government. The solutions are, however, likely to vary among the utilities in the absence of significant Federal intervention.

The utilities are not inclined to commit to substantially greater waste-preparation operations at reactor sites than those required to sustain the safe operation of the nuclear power plant. This attitude stems mainly from concerns about institutional, liability, and licensing issues rather than simply technical concerns.

Any waste-management option that requires extensive at-reactor consolidation or other at-reactor operations that are beyond those otherwise needed to safely and efficiently store fuel pending acceptance by the DOE would require facility modification and operations that encroach on the primary function of reactors—the generation of electricity.

COSTS UNQUANTIFIED IN THE MRS PROPOSAL

The DOE has been asked to provide estimates for certain costs that were identified but not quantified in the MRS proposal. These costs fall into the general categories of impact mitigation, consultation-and-cooperation (C&C) agreements, payments equivalent to taxes, and licensing and permit fees.

These costs were not quantified in the MRS proposal because the DOE felt that including them in the proposal was not appropriate. As explained in the DOE's comments on the GAO report, such costs were not specified in the proposal "to allow the DOE flexibility in the consultation-and-cooperation process that will be initiated if Congress approves the MRS proposal." An estimate of State and local taxes (or payments in lieu thereof) was nonetheless included in the proposal documents. The DOE's comments also pointed out that some of these costs should be determined by the Congress "as a matter of national policy and of the value of the MRS to the waste-management system, as opposed to a DOE estimate." *The authority for these expenditures would come from the legislation authorizing the MRS facility.* Only funds for impact mitigation have already been approved by the Congress, as they are included in the Act. Other payments to the affected State and local jurisdictions, although proposed by the DOE, are yet to be approved by the Congress. Consequently, the costs for these items may be as low as zero.

Mr. BREAUX. Mr. President, I rise to speak on the pending amendment as the chairman of the Nuclear Regulation Subcommittee of the Environment and Public Works Committee.

I start by making the point for those Members who do not sit on any of the authorizing committees that I have been deeply involved in this legislation. I am certain that many of them are very confused about what all the debate has been about; why are we engaged in a filibuster on this legislation; why some are filibustering and stopping other legislation that needs to come to the floor of this body and to be concluded with the other body, matter of tremendous importance.

I say there is not a great deal of difference in the approach of the Energy Committee and the Environment and Public Works Committee on this subject. I, as one Senator from the State of Louisiana, believe in nuclear power. I support it. I think there are a lot of things that we can continue to benefit from. I think there are major steps that need to be taken to improve the delivery of nuclear power. But my bottom line is that I support nuclear power. I think it is good for this country. It is also the policy of this country. We have established that.

I also support, as anyone who supports nuclear power supports, the establishment of a safe method of disposing nuclear waste. You cannot have one without the other. You cannot have a nuclear power industry in this country without having a means of disposing of nuclear waste.

Some perhaps will argue that there are those in the Senate who want to do something about nuclear waste and there are others who do not and, therefore, those who do not want to approve this legislation are, in reality, opposed to nuclear power.

It is not true. I support finding a site to dispose of nuclear waste because I support nuclear power. Until we solve the waste problem, there is no way that we are going to continue to be able to produce and use nuclear power produced by the industry in this country of ours.

Therefore, the difference boils down not to those who support finding a nuclear waste site versus those who refuse to do anything about it. That is not the question. The real question that we find ourselves addressing is how we go about picking those sites. Therein lies the difference between the procedure of the Environment and Public Works Committee and the Energy Committee. That difference is really very simple. The difference in the approaches is really not that com-

plicated. The difference in the approach as I see it deals with how we select the site and do the final work to determine whether that site is a responsible one to put nuclear waste in. The difference in the two committees' approach is not that significant, not that hard to understand. In fact, it is quite simple.

Our committee's approach says that there are three sites that have been picked as potential sites. Our committee says that before you select one of those sites for full characterization, before you select one of those sites to drill a major shaft down into the ground, before you spend the billions of dollars that are going to be needed to, in fact, sink that shaft, let us have on hand information about all three sites. We simply must be able to justify that the one site that is finally selected for this major endeavor is suitable; that it has been selected with information and with evidence and with some surface-based testing. The record is very clear that surface-based testing is critically important to determine whether one site is more preferable than the others.

That is our committee's approach.

My interpretation and understanding of the Energy Committee's approach is that they have modified their bill since they have come to the floor. They have accepted some of these ingredients I have just described with regard to surface-based testing. But there is a major difference and the major difference is that they want to do the surface-based testing after someone has already made the decision to do the shaft construction, to expend the millions and perhaps billions of dollars to determine what one site looks like underground.

My question is, if it is important enough to do surface-based testing and find out about the three sites, is it not important enough to have that information before we pick the one final site? I think the obvious answer is that of course it is.

Why go out and make a commitment on one site and agree to sink a shaft at that site without having the information about the other two sites on hand?

That really is the crux of the difference as to where we are at this point in time.

I have some information that I think is important for the record and that should be placed in the RECORD so that Senators who will try to come up with an honest evaluation can look at the evidence on both sides and come to the proper conclusion.

This decision, which seemingly we are being rushed into making, is a decision that is going to be with us and the rest of the world for thousands of years—for thousands of years, not months or days. It is a decision that the world will look to a thousand years from now and say, "Did the U.S. Senate rush to judgment? Why was there such a mad dash toward selecting a site that 24 months was compromised and they made the wrong decision?"

I say that does not make a great deal of sense. Surely, a decision on something as significant as what we as a nation are going to do with nuclear waste, a decision that is going to affect this country for generations and thousands of years, should be made with the same degree of intensive search and scrutiny as we make when deciding where to dump garbage from our homes, where to drill an oil well, or where to dig a canal. Those decisions are made after carefully looking at all the alternatives.

The Energy Committee says we should pick a site and go ahead and do the final testing work on it before we have done the minimum amount of work on the other alternatives.

That is what I think we have heard for the last several days from the Senator from Washington and the Senator from Nevada, who are uniquely concerned because their States have been selected for one of the possible sites. I do not hear them arguing against that. I just hear them making a plea that all of the sites be given proper evaluation before the final selection is made. Is that too much to ask? Is that too much to ask in order to make a decision which is going to be with us for thousands of years? I would suggest they are asking the very minimum and that we as Members of the Senate owe that to the country and the rest of the world.

I think the point needs to be made that there is not a great deal of difference between the approach of the Energy Committee and the approach of the Environment and Public Works Committee. I hope, before we get to a final decision, we can sit down and come to an agreement because the only difference of major substance is that our committee is recommending the three candidate sites have surface work done so that we know about the geology, and after we know the geology of all three sites then and only then do we pick the final site to drill the shaft and make that final commitment.

The Energy Committee says make the final commitment first and then while you are doing the work based on that final commitment, go out and study the other two. That is putting the cart before the horse. It is more important to get the information and use that information, then make your decision. Why study the problem if you are not going to use the information gained from the study to make the decision? I suggest to those who argue that our approach is too slow, I merely repeat, a 24-month delay to gain additional information on a decision that is going to be around for thousands of years, thousands of years, is not something that we can afford not to take, that we cannot afford to sweep 24 months under the table for something that is going to be with us for thousands of years.

When the Congress first enacted the Nuclear Waste Policy Act back in 1982, most observers believed that we had fashioned a well thought out and environmentally sound program that would facilitate our effort to address the nuclear waste disposal issue. The 1982 statute, which reflected the work of three Senate committees and seven House committees, called for the Secretary of Energy to select a number of potential sites located in different geological media for development as a permanent underground geologic repository for the disposal of high-level radioactive nuclear waste. After narrowing these potential sites to three preferred sites, the Secretary was directed to fully characterize those sites and then select one for which a license application would be submitted to the Nuclear Regulatory Commission.

At the time that one site is selected, the existing law requires the Department of Energy to prepare an environmental impact statement. It is not a big chore. We have prepared environmental impact statements to dredge canals. Certainly we should do one to select the site for disposal of nuclear waste. It was well understood at the time the current law was passed that the first repository site would most probably be located in the Western part of the United States, and in fact the three candidate sites that are now the subject of more extensive characterization efforts by the Department of Energy are located in the States of Texas, Nevada, and Washington.

As a complement to the so-called first repository program, the Congress also directed the Secretary of Energy to examine potential candidate sites for the development of a second repository, and this second repository program was to go forward on a parallel track, although roughly 4 years behind the first repository program.

It was understood at the time that this effort would focus on granite sites in the Eastern part of the United States, providing what was then considered a vital regional balance between the West and the East to the Nuclear Waste Disposal Program.

Finally, the Congress directed the Secretary of Energy to conduct a detailed study of the need for and the feasibility of an engineered aboveground facility called a monitored retrievable storage facility, or the MRS. Significantly, while the original act authorized the Secretary to proceed with a license application for the first repository, the construction of the second repository as well as the MRS

were subject to further congressional action. As is often the case when a program is as technically complicated as the Nuclear Waste Program and given the obvious political sensitivity of locating a nuclear waste facility in any one State, the task of carrying out this program has obviously not been very easy. Indeed, many of the assumptions regarding the need for the cost of two repositories have proven to be incorrect.

Mr. President, it is now generally well accepted that this program is in need of midterm corrections, and that is really why we are here today, because most people—the Energy Committee, the Environment and Public Works Committee, committees in the House—agree that some changes, some midterm corrections in the program need to be made.

During the debate that has taken place on the Senate floor over the last 4 days, I have not heard anyone disagree with the fact that we need to make some changes in the nuclear waste program.

Let me repeat that, Mr. President. Not one of the statements that have been made on the Senate floor has challenged to notion that we need to make some corrections, and we need to make some changes in the 1982 act. What the Members have heard have been a number of very eloquent statements by Members of this body who have deep founded, well intentioned, and some very honest disagreements about the shape of the necessary corrections and how we go about reaching the new statement policy that we can agree upon.

On the one hand, Members have heard the distinguished managers of the bill defend their position incorporated by the Appropriations Committee in their amendments, and incorporated in the second-degree amendment on which we will shortly be voting. In essence, their position would amend the Nuclear Waste Policy Act of 1982 to first require that the Secretary of Energy select one of the three current first-round sites by January 1, 1989, for full characterization including the sinking of the exploratory shaft and full at depth testing. Under their original approach, all work of the other two sites would be halted unless the first site chosen proved unacceptable. Last week, this approach was modified on the floor by my senior colleague, the Senator from Louisiana. Under the pending amendment that we now have, additional surface-based testing would continue at the two sites not immediately selected in order to enhance the state of readiness at these two sites if the first proved unlicensable.

I interpret that to mean that the Department is to come in now and pick one of the three sites, and do all of the full characterization work, sink the massive shaft down into the ground, and do this underground testing that that shaft would allow. While you are doing that, do some surface-based testing on the other two sites. That is where I think their approach is defective.

The second thing that their amendment does is to cancel all site specific work on the second repository. I mentioned that the 1982 act said we will have a site somewhere in the West, and a site somewhere in the East for a second repository. The Energy Committee's approach today says we will cancel all site specific work on this second round repository and require the Secretary of Energy by the year 2010 to report to the Congress on the need for a second repository.

Again, modifications were proposed to this provision last week, which would entail a phaseout of the non-site-specific research activities that are ongoing and that are studying in the broadest sense the acceptability of crystalline rock as a so-called host media.

The third thing that their approach does is to authorize the Secretary to construct an above ground monitored retrievable storage facility, an MRS. It would authorize it. Again, modifications adopted last week would require an independent review panel to assess the need for such a facility, although even a negative finding by such a group would not lead to a deauthorization of the facility. Those modifications require setting up an independent review panel to assess again the need for such a facility. Certainly it seems they are approaching that decision with a great deal of care by saying they need more information with regard to whether an MRS facility is needed or not; but, I question whether they just trampled on that approach when it comes to studying, with greater information, the three potential sites for a permanent storage program.

The fourth thing that their bill does is to authorize the payments of incentives for those States that host either the MRS or the repository. Incentives are big bucks that their bill talks about giving to a State which is going to have a nuclear waste facility located in that State. I think it is $100 million to a State that has a permanent repository program per year and $50 million to a State that might end up with a monitored retrievable storage or temporary storage facility in their State per year. Again, I do not really have any qualms with that.

In justification of their position the managers of the bill have made a number of statements that I will get into in more detail concerning the testimony of these so-called experts before their committee concerning the overall state of readiness of the Department of Energy to proceed with selection; second, statements concerning the degree of competence that exist that any one of these three sites will prove to be licensable; third, statements about the tremendous drain on engineering, scientific and other technical talent that results from a dilution of effort that accompanies the complete characterization of the three sites; and, fourth, statements about the tremendous amount of money that is wasted by characterizing more than one site.

On the other hand, Mr. President, we have heard statements by Senators REID, ADAMS, and HECHT wherein they have put before this body a number of technical concerns that have been raised in their respective States about the work that has been done, and in some cases work that has not been done, by the Department of Energy in their early efforts to prove that one of the three current candidates is going to be licensable by the Nuclear Regulatory Commission.

Mr. President, I think some have attempted to characterize the efforts of these Senators as taking the position that not in my backyard do we under any condition want a nuclear waste facility. And these Members represent States that are being considered so the natural argument would be, well, dismiss the arguments of Senator REID, Senator ADAMS, and Senator HECHT because, after all, they just represent their constituents and their constituents do not want these facilities. So, of course, they are going to make these unfounded and unsupported arguments. I would suggest that their arguments are much more detailed than the "We do not want it in our backyard" argument. We also are reminded that they are also cosponsors along with our colleagues, Senators SASSER, MITCHELL, GORE, HATFIELD, PACKWOOD, ROCKEFELLER, PROXMIRE, SANFORD, and COHEN, among others, of legislation that would impose a moratorium on the entire program and require the appointment of a blue-ribbon commission to review the status of the entire program from the word go.

Mr. President, I am neither a cosponsor of the so-called moratorium legislation nor a Senator whose State is being closely examined as a potential repository State. I have, however, spent the last 10 months chairing the Subcommittee on Nuclear Regulation of our Environment and Public Works Committee. In that capacity, I presided over five hearings wherein we have examined various aspects of the Department's effort to implement the Nuclear Waste Policy Act of 1982. Witnesses who have testified before our subcommittee have included Secretary Herrington, Mr. Ben Rusche, until recently the head of the Department of Energy's Nuclear Waste Program, the Commissioners and the staff of the Nuclear Regulatory Commission, representatives from first- and second-

round States, representatives from so-called transportation corridor States, representatives from States being examined for the location of an MRS, and representatives of the environmental community and the nuclear power industry, among others.

In short, our witness list has included many of the same experts that have testified before our colleagues on the Energy Committee. And now we are in the business of trying to interpret what we heard from our panel of experts versus what they have heard from their panel of experts. The truth of the matter is the experts have been by and large the same people testifying before their committee who have presented information before our committee. Why is it then that we have reached two seemingly different conclusions about what type of corrections are needed?

First, I would suggest that none of our hearings really focused on any specific piece of legislation. All of our hearings were in the truest sense of the word oversight hearings to look at the broad-based questions, to ask our witnesses to come in and not comment on some preconceived notion of what the legislation should do but rather we call the witnesses to come in and say, tell us about the program. Tell us about the progress. Tell us about the difficulties that you are experiencing so that we can then sit back and try to come up with some of the answers for these midterm corrections.

Second, I would say, and I said this in my earlier comments, that the two approaches are far more similar then they are different.

The approach of the Energy Committee and the approach of the Environment and Public Works Committee on this issue are far more similar to what we are both trying to recommend for midterm correction than they are different. That is why I said that it seemed to me, in the spirit of compromise, that we could work out an agreement which would be acceptable.

The House Interior Committee has taken one of those approaches where they have said stop all this work on the selection of a nuclear waste site. I think that is wrong. The House approach is to put on a moratorium and let us study it, about whether we need a nuclear waste repository or not. So the House Interior Committee says stop all work, put on a moratorium. I think that is the wrong approach, an extreme approach.

The Energy Committee, on the other hand, says let us go forward as quickly as possible. Let us pick a site right now and sink a shaft.

I think there is a middle ground, and I suggest that our approach is that middle ground, which says let us look at all three sites and do surface work on all three; and after you have the information, after you have the evidence, pick the site on which you want to do the final work. Before you make a decision, let us have the evidence; that is all we are saying.

I hope that the two committees which have similar approaches except for this difference will get together and work out the difference.

The legislation of the Environment and Public Works Committee does not quarrel with many of the Energy Committee's major changes in policy that they are advocating. It supports some of the changes they have made in their bill.

I think that bears repeating. The Environment and Public Works Committee does not quarrel or take issue with the four fundamental basic changes advocated by the Energy Committee. We have accepted, for example, the concept of sequential characterization and the cancellation of the second repository program. We have not taken issue with the decision to authorize either the MRS or the payment of incentives to host States. We have no quarrel with four major policy changes they are recommending.

In fact, this Senator has said, on the issue of payments to the potential host State, that I support that concept if that is the only way we could get them to host a permanent repository.

I have no problem with the decision to authorize the MRS. I want to make sure it does not become a permanent site, but I have no problem with authorizing the retrievable storage facility.

What we have taken issue with is the method advocated by the managers of this bill, by which the one preferred site will be selected and the lack of constraints placed upon the MRS. Those are the only two differences. That is the reason why we have a filibuster—that is it. It is a very simple difference between the two approaches.

Before I more fully explain why we have taken issue with this, I will take a few minutes to outline what is in our bill, the Environment and Public Works Committee bill.

Effective upon the date of enactment, our legislation would require the Department of Energy to identify the major technical issues at each of the three current candidate sites that relate to the suitability of such sites for development as a repository. These issues would be identified by the Department, in consultation with affected States and Indian tribes, the National Academy of Sciences, and the Nuclear Regulatory Commission.

After they have been identified, the issues would then have to be addressed through a surface-based testing plan, if existing data did not provide the answers; and the Department of Energy would be required to conduct such surface testing at all three of the sites where such testing either:

One, could reveal significant information about site suitability important to know before major resources are committed for "at depth" characterization; or

Two, is necessary to permit DOE to evaluate the suitability of the site for development as a repository.

I ask the Members to think about that standard. Is that an unreasonable thing to request? Is that an unreasonable requirement to have to meet before we go about selecting a facility that is going to store nuclear radioactive waste for thousands of years? Is that too much to ask, that the candidate sites be looked at and that we do some preliminary testing to get information on which to base a decision to do the final testing to select that site?

I would think that everyone would agree that before that decision is made, information about all the sites is needed and should be on hand, in order to make that final jump, before we make that final cut and spend the billions of dollars to assess the viability of that site.

Upon completion of the testing, the surface-based testing, testing that could be done without having to sink a major shaft—after that surface-based testing is completed, but, in any event, no later than January 1, 1991, which is only about 24 months later than the Energy Committee's proposal, our bill directs the Secretary of Energy to select one of these sites as the preferred site for development as a repository.

That means the full characterization, including the sinking of the shaft. Notably, our legislation requires the Secretary to make the selection based upon the relevant guidelines in existing law and applies the requirements of the National Environmental Policy Act to that decision. The National Environmental Policy Act is the law of the land. It requires an environmental impact statement to be done before Federal action which has a significant effect on the environment is taken. That is the existing law. It is a wise decision. When critical decisions are to be made that could potentially affect the environment, not just for the next month or the next year or the next several thousand years, why should the National Environmental Policy Act be waived?

Our bill recognizes that the process for selecting a site has an effect on the environment. Certainly it has a potential effect on the environment. All we are saying is that it should be applied to the methodology around which we select the site that is going to be the preferred site for the sinking of a shaft.

Who can argue that a decision of that magnitude, which is going to be a

permanent decision for perhaps the rest of the history of our Nation, which can affect Americans in every State, is not a decision that will have a potential effect on the environment? Of course it has a potential effect. It has a direct effect. That cannot be denied. So the application of the National Environmental Policy Act should not be denied.

Our legislation says that that decision should be subject to the National Environmental Policy Act. Our position is that the selection of the preferred site should be based on the technical criteria of the Nuclear Waste Policy Act and that we should consider the National Environmental Policy Act requirements as being applicable to that decision process.

In what other areas does our approach differ from that which is currently pending before Senate? First, we give the potentially-aggrieved parties 120 days rather than 30 days to file the appeals of any Secretarial decisions before the Temporary Emergency Court of Appeals.

(Mr. CONRAD assumed the chair.)

Mr. BREAUX. Is it unreasonable, given the enormous record that will be compiled in this program, encompassing literally thousands of pages of highly technical and detailed information, to give potential litigants who are going to be affected forever by this decision an extra 90 days to file briefs?

Ninety days—is that too long on a decision that ultimately will be with us for thousands and thousands of years perhaps?

Second, we propose certain safeguards on the licensing of any monitored retrievable storage facility, or MRS, that might be authorized by the Congress, in an effort to ensure that it does not become the de facto repository and hence the problem of future generations. The distinguished Senator from South Carolina [Mr. HOLLINGS] has already given a most eloquent statement on the problems associated with the MRS provisions of the pending amendment that I will not repeat here. I will, however, point out that the so-called safeguards included in our legislation have either already been adopted by the Department of Energy in its earlier proposal to the Congress, or by local government groups that have studied the MRS concept and support it with these conditions.

The question again arises, Mr. President. Why, given this apparent agreement between the Energy Committee and the Environment and Public Works Committee on many of the major policy initiatives sought by the Energy Committee, do we find ourselves in this situation on this bill? Frankly, I am very, very puzzled myself and have always felt that differences should and could be eliminated.

I suspect, however, that the answer is really the inability on the part of the managers, myself and my senior Senator from Louisiana, and the other parties and other managers of the bill to compromise on the issue of the dates. That is, we have been told that virtually anything in the proposal that has come out of the Energy Committee is negotiable, except the date of January 1, 1989 for the selection of a preferred site.

I can only presume, therefore, that our committees have a vastly different understanding of the record on the key issue of whether the DOE will be able, on that date, to select a preferred site from the current candidate list of three. Let us explore for a moment, what that record reveals.

As I earlier stated, the proponents of the amendment before us at this moment have argued that all of the experts that have testified before them have indicated that the only roadblock in their way to the selection of this one site and full speed ahead on this one site, including the sinking of this exploratory shaft, is the objections of the potential host States. The States that might be selected are objecting. The testimony and the positions of the Nuclear Regulatory Commission has been generously used in connection with this argument.

But, as this Member reviews the position of the NRC, starting with something known as SECY-87-137, that is just not the case. SECY-87-137 is the name of a document that encompasses the NRC's "first quarterly status report on the prelicensing phase of DOE's Civilian High-Level Radioactive Waste Management Program" This report was prepared by the Commission's technical staff to provide the Commissioners with an update about the DOE's waste program implementation efforts and to flag for the Commissioners the NRC staff's concerns about such efforts.

Six action items from the Commission's staff are detailed in this document and some of them are most instructive to this debate, in particular, the staff discussion concerning the implementation by the DOE of scheduled and systematic consultations. In this part of the report, the NRC notes that the primary method of prelicensing consultation between the NRC and DOE, established under the Nuclear Waste Policy Act, is the NRC's review and comment on the DOE's site characterization plans [SCP's] and semiannual progress reports.

According to the NRC:

[T]o facilitate this formal process, a Procedural Agreement between NRC and DOE was established in 1983 * * * which outlined procedures for consultation and exchange of information during investigation and characterization of sites for a geologic repository. These prelicensing consultations are intended to assure that NRC receives adequate information on the DOE Program in a timely manner to facilitate early identification and resolution of important licensing issues.

After documenting the past failures of the Department of Energy to timely meet in these prelicensing consultations, and the attendant risks that such failures held for the license application, the staff noted that:

[W]e will be proposing to DOE, in the upcoming management meetings that near-term technical meetings should address specific concerns related to surface-based testing strategies. In our comments on the Draft Mission Plan Amendment we indicated that some surface-based testing may be needed prior to construction of the shafts because (a) shaft construction may render some testing impossible or useless; and (b) such testing may reveal information about site suitability important to know before major resources are committed for shaft construction. Significant progress toward resolution can be made for some areas of technical concern at each site through surface-based testing before sinking exploratory shafts.

Mr. President, a third enclosure to this document sets forth, in chart form, an issues hierarchy that identified for each of the three candidate sites the major licensing issues and the predominant research approach, that is, surface based and/or laboratory testing or underground testing and/or shaft sinking, that could be followed in the attempt to resolve them. Most interestingly, this chart reveals that:

First, of the five major licensing issues at the Hanford, WA site, four can approach resolution through means other than the sinking of an exploratory shaft;

Second, of the five major licensing issues at Yucca Mountain, NV, two can approach resolution through surface-based testing alone, two others require a combination of surface and underground tests, and only one requires underground tests alone; and

Third, of the four major licensing issues at the Deaf Smith, TX site, one can approach resolution solely through the use of surface-based testing, two others require a combination of surface and underground tests, and one requires the sinking of an exploratory shaft.

Mr. President, I ask unanimous consent that the relevant portions of the NRC's document, SECY-87-137, that I have just referred to be entered into the record and printed at this point in the debate.

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

PORTIONS OF DOCUMENT SECY-87-137

JUNE 8, 1987.

For: The Commissioners.

From: Victor Stello, Jr., Executive Director for Operations.

Subject: First quarterly progress report on the prelicensing phase of DOE's civilian high-level radioactive waste management program.

Purpose: To provide the Commission with the first quarterly progress report on the pre-licensing phase of DOE's Civilian High-Level Radioactive Waste Management Program.

Summary: The NRC staff has completed the first quarterly progress report on the pre-licensing phase of DOE's Civilian High-Level Radioactive Waste Management Program. This progress report was requested by the Commission and referenced in the Chairman's April 7, 1987 letter to DOE transmitting the NRC staff's comments on the Draft Mission Plan Amendment, issued in January 1987. The focus of this report is on the current status of seven action items which cover the key aspects of the NRC/DOE pre-licensing consultation program. Focusing on these items should provide the Commission with the overall NRC staff perspective on the progress of the repository program. Also, this report will provide information to the Commission on NRC/DOE interactions prior to meeting with the Director of DOE's Office of Civilian Radioactive Waste Management on June 11, 1987.

BACKGROUND

In the Draft Mission Plan Amendment of Janaury 1987, the DOE committed to six activities to make maximum use of the near-term schedule extension and to increase confidence that the Commission's review of the license application could be completed within the three year period required by the Nuclear Waste Policy Act (NWPA) of 1982.

The six activities listed in the DOE Draft Mission Plan Amendment are:

1. Interactions with the Nuclear Regulatory Commission on technical issues, using available options (e.g., rulemaking) to resolve issues.

2. The development and operation of a licensing support system that will provide storage and retrieval for specified licensing information.

3. The implementation of, and interactions with the Nuclear Regulatory Commission on, a quality-assurance program that will fully satisfy the Commission's requirements for the acquisition of data used in the licensing process.

4. The implementation of the issue-resolution strategy, which is based on the performance-allocation process requested by the Nuclear Regulatory Commission.

5. Provisions for greater involvement by the States and affected Indian Tribes in the technical program.

6. The implementation of a program of licensing topical reports, which will allow the NRC staff to consider various issues before the submittal of the license application and should greatly reduce the volume of material to be included in the application.

Five of the six activities directly correlate with the six action items identified in NRC comments on the draft Project Decision Schedule (PDS) dated October 24, 1985, as needing to be completed by DOE in a timely fashion during the pre-licensing phase of DOE's high-level waste repository program, if there is to be any real possibility that NRC can review the license application within the three year period required by the NWPA.

The six action items from NRC staff comments on the draft PDS are:

1. Implementation by DOE of Scheduled and Systematic Consultations.

2. Development of an Information Retrieval System.

3. Early Implementation of a Quality Assurance Program.

4. Early Establishment of Repository Design Parameters.

5. Early Resolution of Major State and Indian Tribe Concerns.

6. Adoption of Conservatism.

The one action item that DOE does not address is adoption of conservatism and a new item which DOE listed as an activity in the Draft Mission Plan Amendment is the implementation of a program of licensing topical reports to work towards resolution of issues before the submittal of the license application. This is an activity which NRC staff did not specifically identify as an action item to be tracked in the draft PDS comments but considers important to the success of the pre-licensing program and will include in the quarterly progress reports to the Commission as identified below.

7. Early Resolution of Issues through a Program of Licensing Topical Reports and Other Mechanisms.

In summary, for purposes of keeping the Commission informed of the status and progress made on the six DOE identified activities and the six NRC action items identified in our PDS comments, the staff will track the six NRC identified action items and the topical report activity identified by DOE as listed above. The NRC staff would appreciate any suggestions the Commission might have to make the Quarterly Progress Reports more effective.

In addition to a discussion of the status of these seven items, enclosed is information on the current status of NRC's activities required by the NWPA (Enclosure 1).

DISCUSSION

The current status of seven NRC action items is given below. (The original wording of the action item from the NRC staff comments on the draft PDS is given following the title and then followed by the status.)

1. Implementation by DOE of Scheduled and Systematic Consultations: DOE would meet with NRC staff to lay out current planned activities and milestones for site characterization (including preparations for characterization) to provide a detailed and systematic basis for determining the appropriate points for consultation. Timely consultation will become increasingly important given the long lead times for the development of plans and procedures, and for the timely procurement of essential services and equipment.

The primary method of pre-licensing consultation between NRC and DOE, established under the NWPA, is NRC's review and comment on DOE's Site Characterization Plans (SCPs) and semiannual progress reports. To facilitate this formal process, a Procedural Agreement between NRC and DOE was established in 1983 (Enclosure 2) which outlined procedures for consultation and exchange of information during investigation and characterization of sites for a geological repository. These pre-licensing consultations are intended to assure that NRC receives adequate information on the DOE program in a timely manner to facilitate early identification and resolution of potential licensing issues. To be most effective these consultations should be scheduled sufficiently early so that NRC comments can be resolved by DOE with enough lead time so as not to delay DOE activities or the NRC licensing process. They should also contribute to the DOE's development of adequate SCP's and a License Application (LA) as well as increase the confidence that NRC can review the DOE's LA within the three year period required by the NWPA. Under the Procedural Agreement the pre-licensing consultation interactions consist of technical meetings, data and document reviews, and prompt information exchange by an NRC On-site Licensing Representative (OR) at each DOE project office. (At present there are ORs stationed at the DOE Hanford and Nevada project sites. An OR will be selected for the Texas project site once DOE moves its salt staff to Texas). In addition, these interactions have been supplemented by periodically sending NRC headquarters staff to the DOE project offices to work with the NRC ORs.

While DOE revised their general milestones and schedules in the Draft Mission Plan Amendment of January 1987, they have not yet provided to NRC project-specific milestones and schedules. The SCPs which DOE is currrently preparing will lay out detailed milestones and schedules for each project. Project-specific milestones and schedules are needed to enable NRC and DOE to schedule appropriate consultations as the project work proceeds.

The current status of NRC/DOE consultations is as follows:

For the period from August 1985 (when it began to appear that DOE was having difficulty scheduling agreed to technical meetings) through March 1987, the following interactions occurred. There were no formal technical meetings between the NRC staff and the DOE's Nevada Nuclear Waste Storage Investigations (NNWSI) Project. For the DOE's Hanford Basalt Waste Isolation Project (BWIP), two technical meetings were held in December 1985, and for the DOE's Texas Salt Repository Project SRPO), two technical meetings were held in November 1985 and January 1986. In addition, there were also nine NRC/DOE technical meetings on generic topics (as opposed to site-specific). There were only two data reviews: one at BWIP and one at SRPO. However, during the same period the NRC ORs and NRC headquarters staff assigned to the ORs offices were much more successful in working with and obtaining information from DOE. Such staff interactions have been frequent and successful for NNWSI and SRPO while at BWIP they have been less frequent and access to information limited. Hence while the NRC staff has been able to keep generally current with the NNWSI and SRPO activities and to a lesser extent with the BWIP activities, there is a need for more site specific technical interactions and better access for the OR at the BWIP site. Despite the difficulties identified, the pre-licensing consultation has been generally adequate to permit NRC to perform its review of DOE programmatic documents issued to date in a timely manner. However, the main effect of the lack of interactions is that the SCPs prepared by DOE will not reflect the NRC comments and feedback that would have been generated in these interactions. This will probably result in the identification of more concerns and issues in the NRC's review of the SCPs, that will have to be resolved by DOE prior to the start of major site characterization activities and excavation of the exploratory shaft.

The need to increase the frequency and effectiveness of NRC/DOE site-specific

technical interactions has been a focus of DOE and NRC management attention for all three DOE projects. Since DOE has been almost continuously occupied with writing the Environmental Assessments (EAs) and SCPs over the past three years—documents which then consume NRC's time and resources during the comprehensive review required—it has been difficult fo find mutually acceptable times to hold as many technical interactions as would have been desirable. However, both NRC and DOE management have committed to improving the extent and effectiveness of technical interactions, particularly formal technical meetings.

DOE and NRC agreed in December 1986 to have seven technical meetings during the first half of 1987. Four of these meetings (i.e. Hanford Hydrologic Testing, Texas Exploratory Shaft Design, Nevada Exploratory Shaft, and Issues Hierarchy and Performance Allocation) were held. The NRC staff considers that these meetings succeeded in making progress toward resolving technical issues previously identified by NRC staff. The dates tentatively scheduled for the remaining meetings have slipped. NRC and DOE management are scheduled to meet in early June 1987 to agree on a revised schedule for future NRC/DOE meetings for 1987.

Due to uncertainties in DOE's schedules, particularly regarding when exploratory shafts will be sunk, NRC staff considers that future technical interactions with DOE, States and Tribes should be focused on near-term information needs. We will be proposing to DOE, in the upcoming management meetings that near-term technical meetings should address specific concerns related to surface-based testing strategies. In our comments on the Draft Mission Plan Amendment we indicated that some surface-based testing may be needed prior to construction of the shafts because (a) shaft construction may render some testing impossible or useless; and (b) such testing may reveal information about site suitability important to know before major resources are committed for shaft construction. Significant progress toward resolution can be made for some areas of technical concern at each site through surface-based testing before sinking exploratory shafts (see Enclosure 3).

Conducting meetings to discuss surface-based testing strategies will also allow the staff the opportunity to determine how DOE is incorporating many of the concerns identified in our final EA comments into the SCPs. This will, in turn, provide valuable insight on DOE's current approach to implementing conservatism in their program, by seeing how uncertainties and alternative interpretations are being identified and factored into test plans.

ENCLOSURE 3

MAJOR ISSUES AND RESOLUTION APPROACH

Issue	Predominant approach: Surface-based and/or laboratory testing	Predominant approach: Underground testing and/or shaft sinking
HANFORD SITE		
Characterization of groundwater flow system	X	
Tectonic stability	X	
Radionuclide retardation	X	
Container lifetime	X	
Repository constructability/high in situ stress		X
YUCCA MOUNTAIN SITE		
Presence of potentially active faults in the vicinity of Yucca Mountain	X	X
Potential for hydrothermal activity in the vicinity of Yucca Mountain	X	
Groundwater flow		X
Effectiveness of the potential radionuclide retardation mechanisms available at Yucca Mountain	X	
Potential for volcanism in the vicinity of Yucca Mountain	X	
DEAF SMITH SITE		
Potential for localized salt dissolution along faults acting as groundwater flow paths	X	
Effects of heterogeneities in the salt units on repository constructability and retrievability	X	X
Potential for shaft seal failures resulting in ground water inflow		X
Potential for localized corrosion of waste package in a brine environment—Brine migration/chemistry		X
Localized corrosion	X	

MAJOR ISSUES AND RESOLUTION APPROACH—Continued

Mr. BREAUX. Mr. President, the managers of the bill will probably say that this early June position of the NRC has been overtaken by subsequent events and statements of the Commission. Let us examine some of the other relevant Commission documents on this issue.

On April 27, 1987, Commissioner Carr of the NRC sent a memorandum to the Commission's Executive Director for Operations and General Counsel wherein it is stated:

My review of staff testimony on high level waste issues for submission to the Senate Committee on Energy and Natural Resources identified several agency policy issues that should be decided at the Commission level. Please prepare an in-depth analaysis of S. 839 [the fore-runner of S. 1668 and the pending amendment] which identifies these issues and provides options for Commission consideration and/or action.

As a result of this request, the Commission staff prepared another document, known as SECY-87-175. This document, sent to the Commissioners on July 17, 1987, indicates that the technical and policy staff of the NRC advocated a position of support for Congressional proposals for sequential site characterization:

Provided that DOE is required to conduct a program of surface-based testing and a comparative analysis of at least three sites before selecting a qualified site for the excavation of an exploratory shaft and at-depth testing. On proposed amendments concerning the National Environmental Policy Act (NEPA), the staff recommends that NWPA requirements concerning NEPA be amended to permit the implementation of the process described above.

Let me repeat, Mr. President, by quoting from a more in-depth analysis of the summary recommendation quoted above. The technical and policy staff of the Commission recommended that the NRC.

Agree with the concept of single at-depth site characterization provided that it take effect after DOE has completed a program of surface-based site characterization activities and a comparative evaluation of at least three sites . . . the recommended two-tiered site characterization option would enable NRC and DOE to concentrate their respective resources during the most resource-intensive phase of the program, which would permit higher technical quality of work at the site selected. Like the current NWPA program, the recommended option would retain the concept of conducting a rigorous comparative evaluation of at least three sites before making a major commitment to a single site. The advantage of two-tiered site characterization over the current program . . . is that the recommended approach would enhance the degree of assurance that the site selected for the most resource-intensive characterization activities will meet NRC licensing requirements.

Mr. President, this is the NRC's technical and policy staff recommendations. These are the people in charge of making sure that everything we deal with, with nuclear power and the disposal of nuclear waste, is done safely. And that is the real heart and crux of the difference between the Energy Committee's approach and the approach of the Environment and Public Works Committee.

I agree that it is not in the best interest of the program to do full characterization at all three sites at the same time. I agree that it is unbelievably expensive and in all likelihood unnecessary. But I feel very strongly that before we pick that final site, before we make that irrevocable decision to sink the shaft and go forward with selecting that one site, that we ought to have a minimum amount of information from all three sites. And not after the fact, but before the fact.

That is the only difference between the approach. Our approach says, "Before you make that final commitment, do the surface-based testing, get the information on hand, have somebody read it, study it, take a look at it and then go forward with the final decision to sink the shaft in the site that is most likely to be the permanent site for the next several thousand years."

The Energy Committee's approach is saying, "Go ahead and make the decision; go ahead and right now pick the site and sink the shaft. And, oh, by the way, while you are doing that, it is all right to go off and study the other two." The point is that the information to be gleaned from the studying of the two should be available before the decision is made. That is why I think that their product is deficient with regard to putting the cart before the horse, making a decision before the evidence is in. Let us get the evidence and then proceed to the actions that are required based on that evidence.

Mr. President, I ask unanimous consent that Commissioner Carr's memorandum and relevant portions of

SECY 87-175 be printed in the RECORD.

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

NUCLEAR REGULATORY COMMISSION,
Washington, D.C., April 27, 1987.

Memorandum for: Victor Stello, Jr., Executive Director for Operations, William C. Parler, General Counsel.

From: Kenneth M. Carr, Commissioner.

Subject: High level waste issues.

My review of staff testimony on high level waste issues for submission to the Senate Committee on Energy and Natural Resources identified several agency policy issues that should be decided at the Commission level. Please prepare an in-depth analysis of S. 839 which identifies these issues and provides options for Commission consideration and/or action. Staff should also consider how this legislation may affect the NRC Waste Confidence Decision.

KENNETH M. CARR,
Commissioner.

POLICY ISSUE

[July 17, 1987 Notation Vote, SECY-87-175]

For: The Commissioners.

From: Victor Stello, Jr., Executive Director for Operations.

Subject: Senate Bill 839, "Nuclear Waste Policy Act Amendments of 1987".

Purpose: To respond to the Commission's request to provide an in-depth analysis of Senate Bill 839; to identify major policy issues in the bill; and to provide options for Commission positions on these issues.

Category: This paper covers a major policy question. Resource estimates are Category I.

Issue: What positions the Commission should take, if any, concerning S. 839 and other proposed amendments to the Nuclear Waste Policy Act of 1982 (NWPA).

Summary: The staff does not believe there is a sufficient mission-related basis for NRC to initiate efforts for Congress to reopen the NWPA at this time. Congress is currently considering numerous bills which would restructure the national high-level waste program. The proposed bills cover a wide range of issues affecting the waste program, and represent diverse regional interests in Congress. The staff believes that a comprehensive basis for arriving at Commission positions on these issues needs to be established. The staff is preparing an Information Paper setting forth policy principles which staff intends to apply in recommending positions for Commission consideration. In the interim, the staff suggests that NRC proceed with caution in commenting on S. 839 and other bills to revise the nuclear waste program until the Commission has established the broad policy basis for developing positions on the issues.

In the present paper, the staff is providing an analysis of major policy issues in Senate Bill 839 and a discussion of options on these issues in response to a Commission request. In summary, if Congress chooses to pursue S. 839, staff would make the following recommendations: Concerning proposed amendments to require the Department of Energy (DOE) to characterize only one site at a time, the staff recommends that the Commission consider supporting the concept provided that DOE is required to conduct a program of surface-based testing and a comparative analysis of at least three sites before selecting a qualified site for the excavation of an exploratory shaft and at-depth testing. On proposed amendments concerning the National Environmental Policy Act (NEPA), the staff recommends that NWPA requirements concerning NEPA be amended to permit the implementation of the process described above. The staff recommends that the Commission request deletion of the proposed requirement that in any proceeding involving a civilian reactor, the Commission not consider any changes resulting from S. 839 in the schedule for opening a repository or monitored retrievable storage (MRS) facility. The staff also recommends that the Commission take no position on the proposed financial incentives in S. 839 for state and tribal participation in the development of an MRS and repository or on the proposed amendments to suspend existing NWPA requirements concerning the development of a second repository while an incentive agreement for an MRS is in effect.

Background: On March 25, the "Nuclear Waste Policy Act Amendments of 1987" (S. 839) was introduced in the Senate. The bill would add a new Title IV to the NWPA to: (1) authorize DOE to enter into financial incentive agreements with states or Indian tribes for development of a repository or monitored retrievable storage (MRS) facility; (2) require that DOE suspend characterization activities at other sites while a financial incentive agreement for a specific repository site is in effect; (3) require DOE to construct and operate an MRS facility; (4) remove NWPA requirements with respect to a second repository while an incentive agreement on an MRS is in effect; (5) exempt activities under Title IV from NEPA; and (6) provide that the Commission "not consider any changes in the schedule for opening a repository or monitored retrievable storage facility resulting from the implementation of this title in any proceeding involving a civilian nuclear power reactor."

S. 839 is one of a number of bills currently circulating in Congress to amend the national high-level waste program. Selected features of other bills include: (1) a requirement that no spent fuel be transported to a repository until it has been stored (at-reactor or at an MRS) for at least fifty years following removal from the reactor core (S. 1141); (2) suspension of site characterization and siting activities for a repository until January 1998 and development of four regional MRS facilities in proximity to the sources and beneficiaries of nuclear power (S. 1266); (3) establishment of a "Nuclear Waste Review [or Policy] Commission" to review and make recommendations to Congress concerning the nuclear waste disposal program (S. 748 and H.R. 2888); and (4) provision that NRC promulgate a rule requiring licensees to develop a contingency plan for safe storage of spent fuel and high-level waste in the event that no MRS or repository is available by January 1, 1998, and that upon implementation of the contingency plan DOE will take title to the spent fuel and high-level waste and reimburse licensees for costs of implementing such a plan (S. 748 and H.R. 2888). A list of legislation pending on the high-level waste program can be found in Enclosure 1.

The Commission currently does not have a specific policy basis for taking positions on these issues as they arise in individual legislative proposals. The staff believes that a consistent set of policy principles would be useful in developing positions on proposed legislation on a case-by-case basis. The staff intends to prepare in the near future an Information Paper setting forth policy principles to be applied to a broad spectrum of high-level waste management issues for Commission consideration.

On April 28, NRC staff appeared before the Senate Committee on Energy and Natural Resources to testify on the high-level waste program and provide preliminary comments on S. 839 (Enclosure 2). Following the hearing, the staff received a request from the Commission (Enclosure 3) to prepare an analysis of S. 839 identifying agency policy issues which should be decided at the Commission level, and options for Commission consideration and/or action. Appendix A presents a detailed discussion of the issues, including options for addressing them.

Discussion: A section-by-section analysis of S. 839 is provided in Enclosure 4. Four major policy issues which would have a direct impact on the NRC program emerge from the detailed analysis of the bill: (1) single and if necessary sequential site characterization instead of simultaneous characterization of multiple sites; (2) the integration of MRS facility into high-level waste disposal system; (3) the effect of S. 839 on NRC's NEPA responsibilities; and (4) the requirement that NRC not consider changes in the schedule for a repository or MRS resulting from Title IV in and proceeding involving a civilian nuclear power reactor, a provision which may affect NRC's Waste Confidence Rulemaking. The requirement for an MRS will not be included in this discussion because the staff believes that the Commission decided this issue when it took a neutral position on the need for an MRS in an April 27, 1987 letter from Chairman Zech to Senators Gore and Sasser (Enclosure 5).

Two additional policy issues which may affect the NRC program also emerge from S. 839: (1) financial incentives; and (2) the elimination of the second repository program. These issues will be treated separately from the four major policy issues in the bill because they fall outside the scope of NRC's traditional role of protecting public health and safety.

Abstracted from Appendix A, a summary of the salient policy issues in S. 839, options for dealing with them, and the staff's recommendations are presented in Parts I and II below for the Commission's consideration and/or action. These issues raise the large question of whether the Commission should act on its own initiative, apart from any request for its views, to seek amendments to the NWPA at this time. This issue is discussed under Part III.

I. MAJOR POLICY ISSUES

Issue I(A)—Single Site Characterization: Under Section 404(A) of S. 839, DOE may characterize only the site for which there is a valid incentive agreement, and only one incentive for a respoitory may be in effect at any one time. Existing law and NRC regulations require characterization of no fewer than three sites before selection of a site for repository development.

Option I(A)(1)—Agree with the approach of single site characterization on the grounds that it may improve the technical quality of the program by focusing NRC and DOE resources on a single site.

Option I(A)(2)—Disagree with approach of single site characterization.

Option I(A)(3)—Agree with the concept of single at-depth site characterization provided that it take effect after DOE has completed a program of surface-based site characterization activities and a comparative

evaluation of at least three sites, leading to selection of a qualified site for at-depth testing. NRC and other concerned parties should be given an opportunity to comment on DOE plans for the surface-based site characterization program before it is implemented. NRC and other concerned parties should also have an opportunity to review and comment on the site which DOE chooses before sinking of an exploratory shaft.

Staff Recommendation: Option I(A)(3). Staff believes that this option captures the principal advantages of both the proposed and the current NWPA programs. Like S. 839, the recommended two-tiered site characterization option would enable NRC and DOE to concentrate their respective resources during the most resource-intensive phase of the program, which would permit higher technical quality of work at the site selected by DOE for at-depth testing. Like the current NWPA program, the recommended option would retain the concept of conducting a rigorous comparative evaluation of at least three sites before making a major commitment to a single site. The advantage of two-tiered site characterization over the current program, however, is that the recommended approach would enhance the degree of assurance that the site selected for the most resource-intensive characterization activities will meet NRC licensing requirements.

Issue I(B)—Effective of S.839 on NRC's NEPA Responsibilities: Section 407(C) provides that, "In implementing the authorities contained in this Title, the National Environmental Policy Act of 1969 shall not apply." NRC is required by the NWPA to adopt DOE's environmental impact statement "to the extent practicable." If DOE is not required to prepare an EIS, it is not clear how NRC would fulfill this requirement, or whether NRC would have a continuing responsibility to conduct what could by default become the only major NEPA review in the repository program.

Option I(B)(1)—Express no view.

Option I(B)(2)—Indicate to Congress that S. 839 does not adequately define NRC and DOE NEPA obligations under Title I, and request a clarification of Congressional intent.

Option I(B)(3)—Propose to Congress specific statutory language or legislative history to resolve the ambiguity, and conform NRC's and DOE's NEPA responsibilities to recommended Option I(A)(3), which provides for a comparative evaluation of at least three partially-characterized sites prior to at-depth testing at a single site.

Option I(B)(4)—Recommend that Congress delete Section 407(C).

Staff Recommendation: Option I(B)(3). The staff believes that this option would most effectively enable the Commission to help shape the outcome of the legislative process at a more formative stage.

Issue I(C)—Effect of S. 839 on Waste Confidence Rulemaking: Section 407(D) provides that "The Commission shall not consider any changes in the schedule for opening a repository or monitored retrievable storage facility resulting from the implementation of this title in any proceeding involving a civilian nuclear power reactor." This provision may preclude the Commission from considering, as it now does, the health and safety implications for reactors of delays in the availability of safe spent fuel storage and disposal.

Option I(C)(1)—Accede to 407(D) of S. 839 in its present form, and withdraw any Commission prerogative to address affected waste confidence questions in "any proceeding," be it generic or specific to an individual reactor.

Option I(C)(2)—Inform Congress that if Section 407(D) is enacted in its present form, the Commission would construe it as intended only to prevent the adjudication in an individual reactor licensing proceeding of issues arising from changes in the schedule for opening a repository or MRS. The Commission could then declare itself free to carry out periodic reviews of such Waste Confidence issues in a rulemaking or other generic proceeding, and to apply any resulting rule in subsequent individual reactor licensing adjudications.

Option I(C)(3)—Recommend to Congress that it delete Section 407(D).

Staff Recommendation: Option I(C)(3). If in the commission's judgment the changes in schedule resulting from S. 839 were to have significant adverse environmental or safety consequences, the staff believes that the Commission would surely be justified in wanting to reflect these consequences in its licensing decisions.

II. ADDITIONAL POLICY ISSUES

Issue II(A)—Financial Incentives:

S. 839 provides for substantial incentive payments for the state or tribe willing to host a repository or MRS facility. The state or tribe must, in return, agree to expedite site characterization and facility construction, and to forfeit its rights to judicial review and to disapprove a DOE recommendation of a site within its borders.

Option II(A)(1)—Agree with the approach of offering a financial incentive on the grounds that, on balance, it would be more likely than not to expedite development of a repository and thus contribute to the Commission's confidence that a repository will be available in the 2007-2009 time frame.

Option II(A)(2)—Disagree with the incentive approach on the grounds that: (1) it would not contribute to the technical adequacy of a site; (2) incentive payments would probably take precedence over other DOE high-level waste program expenditures in any competition for appropriated funds, possibly impairing DOE's ability to attain repository operation within the 2007-2009 time frame in the Commission's current Waste Confidence Decision; and (3) the incentive approach in S. 839 could impair the Commission's ability to reach timely closure in licensing issues by discouraging active participation of states and tribes in NRC efforts to identify and resolve these issues before their adjudication in the construction authorization hearing.

Option II(A)(3)—Take no position on the question of the proposed incentives, provided that they incorporate the recommended concepts of two-tiered site characterization and comparative review of sites at which surface-based testing has been conducted, prior to the conclusion of any incentive agreement for a repository. Indicate that with these stipulations fulfilled, NRC would proceed to focus on its health, safety, environmental, and licensing responsibilities in the high-level waste program with or without an incentive program.

Staff Recommendation: Option II(A)(3). The staff's principal concern with any incentive program would be the possibility that the specific incentives proposed might enhance the likelihood that a site pursued for development would not meet NRC licensing requirements. If Congress chooses to adopt a two-tiered site characterization process with a comparative evaluation of alternatives prior to selecting a site for at-depth testing and an incentive agreement, the staff believes that the incentives proposed in this bill would be less likely to result in the selection of an unlicensable site. If Congress chooses to pursue an incentive approach like that currently in S. 839 without these concepts, however, the staff would recommend that the Commission reconsider its neutrality.

Issue II(B)—Elimination of Second Repository Program: Section 405(C) provides that while an incentive agreement is in effect for an MRS, the DOE shall not be subject to Title I requirements for development of a second repository. This subsection would also relieve the Commission of the requirement in Section 114(d) of current law which prohibits, in approving the first repository application, the emplacement of more than 70,000 metric tons of heavy metal, or a quantity of HLW resulting from the reprocessing of such an amount of heavy metal, in the repository until a second repository is in operation.

Option II(B)(1)—Agree with the proposed provision on the grounds that there is no technical basis for the requirement for a second repository, and that its elimination would result in more cost-effective use of limited NRC staff resources.

Option II(B)(2)—Disagree with the proposed provision on the grounds that if the first repository and/or the MRS undergo extended delays, or if the first repository begins to experience problems requiring retrieval of wastes after an extended period of operation, a second repository would provide a "safety net" for timely re-disposal.

Option II(B)(3)—Take no position. As long as NRC has assurance that safe storage will be available until the termination of repository operations, or for the period during which the option of waste retrieval must be preserved under 10 CFR 60.111, whichever is longer, the staff sees no reason for maintaining the NWPA requirement for the second repository program. The Commission can provide itself such assurance by appropriate conditions on the repository license.

Staff Recommendation—Option II(B)(3). The staff believes that the regulatory controls available to the Commission for repository licensing would enable the Commission to assure the availability of sufficient standby safe storage to avert any public health and safety risks that would otherwise require the development of a second repository.

III. NEED FOR COMMISSION ACTION ON NWPA AMENDMENTS

Apart from the specific amendments proposed in this bill, there remains the strategic issue of whether the Commission should recommend to Congress that the NWPA be reviewed for an overall mid-course correction. As desirable as certain adjustments in the national program might be for reasons other than protection of public health and safety or the environment, the staff does not consider that there is currently a sufficient mission-related basis for the Commission to initiate legislation to obtain such changes. In particular, the Commission has not found in the course of its review of DOE's Mission Plan Amendment that the resulting DOE program would be unlikely to assure that a safe repository will be available within the 2007-2009 timeframe of the Commission's current Waste Confidence Decision.

If Congress were to request the Commission's views on NWPA program revisions

similar to those in the current version of S. 339, however, the staff believes that the Commission could usefully suggest amendments to the bill along the lines recommended above. In any case, if Congress enacted amendments to the current NWPA program that would foreseeably affect the schedule for availability of a repository or storage facility in the 2007-2009 time frame, the Commission may find a review of its Waste Confidence findings warranted before the first periodic review currently scheduled for August, 1989.

Recommendations: That the Commission:

Include as appropriate the options recommended above by the staff in formulating any future position on S. 839 as requested by Congress.

Note that the staff is preparing an Information Paper, which will be provided to the Commission in September, setting forth policy principles which staff intends to apply in recommending positions on a broad spectrum of high-level waste management issues for Commission consideration.

Note that the Office of the General Counsel has reviewed this paper and appended material, and has no legal objections.

VICTOR STELLO, Jr.,
Executive Director for Operations.

Commissioners' comments or consent should be provided directly to the Office of the Secretary by c.o.b. Tuesday, August 4, 1987.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT Tuesday, July 28, 1987, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional time for analytical review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

Mr. BREAUX. Mr. President, these comments, and dozens of others from the staff of the NRC have been made available to the Subcommittee on Nuclear Regulation. In one such other document, an August 20, 1987, memorandum to the Commission's Office of General Counsel, the staff states that:

[W]e believe that three sites should be characterized through a technically sound program of surface-based testing to provide a basis for comparison of the sites and the selection of one site for characterization at depth . . . [and] . . . [W]e recommend that the selection deadline allow at least two years for completion of this surface-based testing program . . .

Two years; twenty-four months. Is that such a big deal when we are talking about something that is going to be with us for literally thousands of years; 24 months extra to do a little surface-based testing before we move to the next step? In light of the fact that we are preparing to do something that is going to be around forever, I suggest that 24 months to do some additional testing is not too much to ask.

In another such document, a September 2, 1987, memorandum for the Commissioners, the staff comments:

. . . if Congress determines that DOE should complete characterization of one preferred site at a time instead of three simultaneously . . . at least three sites should undergo a technically sound program of surface-based testing to provide a basis for comparison of the sites and selection of one . . . [and] . . . the proposed site selection deadline should be set back to allow at least two years for completion of this surface-based testing program plus one year for data analysis and reporting . . .

And that, I think, is the real crux of the argument. Here are the people who are experts. I am not an expert, but I can read the information and the evidence that experts have given us. This country has a nuclear program that says the safety questions are going to be solved and decided by the Nuclear Regulatory Commissioners. They are in charge of the safety program. And what they are telling us in this September memorandum is quite simple: If you think it is necessary to only do one site before characterization, they have no problems with that. But they do say that before you do the one site, please give us the information on all three.

And that is why they say that should DOE decide to do one site, go ahead and do it, but at least the three sites that are now out there ought to undergo a technically sound program of surface-based testing to provide a basis for comparison of the sites at the selection of one.

The Energy Committee's approach is to say, "Select one. And then, after that decision has been made, it is all right to go off and do the study on the other two."

Well, the point is that the site has already been selected. Would it not be better policy to say: "Let us look at all three and then, based on that information, select one for the final testing."

Mr. President, I think that this record is pretty clear about the position of the Nuclear Regulatory Commission's technical and policy staff concerning their thoughts on the manner in which we should narrow down the current list of three candidate sites to one for full characterization and at-depth testing.

What about the Commissioners themselves? Some would argue: "Well, that is just the staff. What do they know?" I think they know a lot. They are the experts. They are the professionals. They are the people who, at a great financial sacrifice, have been involved in coming up with information that we can make policy decisions based upon. Their recommendation is clear.

What about the Commissioners? Do the Commissioners agree with the staff, the technical staff? The answer is, yes, they do. I think the record is pretty clear.

A couple of weeks ago, on October 29, 1987, the NRC Commissioners testified before our Subcommittee on Nuclear Regulation. At that time, I read to the Commissioners a number of the staff's comments, similar to those I have just outlined for the benefit of colleagues in the Senate. I also quoted from the enclosures to the August 20, 1987, memorandum I have previously discussed, wherein it is noted:

[T]he existing data base for the three sites selected for characterization is limited, and at this stage of the site investigation and screening process, there is inherent uncertainty in site information that can lead to alternative interpretations of data.

I read that to the Commissioners and then I asked the question:

Do you agree generally with the statement that in light of the amount of information currently available, what your staff refers to as "limited information", that a program of surface-based testing would be prudent and give you a higher degree of information in order to have confidence that the site selected would, in fact, be licensable?

Well, Mr. President, the Commissioners all agreed.

So I asked the question of the Commissioners whether they agreed with their technical and expert staff that said this additional information would be most helpful. And, indeed, after a lengthy back and forth period of questions and answers, Commissioner Carr, I think summed up the position of the Commissioners by saying:

. . . it is the staff position, certainly, it is my position, that it is reasonable to go with surface characterization all you can before you get ready to put all the money into the new shaft. So . . . go ahead and attempt to rule out, if we can, for the surface, anything before you start digging deep holes.

That is pretty clear. I then asked the other four Commissioners, individually, if they agreed with Commissioner Carr and the staff's position that has now been fully laid out in this record, and all four of the other members of the Commission concurred.

Mr. President, why has the NRC taken this position? Why, after some 4½ years under this program do we have the NRC stating that:

. . . approximately three years [from this past summer] will be needed at each site to conduct surface-based testing, analyze the data, and report on the results. (This three year estimate does not include time needed to have an adequate program in place before testing begins, time needed for obtaining land access, or time for testing which can be conducted prior to submitting formal site characterization plans.) Preliminary results could be available in about two years. Such testing would likely provide sufficient geologic, hydrologic, and engineering data to evaluate potential flaws and develop a basic understanding of each site's characteristics so that more informed judgments could be made on the selection of a site for shaft sinking.

Mr. President, the NRC in this statement is talking about the need for basic understanding. How many endeavors would be halted without a basic understanding before we proceed to final conclusion? Would we proceed to launch a shuttle without a basic understanding of this being the right one, or the right way to do it? Would we develop a new weapons program

without a basic understanding of whether this is the right approach, given other alternatives? So why would we say we should go forward with the disposal of nuclear waste that is going to be here for thousands of years without a basic understanding—not a complete understanding, just the basics the NRC says we do not have, in order to select that one site for full characterization, for building a deep shaft?

How can we say that nuclear waste is less important, from an environmental standpoint, that all the other environmental actions we take as a nation? That other alternatives are adequately looked at before the final decision is made.

Is nuclear waste disposal less important than all of these other activities for the safey and health of the human health in the environment? I would suggest that it certainly is not.

Mr. President, I don't know if all my colleagues heard that last quote from the NRC. A 2-year surface-based testing program is being advocated to help acquire "a basic understanding" of some of the aspects of these three sites.

Mr. President, let me take a stab at answering my own question. The simple fact of the matter is that this program is far more complicated than anyone at the Department of Energy ever, in their wildest dreams, imagined.

The Department has never before had to acquire a license from the NRC for any of its facilities. I do not say this in any effort or attempt to "slam" the Department. I have, Mr. President, been impressed by the sincerity with which these good people have attempted to carry out their technical missions.

However, the simple fact remains that this program has been driven by overoptimism at almost every turn. This overoptimism existed within the Department long before the Nuclear Waste Policy Act was signed into law, evidenced by the fact that the Department had started drilling an exploratory shaft at the Hanford, WA, site in 1982, prior to the act's signing. And, unfortunately, some of that optimism crept into that statute as regards initial schedules. Mr. President, not one of the original milestones in the Nuclear Waste Policy Act has ever been met.

I submit to my colleagues that despite all the tough lessons that have been learned, or that should have been learned by this Department and the Congress from the efforts to date in implementing this act, that the same overoptimism, perhaps fatal optimism, still exists at the DOE and is reflected in the amendment currently pending before us.

Mr. President, I will note that there exists a glimmer of hope that some of the lessons that should have been learned as a result of past mistakes are being taken into account by the Department of Energy. On October 30, 1987, Charles E. Kay, the Deputy Director of the DOE's Office of Civilian Radioactive Waste Management wrote to Chairman Zech of the Nuclear Regulatory Commission. In his letter, Mr. Kay responded to some of the NRC's concerns about the status of the Department's surface-based testing program.

Mr. Kay notes that:

. . . DOE, in exercising its programmatic responsibility to consider program schedule and the associated overall program costs, is re-studying the use of surface-based testing to facilitate some important early site evaluations . . . The basic question raised by SECY 87-137 is the time sequencing of surface-based vs. underground testing. The NRC staff appears to suggest that specific surface-based testing should be completed at all sites before starting exploratory shaft construction and underground testing. Two reasons are cited, related to (a) the effects of shaft construction on other testing, and (b) the effects of shaft construction on other testing, and (b) obtaining information needed to evaluate site suitability using less-costly surface-based testing . . . DOE agrees that reason (a) can ba a valid technical reason to defer exploratory shaft construction . . . [and] . . . [R]eason (b) could also be a valid programmatic reason to defer shaft construction . . .

After discussing the status of DOE's investigative efforts at the three candidate sites to date, Mr. Kay concludes by noting that:

DOE's current plans for the relative timing of surface-based testing versus exploratory shaft construction are site-specific. For the Hanford site and the Deaf Smith County site, a number of surface-based testing activities are planned to be conducted before exploratory shaft construction * * * The details of these tests will be discussed in the consultative draft Site Characterization Plans which are scheduled for issuance in January 1988.

So, I would suggest, Mr. Chairman, that the approach of the two committees is not that different but, if we are going to make these decisions, which I strongly support, let us have at least a basic understanding of the evidence before the final shaft sinking decision is made.

Other than that, the Energy Committee bill is one that has the four principles that I clearly support. There is only one minor difference that I think is left and that is why we are having a filibuster.

I would think if we have to make even a small error, let it be on the side of a safe environment.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. REID. Mr. President, I would ask unanimous consent that I be allowed to enter a brief colloquy with the Senator from Louisiana; that it not be charged as my second speech; and that it is not going to be charged against the 30 hours. And I said it will be brief colloquy.

The PRESIDING OFFICER. Is there objection? Without objection, it is so ordered.

Mr. REID. Would the Senator from Louisiana indicate to me if you are in any way designing an effort to phase out nuclear power?

Mr. BREAUX. I would say to the Senator from Nevada. No, I support nuclear power and my record reflects, that. I am an advocate of it. I am a strong advocate of nuclear power. I am a strong advocate of a nuclear waste disposal program because you cannot have nuclear power without a waste program to dispose of the waste.

Mr. REID. I would further ask the chairman of the subcommittee, does this bill in fact save $3.9 billion?

Mr. BREAUX. I would say to the distinguished Senator from Nevada that when you add the incentives that are offered in the pending amendment to the cost of characterizing one site, the answer is no; this bill costs more than characterizing three sites, without incentives.

Mr. REID. I have listened with interest to the outline given by the chairman of the Subcommittee on Nuclear Regulation of the Nuclear Regulatory Commission's position on the advisability of additional surface-based testing. The chairman of the subcommittee has placed into the RECORD documents stating the various policy positions taken by the Commission staff. I would like to ask the distinguished chairman of the subcommittee whether there also are documents stating the Commission staff's specific technical concerns regarding the first repository program?

Mr. BREAUX. I thank the distinguished Senator from Nevada for his question because it really is important.

We are talking about who has the technical expertise. If it is the NRC, their information is important, it is valuable, it is critical. It is the only real evidence that we can use to judge whether we are making the right decision.

So the documents the Senator from Nevada refers to, we do have. There is a package received by our subcommittee last week regarding the technical concerns of the NRC technical staff.

In this package are the following materials:

First. Documents relating to the NRC's position that DOE conduct additional surface-based testing, prior to sinking an exploratory shaft, to better understand the hydrology of the Hanford site, and DOE's acceptance of that position.

Second. Documents relating to the geochemistry data review of the Hanford site, in order to understand the ability of the Hanford basalt to trap the radionuclides.

Third. Documents relating to the NRC's audit of the DOE quality assurance program regarding the Yucca Mountain site indentifying deficiencies in the QA program that the NRC stated could preclude the use of the underlying technical information in licensing.

Fourth. Documents relating to the NRC's review of the DOE quality assurance program at Hanford. The NRC staff states, for example, the NRC's staff concerns that "some of the types of concerns identified may be indicative of an ineffective QA program and inadequate program control."

Fifth. A technical survey, prepared by an NRC consultant and published by the NRC, of the geophysical techniques used in site characterization in basalt, salt, and tuff. The technical abstract of the study states that "the seismic reflection method, which is generally considered to be the most incisive of the geophysical techniques, has to date provided only marginal information on structure at the depth of the proposed repository at the Hanford, WA, site, and no useful results at all at the Yucca Mountain, NV, site. * * * It appears that to adequately characterize a site using geophysics, modifications will have to be made to standard techniques to emphasize structural details at the depths of interest."

These documents indicate just some of the technical concerns underlying the NRC staff's position. I hope that this has been responsive to the Senator's question.

Mr. REID. It has. I yield the floor.

Mr. STAFFORD addressed the Chair.

The PRESIDING OFFICER. The Senator from Vermont.

Mr. STAFFORD. Mr. President, the pending amendment to H.R. 2700, the Energy and Water Appropriations Act, contains provisions to redirect Federal efforts under the Nuclear Waste Policy Act of 1982. These provisions are far-reaching, modifying policies that were developed after long—and at times agonizing—deliberations by three committees in the Senate and, perhaps, twice that number in the House, over two Congresses.

And the Senate is being now asked to act on these important policy issues as part of the appropriations process.

Mr. President, I, and others on the Environment and Public Works Committee are not opposed to the major objectives of provisions contained both in S. 1668, a bill reported by the Energy and Natural Resources Committee, and in the pending amendment which incorporates the bill.

But I find myself having to oppose the process by which the provisions are being presented to the Senate, a process that, most disturbing to me, has not allowed adequate consideration of how the National Environmental Policy Act [NEPA] should apply to the selection of a site for disposal of high-level nuclear waste.

Under the existing Nuclear Waste Policy Act, Congress laid out what has come to be called by some a roadmap, directing just how NEPA is to apply to the nuclear waste site selection process.

That roadmap was central to the nuclear waste bill reported by the Environment and Public Works Committee in the 97th Congress and is a major element in the law that was enacted.

It involved careful consideration of the points in the process where environmental assessments and environmental impact statements were needed and the issues that should be addressed in these statements and assessments.

The sponsors of the pending amendments say that they have left the roadmap largely in place. This is true, but the old roadmap does not have much relevance to the new route the amendment lays out.

One of the most important decisions to be made, it seems to the Senator from Vermont, is the selection by the Department of Energy of what the Johnston amendment calls the preferred site, that is, the one site that will be characterized under the amendment.

And yet the report accompanying S. 1668, on which the Johnston amendment is based, explicitly states that "the selection of a preferred site should not be considered a major Federal action requiring preparation of an environmental assessment."

If the selection of one site for characterization as this Nation's only repository for high-level nuclear waste is not a major Federal action, this Senator is hard-pressed to know what is.

The pending amendment also would exempt the selection of a site for a monitored retrievable storage facility—or MRS—from NEPA requirements.

The amendment would apply NEPA to a repository and MRS only after the sites have been selected and if a benefits agreement has been entered into with a State or Indian tribe. But at that point, the NEPA process would be almost meaningless, as there would be no alternatives to the single site for a decisionmaker to consider.

Mr. President, in this Senator's judgment there are no irreconcilable differences between the provisions of the pending amendment and the views of Members who wish to see an expedited but thorough assessment and consideration of environmental factors in establishing nuclear waste disposal facilities in this country.

The Environment and Public Works Committee has already worked on a package of amendments that we believe are consistent with the primary objectives of the Johnston amendment and S. 1668. The Environment and Public Works Committee clearly shares jurisdiction over the Nuclear Waste Program with the Energy and Natural Resources Committee, and believes that the most appropriate process for Senate consideration of these issues is one whereby both committees have had the opportunity to reconcile differences, and if that fails, to present our differing views to the Senate in a normal legislative context.

The issue is too important to rush through in such an unorthodox fashion.

I would hope the Senate would defer action on the nuclear waste proposals before us and consider them, as is appropriate, as the separate legislative measures they are.

Mr. President, I yield the floor.

Mr. SIMPSON addressed the Chair.

The PRESIDING OFFICER. The Senator from Wyoming.

Mr. SIMPSON. Mr. President, I commend the distinguished Senator from Vermont, who has done such a wonderful job in his previous capacity as chairman of the Committee on Environment and Public Works, following Senator Randolph.

I would also like to thank Senator BREAUX who has also done a fine job, to my mind, as chairman of the Subcommittee on Nuclear Regulation, a subcommittee I chaired for 6 years when the Republicans were in the majority and now I find it a privilege to serve with him as ranking member of the subcommittee. I commend him for his mastery of the subject. He was born into it and has done some very productive work as chairman. It is a great privilege to serve with him and his fine staff.

Mr. President, I have just a few remarks, within these postcloture rules, on the issue that has been before the Senate for the past week or so—the issue of nuclear waste disposal. This is a tough, tough issue.

We have just finished voting to invoke cloture on the Johnston second-degree amendment to the first committee amendment. For the benefit of my colleagues who may not have been following this quite as intently, they may be a little perplexed by the parliamentary maneuvering during the past week pertaining to the committee amendments, including those amendments approved in the Appropriations Committee regarding the Department of Energy program.

It might be difficult in some measure to determine "who is on first" here as we go through the parliamentary aspects of this, or who is filling the tree, and who is doing what. But that is the way we do this particular business, and it is a rather interesting way of getting to things.

We have a parliamentary procedure for this.

This legislation includes a number of nuclear waste-related provisions together with those modifications which were offered late last week by the Senator from Louisiana. The pending second-degree amendment has in turn been divided into three parts—like old Gaul, if I remember correctly—and it is now the second division which is before the Senate.

This amendment contains what I view to be fundamental changes in the Nuclear Waste Program, changes which are deserving of the careful attention of Members and which I will discuss in more detail in a bit.

I want to say that Senator JOHNSTON has done a remarkable job as chairman of the Energy and Natural Resources Committee. I went with the Senator to Sweden and to France to study and visit high-level waste disposal facilities—repositories—retrievable storage facilities for handling nuclear waste, and reprocessing facilities. It was a rather remarkable trip in many ways.

I watched and saw the intent of the Senator, being an advocate of nuclear power, as Senator BREAUX has well stated, as have all of us who have been following this issue.

The issue here really is quite simple. There are 108 commercial reactors in the United States, and all of them crank out high-level nuclear waste. It is not low-level waste. It is not transuranic waste. It is high level. It is the big stuff.

As we dabbled around with this issue over the years, and we have—we agreed to a very good approach to this in 1982 when we put together the high-level waste program—to address the problem of 15,000 metric tons of nuclear waste sitting in pools out beside the reactors.

I do not hear everybody trying to help us figure out how we are going to deal with that problem. Maybe the people of America can. And they are in many ways often smarter than we are on many subjects because they are not torn with the political pressures that we get here, and there are no greater political pressures that take place but right here—nuclear high-level waste and the transportation thereof. And so 15,000 metric tons are sitting in pools of water out beside all of these 108 reactors, and we do nothing with it. At least we are all aware of the problem.

But I do not think that is going to be acceptable much longer to the people of the United States, and we are going to then have to have the permanent geological repository and monitored retrievable storage, which is not the permanent repository. That is one of the things that is very important. All of us, or at least most of us, agree that you cannot have monitored retrievable storage, which is just a temporary thing, and then let that become the permanent repository. That is not fair, it is not right, it will not work, and it is not a confidence builder. So you have to have the permanent geological repository. And then, of course, the transportation of it to that repository will be a whole different debate in this body. That ought to be a spirited debate indeed—how do you transport the material?

So a brief word about these procedures. The parliamentary situation may appear a bit confusing to those of our colleagues who have not been as involved in this debate. The matter, as I say, is a simple one: Do we want to adopt major changes in the Nuclear Waste Program that are proposed in this amendment on this piece of appropriations legislation? That is the issue. That is the central issue in my mind.

For reasons that I will discuss, I have as I say the greatest respect for my colleagues from Idaho and Louisiana, Senators MCCLURE and JOHNSTON, who have worked so hard on this and do it beautifully, and they have been loyalists in the cause in most situations that we have dealt with in the past, but I have reached the conclusion after carefully examining the proposed approach that we would be well advised to reflect more carefully on this issue and to address it in a manner and on a legislative vehicle that takes full advantage of the expertise of the authorizing committees in both the House and the Senate and to respond to some of the technical concerns that have been raised about the approach that is now before the Senate as an amendment.

Let me just give you a little résumé of how we got here. I was one of the players back in 1982. After 4 years of effort—and we really did work at this—with the involvement of three Senate authorizing committees and at least six House authorizing committees—add one, you have the Rules Committee over there, so that is seven—we crafted the Nuclear Waste Policy Act in 1982. It was referred to as a "delicately balanced political and technical compromise." The act reflected the work of scores of Members and the strength of the committee process. I was chairman of the Subcommittee on Nuclear Regulation. My friend from Colorado, Gary Hart, was the ranking member and was of immeasurable assistance to us as we grappled with this issue. We were there. Senator MCCLURE was chairman of the Energy Committee and Senator BENNETT JOHNSTON was the ranking member. One bright day we got together and said, "Let's quit fighting over turf; let's quit scrapping among the staff as to who should be handling high-level nuclear waste: Should it be Energy? Should it be Environment?"

The issue was as long as you scrap about that kind of stuff around here, you never get anything done at all. It is tougher in the House where you have six subcommittees all punching each other's lights out on nuclear, some who are absolutely antinuclear, period. They do not believe we should have any commercial nuclear power. At least they are honest about that and they say that. And others say, "Yes, we must continue and we must ignore some of the legitimate concerns."

So that is where we have been. Finally, we got all those committees together. I remember so well, when we moved forward. It was a testament, I think, to the ability to reach a consensus and move forward on a controversial and highly emotional issue with the support of Members from all regions of the country and both parties.

In short, the act provided a direction and a focus to a DOE program that was simply drifting at sea, with no clear mandate from the Congress. And so we got together, Member to Member, which works still, thank Heaven, around here. That was the only way, Mr. President, with the firm foundation and the solid backing here in the Congress that we felt we would succeed in addressing this vexatious issue of nuclear waste disposal. The approach was a simple one, and my dear friend from Arizona, whom I have served with on conference committees and in other capacities, that man of great, good wisdom and great, good humor, MO UDALL, I think described it once—he said, "It really wasn't too difficult. You could write it on the back of an envelope."

That is what we did in 1982. We wrote it on the back of an envelope. I remember distinctly one time we were all huddled together in a room and the Members all made their pact. They said, "Here we are; we are ready to do this." And there were several staffers there who gasped as they thought we had sold the farm. It was not quite pure enough for some of them or quite impure enough for others. And I remember, I think it was MO UDALL who turned—and I remember him sharing that—and said, "If any staff person has any further thing to say about this, say it now, because anyone who leaves this room and goes out and says that one of the Members has lost their marbles, has given away something they shouldn't have given away, we want to know who that is right now." And there was a great deal of coughing and light mumbling and that type of thing, and the staff members finally realized that the Members could actually do their work.

I know that is an unheard of thing in this place. I do not say that about my right-hand man and none of us do about the people who serve us so beau-

tifully on the staff. I could never have been even in any way knowledgeable in this area without the support and assistance of Jim Curtiss, who sits to my right at this present moment. He is the right hemisphere of my brain on nuclear regulatory matters. When I came to the Senate, I had been here 6 weeks and suddenly I was on a helicopter headed for Three Mile Island. I did not know zirconium cladding from a Zippo lighter. But I learned. I learned fast. I had to. Gary Hart was chairman. I thought he did a superb job in his work with regard to the report on Three Mile Island, and I was pleased to sign on. I think it is still one of the best reports that came from Three Mile Island, including the final work of the Rogovin Commission and others.

But in any event, we did something. It was simple enough to put on the back of an envelope. First, we directed the Department of Energy to move forward with a program to construct permanent geological repositories for the long-term isolation of nuclear waste from civilian nuclear powerplants and from our defense-related atomic energy programs, focusing on the nine sites that DOE was examining in various geological media, primarily in the West.

Second, in an effort to strike a crucial geographical balance in the program—you had to have that—we also directed DOE to begin work on a second repository program focusing on the granite formations in the East.

Third, we provided that both repositories would be licensed by the Nuclear Regulatory Commission.

Fourth, we provided for detailed involvement by the affected States and Indian tribes.

Fifth, we directed DOE to study the need for a temporary storage facility, referred to as an MRS, monitored retrievable storage facility, and to report back to the Congress with a recommendation.

That is it. It fit on the back of an envelope. We did that with all of those great hopes that we had in 1982, and put that thing on the books thinking we were on our way to resolving the issue of how to handle nuclear waste disposal. We knew that the program would be controversial. Boy, did we know that. And we knew that the DOE had its work cut out for it. We knew that. But we were very confident that the act itself established a framework for identifying a suitable site for deep geological disposal of nuclear waste in a manner that assured that the technical concerns would be addressed both by the DOE and through the NRC licensing procedure, and that the affected States and Indian tribes would have a direct participatory role in the process.

Well, unfortunately, things did not quite work out that way. The program was, I think, dealt a near fatal blow when on May 28, 1986, the Department of Energy, in a clear violation of the requirements of the act, announced that it was "indefinitely postponing" the second repository program, a decision which was widely viewed by any as one motivated by political and not technical considerations.

I have the highest regard and respect for John Herrington, the Secretary of Energy. He, I think, has done an extraordinary job in an extraordinarily tough situation, without question over there. But the motivation of that from the lower staff level, and wherever else it came from—it was a tough, tough, not just a shot across the bow, but one that hit below the waterline and came in with a heavy, heavy stroke.

The Department, I think, then compounded the problem when it subsequently sought to ratify that decision through the submission to Congress of amendments to the "programmatic mission plan"—do not ask me what that is; that is some kind of bureaucratic reference; I think—arguing that if the Congress did not reject the proposed changes, then the Department would construe this lack of action as an endorsement of the Department's second repository plan. That is a rather unheard of approach, an approach and procedure which was clearly not contemplated in the law in any sense.

So as I say, both of those DOE actions were clear violations of the 1982 act.

Many of the Members hear on the floor so advised the Department of that fact. Letters were sent to this effect, copies of which I ask unanimous consent to be inclued in the RECORD.

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

U.S. SENATE, COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC, February 26, 1987.

Hon. JOHN S. HERRINGTON,
Secretary, U.S. Department of Energy, Washington, DC.

DEAR MR. SECRETARY: We are writing to reiterate our belief that the Department's decision to "postpone indefintely" site-specific work related to a second geologic repository is in violation of the requirements of the Nuclear Waste Policy Act of 1982. Furthermore, it is our belief that the Department cannot make that decision legal by anything it says in its "amendments" to the mission plan for the program under section 301 of the Act. The requirements of the Act remain intact—including the requirement to recommend three sites for characterization for a second repository by July 1, 1989—until they are amended or otherwise supplanted by new legislation, as your own General Counsel, J. Michael Farrell, pointed out in a memorandum dated September 5, 1986.

Recent appearances by you before Committees of Congress have left misunderstandings by the public of the role of the mission plan and of the Department's proposed amendments to the plan in the nuclear waste program. The purpose of the plan is to inform Congress and the public of the Department's intention in implementing the waste program. But the plan has no legal status. The Act itself is the only legal basis for the nuclear waste program.

Congress is under no obligation to respond to the mission plan or amendments to it by some particular time limit. Furthermore, Congress' action or inaction in reviewing the mission plan has no effect on the legality of the actions by the Department under the program. If, therefore, DOE takes an action that is contrary to the Act, it is risking litigation. In our view, the Department has been taking such a risk since May 28, 1986, when site-specific work on a second repository was postponed indefinitely. We also understand that litigation has resulted from your May 28 decision.

Recent testimony by you and by Mr. Ben Rusche, Director of the Office of Civilian Radioactive Waste Management, indicates that the Department would interpret an appropriation of $725 million for the waste program for Fiscal Year 1988 as approval of your proposed amendments to the Mission Plan. We do not agree with this interpretation. Action taken by the Congress in appropriations acts approving one or another level of appropriations does not supersede statutory mandates of the Nuclear Waste Policy Act of 1982. You are obligated to carry out the requirements of the Act using whatever level of appropriations Congress provides.

We urge you to explain in writing your plans to proceed with the nuclear waste program at the earliest possible time, including a clarification of what you expect to do and when you would do it assuming Congress does not amend the Nuclear Waste Policy Act. Your explanation should include a discussion, prepared in consultation with the General Counsel of the Department, of the relationship of the program currently in place to the requirements of the Act and your plans to bring that program into compliance with the Act.

We would appreciate your prompt attention to this request.

Sincerely,

James A. McClure, Ranking Minority Member; J. Bennett Johnston, Chairman; Pete V. Domenici; Daniel Evans; Chic Hecht; Jeff Bingaman; John Melcher; Dale Bumpers; Frank Murkowski; Malcolm Wallop; Don Nickles; Timothy E. Wirth; Kent Conrad.

U.S. SENATE, COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC, June 11, 1986.

Hon. JOHN S. HERRINGTON,
Secretary, U.S. Department of Energy, Washington, DC.

DEAR MR. SECRETARY: We are writing to express our concern over the Department's recently announced decision to indefinitely postpone site-specific work on a second geologic repository under the Nuclear Waste Policy Act of 1982 (NWPA). We have questions about this decision as a matter of policy. In addition, and perhaps more importantly, the decision violates the clear statutory mandate of the NWPA that the Department proceed with a program for the siting of two geologic repositories, in accordance with a statutorily prescribed time schedule.

The Nuclear Waste Policy Act was enacted in 1982 after years of Congressional effort to achieve an equitable and workable balance of a great diversity of interests. As you may recall, numerous efforts were made in the course of the legislative debate to exclude individual sites, individual states, specific geologic media, or entire regions from consideration. The Congress voted overwhelmingly to reject such parochial efforts.

The bill ultimately enacted by Congress—including provisions for the siting of a second repository—strikes a delicate and carefully considered balance, in a manner designed to ensure the success of this most challenging undertaking. Your decision to postpone indefinitely the Department's site-specific work on the second repository program could destroy that delicate balance and might ultimately lead to an erosion of the technical balance and political compromise that was so essential to enactment of this Act in the first place.

The requirement to proceed with a program for the siting of a second repository is firmly established throughout the Act. Section 112(b)(1)(C) of the Act requires the Secretary to recommend to the President, not later than July 1, 1989, three sites that the Secretary determines are suitable for site characterization for selection of the second repository. Section 114(a)(2)(A) of the Act requires the President, not later than March 31, 1990, to recommend to the Congress one of the three sites characterized that the President considers qualified for a construction authorization for a second repository.

The decision on whether to proceed with a second repository is a matter that the Congress, not the Department, must ultimately decide. The Act has been carefully structured to ensure that the Congress will have the necessary information available to it—including the extensive information that will be developed through the second repository program—at the time that it must decide whether or not to authorize construction of a second repository. The schedules established in the Act are an integral part of this framework. The statutory framework does not, by design, give the Department the flexibility to tailor the repository program in the manner that your decision contemplates, based upon your judgment as to what is economically prudent, what the discharge rate of spent fuel is, or by the progress that you are making in siting the first repository.

The course that you have elected to take—including your disregard of the statutory schedules and requirements for a second repository—raises the real potential that Congress will not have the information before it to decide which of these two alternatives to pursue. If the Department disagrees with the carefully structured statutory framework of the Nuclear Waste Policy Act, we urge you to make your views known to Congress and to recommend whatever amendments are necessary, together with a detailed justification for such changes.

Accordingly, we ask that you provide us with a detailed memorandum of law setting forth the basis for the Department's decision, as well as a full explanation of the technical and financial implications of this course of action.

In addition, we ask that you promptly submit proposed legislation to modify the Nuclear Waste Policy Act in a manner that will reflect the conclusions that you have now reached about the need for and timing of a second repository. Alternatively, please submit a detailed programmatic and technical explanation of the steps that the Department intends to take to comply with the Act, including but not limited to the requirement that you recommend to the President, not later than July 1, 1989, three sites that are suitable for site characterization for selection of the second repository.

We trust that a timely resolution of these concerns can be achieved, and we look forward to a resumption of the good faith cooperation between Congress and the Department that has so greatly contributed to the success of the Nuclear Waste Policy Act to date.

Sincerely yours,

Morris K. Udall, James A. McClure, Alan K. Simpson, J. Bennett Johnston, Pete V. Domenici, Lloyd Bentsen, Steven D. Symms, Paul Laxalt, Daniel J. Evans, Chic Hecht, Phil Gramm, Slade Gorton, Sid Morrison.

Mr. SIMPSON. Those letters advise the Department that the actions were not consistent with the act. And, unfortunately, the program has been in a free-fall tailspin ever since, with the confidence and credibility of the Department and of this program severely impaired and with our 1982 program now in desperate need of what is referred to as midcourse corrections and redirection.

I wanted to review that, Mr. President, because I think it is important to understand how we got to where we are today and, based upon that background, what changes we should make.

We are not here—and I think this is critically important—because the procedures or the programs laid out in the 1982 act were "unworkable or unwise." They were not. They were darned good things to have on the books.

Nor are we here because protracted litigation has derailed this program. We are not here because the concerns of the affected States and Indian tribes as well as the NRC have impeded progress, which was the concern that some had expressed—that the 1982 act was "overly procedural."

We are at this unfortunate juncture, Mr. President, for the reasons I have laid out—that is, the 1982 act was not implemented in the manner that we envisioned. It was distorted and overturned—not implemented in accordance with the law that we put on the books.

At the same time, Mr. President, the question for the Senate now is, "How do we get this program back on the track?" In that regard, I am ready to move forward promptly and will do so with Senator BREAUX as subcommittee chairman to address the problems of this program and to make some midcourse corrections that need to be made in the statute in order that we can get on with the task of resolving the nuclear waste disposal issue.

Both authorizing committees in the Senate, the Energy Committee and the Environment Committee, have reported legislation in response to their respective reconciliation directives providing each committee's views of the necessary midcourse corrections that need to be made. And we are going to be in a position shortly where we can take this issue up when we move to the reconciliation bill where the committees will have a role in fashioning the 1982 legislation, and all sit down at the table and put the program back together again. That should not take too long. We knew what we wanted to do then, and we know what we want to do now.

Here in the Senate, both committees agree in large measure on the changes that should be made. I think it is very important to know that we concur. We both agree that we should proceed with the process of sequential, rather than parallel, characterization. We both agree that the MRS should be built. We both agree that the second repository program should be canceled. And we both agree that financial incentives are an appropriate part of this program.

I have some grave reservations though, Mr. President, about addressing a subject as controversial as this where it will require a solid consensus—we will not succeed without a solid consensus—if the program is to succeed, on an appropriations bill where the language is incorporated by reference and where amendments on major issues only surfaced late last week, where the entire authorizing process is bypassed by both the Senate and the House side. And for those reasons alone, Mr. President, I intend to certainly urge my colleagues at the appropriate time in the debate not to approve division II of this amendment as an amendment to the appropriations bill.

My concern is not simply with the procedure of the vehicle, Mr. President. There are two aspects of the approach now contained in this amendment that I have concerns about, and that the Environment Committee in the legislation recently submitted to the Budget Committee has addressed.

First, we just do not have the sufficient technical information on the three candidate sites—we do not have it. Why kid ourselves—the Hanford site in Washington, the Yucca Mountain site in Nevada, the Deaf Smith site in Texas, nor will we have that information by January 1, 1989 to make what will, under this legislation, now become the most significant decision in the nuclear waste disposal program, which is selecting a single site for characterization.

Just an example: the Department of Energy is planning to undertake a surface-based hydrology test program at the Hanford site that in the Department's words "is necessary to provide sufficient data to detemine whether

the site is qualified for licensing and to provide an early indication of whether disqualifying conditions are present before proceeding with construction of the exploratory shaft."

This test then, which has not yet begun and which will take 22 months, will collect necessary information to determine whether this site is worth pursuing, yet the date for selecting the single site under the pending amendment, January 1, 1989, would result in a selection of a site prior to the completion of the tests to determine whether Hanford is qualified for licensing, and to determine whether disqualifying conditions are present tests involving information that in the DOE's words "may be significantly changed or rendered unobtainable after shaft construction." And at the Texas site in the Panhandle of Texas, the Department of Energy is not yet even able to gain access to the land. It cannot get on that on private land yet in order to conduct the necessary surface-based tests and does not expect, at least at the earliest, to get on the site until March 1989.

So how can we say that we have sufficient information? How bizarre. And that we are ready to pick a single site for characterization? Absurd. We do not even have access to one of the three sites yet.

According to an October 30, 1987, letter to Chairman Zech from Ed Kay, DOE is right in the middle of "restudying the use of surface-based testing to facilitate some important early site evaluations"—a reevaluation that is currently underway and not scheduled to be completed until the end of this year. I ask consent that this letter be printed in the RECORD.

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

DEPARTMENT OF ENERGY,
Washington, DC, October 30, 1987.

Mr. LANDO W. ZECH, Jr.,
Chairman, U.S. Nuclear Regulatory Commission, Washington, DC.

DEAR MR. CHAIRMAN: At the June 11, 1987, meeting of the Nuclear Regulatory Commission (NRC) with the Director of the Department of Energy's (DOE) Office of Civilian Radioactive Waste Management, DOE agreed to review NRC staff suggestions concerning the determination of site parameters by surface-based testing and to consider the scheduling of such testing to enable early evaluation of site disqualifying factors.

Our current plans relative to surface-based during testing are summarized in the enclosed discussion.

Although a separate review of results from surface-based site characterization testing prior to underground testing is not a part of the Nuclear Waste Policy Act siting process or of the 10 CFR Part 60 licensing procedure, DOE, in exercising its programmatic responsibility to consider program schedule and the associated overall program costs, is restudying the use of surface-based testing to facilitate some important early site evaluations. Specifically, we are reviewing currently planned tests to see how they might be rescheduled to facilitate certain early evaluations and are looking at technical procedures for these evaluations. This study is scheduled to be completed before the end of this calendar year. It will provide necessary information for the programmatic decisions on site characterization test scheduling. We will keep the NRC informed of our deliberations on these matters.

As you know, DOE plans to issue consultative drafts of the Site Characterization Plans in early January 1988. These will discuss the testing in detail. Through workshops with States, Indian Tribes, and NRC staff, we plan to review the testing and will be in a position to take appropriate action on all comments received.

If you would like any additional information, please do not hesitate to contact me.

Sincerely,

CHARLES B. KAY,
Deputy Director, Office of Civilian Radioactive Waste Management.

Mr. SIMPSON. In view of that, how can we go forward with a program that requires a decision by January 1, 1989—when DOE is right now looking at how to approach the surface-based testing issue?

If this amendment is approved—with the January 1, 1989, deadline for selecting a site—DOE, under its own schedule, will not have the information at the Hanford site, may not have access to the Texas site, and certainly will not have much time to conduct useful surface-based tests before we commit major resources to a single site. I think that is an unwise course of action.

When you add to that the fact that DOE will now be selecting a site before the final EPA standards are in place—now scheduled for January 1, 1990, under this amendment—I think we are rushing in an extraordinarily headlong fashion into a decision that we will come to regret.

My second concern with the amendment has to do with the language on the monitored, retrievable storage facility—the MRS. I am not opposed to the construction of an MRS. I think it makes a great deal more sense to have this fuel stored at a single, federally operated facility, rather than at the 110 reactors where the fuel is currently backing up. The groups who fight it do not care about that. I think they should begin to care.

At the same time, I am troubled by the fact that the language contains absolutely no restrictions on the capacity of this facility, the length of time for storage of fuel, or the relationship of this facility to the repository program—provisions that would ensure that this facility would not become a de facto repository, should our repository program falter. It does not even include the two restrictions that DOE recommended to address this very concern—a 15,000 metric ton limit and a requirement that the facility not start operating until a construction authorization for the repository has been issued.

I think those are prudent restrictions, and I would like to see them included if we are going to build an MRS.

Those two concerns—related to the timing and amount of technical information for selecting the preferred site and the MRS restrictions—constitute my major reservations about this approach on this legislation.

Mr. President, I do not think our House colleagues are going to be very impressed by this procedure as we deal with this measure in this way, and we have to remember how vital they are; because there are six committees, in the House that will dabble with this, and they really do get into it with gusto, and we had better pay attention that this is not the way to go here.

I am not opposed to addressing this issue this year. I think the authorizing committees are well poised to do that. But it is with great reluctance—both because of the procedural approach and because of the two basic concerns I have with the policy in this amendment—that I intend to join my chairman, my leader, Senator BREAUX, on this one, and urge my colleagues to vote against including this amendment on the energy and water bill. It is inappropriate, and it will be most difficult to pass with our House colleagues.

The PRESIDING OFFICER (Mr. SANFORD). Who yields time?

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

The PRESIDING OFFICER. The clerk will call the roll.

The bill clerk proceeded to call the roll.

Mr. 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.

ALLOCATION OF TIME

Mr. BYRD. Mr. President, I ask unanimous consent that the time for the two party conferences, namely from 12:45 to 2 p.m. today, come out of the overall 30 hours.

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

Mr. BYRD. Mr. President, I believe Senator HUMPHREY is going to be seeking recognition shortly.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The bill clerk proceeded to call the roll.

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

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

VISITING PARLIAMENTARIANS FROM THE PAKISTAN PARLIAMENT

Mr. HUMPHREY. Mr. President, my colleagues, we are honored to have on the floor of the Senate today, five visiting Members of the Parliament of Pakistan.

Last September, five Members of the Pakistan National Assembly visited the Senate. Today, both the Senate and the National Assembly of Pakistan are represented.

This is an historic visit, as these elected parliamentarians are testament to the important strides that Pakistan is taking to restore democracy and elected government.

Mr. President, 1985 was an important year for the people of Pakistan. In January of 1985, Pakistan's President Zia Ul-Haq announced that parliamentary and provincial elections would be held the following month. In those elections, more than 1,200 candidates contested for the more than 200 seats in the National Assembly. Although the elections were formally boycotted by some, an article by Prof. William Richter that appeared in the February 1986 edition of "Asian Survey" states: "The February elections were widely regarded as relatively clean and fair."

In connection with fairness, it is signifcant to note that voters in those elections defeated several of President Zia's own Cabinet officers.

Following the elections, the provincial assemblies moved quickly to elect Members of the Upper House—the National Senate. President Zia designated Mr. Muhammed Khan Junejo as Prime Minister, and by April of 1985, a 13-member Cabinet was announced. In keeping with the Prime Minister's promises, on December 30, 1985, martial law was formally abolished and civilian government was once again restored.

Mr. President, these are very significant developments. We are all encouraged by the progress that Pakistan continues to make. During a visit to Washington in 1986, Prime Minister Junejo discussed with President Reagan Pakistan's progress toward the restoration of democracy. A joint statement released at the conclusion of that visit states:

> The President lauded the return of representative democracy to Pakistan, praising Prime Minister Junejo and President Zia for the steps taken to end martial law and restore to the Pakistan people the full liberties granted by the 1973 constitution.

Earlier this year, the State Department formally reported to Congress that "democracy and respect for human rights advanced significantly in 1986."

Mr. President, my introduction would be incomplete without paying tribute also to Pakistan's courage and principle in standing as a bulwark against Soviet imperialism and for her compassion toward the more than 3 million refugees in Pakistan who have fled the Soviet war in Afghanistan. It is a simple fact, that were it not for Pakistan's courage, by now Afghanistan would have been dragged bleeding into the Soviet Empire and the security of all of South Central Asia imperiled. For her stand Pakistan suffered numerous cross border attacks and KGB-inspired terrorism. She is bearing a heavy burden today and richly deserves American commitment to her security and economic well-being.

Mr. President, while the Senate conducts its business, I hope that Members will take a moment to come to the edge of the Chamber here where our friends, our fellow Parliamentarians, our fellow Senators, democratically elected representatives of the people of Pakistan are here to chat with us.

They are Senator Mian, Senator Shah, Senator Khan, Senator Iqbal, Senator Soomro, and Secretary Quereshi. You are welcome.

(Applause.)

Mr. President, I thank the Chair and thank the leadership for accommodating this delegation today.

Mr. McCONNELL addressed the Chair.

The PRESIDING OFFICER. The Senator from Kentucky.

Mr. McCONNELL. Mr. President, I ask unanimous consent to proceed for 10 minutes out of order.

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

PROTECTION OF U.S. SHIPPING IN THE GULF

Mr. McCONNELL. Mr. President, over the past several months, I have strongly supported this administration's objectives in the Persian Gulf. In recent testimony before the Senate Foreign Relations Committee, Former Secretary Weinberger identified those interests clearly. He said, and I quote, "We are in the gulf to maintain freedom of navigation for U.S. flagged vessels; we are preserving free world access to the oil resources of the region; we are promoting the stability and security of moderate Arab regimes in the face of Iranian intimidation and we are preventing the spread of Iranian radicalism; and (finally) we are limiting the expansion of Soviet influence in the region." I believe each one of these goals is realistic, sensible, and in our national interests. More importantly, I think they are achievable.

However, Mr. President, last Friday, an incident occurred which has caused me to question the degree of our commitment to these objectives. Thirty miles off the coast of Dubai, the *Grand Wisdom*, a U.S.-operated tanker, was struck by five rocket propelled grenades presumably fired by Iranians. According to the AP story, sources within the shipping industry indicated that the *Grand Wisdom* is U.S. effective controlled, that is to say American owned as well as American operated.

Let me first say that I do not think that this incident reflected any significant change in the situation. I think it is consistent with the unpredicatable history of Iranian terrorist hit and run attacks.

But, when I heard about this attack, I asked whether the *Grand Wisdom* had been protected by United States or allied ships. The answer apparently is no. Mr. President, while this attack has not created undue disturbance within the shipping industry of the gulf, it raises a question that we must resolve.

I believe that U.S. owned and operated ships should be accorded some assurance of protection from Iranian terrorists. I strongly believe that these American owned and operated ships clearly fall within the domain of U.S. national interests.

I would like to draw my colleagues' attention to a few facts that should bear on any decision to offer protection to these ships.

There are currently roughly 60 U.S. effective controlled ships without U.S. flags that regularly transport oil through the gulf. On an average day there are less than five U.S. effective controlled ships actually operating in the Gulf. These vessels meet stringent international standards for safety. Given the fact that tankers run $30 million to $40 million a piece, it doesn't surprise me that the owners of these ships have safety as a priority, these vessels primarily fly the flags of Panama, Liberia, and the Bahamas, but they are owned by American companies and they pay American income taxes. In addition, the law clearly states that in time of national emergency, these vessels can be requisitioned by the U.S. Government for official use. [46 USC Sec. 12429 (a)]

These ships are available to serve American national security interests, pay American income taxes and are managed by American corporations. I believe they warrant American protection.

American effective controlled tankers may only need to tag along with a convoy or to seek assistance if they believe they are going to be attacked. Many of the companies may not, in fact, ask for full escort protection particularly given the fact that they would have to operate on the Navy's schedule.

Mr. President, the Defense Department has indicated that naval protection will automatically follow any ships that fly the U.S. flag. The question is why don't some of the ships fly the American flag? The answer is a

question of dollars and cents. To fly the American flag, they must hire American crews. This can run as high as $4.5 million a year. Compare this with the $700,000 to $1 million that qualified foreign crews cost and it becomes clear that U.S. shipping can't compete against the British, Norwegians, Japanese, or any other nationality if they must hire American. We've priced ourselves out of the market.

With oil prices as depressed as they are, I can't make the argument that the American owners should absorb an annual difference in operating costs $3 million per ship—particularly when you know the constituent at the gas pump will ultimately pay the price.

So where does this leave us? The United States brings in 400,000 barrels a day from the gulf on these American ships. Economic practicalities keep American companies from flagging American, which, in turn, bars these ships from U.S. protection. Today, it is obviously still worth the risk to these companies to continue to ply the gulf. Oil prices, insurance fees and the threat from Iran are all within reason. Tomorrow, the question will be whether or not it continues to be worth the risk and for how long? We must ask ourselves if drawing a selective zone of protection to exclude American controlled tankers is sensible in the long run? Will this eventually mean that instead of an Arab oil embargo, we will face an American oil company embargo—tankers just won't go in to the gulf?

We must also ask ourselves whether we are currently drawing an arbitrary line of defense that simply invites Iran to attack America's interests? While I recognize the current constraints on the United States and allied naval presence I would argue that American ships deserve to know their government's on their side, and that, they can reliably turn to their government for information and protection.

I would like to return to Secretary Weinberger's testimony before the Foreign Relations Committee and add to his goals. I believe it is in United States national interests to preserve and defend freedom of navigation of the high seas but not just for a select few U.S. reflagged vessels. I believe it is vital that we protect all American effective controlled ships. If they are not declared within the sphere of our support and protection today, we face enormous losses tomorrow. I do not think the American people will draw the distinction between U.S.-controlled versus U.S.-flagged vessels. Nor should they. It is the principle of American interests that is at stake, not the flag on the vessel.

The PRESIDING OFFICER. Who yields time?

The majority leader.

JOINT MEETING OF THE TWO HOUSES—ADDRESS BY HIS EXCELLENCY CHAIM HERZOG, PRESIDENT OF ISRAEL

Mr. BYRD. Mr. President, I ask unanimous consent that it be in order to appoint a committee on the part of the Senate to join with a like committee on the part of the House of Representatives to escort His Excellency Chaim Herzog, President of Israel, into the House Chamber for the joint meeting today, November 10, 1987.

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

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

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

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

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

RECESS UNTIL 2 P.M. TODAY

Mr. BYRD. Mr. President, I ask unanimous consent that the Senate proceed now to stand in recess for the conferences which will continue until 2 p.m., and that the entire time be taken out of the overall 30 hours.

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

Thereupon, at 12:37 p.m., the Senate recessed until 2 p.m.; whereupon, the Senate reassembled when called to order by the Presiding Officer (Mr. DODD).

Mr. MURKOWSKI addressed the Chair.

The PRESIDING OFFICER. The Senator from Alaska.

Mr. MURKOWSKI. Mr. President, I ask unanimous consent that I may speak out of order for 7 or 8 minutes at this time.

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

Mr. MURKOWSKI. I thank the Chair.

(The remarks of Mr. MURKOWSKI appear in today's RECORD under Statements on Introduced Bills and Joint Resolutions.)

The PRESIDING OFFICER. The Senator from Florida.

Mr. CHILES. Mr. President, I ask unanimous consent that I might speak notwithstanding the cloture motion.

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

KROME NORTH DETENTION CENTER

Mr. CHILES. Mr. President, on Sunday night 30 inmates escaped from the Krome North Detention Center in South Dade County, FL. Krome is a center of the Immigration and Naturalization Service [INS] used for processing and detaining illegal aliens.

Most of the 30 men who escaped were felons—convicted of crimes in the United States and in the midst of their deportation proceedings. Fortunately, 12 were recaptured and returned to Krome. The remainder are being hunted down throughout South Dade County which borders on the Everglades.

Mr. President, Krome North has been compared to a chicken coop—it is far from a maximum security facility where felons are traditionally held in this country. Krome was intended to hold aliens awaiting a determination of their immigration status in this country. In the past, the only crime these aliens might have committed was walking across the border without documentation.

Today, the story is different—dangerously different. Most of the aliens being held in Krome according to the district director of INS, are felons—known, convicted felons.

According to the district director almost 90 percent of the current residents at Krome are felons.

Mr. President, Krome is now a direct and dangerous threat to the people of south Florida. To hold hardened criminals in a facility with a simple barbed wire fence as the only deterrent to escape is more than a menace to the community. The continuing instances of Krome escapes are instilling fear in the people who live around the center. And, the growing manhunts are a burden to Dade County police, Florida highway troopers, and other law enforcement officials.

Mr. President, today I am calling on Attorney General Meese to close down Krome North and to immediately delegate special border patrol "REACT" teams to the facility until the felons can be removed.

Such action is necessary to protect the people of south Florida. Their security is my chief concern. This week's escape is one of several which have taken place during the past few years. The Justice Department has reacted to previous escapes by limited actions—such as removing some of the felon gang leaders to more secure facilities. But, when conditions calm down and the public eye is removed from the facility, they continue to place additional felons in Krome. We cannot tolerate such neglect any longer.

Mr. President, I ask unanimous consent to have printed in the RECORD my letter to Attorney General Meese, together with some material I have on this matter.

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

U.S. SENATE,
November 10, 1987.

Hon. EDWIN W. MEESE,
Attorney General, Department of Justice, Washington, DC.

DEAR GENERAL MEESE: It is with grave urgency that I ask you to close-down the Krome North Detention Center in South Florida and immediately delegate appropriate border patrol teams to the facility to guard the inmates until they can be removed to more secure facilities.

Last Sunday evening, 30 inmates escaped from Krome and most were felons. As you're aware, this is not an isolated incident, such escapes of felons have occurred repeatedly during the past few years. Such escapes are a direct threat to the people of Dade County. The community around Krome, local law enforcement contingents, and I cannot tolerate such disregard for their safety and well-being.

Krome North is at best a minimum security facility intended to detain aliens awaiting immigration processing. As you're aware, I have been concerned about the presence of felons in a minimum secure facility for years and do not see any progress towards reversal of this action. In fact, the placement of felons today in Krome appears to be at a record high number.

I am keenly sympathetic to the lack of prison space in this country and have been working with the Justice Department to remedy this critical situation. But, I cannot stand idly by and watch hardened criminals placed in a facility like Krome. Such felons should be incarcerated in far more secure institutions until we can deport them from our lands.

If there is any way I can assist in removing felons from Krome, I stand ready to do so. Meanwhile, I would appreciate immediate action on the part of the Department of Justice to correct this threatening situation and would like to be advised of any action taken in this regard.

With personal regards, I am

Sincerely,

LAWTON CHILES.

[From the Miami Herald, Nov. 10, 1987]

POLICE SEEK 6 KROME ESCAPEES

(By Tina Montalvo)

Six Krome Avenue detention center inmates remained at large Monday from the group of 26 who escaped Sunday night by breaking through an iron grating on a barracks window and scaling two 12-foot fences.

One of the last inmates captured, a Haitian who had discarded his orange camp uniform, was found in his "skivvies" near a Kendall Lakes school at about 7 a.m., said Immigration and Naturalization Service District Director Perry Rivkind. A Highway Patrol trooper spotted another inmate Monday evening as the man was making a phone call near the detention center entrance.

Seven special INS agents—a fraction of the team that searched the swampy terrain surrounding the camp until daylight—scattered throughout Dade and Broward counties to find the remaining escapees.

At Krome, a minimum-security facility, officials assigned five INS special agents and two detention officers to patrol the chain-link fence surrounding the camp "until things calm down," Rivkind said. A 15-member team of Border Patrol agents and INS officers from Texas will be in Miami Tuesday to relieve local agents.

When the escape occurred at about 10:15 p.m. Sunday, two armed guards were patrolling the fence, one on each side of the camp.

"Even if you had 10 perimeter guards, the only thing they could have done was grab some of the men," Rivkind said, explaining that guards may shoot only to defend themselves, their partners or innocent bystanders.

"We don't have the staff or the funds to maintain a maximum-security place. People get out of maximum-security facilities, too—Sing-Sing, Alcatraz, Elmira, Atlanta."

The escapees, mostly Jamaicans and Haitians, were awaiting deportation after serving sentences in state and federal prisons for "drug peddling and larceny," Rivkind said. They had apparently chipped away for days at the concrete that held the grating in a 3-by-5 foot window in their second-floor sleeping quarters.

After working the grating loose, 30 men jumped about 12 feet to the camp yard and ran to the two fences, about a dozen feet apart and each topped with coiled, heavily barbed wire. Four of the men, identified as Mariel felons, did not get beyond the second fence.

About 35 other inmates rushed a gate but were forced back.

Fifty immigration agents and 15 Metro-Dade police, with dogs and in helicopters, searched the muck-laden area surrounding the camp. Florida Highway Patrol troopers set up roadblocks nearby and peered into cars for signs of the escapees.

Two were found kneeling in a clump of melaleuca by Metro-Dade K-9 officer Jim Reddy and his dog, Shooter, near Krome's main entrance. Reddy, 5-foot-10, emerged from the swamp with muck up to his thighs.

The search continued until daylight. The captured escapees were put in isolation at Krome.

Ninety percent of the detainees currently at the camp are ex-felons. "Picking up criminal aliens is a priority," Rivkind said. The average stay at Krome is 22 days, but delays often occur because of red tape involved in deportation cases.

When the escape occurred, 431 men were in detention. The camp's capacity is about 350.

Richard Smith, INS deputy district director, said additional guards probably won't deter escapes, but more barbed wire could. An effective solution, he said, would be to lay three rolls of wire—measuring nine feet deep—on the ground along the inside of the inner fence, with more rolls piled on top like a pyramid.

"The idea is to keep them away from the fence so they can't even start climbing it," Smith said.

[From the Miami Herald, Nov. 9, 1987]

26 ESCAPE FROM KROME; 12 RECAPTURED—JAMAICANS, HAITIANS WERE FACING DEPORTATION

(By Carlos Harrison and Jill Singer)

Twenty-six Krome Detention Center inmates broke through the iron grating on a barracks window and scaled two 12-foot fences topped with razorsharp wire Sunday night, escaping into the snake-in-fested West Dade swampland.

Fourteen of the escapees were still at large by 12:30 a.m. today, Twelve were captured in the swamp; four others tried to get out but never made it outside the second fence.

Some of the men shed their orange prison garb just outside the compound, fleeing into the night in their underwear, T-shirts and bare feet, said U.S. Immigration and Naturalization Service district director Perry Rivkind.

"I believe they'll bring them all in during the night," Rivkind said. "These people will have to come out of the Glades. The mosquitoes will eat them alive."

The escapees apparently had chipped for days at the concrete that held the grating on the 3-by-5-foot barracks window. Sunday night, the men pushed the grating away, clambered into the inner camp yard, then ran toward the fence.

The escape was discovered around 10:15 p.m., when guards saw men streaming toward the fence. As three INS guards scrambled to control the break, about 35 other detainees rushed a grate in a fenced area in the compound, twisting the metal before they were forced back.

"Another 30 to 40 would have gotten out if they could have," Rivkind said. "I would not call this a major riot. I would call this a major escape."

The escaped men were primarily Jamaicans and Haitians facing deportation, Rivkind said. Most of the Jamaicans had felony criminal records and were at Krome after their release from state or federal prisons, he said.

Rivkind wasn't sure how the men managed to pry the grate loose. "The ingenuity involved defies imagination sometimes," he said.

He said 431 men were being held at the camp, which has a capacity of 354. They were being guarded by three men when the escape occurred.

"The whole camp wasn't trying to escape," Rivkind said.

After the escape, an INS and U.S. Border Patrol team of 40 men in riot gear and armed with tear gas and shotguns poured into the camp.

Early today, Metro canine officers searched for escapees hiding in the sawgrass and melaleuca trees under a drizzle, as a helicopter circled overhead with its powerful spotlight on. Metro squad cars, their lights flashing, blocked off sections of the Tamiami Trail and Krome Avenue.

PRESIDENTIAL SUPPORT FOR A CABINET LEVEL VETERANS' ADMINISTRATION

Mr. MURKOWSKI. Mr. President, President Ronald Reagan announced today that he will support legislation to elevate the Veterans' Administration to Cabinet-level status. I am pleased that the President has joined with Members of Congress in both parties in supporting Cabinet-level status for the Veterans' Administration. Veterans, through their service, have earned the recognition a Cabinet-level VA will provide.

In addition to recognition for veterans, and the agency that serves them, a Cabinet level VA makes good sense for America. Almost 78 million Americans, veterans, their dependents and survivors, are potentially eligible for veterans' benefits.

The VA has more employees than any agency except the Defense Department and Postal Service.

It has a budget of almost $28 billion.

It operates the largest health care system in the country and the largest single life insurance program in the country.

The VA Home Loan Guaranty Program is critical to both the home-buying veteran and the homebuilding and mortgage finance industry.

VA education benefit policies affect every post secondary educational institution in the country.

Clearly it is appropriate for the VA to sit at the Cabinet table with other executive departments. That is why I am proud to have joined with Senator THURMOND in cosponsoring this much-deserved and long-delayed legislation. I understand the House Committee on Government Operation sent the bill to the House on Tuesday and that the House may act as soon as next week. I encourage the Senate to join me in seeking an early opportunity to vote on this important legislation. Enactment of this bill will make this Veterans' day a day veterans can remember as the day they achieved yet another victory for America—a Cabinet-level Veterans' Administration.

ENTITLEMENT PROGRAMS IN BUDGET NEGOTIATIONS

Mr. SIMPSON. Mr. President, I want to add to my remarks earlier in the week regarding the wisdom of including cost-of-living adjustments for Federal entitlement programs in the budget negotiations.

I said—and I was speaking, certainly, only for myself—that we are not going to get this job done unless we limit or freeze the cost-of-living allowance on every program in the United States.

I was particularly gratified to receive a letter of support from an unexpected quarter, and that is an organization with which I have sometimes disagreed. The letter is from the National Commander of the Disabled American Veterans, Gene A. Murphy.

Mr. President, Commander Murphy writes to say that the 1.1 million members of the DAV would be willing to accept "a delay, reduction, or cancellation of the cost-of-living adjustments now being considered for a VA service-connected disability compensation and nonservice-connected pension benefits, so long as such an action would be uniformly applied to all Federal entitlement programs, including those administered by the Social Security Administration."

The veterans' compensation and pension programs were made exempt from the automatic reduction mechanism of Gramm-Rudman-Hollings, as was Social Security.

The Senate Veterans' Affairs Committee has favorable reported legislation that would raise the compensation and pension benefits by an amount equal to the cost of living adjustment for Social Security, currently estimated at 4.2 percent for this year.

The HUD-Independent agencies appropriation measure recently passed by the Senate includes funding for the cost of living adjustments for these veterans' programs. The cost of living adjustment for service-connected compensation for this year is over $350 million and for pension is $97 million. Eliminating this COLA for 1 year would reduce the deficit about $450 million.

That this organization of disabled American veterans should express its willingness to put the cost of living adjustments for these benefit programs on the budget negotiations table speaks volumes, Mr. President.

It says to me that more Americans than we will ever know are coming to realize that deficit reduction is crucial to this Nation. It says to me that veterans who have been called upon to serve and defend their country in times of war and peace have shown that they are willing to sacrifice when it affects them personally, by accepting reduced cost-of-living adjustments for a limited time. It speaks volumes about how crucial it is that all entitlement programs be given the same treatment.

It speaks volumes about the solid leadership of the Disabled American Veterans and their Washington staff. They are a very spirited group. We have had some good, old slugfests in the past, and I have great admiration and regard for them. I commend them.

I cannot agree more with Commander Murphy that all social programs must be included. I applaud him and the 1.1 million members of the Disabled American Veterans for taking this reasonable and responsible stand.

I ask unanimous consent that the letter be printed in the RECORD.

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

DISABLED AMERICAN VETERANS, NATIONAL SERVICE AND LEGISLATIVE HEADQUARTERS,
Washington, DC, November 5, 1987.

Hon. ALAN K. SIMPSON,
U.S. Senate,
Washington, DC.

DEAR SENATOR SIMPSON: In response to the current crisis that has rocked our nation's financial community and seriously impaired confidence—both home and abroad—in the American economy, key members of the Congress and the Executive Branch are involved in discussions aimed at achieving agreement upon a meaningful "deficit reduction package" for the coming fiscal year.

Certainly all Americans—including those who have served in our nation's Armed Forces—wish them Godspeed and success in this most difficult task.

As these deliberations most assuredly will include scrutiny of federal entitlement programs as one area in which to achieve reduced expenditures, I wish to inform you that the 1.1 million members of the Disabled American Veterans are willing to accept a delay, reduction or cancellation of the cost of living adjustments now being considered for VA service-connected disability compensation and nonservice-connected pension benefits, so long as such an action would be uniformly applied to all federal entitlement programs, including those administered by the Social Security Administration.

As you are most aware, the President has indicated his willingness to put all entitlement programs "on the table" with the exception of Social Security benefits. The Congress, however, in dealing with this same vexing problem under the sequestration provisions of Gramm/Rudman/Hollings, has previously decided that if some exceptions to across the board cuts are to be made, veterans' programs, such as disability compensation and pension benefits, must be included.

The members of the Disabled American Veterans are certainly no strangers to sacrifice and, as indicated above, we are once again willing to place the welfare of our country above self-interest. We simply insist that all others be required to share in shouldering this burden.

If the FY '88 deficit reduction proposal should include a freeze in federal entitlements that is applied equally across the board, so be it. However, if exceptions are to be made, I urge your support for a proposal that does not forget, or impact upon, the benefits of those veterans and survivors of veterans who have incurred disabilities or death in defense of America.

Sincerely,

GENE A. MURPHY,
National Commander.

VISIT TO THE CAPITOL BY "HAPPY" CHANDLER

Mr. SIMPSON. Mr. President, I want to acknowledge the presence in the Chamber of the former Governor of Kentucky, Happy Chandler, who was a Governor when my father was involved in gubernatorial affairs for the State of Wyoming.

Happy Chandler is a unique individual, one of the most marvelous men I have come to know. He approaches his 90th birthday this week, and he is visiting with all of us in the Chamber. My father will celebrate his 90th birthday on November 12. The two of them cut quite a figure. Would that my father had the physical prowess that this gentleman displays to us.

I send Happy Chandler, former Governor and former baseball commissioner, the respect and love of my parents, who thoroughly enjoy that man.

Mr. BYRD. Mr. President, I wish to add my comments to those of the distinguished assistant Republican leader.

The distinguished senior Senator from Kentucky [Mr. FORD] brought to the Democratic caucus today this very distinguished former U.S. Senator and former Governor of Kentucky, Happy Chandler. We were proud to have him as our guest. We are proud that he is visiting in the Chamber today as our guest, and we hope that he will grace us with many future visits.

It is remarkable that this man is about to reach his 90th birthday and still is so alert, so active, and wants to come back to the old haunts and be around the Senate Chamber, where he spent some of his earlier years in the service of his great State of Kentucky and in the service of the Nation. We are very delighted to have him as our guest today.

I thank all Senators.

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

THE PRESIDING OFFICER (Mr. FORD). The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

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

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

Mr. BYRD. Mr. President, a number of discussions have been going on between the managers of the bill, Mr. JOHNSTON and Mr. MCCLURE, and Senators who have been discussing at some length the subject matter of the bill and certain amendments therein and thereto.

The following time agreement is, I think, agreed to on the part of all participants. It would be in lieu of cloture. It would be as follows:

UNANIMOUS-CONSENT AGREEMENT—H.R. 2700

Mr. BYRD. Mr. President, I ask unanimous consent that the modified Johnston amendment No. 1125 to the first committee amendment be withdrawn.

That the committee amendments to H.R. 2700 be considered as agreed to en bloc as original text for the purpose of further amendment, with the exception of the committee amendments on nuclear waste disposal on page 39, line 25 through line 23, page 40.

That a rollcall vote on the excepted committee amendments, listed above, en bloc, occur at 12 noon on Thursday, November 12, with the time between 10 a.m. and 12 noon equally divided and controlled between Senator JOHNSTON and Senators ADAMS and REID; and that the amendments, if adopted en bloc, be considered as original text for the purpose of further amendments and that no amendments to those amendments be in order prior to the vote at 12 noon on Thursday.

That Senator REID be recognized to offer two amendments on nuclear waste with a time limitation of 1½ hours equally divided on each.

That Senator ADAMS be recognized to offer three amendments on nuclear waste with a time limitation of 1½ hours equally divided on each.

That any second-degree amendments to the five amendments listed above must be germane to the amendment to which it is offered and time for debate be limited to 20 minutes equally divided in the ususal form.

That Senator BREAUX be recognized to make a motion to recommit the bill with instructions relating to the nuclear waste issue, that no point of order under rule XVI be in order with respect to the instructions, that any amendments to the instructions must be germane and limited to 20 minutes equally divided in the usual form, and that debate on the motion be limited to 2 hours equally divided and controlled by Senators BREAUX and JOHNSTON.

Last, that final passage not to occur before Wednesday, November 18.

And that the agreement be in the usual form.

Mr. President, I have two questions before I ask the Chair to put the request.

What about the time on debatable motions, appeals, or points of order if such are submitted to the Senate?

Concerning no point of order under rule XVI, does this give Senators any problem?

Mr. MCCLURE. Mr. President, will the distinguished majority leader yield?

Mr. BYRD. Yes.

Mr. MCCLURE. Mr. President, I have no objection to the inclusion on the appeals and points of order with respect to the amendments listed. My understanding of the unanimous-consent agreement as presented to us is that there is no limitation on the right of other Members to offer amendments in the usual form, in the usual manner. Points of order with respect to them or appeals with respect to them would be in the usual course of business. I believe I am correct in that, am I not?

Mr. REID. If the majority leader will yield, that is our understanding also.

Mr. MCCLURE. Will the distinguished Democratic leader yield further for a question?

Mr. BYRD. Yes.

Mr. MCCLURE. My understanding of what we are doing of attempting to do by this unanimous-consent agreement is to bring to an end the course of events that has brought us to this point with respect to the discussions that the distinguished Senator from Washington and the Senator from Nevada have been conducting in the main and put us back on the bill, reserving the one issue which would be voted upon and acted upon separately, approving all the rest of the committee amendments but then leaving the bill open to the usual course otherwise. It is also, I believe, the understanding with the gentlemen that have been conducting the extensive discussion that it is now their intention to bring this matter to a head and to a vote and that there would not be further extended discussion.

Mr. ADAMS. If the majority leader will yield——

Mr. BYRD. Yes, I yield.

Mr. ADAMS. Yes, that is our understanding, that we have no desire for extended discussion on the portions of the bill that are not involved in the nuclear waste amendment that was passed from the committee and placed in the bill. The other sections would be handled in the usual form and it would be to the text of H.R. 2700, as amended by the Energy and Water Appropriations Subcommittee. We have excised out the particular section on nuclear waste.

Mr. MCCLURE. If the distinguished leader will yield for one more question.

Mr. BYRD. Yes, I yield.

Mr. MCCLURE. Senator HECHT I believe has five amendments dealing generally with the subject of nuclear waste and I would understand that those would not be precluded by this agreement.

Mr. REID. If the majority leader will yield——

Mr. BYRD. I yield.

Mr. REID. I certainly have no objection to his offering amendments but that is not part of the unanimous-consent request at this time.

Mr. MCCLURE. Yes, I understand that. If the Senator will yield further, I simply did not wish to have anyone read this and understand that, because they deal with the question of nuclear waste, they would be preempted by this agreement. I do not understand this agreement to have that effect. He would be free to offer those in the ordinary course of business. With that understanding of this discussion, certainly on behalf of those on this side of the aisle we have no objection to the unanimous-consent request.

Mr. ADAMS. I might say, Mr. Leader, with respect to Senator REID and I, with that understanding, we have no objection to the unanimous-consent request.

Mr. BYRD. Mr. President, I add one provision; namely, that a point of order under rule XV against the excepted amendment be waived.

The PRESIDING OFFICER. Is there objection?

Mr. BYRD. Mr. President, reserving the right to object.

Mr. REID. Will the leader yield for a question?

Mr. BYRD. Yes.

Mr. REID. Would rule XV also apply to the motion to recommit, the waiver of rule XV? It would seem that would be the case. We did not talk about that earlier. We would agree to do so.

The PRESIDING OFFICER. Rule XV would only apply to committee amendments.

Mr. BYRD. Mr. President, the amendment to be proposed in the

paragraph on recommittal with instructions would be subject to rule XV and rule XV should be waived. I, therefore, include that in my request, that it be waived, that a point of order be waived.

Mr. ADAMS. We have no objection to that, Mr. Leader.

The PRESIDING OFFICER. Is there objection to the unanimous-consent request of the majority leader?

Without objection, it is so ordered.

Mr. BYRD. Mr. President, I thank all Senators.

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

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

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

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

Mr. BYRD. Madam President, I think it is the spirit of the agreement that the various provisions thereof dealing with amendments, et cetera, will occur in sequence in the order stated. But with the exception that in regard to the motion to recommit with instructions that will not necessarily follow in sequence. Senator BREAUX can make that motion at any time prior to the passage of the bill. I think that is the understanding, and I would make that request if all are agreed.

Mr. McCLURE. Will the distinguished majority leader yield?

Mr. BYRD. Yes.

Mr. McCLURE. I think it is the sense of the unanimous consent that is entered into that regarding the committee amendments dealing with nuclear waste the rollcall occur on that, we then follow with the two other sets of amendments that may be offered, that any other perfecting amendments that might deal with nuclear waste could be offered during that period of time or following that period of time, or they could be offered following the motion to recommit. They can come either before or after, but that the Breaux amendment not necessarily follow immediately after the other amendments to the exclusion of other actions. If that is the sense of what the Senator is suggesting, I certainly have no objection to that understanding.

Mr. BYRD. Yes. It is.

Mr. ADAMS. If the majority leader will yield, yes, it is our understanding that after the vote there would be an opportunity in sequential order as mentioned by the majority leader going through the amendments of Senators ADAMS and REID, and then to the committee modification amendments if they wish to offer them, and then Senator HECHT's amendments if he wishes to offer them. Then there would be a period of time for the offering of amendments to the original text, and that at the end of that period of time, Senator BREAUX would have any time before the final passage of the bill to offer his motion to recommit. But the other amendments other Senators might have on other subjects would be coming in in regular fashion as mentioned by the majority leader.

Mr. BYRD. Madam President, that is the general understanding. May I ask the Chair if there is any problem that the Chair would note with that agreement?

The PRESIDING OFFICER. The Chair would like to comment that under the agreement being proposed the Senator from Louisiana may offer the motion to recommit at any time.

Mr. BYRD. Yes, that is correct. So having the provisions that precede the reference to that motion to recommit occur in sequence as stated in the order, it presents no problem as far as the Chair can ascertain?

The PRESIDING OFFICER. The majority leader is right. The Chair does not observe any problems in the request.

Mr. BYRD. I thank the Chair. I make that request, Madam President.

The PRESIDING OFFICER. Is there objection to the unanimous-consent request by the majority leader on the framework for offering the amendment? Observing none, the unanimous-consent request is agreed to.

The Chair would like to note that it is difficult to hear the majority leader. Will Senators in the rear just be a little quieter in their discussions?

Mr. BYRD. I thank the Chair.

Madam President, I suggest the absence of a quorum.

Mr. ADAMS. Will the majority leader withhold?

Mr. BYRD. Yes, I withhold.

Mr. ADAMS. I want to express my appreciation to the majority leader for his assistance.

Mr. McCLURE. Madam President, the Senate is not in order.

The PRESIDING OFFICER. The ranking minority manager on this bill is absolutely right. The majority leader has the floor. The majority leader had the floor and suggested the absence of a quorum.

The Senator from Washington State was attempting to get the majority leader's attention.

Mr. BYRD. Yes. I beg the Senator's pardon.

Mr. ADAMS. I want to express my appreciation to the majority leader on behalf of myself and the other Members for his assistance in drafting of the unanimous-consent request. It was most kind of him. We appreciate it.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

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

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

Mr. BYRD. Madam President, I did not mean to walk away from the distinguished Senator. I thank the able Senator from Washington, [Mr. ADAMS] and those other Senators who have been associated with him in the effort. They have been most cooperative with the leadership—Senator REID, Senator BREAUX—and most understanding. And I could not ask for any finer accommodations as far as the leadership is concerned than have been given by these Senators. They have demonstrated great facility with the rules, and I must compliment them. It has been a good effort, I would say.

I am happy with the agreement that has resulted from the discussions. I want to compliment all Senators on all sides for having worked out the agreement. I want to thank all Senators because I think this will help to expedite the action of the Senate on this bill and also the actions of the Senate on other legislation.

Mr. SASSER. Madam President, for some time, I have taken every available opportunity to bring to my colleagues' attention shortcomings in a key component of the Nuclear Waste Policy Act—the monitored retrievable storage facility, or the MRS. My objections to the MRS have been simple enough. I have never thought the MRS concept was fully developed by the Department of Energy. I do not believe the Department of Energy has told us enough about the MRS to allow us to make an informed decision on whether to proceed with this facility.

Indeed, the MRS proposal has been plagued by uncertainty since its inception. At times, this uncertainty has focused on the need for this type of facility. We see further uncertainty over exactly what role an MRS should play in a national nuclear waste management system. We see uncertainty surrounding the analysis of the MRS by the Department of Energy.

I have also been troubled by the way DOE has handled the MRS proposal. This administration has pursued an MRS policy designed to try to isolate and minimize political opposition to the facility. Unfortunately, that meant giving political considerations greater weight than scientific rigor and thoughtful consideration of just what the MRS is all about.

Only political expedience can explain why the three sites DOE proposed for the MRS are in one State. Political expedience is the only rationale one can come up with for the pro-

posal to locate the MRS in Oak Ridge, TN—a heavily-populated community in its own right which is a mere stone's throw away from Knoxville, TN—Tennessee's third largest metropolitan area with more than 500,000 inhabitants. The site selected by DOE is less than 1 hour away from the great Smoky Mountains National Park, this Nation's most visited national park with nearly 10 million visitors last year.

In short, DOE's development of the MRS proposal and its suggestions for where to put the facility simply did not add up. It was clear that rational development of an MRS proposal had given way to finding the path of political expediency. Despite what I believe are serious flaws in the MRS proposal, the administration insisted on moving forward.

Many of my fears about the shortcomings in the MRS proposal were borne out in a study of the MRS done by the General Accounting Office this year. The GAO took a close look at the MRS proposal and found it lacking. Now, I will get into some of the specific recommendations of the GAO report in a moment. Right now I want to emphasize the general thrust of the report. The GAO report concludes that DOE has simply not provided the Congress enough information on the MRS to warrant authorizing such a facility. Congress should not move forward on the question of authorization until more detailed, complete analysis of the MRS is done.

Where are some of the shortcomings in the MRS proposal? First, the GAO notes that the Department of Energy's analysis of alternatives to the MRS is limited. Options including designs and improvements to the waste management system were not developed to the same extent as the MRS option. Alternatives to the MRS identified by the Department of Energy were analyzed on the basis of how each option individually could improve the waste management system. Yet, no effort was made to determine the effect of combining these various options.

So what we saw was DOE looking at a variety of onsite storage options for a waste management system. But, each was considered separately and weighed against the MRS. DOE has not made the case that the combination of any number of these onsite options results in a system inferior to one with an MRS. Indeed, the GAO notes that the Department of Energy has not firmly concluded that alternatives to the MRS are infeasible or that costs and disadvantages outweigh advantages.

It seems obvious to me, Mr. President, that options other than the MRS were given short shrift by the Department of Energy. The GAO report suggests that alternatives to the MRS were given little more than cursory treatment. As a result, we do not have an accurate picture of a waste management system with and without an MRS.

Now, DOE would attempt to make the case that utilities would shy away from onsite storage options and opt for an MRS. Yet, GAO correctly points out that there is no factual basis for this claim. This type of information has simply not been gathered from the utilities. We would be making a dangerous mistake to simply assume all utilities prefer an MRS to onsite storage.

My native State of Tennessee provides a classic case of the shortcomings of such thinking. The Tennessee Valley Authority has a number of nuclear powerplants within its system. When operational, these plants produce the type of nuclear waste we are talking about in this debate.

Over the past few months, an internal debate has gone on at TVA about the wisdom of the MRS compared with onsite storage. TVA's nuclear staff wrestled with the question of what was better for their operations as a utility. Internal memos indicate that TVA would be just as satisfied with a nucler waste management system with an MRS. They don't need the MRS to safely store spent nuclear fuel before shipment to a final repository. TVA finds onsite storage to be the preferred course.

Thus, a major utility in a multi-state region has arrived at the conclusion that the assumptions in favor of the MRS are misplaced. This utility does not see the MRS as essential to safely storing spent nuclear fuel. Why then does the Department of Energy persist in assuming the MRS fills a critical need?

A second major shortcoming the GAO found in the MRS proposal centers on the question of cost. DOE's MRS proposal estimates that such a facility would cost about $2.3 billion. However, there are a number of additional costs that are not included in this estimate. According to DOE's own independent cost estimating staff, these additional costs could be substantial. It is the further opinion of the cost estimating office that these additional costs could increase operating costs for an MRS by as much as 10 to 15 percent.

Rather than go on at great length, let me try to summarize some of GAO's findings, Madam President. As I've indicated, we don't know enough about the cost of the MRS. We don't now enough about the need for an MRS. We don't know what will happen to the waste management system with an MRS. We don't know if we can achieve the benefits attributed to an MRS through other means.

As this list of shortcomings is looked at, one can only share the simple conclusion reached by the GAO. The Congress does not have sufficient information on the MRS to authorize this facility. Let me quote from the GAO report:

> Regardless of the purpose of the MRS as proposed by the DOE, we do not believe that DOE's proposal is sufficiently comprehensive for the Congress to make an informed decision on the cost of, need for, or consequences of integrating an MRS into the waste management system, or whether the benefits attributed to the MRS can be better achieved by other means.
>
> Before the Congress decides whether the MRS is needed or would be beneficial, and therefore, should be approved, more detailed information should be available regarding MRS' costs and the consequences for the Waste Program of not having an MRS. We believe that DOE should provide greater detail on how the authorized waste management system can be improved to provide benefits similar to an MRS * * *. We also believe that too many uncertainties regarding the costs and benefits of an MRS and potential alternatives currently exist to make a firm decision regarding the need for and relative value of an MRS. DOE should do more work to better define these factors to permit a more informed congressional decision on whether to include an MRS * * * in the Nuclear Waste Disposal Program.

Clearly, Madam President, there is much we need to know before we move forward on the MRS. The amendment before us seeks to provide answers to many of these questions about the MRS. First, the amendment recognizes that we should gather more information about the MRS.

The amendment establishes a MRS Review Commission, appointed by the leadership of the House and Senate. This three-person panel is directed to go back and prepare a report on the need for the MRS as a part of a national nuclear waste management system. In preparing this report, the Commission is further directed to go back and review DOE's handling of the MRS proposal. The report will also include the comments and views of those who would be affected by such a facility. Finally, this report will contain a recommendation to Congress on whether or not an MRS should be included in a waste management system.

To help ensure that this Commission addresses many of the shortcomings I have outlined, we direct the Commission to compare the MRS to onsite storage alternatives. In making this comparison, the amendment sets forth a series of factors which would be affected by a system with an MRS and without an MRS. These factors include repository design, waste package design, waste preparation, waste transportation among other items.

In general, Madam President, this amendment would gather the critical information on the MRS which is lacking right now. The amendment recognizes that it does not make sense to move forward with authorizing the MRS given this information shortfall.

The question of authorizing the MRS is deferred until the MRS Commission reports back to Congress in early 1989.

At that time, several options are available. First, if the MRS Commission comes out with a report that the MRS is a bad idea, and moreover an idea which has been handled poorly by the Department of Energy, the Secretary may elect to drop the MRS proposal. No further action would be taken on the MRS.

In the case where the MRS Commission reports that the proposal is fatally flawed, but DOE is determined to press forward, Congress can disapprove authorization of the MRS. In this case, a resolution disapproving the MRS would be considered in both the Senate and House under expedited procedures.

Finally, there is the possibility that the MRS Commission will report back that the MRS is a worthy concept which would add much to a national nuclear waste management system. Given the track record of the MRS proposal, I have great doubts about such a finding. However, it is a possibility. In that event, the Department of Energy would be permitted to move forward with an MRS.

In effect, what we are doing with this amendment is delaying the authorization of the MRS. It may develop that Congress is again asked to speak on the question of authorizing the MRS. But we would be doing so with more complete information on the facility. We would have the judgment of an objective panel on the questions many of us have raised throughout the MRS debate.

I emphasize that it would be foolhardy to move forward without that information. As the General Accounting Office found earlier this year, Congress needs more detailed information on the MRS. A wide array of questions about the MRS should be answered before we move ahead on this type of facility. This amendment would provide answers to many of those questions. It will help ensure that thoughtful analysis lies behind any decisions on a storage of spent nuclear fuel. It will help put us back on the path of scientific rigor. I urge my colleagues to support this amendment.

Madam President, I should like to discuss some of the elements of this amendment with the distinguished chairman of the Energy Committee. I would think that the chairman would agree with me that the membership of the MRS Review Commission should be such that, to the greatest extent, it ensures an objective analysis of a very difficult problem. While the selection of members for the Review Commission will be left for the leadership, would the chairman agree that the credibility of the Commission's report would be open to question if Commission members are strongly associated with either side of this issue?

Mr. JOHNSTON. I agree that the credibility of the MRS Commission is very important. Because of this, persons with strong views for or against the use of an MRS in our nuclear waste management system should not be Commission members.

Mr. SASSER. I would further like to underscore what I see as a very critical aspect of the Review Commission's task. As I've noted in the past, a credible study of alternatives to the MRS should not only analyze how each individual alternative could affect the waste management system, but should also look at the effect of combining various alternatives. Now, the amendment before us directs the MRS Review Commission to compare the MRS with at-reactor storage of spent nuclear fuel prior to its disposal in a permanent repository. As the chairman knows, the question of at-reactor storage involves a number of potential alternatives to a waste management system with an MRS.

It is my understanding that the MRS Review Commission established in this amendment will address one shortcoming the General Accounting Office found in DOE's previous analysis of the MRS—that is that alternatives to the MRS be studied to determine the viability of individual options and to what extent combinations of some or all of these options might improve the nuclear waste management system, and at what cost. Does the chairman share my reading of this provision?

Mr. JOHNSTON. The Commission is charged to recommend to Congress whether an MRS facility as defined in the act should be included in the national nuclear waste management system to achieve the purposes of the Nuclear Waste Policy Act, as we are amending it here, including meeting needs for packaging and handling, improving flexibility in the repository development schedule, and providing temporary storage of spent fuel accepted for disposal.

In making this recommendation, the Commission would compare the MRS to the alternative of at-reactor storage of spent fuel prior to disposal in a repository.

The Commission is free to look at options for at-reactor storage in making this comparison, just as it is free to look at options for the MRS system.

Mr. SASSER. Mr. President, I would like to address a few questions to the chairman about the procedures under section 115 of the Nuclear Waste Policy Act which we establish in this amendment.

The amendment speaks of a situation where Congress could act on a resolution disapproving the deployment of a MRS. The consideration of such a resolution is bound by the procedures set forth in section 115.

Under those provisions, who could introduce the type of resolution this amendment calls for?

Mr. JOHNSTON. Any Senator and any Member of the House of Representatives can introduce the resolution contemplated under this amendment.

Mr. SASSER. As I read section 115, it seems clear that the chairman of the appropriate committee must introduce such a resolution should the situation develop. Does the chairman agree with my reading of section 115?

Mr. JOHNSTON. The amendment references section 115 of the Nuclear Waste Policy Act. The procedures of section 115 are triggered only if the MRS Commission recommends that an MRS should not be included in the national nuclear waste management system, and the Secretary of Energy still determines to go ahead and include an MRS in the system.

In that instance, and only in that instance, there is an opportunity under the amendment for Congress to override the Secretary's decision to go ahead with an MRS in the face of the Commission's negative recommendation. Any Senator and any Member of the House may introduce a joint resolution to accomplish this override.

In the Senate, the chairman of the committee to which the recommendation of the Commission is referred is directed by section 115 to introduce a resolution to override the Secretary. However, nothing obligates the chairman of this committee to support the resolution he introduces.

Mr. SASSER. Finally, Madam President, my colleagues will recall that the Nuclear Waste Policy Act already contains language allowing States selected to host either the MRS or a permanent repository a notice of disapproval. How, as the chairman knows, there is quite a bit of uncertainty surrounding just how the procedures for such a notice of disapproval would work. It is not my intention of step into that quagmire at this time.

However, I do want to state that I don't believe the provisions in this amendment in any way affect a State's ability to file a notice of disapproval under the Nuclear Waste Policy Act. Nothing we are doing there today would impair a State's filing such a notice of disapproval under the act. Does the chairman concur in this position?

Mr. JOHNSTON. As the Senator knows, section 402(e) of S. 1668 explicitly provides for a disapproval of the siting of an MRS facility. This procedure is entirely separate from the procedure in the Senator's amendment and is unaffected by the Senator's amendment.

Mr. BYRD. Madam President, I understand that there are several Sena-

tors who wish to speak on the subject matter before the Senate, and I would suggest that they come to the floor or let the cloakrooms know that they wish to speak on this matter. There will be time this afternoon for them to do so. Their time will be very much constricted come Thursday morning; and if they have any idea of wanting to speak prior to the vote which will occur on Thursday, this afternoon would be about their only opportunity.

Mr. McCLURE. Madam President, will the distinguished majority leader yield for a brief comment?

Mr. BYRD. I yield.

Mr. McCLURE. I appreciate the comment made by the majority leader, because I, too, want to urge that those who wish to speak with respect to the committee amendment, which includes nuclear waste, come to the floor and do so.

The unanimous consent agreement which has now been entered into and under which we operate—while there will be amendments offered later on, the vote on the committee amendment dealing with this subject will occur no later than 12 o'clock noon on Thursday, and there will be 2 hours of debate, equally divided, on Thursday morning.

If that is not going to be enough time to consider or to give opportunity to all Members to speak, they should be advised to come and speak at this time, rather than take their chances in the constrained time period on Thursday morning.

Mr. BYRD. Yes.

In the meantime, I hope that our staffs can help us to clear other legislation for action possibly this afternoon; and if a rollcall vote is ordered thereon, we will try to start off Thursday with such a vote. I do know that staffs on both sides are presently working on a possible bill that can be called up, hopefully, and debated and acted upon.

Madam President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

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

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

UNANIMOUS-CONSENT AGREEMENT—CONFERENCE REPORT ON H.R. 1451, THE OLDER AMERICANS ACT

Mr. BYRD. Madam President, this has just been cleared with the distinguished Senator from Mississippi, Mr. COCHRAN, and the acting Republican leader, who is here on the floor. I will present it to the Senate.

I ask unanimous consent that when the Senate turns to the consideration of conference report on H.R. 1451, the Older Americans Act, time for debate on the conference report be limited to 30 minutes, equally divided and controlled between Senators MATSUNAGA and COCHRAN; that there be 20 minutes on any debatable motion, appeal, or point of order if submitted by the Chair for debate.

The PRESIDING OFFICER. Is there objection to the request?

Hearing none, it is so ordered.

Mr. BYRD. Madam President, on the vote on the adoption of the conference report, I ask unanimous consent that that vote occur on Thursday morning at the hour of 9:30 a.m.

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

Mr. BYRD. Madam President, I ask unanimous consent that it be in order at this time to order the yeas and nays on the motion to adopt the conference report.

The PRESIDING OFFICER. Is there objection? Without objection, it is in order.

Mr. BYRD. Madam President, I ask for the yeas and nays on the adoption of the conference report on the Older Americans Act.

The PRESIDING OFFICER. Is there a sufficient second?

There is a sufficient second.

The yeas and nays were ordered.

Mr. BYRD. Madam President, I ask unanimous consent that that rollcall vote on Thursday morning be a 30-minute rollcall vote and that the call for regular order be automatic at the close of the 30 minutes; to wit, 10 o'clock a.m.

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

Mr. BYRD. Madam President, I thank all Senators. I thank Mr. MCCLURE, Mr. COCHRAN, and Mr. MATSUNAGA.

Senators will be speaking later this afternoon, beginning now, on the energy and water appropriation bill. And when Senator MATSUNAGA and Senator COCHRAN feel that they wish to address remarks to the subject of the conference report on the Older Americans Act under the agreement they may do so at any time this afternoon.

I yield the floor.

Mr. ADAMS addressed the Chair.

Mr. BYRD. Madam President, will the distinguished Senator yield?

Mr. ADAMS. Yes.

Mr. BYRD. I beg his pardon for the interruption. I just yielded the floor, and I am sorry to interrupt him.

Madam President, there will be no more rollcall votes today.

Mr. ADAMS. Before the majority leader leaves the floor, it is my understanding that Senator CRANSTON and potentially one other Senator will be here to present the conference report this afternoon.

Mr. BYRD. Senator MATSUNAGA and Senator COCHRAN will be managing that conference report. Senator MATSUNAGA may be on his way shortly and Senator COCHRAN will speak later in the afternoon.

Mr. ADAMS. I thank the majority leader.

ENERGY AND WATER DEVELOPMENT APPROPRIATION ACT, 1988

The Senate continued with the consideration of the bill (H.R. 2700).

Mr. ADAMS. Madam President, we have had several days of debate on the nuclear waste issue, as previously stated, and we have how arrived at a situation with regard to the bill where we will have a straight up or down vote on the nuclear waste addition to the bill H.R. 2700 which is an appropriation bill. Senator REID and myself and others have taken the time of the Senate in order to discuss the problem of trying to change the entire nuclear waste program on an appropriations bill and why we did not feel that was correct.

I want to state that I was very pleased this morning to listen to the remarks of Senator ALAN SIMPSON of Wyoming who was chairman of the Subcommittee on Environment and Public Works handling nuclear regulatory matters during the time when the 1982 act was passed. I think his remarks were very much to the point of why it is that we have done everything possible—and I believe we have accomplished our purpose—to see to it that the parties that spent so many days, weeks, and months drafting the Nuclear Waste Policy Act of 1982 would be included in this major modification of the act.

Madam President, this is not just a simple amendment to an appropriation bill. It is a major piece of authorizing legislation being placed on an appropriation bill and, as pointed out by Senator SIMPSON so very well this morning, there were three Senate committees and six House authorizing committees plus the Rules Committee involved in consideration of this bill in 1982.

We think it is essential, therefore, that this not be included in this appropriation bill, and we are therefore going to have a vote on that on Thursday under the unanimous-consent request, which will give the Senators an opportunity to remove that from the bill. I think it should be removed from the bill. I think it will be removed from the bill. But if it is not, we now have members of the Environment and Public Works Committee prepared to offer appropriate motions under the unanimous-consent request to be

certain that the Environment and Public Works Committee is involved.

And I want to state, Madam President, that if for any reason we are not successful—and I think we will be, and I think we should be—we will ask that conferees be appointed—it will not be an automatic thing—we will ask that conferees be appointed that recognize the authorizing committees of the Senate. We do not want them there as consultants or advisers or advocates. We want them as full participating members. They deserve to be. They should be. We are going to do everything we can to see that they will be. But that is for a later day.

I do not think that will be necessary. I think that we will manage to move this out of the appropriation bill, then this bill will go before the Senate, be debated as an appropriation bill and all of us hope promptly passed.

I wish we had not had to go through this exercise of the last 2 weeks. We would not have gone through this exercise if it had not been that this bill was going to drastically affect the entire Nation.

Yes, the State of Washington, would be affected. But, Madam President, it is affected as a potential site. A lot of people are saying it is not going to be the site. Madam President, we already have 66 million gallons of highly radioactive waste sitting in our State. We would like to have it cleaned up. We have lived with it. We will have to continue to live with it. We are trying to clean it up. So it was not a not-in-my-backyard thing. It dealt with the Nation making the proper decision on where and how nuclear waste being pumped out of 108 reactors would be handled.

We have heard now a very good discussion, not just from Senators who are opposing this, but now the Senators have begun to move in that were involved in the 1982 act, saying, "Wait a minute, we should not have this bill placed in the appropriation bill and it by itself is flawed."

They mentioned this morning and discussed at length, and so I will not have to again, the fact that the characterization of the sites—as Senator BREAUX so very well put it, who is now the chairman of the subcommittee in Environment and Public Works dealing with this matter—is putting the cart before the horse. In other words, you let DOE, in whom confidence has been lost by the entire Nation, go out and select a site and then after they have selected the site, you go and characterize other sites in case they made a mistake in the first one. And that is a terrible way to proceed. It is a terrible way to proceed because if you have made a mistake and are going to need the characterization, you could have avoided it by having all three characterized at the same time and known before you started drilling shafts.

It goes to costs, which the Senator from Louisiana has said is one of the advantages of his bill. I am going to talk about costs today, because that is the subject we have not discussed. But I think it is very important that where we are now, where we are trying to reduce the deficit, to understand that the bill that came out of the Subcommittee on Energy of the Appropriations Committee is a bill that will not save any money. Even worse, it shifts money from one year to another and increases the burden at a later time.

It has provisions in it that many people in the Senate may want to support. I may want to support the provisions of paying some benefits to the State that eventually gets this. I do not know. I have not made up my mind on that. But it is in the bill that they passed out and if that provision goes into effect, the program that comes out will cost this Nation over the next 20 years a minimum of $6 billion more than if we left the original act in place.

We have all agreed, of those who have spoken on this matter, and I think it is a consensus if not an absolute majority of everyone in the Senate and in the House, that DOE has not implemented the 1982 act.

The 1982 act was one the Nation was willing to live with and DOE just plain politicized it. They did terrible things like declaring, as the Senator from Wyoming said this morning, declaring on May 26 of this year they were going to wipe out part of the States that were under the original act. That was bad enough and started everybody into a great flurry. But they followed on after that with the ultimate insult from an executive department, Madam President. I know about what executive departments can and cannot do, and I will tell you this; I never would have done that as a Secretary because all of my colleagues up here and everybody I relied on for authorization or appropriation would have taken it out of my hide.

They came up before the committee that had jurisdiction, the Energy and Water Committee, and said: We are going to change this plan that we had. We are going to call it a modification. If you do not pass a bill that says we cannot do it, we are going to go ahead and do it. Even though it was not the original act. I think maybe that explosion finally moved the committee to say: Well, we had better make a midcourse correction. And I agree with the committee. And we certainly should. We have got to stop DOE from simply saying: we are going to change the law by what is called a program modification.

Now, that is why we have stressed the three things. The thing that was taken up this morning by the Senators from the Environment and Public Works Committee, which said: For goodness sakes characterize the three sites before you start so we do not dig a big hole in the ground, find it is the wrong place and then go back to two other sites. That is going to multiply our costs enormously. If you are going to do this sequential site selection, and that may be a good way to proceed, do all three, look at them on the surface enough so you know you have got the right site.

The second part that this Senator is going to be offering an amendment on is, for goodness sake, get somebody else besides DOE making that decision to take it out to the public and to bring it up here to Capitol Hill.

I do not care whether you use the Nuclear Regulatory Commission or whether you want to have a separate blue ribbon commission, but somebody other than DOE better bring it up here because I will tell you, if they do not, we are going to have the same problem that we have had before.

I have been in committees, being invited by the committee chairman, such as Governmental Affairs here. The DOE's testimony was a disaster. I attended the committee hearings of the Energy and Water Committee. Their testimony was a disaster. In front of the Appropriations Committee I gave up; I finally did not go there, but I hear it was a disaster. I have talked to my colleagues on the House side. They say that every time they come up there, there is a new dragon that jumps up. Somebody else should get in there, and I am going to offer that amendment if we do not knock this thing out of this bill, and it needs to be in there.

Again, I discussed this with the Senator from Louisiana. We have just a difference of opinion, Senator JOHNSTON and I. He wants to have the lame duck administration decide it on January 1, 1989. I think that is the worst politics imaginable. You would have the same people doing it that have been a problem in the past. Not only that, but they would be doing it on their way out of office and they would be doing it when there is going to be a new administration. Because regardless of whether there is a Democratic or Republican President in 1988, it is not going to be Ronald Reagan. He cannot run again. It is not going to be his Cabinet officers. They are going to leave. So you leave it right to a group who is leaving office to have them decide this issue, and then the next administration is going to live with it.

No administration that I know of is ever going to take a decision like that and accept it. So you are just building in delay, you are building in lawsuits. I will offer an amendment on that.

I am just hopeful that I can get off this floor and not have to do any more

with these, in amendments and in trying to prevent this because I think that we would like to have a nice, simply energy and water bill without nuclear waste in it; do that bill, go on with it and all the rest of us can then see the committees that have been involved with this for years and years go back to drawing a bill. I think they can draw a very good bill.

The distinguished Senator from Idaho has been involved in this for years and years. My former distinguished colleague, Senator Jackson, the chairman of that committee before, was ranking member when the 1982 act was put together. We miss him very much.

There are others now on the committee that I believe can carry that burden forward. I do not believe we ought to play around the edges on this. We ought to take it on four square. The nuclear waste is there. It has continued to build up. Every day 108 reactors have pumped out some more. But let us get the right people doing it and let us not worry about whether it takes 24 months or 18 months or 6 months. We are talking about 10,000 years. We are talking about beyond the year 2000 before this thing really begins to move and to work.

Therefore, I should think we should do it right the first time. Let us not do it wrong and regret at our leisure. Let us do it right and be pleased with the result.

I think it is important in these last remarks that I am making today, before we get into the amending process and the vote on this nuclear waste provision—because that is what I have concentrated on—that I talk directly about costs. That is what this committee is supposed to be involved in. Everybody is worried about the allocation of their costs and how much money all of this is going to place in this budget; place in the next budget. Indeed, these nuclear waste policy amendments appear in this Appropriation Committee as part of the Senate Energy Committee's reconciliation package. They want to get savings in excess of $100 million. I do not blame them. Everybody wants savings. But the mechanism they used was to abandon the Nuclear Waste Policy Act and require DOE to characterize three sites and to select sites for a second repository.

Let us be blunt, Madam President. This legislation is not going to save very much money if it saves any money at all. In fact, it will probably cost money, more money than any of the other proposals that have been put forward, such as the one from the Senate Environment Committee in its reconciliation package.

Madam President, we think that these packages should both be in front of the reconciliation bill at the same time so that they can be balanced one against the other and the proper one be selected.

Why is this? Madam President, the savings that are supposed to come from cutbacks in the Department of Energy site characterization activities at the two sites, they think they will save that money by conducting them at one site instead of three. But those savings are dubious at best, and in a moment, Madam President, I am going to discuss how much DOE has put in as program management costs rather than actual work on the ground—whether it be drilling or site characterization.

The original bill terminated all site activities on the two runner-up sites. The modified amendment, which was placed in the bill but which we will now move into a separate section of the bill, started site work on the two sites January 1, 1989.

So, instead of having savings in fiscal years 1989, 1990, and 1991, and the cutoff of all characterization activities, the modifications they are saying, they are going to put in as amendments would now require expenditures starting January 1, 1991. These are likely to run into hundreds of millions of dollars.

The proposed savings are just short term; the next 3 or 4 fiscal years. What bothers me about long term—because as a former Budget chairman, I can tell you—the outyears creep up on you in much heavier fashion than your year immediately before you. You start building these programs and they get bigger and bigger and bigger.

What happens if they modify it this way is that they go to the first site and if they have not characterized all three before they have started and they have just guessed on the site and guessed wrong, they have not only spent the money on the first site, they have spent the money characterizing the two sites in the meantime and then they have to go back and go below the surface on the second site. So you are building up an enormously expensive set of characterization, re-characterization, and rebuilding again.

The proposed savings in the committee are offset, the benefits, and in the States with a site and an MRS, these packages can cost billions over the lifetime of repository and the monitored retrievable storage facility.

Fourth, the proposed legislation would authorize construction of a monitored retrievable storage facility that has never been authorized.

I want to state that very clearly and carefully. That is what is going to be voted on when we take this up in the vote on Thursday noon. The bill that came out of the committee authorized an MRS. There will be a proposed modification, I guess—if we do not vote this down, and I do not know whether it will pass or not—that say that it would not be authorized, that they would study it. I think this is a very nice gesture, a very kind gesture, which the Senator from Louisiana, Senator JOHNSTON, has offered to the Senators from Tennessee. But it sort of rode in there at the end, and I guess it is supposed to kind of coalesce support for this package.

I would just state to my very good friends from Tennessee, North and South Carolina, and Georgia, to be very careful about this. The amendment that they will be voting on still leaves an MRS and still leaves it authorized in Tennessee. So I urge them to vote against that amendment. If we defeat it, they do not have anything to worry about. If the amendment is agreed to, they have to worry that an amendment for certain comes in to help them. If we do not defeat the first amendment and it passed, then they are hanging out there as to whether or not some amendment will be offered. They are hanging on good faith and hanging on an amendment that hopefully is going to be offered in a form that will be acceptable.

So the safe way is just to vote down that amendment and do it on Thursday. Then you do not have to worry about modifications coming in there.

Madam President, I am not opposed to mitigating economic damages from a place that is hosting a nuclear waste repository, for that matter, an MRS. I am not opposed to doing surface investigations before we choose a final site. Neither is the Environment Committee of the Senate. But let us not pretend that this legislation is a moneysaver because if you start paying each State with a repository $100 million a year and each State with an MRS $50 million a year, you can see that you do not have a moneysaver.

Let us just face this straight up and down. If we want to go with the benefits package, then we do not have a savings in this bill.

I suggested to the distinguished Senator from Louisiana and the other members of the committee that if they needed and wanted to save money this year, there is a very simple way to do it. I may offer that as an amendment. I will let them consider that as a potential. It is to just cut the DOE nuclear waste budget to $275 million for fiscal year 1988. We urged them to have DOE go ahead and not take up highly questionable sites, but take time to get the program on track. In other words, get a moratorium, cut it for the next couple of years, do what the House has suggested, have a blue ribbon commission, and get the thing in order and then bring it up here with some people we believe and proceed with it. Do not jury rig. Do it straightaway.

I know the modifications are being placed in this, but it does not do any-

thing about the $150 million to be spent each year on an MRS and on a repository.

Now, Madam President, I want to get to the point of what they are doing. I want to discuss that, but I will hold it for now because I know some other Senators, I think Senator BOSCHWITZ and maybe Senator CONRAD, would like to spend some time on this, and certainly we have had an opportunity to discuss it. I wanted to just refer to the fact that the cost estimates which are involved for Hanford alone are cost estimates which build up because of the management fees being placed in this by the Department of Energy. Just this point: Let us take Hanford, WA, because I know something about that. At Hanford, the cost of an exploratory site is $286.6 million out of the characterization cost of $1.6 billion, roughly 18 percent.

We are not being robbed blind by the site characterization program, the actual activities. It is estimated to cost these billions. But what is it for? Of the $1.6 billion cost of characterization at Hanford, $114.5 million or 7 percent is attributed to project management. I call that overhead. A lot of other people call it a lot of other things; $114.5 million. It is almost the cost of the shaft, the program cost management. That is a lot of management of program; $163.7 million or 10 percent is attributed to regulatory and institutional activities. I am not sure what kind of an institution they are going to build with those activities and I do not know how many regulations they are going to issue. But if you take the two together they cost more than the shaft; $147.9 million or 9.2 percent is for developing a waste package for the Hanford site if it were to be selected. And so on.

In other words, when you start looking at the characterization cost of this, I would like to have somebody else look at it and I would be hopeful that the Appropriations Committee next year would come in with some very hard data on where the money is being spent.

Madam President, I ask unanimous consent at this time that I may yield the floor—does the Senator from Minnesota wish to discuss this matter or the Senator from North Dakota—retaining my right to the floor with the understanding that my remarks will not count as a second speech.

Mr. McCLURE. Madam President, I object.

The PRESIDING OFFICER. Objection is heard.

Mr. ADAMS. I yield the floor.

Mr. McCLURE. Madam President, I ask unanimous consent that it be in order for Mr. CONRAD and Mr. BOSCHWITZ to submit a resolution and speak in reference thereto for not to exceed 15 minutes.

The PRESIDING OFFICER. Is there objection? Hearing no objection, the unanimous-consent request is agreed to.

(The remarks of Mr. CONRAD and Mr. BOSCHWITZ relating to the submission of a resolution appear in today's RECORD under Submission of Resolutions.)

ENERGY AND WATER DEVELOPMENT APPROPRIATION ACT, 1988

The Senate continued with the consideration of the bill (H.R. 2700).

Mr. McCLURE addressed the Chair.

The PRESIDING OFFICER. The Senator from Idaho.

Mr. McCLURE. Mr. President, I want to speak for a few minutes with respect to one aspect of the debate about spent nuclear waste and the storage and transportation. I have not before spoken at length on this subject on this floor during the current debate, but as we approach the time when the Senate will vote on the action taken by the subcommittee, the action which embraces within it a proposal that has cleared the Energy and Natual Resources Committee, I think it is important that we have a few of the facts on the table.

Mr. President, some of the inflammatory statements that have been made over the last several days concerning transportation of nuclear materials deserve an extensive rebuttal. I cannot, in good conscience, let the people of this country be misled into thinking doomsday thoughts about the ability of this country to transport nuclear wastes.

Not only have the statements of some of my colleagues been misleading, they were in most cases totally unfounded.

The experience of the last 40 years in the transportation of nuclear materials worldwide is irrefutable evidence of the excellent safety record of this well-regulated industry. Thousands of shipments of spent nuclear fuel and nuclear waste have been made in the United States and throughout the world without causing any adverse consequences to the public, and no amount of hype can counter these facts.

Over 7,000 packages of nuclear materials are shipped daily in the United States alone, along our Nation's highways and railways. These shipments are carefully regulated by a coordinated regulatory system involving the Department of Transportation [DOT], the Nuclear Regulatory Commission [NRC], the Department of Energy [DOE], and State and local governments.

The DOT is responsible for regulating the transportation routing and carriers. The NRC is responsible for nuclear safeguards and the certification of the transport containers. For shipments relating to the Nuclear Waste Policy Act of 1982, the Department of Energy will be the shipper of record and is responsible for development of a nuclear waste and spent fuel transportation system consistent with DOT and NRC regulations, and in consultation with the affected States and local communities.

DEPARTMENT OF TRANSPORTATION

Highway transportation regulations of the Department of Transportation are found in the Hazardous Materials Regulations (49 CFR Parts 170–179), which were finalized in 1981, and are commonly referred to by the docket number, HM–164. The principal purpose of HM–164 is to have in force nationally applicable standards for the safe highway routing of radioactive materials. The docket states that, on the basis of extensive public comment, documented risk studies and past experience in radioactive materials transport, the public risks in transporting these materials by highway are too low to justify the unilaterial imposition by local governments of bans or other severe restrictions on highway transport. However, contrary to what some people have said, State and local input into transport route decisions are not precluded by the regulations. Only those requirements of a State or local government that are inconsistent with the DOT regulations are preempted; but this preemption may be waived if the State or local requirements offer equal or greater safety and do not unreasonably burden commerce. The inclusion of this waiver provision reflects the congressional recognition that there could be valid safety reasons for permitting certain inconsistent State or local rules to coexist with their Federal counterparts. DOT further acknowledges that the task of identifying preferable alternative local routes can best be performed by the States, and accordingly, has developed a mechanism for State designation of alternate routes. The responsibility for the selection of alternative routes is assigned to the State routing authority, with input from local authorities, rather than directly to local authorities, because DOT recognizes both the practical and safety problems associated with placing ultimate routing authority in the tens of thousands of local jurisdictions throughout the country. Furthermore, a State authority has a much broader perspective than local governments because it is responsible for the safety and welfare of all its communities. States do, however, have the capability, through their normal administrative and lawmaking avenues, to incorporate local input directly into their routing decisions. DOT further ensures that localities will have a say, by incorporating

in its regulations a general requirement that States consult with their local jurisdictions. DOT even includes a set of guidelines to assist the States in assessing the safety of any proposed alternate routes.

Driver training requirements are also carefully laid out in the DOT regulations. Drivers must be trained and certified in the radioactive materials requirements in the regulations, in the properties and hazards of the radioactive materials being transported, and in the procedures to follow in any emergency. A physical security plan is required either by these regulations, or similar Nuclear Regulatory Commission rules.

To date, there is absolutely no evidence to rebut the Department of Transportation's conclusion that nuclear fuel and waste can be transported safely over any interstate highway or comparable route.

NUCLEAR REGULATORY COMMISSION

The Nuclear Regulatory Commission [NRC] is responsible for all safeguards aspects of transportation operations, and also for the regulation of packaging and shipping casks used to transport spent nuclear fuel.

I have before me a model of a typical transport cask that is similar in design to those that will be used by the Department of Energy in the shipment of spent fuel from reactor sites to the geologic disposal facility.

This particular model happens to be one that is for rail shipment, not for highway transport. It is therefore larger and heavier but similar in construction.

You will note by looking at this model that it has aluminum fins on the outside for the dispersal of the heat that is contained in the radioactive rods inside—radioactivity, incidentally, that does not come to the surface. The heat does.

It is followed by a buffer material inside that has a stainless steel cask inside that, with a rod inside that, and an aluminum bedding material in which the spent fuel assemblies are placed with uranium and hydrogenous material to capture the radioactive particles that are still being emitted by the rods which stop short of the surface. The only thing that comes to the surface of the cask is heat.

What kind of test does this kind of cask go through to determine whether or not it is safe for transportation? In order to be certified by the NRC, the casks must be designed to withstand certain hypothetical accident conditions. Accordingly, testing is carried out to demonstrate a cask design's ability to survive the following sequence of events:

Drop test: a 9-m (30-ft) drop onto a flat, essentially unyielding, horizontal surface, striking the surface in a position for which maximum damage is expected.

Puncture test: a 1-m (40-in.) drop onto the upper end of a 15-cm (6-in.)-dia solid, vertical, cylindrical, mild steel bar mounted on an essentially unyielding, horizontal surface. The top of the bar must be horizontal and its edge rounded to a radius of not more than 6 mm (0.75 in.).

Thermal test: a 30-min-duration fire at 800 degrees C (1475 degrees F).

Water-Immersion test—fissile material: submersion under a head of water for at least 0.9 m (3 ft) for not less than 8 hours and in the attitude for which maximum leakage is expected. This test is for fissile material in cases where water in-leakage has not been assumed for criticality analysis.

Water-Immersion test—all packages: submersion under a head of water of at least 15 m (50 ft) for not less than 8 hours.

At Sandia National Laboratory, extensive experiments have been performed that have subjected prototype casks to much more severe accident conditions, for example:

Accelerating a cask-bearing truck to 80 mph, then crashing it into a 700-ton concrete wall backed by 1700 tons of earth;

Broadsiding a cask-bearing truck by a 120-ton locomotive travelling at 80 mph;

Dropping a cask from a height of 2000 feet onto hard ground at a fall of 235 mph;

Subjecting a cask to fire in a pool of aviation fuel six times worse than the regulations require.

In each of these severe tests, the cask survived without failure. Incidentally, in the first two tests I mentioned above, the vehicles were totally destroyed, yet the intergrity of the casks was undamaged.

I have a series of pictures here, Mr. President, and I invite Members to look at the pictures. I have seen the movies from which these still photographs were taken, and they are even more impressive than the still photographs.

This picture shows a cask, a smaller one, designed for highway transport, on the bed of a flatbed trailer. It is a 22-wheeler, not a 16-wheeler. The locomotive is just about to crash into that at 80 miles an hour.

The next picture shows what happens as the locomotive hits that cask. The truck begins to disintegrate, buckles in the middle. This is a fraction of a second farther into the crash, as the truck is beginning to fly to pieces, and the cask is beginning to leave the bed of the truck.

The next picture is a little farther into that crash, and it shows what happens to the truck.

In the next one, it looks like the truck has exploded, but in the midst of all that debris that is flying around, you can see the end of the cask as it starts to leave, somewhat as a projectile.

The next picture shows what remains of the truck and the locomotive. The cask is no longer in the picture. It left the scene.

This is a picture of the front end of the locomotive, which shows how far back into the locomotive the cask went as a result of the impact. You can still see the form of the cask imbedded in the front of that locomotive.

Here is a picture of the cask. You will notice that there are a couple of small indentations in one end, actually slightly punctured the outer containment on one end of the cask, after it had flown several hundred feet through the air. That is a more severe test than any of these casks is likely to undergo in any kind of normal accident that you might see anywhere in transportation, and there was no breach of the integrity of the cask and there was no possible leakage of any radioactive material from that cask in that test.

But even if, somehow, the casks could be destroyed, there really is not any imaginable scenario that would be of much threat to anyone's health or well-being. The material inside simply cannot explode. It is not a liquid nor a gas, but a solid ceramic—so it won't drift away or leak out. Short of the localized cleanup immediately in the vicinity of the cask, no one would be endangered.

And what of theft, sabotage, or terrorist activities that some have postulated? To begin with, the NRC imposes strict physical security requirements on carriers, so as to protect against such incidents. These requirements include armed escorts, advance notification of States, onboard communications, immobilization capabilities, and coordination of shipments with local enforcement agencies. But even if these safeguards somehow failed, what is a terrorist supposed to do with a 40,000-pound shipping cask? It would not exactly be easy to steal one, let alone escape with it and be able to hide it. Getting inside the cask is no easy task—the limiters and closure plugs alone weigh several tons. Assuming a terrorist could remove these plugs, he would immediately be exposed to a lethal dose of radiation before he could figure out what to do with the contents. It is the radioactive nature of the spent fuel that, in fact, is the ultimate deterrent and the final layer of safeguard, that makes all of this speculation merely a mental exercise in how ludicrous one can be. I would be much more concerned about what a terrorist could accomplish with a pound of cyanide than with a 40,000-pound canister of spent fuel.

DEPARTMENT OF ENERGY

The Department of Energy already has extensive experience in the shipment of nuclear materials, largely from its work in the area of defense related nuclear materials. They have also gained great experience from their research in the area of spent fuel transportation and cask design, and through their responsibilities for removal of the damaged fuel from Three Mile Island-2 reactor, and shipment of that fuel in specially designed casks

across the country to the Idaho National Engineering Laboratory in my home State, where it is now being stored.

Under the Nuclear Waste Policy Act, the DOE Office of Civilian Radioactive Waste Management is responsible for developing a comprehensive transportation plan and system for transporting this Nation's spent fuel from commercial reactors to a monitored retrievable storage facility or to the permanent repository. The details of this program can be found in their document entitled "Transportation Institutional Plan" (DOE/RE-0094). This plan will evolve into a very sophisticated program over time, but even in this early stage, it is quite impressive. First and foremost, the Nuclear Waste Policy Act Transportation Program will meet all safety and security requirements of DOT and NRC, recognize and conform to all applicable safety requirements of State and local governments, establish and implement a process of addressing all transportation issues, and foster broad-based participation in this process.

Depending on the type of shipping cask used, DOE estimates that approximately 250 rail and 725 truck shipments will be required annually to move spent fuel from reactor sites to their final destination. This number of shipments should be put in perspective: Shipments of spent fuel represent only a small fraction of the total shipments of nuclear materials in this country. Most of the nuclear material shipments—about two-thirds of the total—are for medical purposes and industrial and research activities. Furthermore, shipments of all categories of radioactive materials—medical, research, fresh fuel, low-level waste, spent fuel, and so forth, represent only 3 percent of the Nation's total shipments of hazardous materials. So we are worrying here about a very, very small fraction of the total shipments of hazardous materials that travel our Nation's highways and railways every day.

In a report prepared by the Office of Technology Assessment in July 1986, on the "Transportation of Hazardous Materials," the OTA found that the level of public protection with respect to spent fuel shipments is "much greater than that afforded in any other current hazardous materials shipping activity," and that "the probability of an accident severe enough to cause extensive damage to public health and the environment caused by a radiological release * * * is extremely remote."

Mr. President, those are not my words. Those are the words of the Office of Technology Assessment.

Data collected by DOT also indicate that the safety of nuclear materials transportation far exceeds the safety record for transporting other energy related hazardous materials. For instance, in the period from 1977 to 1983, DOT recorded over 22,000 incidents related to transportation of petroleum fuel products and natural gas. These incidents resulted in 290 deaths, 2,598 injuries, and over $35 million in damages. The same time period shows a total of 460 incidents related to shipments of all types of radioactive materials—of which spent fuel is, as I have already said, a very small fraction, resulting in no deaths, no injuries, and less that $400,000 of damages.

Now let me ask my colleagues what all this fuss is about? Is it that the hazards of shipping spent fuel are so unacceptable? The figures and the experts say no. Perhaps it is just the same old problem that unfairly plagues the nuclear industry—that is, if it is nuclear, we do not want to accept any risks, despite the benefits that nuclear power brings to this country.

Well, alright, let us assume that that is what people want—that is, no shipments of spent fuel. The logic that follows from this simply astounds me. The assertion being made by some in this Chamber is that "we don't want the Johnston/McClure nuclear waste bill because we don't want shipments of nuclear waste." But these same people are espousing alternatives for carrying out work at all three candidate sites—or perhaps even going back and looking at more than three sites—to eventually, and according to them, more soundly, be able to choose a final site. That still does not make transportation go away. And neither does the option of reprocessing. We would still have to ship the fuel, at some time, to some place; unless, of course, my colleagues who are speaking against shipping nuclear waste actually desire to repeal the Nuclear Waste Policy Act entirely, and simply leave the spent fuel in temporary storage facilities at the 60-odd reactor sites scattered across this Nation.

Mr. President, I ask you, is that a responsible, let alone practical, solution to our Nation's nuclear waste disposal problem? Leave the spent fuel in storage pools, for thousands of years while it decays, open to the environment and the elements and man's intrusion, long after the reactors have shut down and the operators and maintenance personnel have departed? Leave it sitting there in Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Idaho, Illinois, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Virginia, Washington, and Wisconsin? That sure is a great way to share the burden and solve the problem, is it not?

If that is what my colleagues are driving at, then I would suggest that the nuclear utilities of this Nation should file suit immediately for a total refund of the almost $3 billion they have paid into the Nuclear Waste Fund, on the basis of a breach of contract. And I would suggest that each of the States that now have nuclear facilities get ready to bite the bullet, for you will be leaving your children for many generations to come one heck of a legacy.

If I now have your attention, let me offer you an alternative: Let us all do something now that will get this Nuclear Waste Program back on track. Let us remove the program from future political maneuverings of future administrations and future Congresses. Let us not go back and reinvent the wheel, but rather, let us take the work that has been accomplished to date and do something productive with it!

Mr. President, none of the other proposals before Congress, and none of the proposals now under consideration by any committee in the House or the Senate do anything but stall the process, further mire it with delay tactics, and further ensure that some future Congress will have to return to patch it back together again. We may as well do nothing at all.

I would hope that this Senate and Congress had better sense than that. I would hope that the Congress will see the merit of a program that allows decisions to be made in a timely manner, allows work to proceed in a logical and cost-effective manner, and allows us all to get off our soap boxes on this issue and move on to more pressing matters.

Mr. President, I yield the floor.

The PRESIDING OFFICER. The Senator from Nevada.

NEW REPROCESSING TECHNOLOGIES

Mr. HECHT. Mr. President, one argument that has been made against reprocessing spent nuclear fuel has been that reprocessing creates more waste than was initially present. I believe I have shown that there is less high level radioactive waste left over after reprocessing, but there is clearly some left-over high level waste that needs to be dealt with in some way.

Many people have told me they wish the whole nuclear waste issue would just go away. Well, the waste is not going to go away by ignoring it, or by putting it in a repository, or even by Congress passing a law saying that it must go away. However, there may be a way to make high level waste go away by pursuing research on reprocessing and recycling. Let me explain what I mean.

It has been known for quite a while that high level wastes can be burned up in a breeder reactor, but no technology has so far been proven effective that would allow these wastes to be burned up in a more conventional light water reactor.

Well, it turns out that we may be a lot closer to burning up high level wastes in a conventional light water reactor than many have previously believed. We owe this interesting information, indirectly anyway, to no less an authority than the New York Times. In early October that newspaper editorialized that Nevada should be generous and do the other 49 States a favor by volunteering to take all of the country's high level nuclear garbage without asking for any compensation whatsoever. In a letter to the editor published in the October 16 edition of the New York Times, Dr. Meyer Steinberg of Brookhaven National Laboratories, makes some very interesting points in response to that editorial.

Dr. Steinberg points out that the Japanese are in the process of developing a nuclear reactor that burns up the long-lived isotopes that pose the greatest challenge to any nuclear waste management program. These are the very same long-lived isotopes that the Energy Department is trying to figure out how to isolate for 10,000 years. These are the same chemicals that are in fact going to remain dangerous for up to 250,000 years.

I hope my colleagues understand the significance of the fact that we are once again about to allow the Japanese to jump out ahead of us in technology development. The Japanese cannot afford to waste energy, so they don't waste energy. Instead, they try to develop a way to produce energy from nuclear waste that even the advanced European countries have not done. And once again, because of politics and tunnelvision, the United States is going to risk abdicating technological superiority in yet another area to our Japanese competitors. We are planning to put our waste in the ground where we can't easily get at it, while the Japanese are going to be burning theirs to make more cars, more televison sets, and more steel to sell in America.

In the long run, Mr. President, the lack of reprocessing, the lack of nuclear energy, are going to be translated into lost jobs, higher unemployment, a larger balance of payments deficit, a weaker dollar. This is not what I want for our country, and I am sure this is not what anyone in this body wants to see take place.

The good news, Mr. President, is that we don't have to surrender this technological opportunity to the Japanese. After reading his letter to the editor, I contacted Dr. Steinberg, and had a lengthy discussion with him about reprocessing and nuclear waste. He sent me some very interesting material that suggests that we now have the technological ability in this country to burn up the long-lived wastes in conventional pressurized water reactors.

Dr. Steinberg sent me a report done by the advanced energy systems division of Westinghouse Electric Corp. The report is dated August 25, 1987. In the cover letter to the report, Dr. J.E. Schmidt, manager of Nuclear Systems Engineering says:

To my knowledge, this is the first time work has been done to optimize a light water reactor to function as a waste burner. The effectiveness of the pressurized water reactor system comes surprisingly close to the liquid metal fast breeder reactor as a waster burner.

Mr. President, this is just one indication that good, old-fashioned Yankee ingenuity may yet solve this waste problem for us, if we just have the good sense to try. The easiest, and, at the same time the most reckless course for us to take is to turn our back on an exciting opportunity, just because it is unfamiliar and doesn't fit in with our prior view of the world, our preconceptions about what is technologically feasible.

One argument that has been used against long term above-ground storage of spent nuclear fuel is that this somehow leaves the problem for a later generation to solve. But isn't this exactly what we are doing when we put waste down into a repository, where it will remain an ever present threat, not just for the next generation, but for hundreds of generations to come? Wouldn't we be more considerate of those to follow us if we were to take waste that would otherwise sit in a repository for 10,000 years, and instead burn it up in a reactor, so that it will be harmless in just a few decades? I ask my colleagues, which is the more responsible approach? Which is the more cost-efficient approach? Which is the safer approach?

Mr. President, this latest development, which suggests that reprocessing and recycling can virtually eliminate the high level nuclear waste problem, is just the most recent of several promising lines of research on this subject. Reprocessing can solve the waste problem for us, safely and cost efficiently. Let's pursue the necessary research and development. Let's not surrender these opportunities to other countries. Let's not lay a long-lived and unnecessary environmental burden on the backs of future generations of Americans. Let's think before we make the Nation leap into a deep geologic repository.

Mr. President, I ask unanimous consent that Dr. Steinberg's letter to the editor of the New York Times, an article by Dr. Steinberg and others published in the periodical Nuclear Technology, and an excerpt from another paper written by Dr. Steinberg from Brookhaven National Laboratory, all be printed in the RECORD at this point in my statement.

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

LET THE NUCLEAR INDUSTRY EAT ITS OWN WASTE

TO THE EDITOR: Further on "Big Spending for a Spent Fuel Bribe," your editorial (Oct. 4) on the bill introduced by Senator Bennett Johnston of Louisiana that would pay Nevada $100 million a year for 50 years to accept an underground site for spent fuel from nuclear reactors:

The only way to prevent bribery in connection with the nuclear-waste problem is to investigate an alternative to long-term burial. The viable alternative is to return the long-lived nuclear waste to nuclear reactors to be transmuted and burned up. This is possible within the immutable laws of physics and nature.

There are basically two types of waste: (1) very long-lived transuranics, such as plutonium, americium and curium, which require hundreds of thousands of years of storage, and (2) long-lived fission products, such as cesium and strontium, which need only hundreds of years of storage.

By reprocessing spent fuel coming from nuclear power reactors, the transuranics can be extracted and returned in the fresh fuel to the reactors. Even the waste fission products can be returned if only for storage in the reactors for eventual decay if it is not possible to transmute them to short-lived waste. The Japanese are already designing a reactor that burns transuranic nuclear waste. So why are we not doing this?

The official answer is that the Waste Management Act of 1982 does not include recycling nuclear waste. Therefore, the Department of Energy is not required to investigate it even if it does have the potential of solving the problem. Another answer appears to be that it is uneconomical to reprocess spent fuel from reactors. That may be true for recovering uranium and plutonium as fuel; however, reprocessing for waste management is eminently economical for two reasons: (1) to avoid a $5 billion bribe for geological age storage and (2) to avoid shutting down 100 operating reactors, as well as removing the obstacle to starting up new reactors whose nuclear waste no one wants in his backyard.

There is a crying need now to investigate the long-overdue alternative of having the nuclear industry eat its own waste.—Meyer Steinberg.

APEX NUCLEAR FUEL CYCLE FOR PRODUCTION OF LIGHT WATER REACTOR FUEL AND ELIMINATION OF RADIOACTIVE WASTE

(By Meyer Steinberg, James R. Powell, and Hiroshi Takahashi)

(Equations and graphs not reproducible for the RECORD.)

The development of a nuclear fission fuel cycle is proposed that eliminates all the radioactive fission product (FP) waste effluent and the need for geological age high-level waste storage and provides a long-term supply of fissile fuel for a light water reactor (LWR) economy. The fuel cycle consists of reprocessing LWR spent fuel (1 to 2 yr old) to remove the stable nonradioactive FPs (NRFPs) (e.g., lanthanides, etc.) and short-lived FPs (SLFP) (e.g., half-lives of <1

to 2 yr) and returning, in dilute form, the long-lived FPs (LLFPs) (e.g., 30-yr half-life cesium and strontium, 10-yr krypton, and 16×10^6-yr iodine) and the transuranics (TUs) (e.g., plutonium, americium, curium, and neptunium) to be refabricated into fresh fuel elements. Makeup fertile and fissile fuel (FF) are to be supplied through the use of the spallator (linear accelerator spallation-target fuel producer). The reprocessing of LWR fuel elements is to be performed by means of the chelox process, which consists of chopping and leaching with an organic chelating reagent (β-diketonate) and distillation of the organometallic compounds formed for purposes of separating and partitioning the FPs. The stable NRFPs and SLFPs are allowed to decay to background in 10 to 20 yr for final disposal to the environment. The fertile material (FM) (e.g., ^{238}U) and TUs are returned to be reincorporated into LWR fuel elements. The even mass-numbered TUs are efficiently converted to odd mass-numbered FF in the reactor, which then fissions to produce thermal energy and FPs in the LWR. The TUs have high thermal neutron cross sections and are therefore efficiently converted in the thermal LWR. The LLFPs (e.g., cesium, strontium, krypton, and iodine) are recycled in the fuel cycle to decay and become transmuted both in the spallator and the LWR to SLFP and stable NRFP products. Decay is the major mode of transmutation of the LLFPs because of their small thermal neutron cross sections. Some neutron transmutation does occur and shortens the storage times for the LLFPs. In this manner, long-term geological age storage of FP waste is avoided and the need for a new fast breeder reactor economy is no longer a necessity by the utility power industry. The APEX fuel cycle can be beneficially applied to the Th/^{233}U cycle as well as the described U/^{239}Pu cycle. A number of development efforts will be required to bring this system into production: however, no new basic scientific or technical proof-of-principle is needed.

INTRODUCTION

It is well known that Purex nuclear fuel reprocessing for the civilian power program was primarily derived from the need to produce weapons-grade plutonium. Thus ^{239}Pu is solvent-extracted with tributyl phosphate (TBP) from an aqueous nitrate solution of spent fission fuel, and the ^{239}Pu is then recovered and concentrated for mixing with fresh uranium oxide to make up the fuel in a thermal nuclear power reactor.[1] Actually no fuel reprocessing has been performed for the civilian power economy since deferment of reprocessing was instituted by the Non-Proliferation Act of 1976. Thus, most of the reprocessing that has occurred was for the weapons program. The effluent high-level waste (HLW) from these production plants contains up to ~2% of the ^{239}Pu originally present in the spent fuel from the convertor reactor together with the fission products (FPs). The HLW from the fuel reprocessing plants has been stored to date on-site in large engineered storage tanks. Much work is now being conducted to solidify this HLW for placement in underground excavations for geological age storage in so-called "waste isolation" facilities. Because of the ^{239}Pu content, which has a 26,000-yr half-life, this waste requires storage for a quarter of a million years (~10 half-lives) to decay to a biologically acceptable background level, along with other long-lived transuranics (TUs), such as plutonium, americium, curium, neptunium, etc. The longest lived and biologically most hazardous FPs, ^{137}Cs and ^{90}Sr, both of which have half-lives of ~30 yr, require at least 300 yr to decay to background. Actually the bulk of the present waste consists of 80 million gal stored at the weapons materials production plants. The main radioactive products in this aged waste consist of plutonium, and cesium and strontium FPs. The civilian fuel, as mentioned above, is not being reprocessed at this time, but is being stored in pools at the power reactor sites. Eventually these elements will either have to be reprocessed or disposed of.

Weapons materials require high concentrations (>20%) of high grade, high purity fissile material (^{239}Pu, ^{235}U, or ^{233}U). For the thermal fission nuclear burner power reactors, for example, the light water reactors (LWRs), one does not need to concentrate fissile ^{235}U (natural) or ^{239}Pu (made from ^{238}U) or even ^{233}U (made from thorium) to these higher levels for use in the power reactor fuel elements. The fissile fuel concentration in the fuel elements need only be on the order of 2 to 4% to be able to function in an LWR.

We are proposing an alternate new fuel cycle that eliminates the radioactive FP waste effluent and thus avoids long-lived geological age radioactive waste storage [2,3] and supplies fissile fuel for the LWR. For all intents and purposes, this fuel cycle does not have any radioactive waste effluent. Only nonradioactive stable waste, which does not have to be stored in a waste isolation facility and can be disposed of in a normal fashion to the environment, is produced by the system.

APEX FUEL CYCLE

The fuel cycle consists of chemically reprocessing LWR spent fuel that has been aged for 1 to 2 yr. The reprocessing removes the stable non radioactive FPs (NRFPs) (e.g., the lanthanides, etc.) and short-lived FPs (SLFPs) with half-lives of <1 to 2 yr and returns, in dilute form, the long-lived TUs (e.g., plutonium, americium, curium, neptunium, etc.) and long-lived FPs (LLFPs) (e.g., mainly the 30-yr half-life cesium and strontium, 10-yr krypton, 16×10^6-yr iodine, etc.) to be refabricated into fresh LWR fuel elements. The fissile TUs (the odd mass-numbered) will fission and the fertile TUs (the even mass-numbered) will be converted to fissile TUs in the thermal nuclear power reactor. The TUs have large thermal neutron cross sections and can either be readily fissioned or converted from fertile material (FM) to fissile fuel (FF) in the LWRs. Equilibrium concentrations of these materials are achieved in the fuel cycle within a relatively short period of time. Recycling the TUs, which actually act as fuel, adds to the power capacity of the LWRs and does not detract from the neutron economy of the reactor. Because of their much lower cross sections, the LLFPs (mainly ^{137}Cs and ^{90}Sr) are not readily transmuted in the LWRs. For these waste products, we would be relying mainly on the decay process by storage within the fuel cycle. Some transmutation will occur in the spallator and the LWRs, which will shorten the recycle storage times for decay of the LLFPs to stable NRFPs. It is interesting to note that the main LLFPs formed in the fission process are the 30-yr half-life ^{137}Cs and ^{90}Sr isotopes so that no other hazardous long-lived nuclides are expected to be formed on recycling. Over the longer period of time, the total inventory of cesium and strontium thus reaches asymptotic equilibrium values.

To implement the above fuel cycle, it may be possible to use conventional Purex reprocessing; however, we are proposing to improve and design the processing chemistry to accomplish the goal set forth. A fundamental consideration is that the initial purpose of Purex was to produce pure plutonium for weapons. Purex was therefore operated to allow plutonium to spill over into the waste to prevent contamination of the plutonium metal with FPs. In the concept proposed herein, the reverse is allowed for the civilian reactor fuel. The FPs are allowed to contaminate the fissile plutonium, but plutonium is not allowed to contaminate the waste. The purpose of this new reprocessing system is to extract the stable NRFPs and SLFPs with < 2 yr half-life and to allow the TUs and LLFPs to remain in the fuel. Furthermore, to produce makeup FF for fabricating fresh fuel elements for use in the thermal burner LWR power reactors, it is proposed to use the spallator (linear accelerator spallation-neutron target rector) to produce fissile material.[2] Isotopic enrichment of ^{235}U from natural uranium is not needed and the cycle functions in the same sense as a breeder.

CHELOX REPROCESSING

The new reprocessing chemistry, which we call "chelox," involves the use of a chelating agent to extract and separate the stable alkali and rare earth FPs from the higher valent uranium and TU oxides.[4]

This is accomplished mechanically by mechanically chopping the LWR fuel elements and leaching the exposed spent UO_2 with the chelating agent. The chop-leach operation has been highly developed in the Purex process.[4] The advantage of chop-leach is that contamination due to escape of dry particulates and volatiles is minimized.

The β-diketonate chelating chemistry has been tried out in the laboratory for complexing and separating TUs but has never been developed into a fuel processing scheme.[5] The basic physical chemistry of the process is available in the literature and has been extensively used as an analytical procedure.[4] At present, it is visualized that the UO_2 from the spent fuel elements will be contacted with the organic β-diketonate chelating agent at temperatures on the order of 100 to 200 °C to extract most of the FPs and some TUs, leaving the bulk of the uranium and plutonium undissolved. The metal complexing chelating agents have been successfully used in extraction of metallic ore bodies and analyzed by gas phase chromatography.[4] It is proposed that this basic analytical procedure be developed into a process that can extract and partition the TUs and FPs. The type of diketonate and the reaction conditions will be one of the major objectives of the proposed research and development (R&D) task. This R&D will determine the feasibility and the process conditions necessary to obtain the optimum desired separation and partitioning of the stable NRFPs and SLFPs from the long-lived TUs and LLFPs. Once the organometallic compounds of the stable and SLFPs are formed, these compounds will be separated and refined by distillation. Distillation is possible because of the widely differing vapor pressures and volatilities between the TUs and FP chelates.[4]

One of the possible chelating agents has the following structure,

$(CH_3)3C–CO/–CO/–C–CF_2–CF_2–CF_3$,

and is organically 6,6,7,7,8,8,8-heptafluoro-2,2-dimethyl-3,5-octanedione (briefly re-

ferred to as fod). Thus, the chelating reaction of spent UO_2 fuel can be represented as

$$UO_2+FPs+TUs+fod=UO_2+TU(fod)+FP(fod).$$

The fod is a stable organic liquid that can be readily handled in the atmosphere. For process purposes, closed reaction vessels are preferred since elevated temperatures will be necessary. By extraction of the UO_2 and distillation of the organometallic chelate, a separation and partitioning will be obtained, whereby stable NRFPs, SLFPs, and LLFPs will be distilled out from the TUs. The vapor pressures of the lanthanide chelates have values of over 10 mm mercury at 200°C, while that of the uranium and plutonium chelates as low as 10^{-3} mm mercury,[5] thus the relative volatility is large ($\sim 10^4$) and a very large separation factor becomes possible. The fod reagent may be recovered by either extraction with another solvent or by hydrogen reduction. If these are not efficient, the chelated organometallic compound can be roasted back to oxide and the fluorine gas will be recovered for remaking the fod chelating agent. The detailed process chemistry has yet to be worked out in an R&D program. Because we are handling small quantities of FPs, the cost per unit of power produced in the total fuel cycle is negligible. The fod is made from relatively cheap organic materials, e.g., acetone, propionic acid, and fluorine, so that makeup of fod losses should not be costly.

It is important to note that the organic chelating agent is stable in the presence of air and water to temperatures >100°C. However, the radiation stability of the chelating agent must also be determined. Some decomposition can be tolerated because of the relative low cost of the reagent in the total fuel cycle cost. It should be noted that fluorine substitution in the organic structure of the chelating agent increases the chemical and radiation stability of the compound. It should also be pointed out that fod is only one of a number of reagents of the β-diketonate class that can be used, so that there can be a large degree of flexibility in process design with this class of compounds.

The recovered uranium, plutonium, TUs, and LLFPs (cesium and strontium) are mixed together and fabricated back into a fuel pellet. In this fabrication procedure, makeup fertile and, if desired, FF is added to the mixed oxide and then made into an LWR Zircaloy-clad fuel element. If ^{235}U from an enrichment plant is available, this can be used to makeup FF. However, this would eventually deplete all the natural ^{235}U and the nuclear industry would then come to a halt unless a breeder reactor becomes available. It is preferred to have a spallator make up the fissile material inventory for assuring long-term fuel supply for an LWR power reactor economy. The chelox process can also be applied to the breeder cycle, however, because of the advantageous LWR economics, present deployment, and acceptability, a spallator supplying fuel to a number of LWRs is preferred.

THE SPALLATOR FOR FF PRODUCTION

The spallator employs a linear accelerator (Linac) to generate a high energy proton (1 to 2 GeV), which impinges on a UO_2 target and produces spallation neutrons that can be absorbed in FM to produce fissile ^{239}Pu (Refs. 2 and 6). The neutron yield is sufficient so that one 600-MW(electric) beam spallator can supply nine 1000-MW(electric) LWRs with fuel throughout the life span of LWR power reactors. High energy and fast fission produce heat in the target that can be converted to steam to generate the electrical energy necessary to drive the accelerator. The spallator is a self-reliant machine with internal circulation of power. In contrast to the breeder, it is not a net producer of power; nor is it a net consumer of power. It only produces FF for burner power reactors. The breeder is a dual-purpose machine since it produces fuel in addition to power, whereas the spallator is a single-purpose machine producing only fuel and is thus decoupled from the utility power grid.

The spallator consists of two major parts: Linac and a spallation target. Over the past 50 yr, the Linac has been developed into a highly reliable and efficient research tool. Figure 1 shows the main features of the accelerator. There is much confidence that a high current (300 mA at 2-GeV proton) continuous wave (cw) production accelerator can be constructed at a reasonable cost.[6] The target is essentially a subcritical assembly resembling a power reactor without control rods. Figure 2 shows the target reactor design for the spallator. Water-cooled pressurized zirconium tubes house UO_2 target assemblies. The proton beam is magnetically spread into a fan shape, which scans the target tubes by means of a magnet drive. The pie shape of the target is to produce a "hohlraum" to minimize leakage of reflected neutrons.

Table I indicates the design characteristics and the production capacity of the spallator. The basic neutron yield for a UO_2 target from spallation, high energy, and fast fission has been calculated to be equivalent to a net production of 94 fissile atom/GeV porton and is backed up by experiment and neutronic model caluclations.[7,8] The fuel-to-moderator volume ratio in the target is 2.37. There is a power-producing region in the spallator that is behind the under-moderated production section and has a fuel-to-moderate volume ratio of 0.5. The peaking power density is not any higher than in an LWR. The yield indicated is for reenriching the spent UO_2 from the LWRs, which would have a fissile concentration of ~2.5%. The target reactor is designed to provide just enough heat to power the accelerator. A conservative accelerator efficiency of 50% (line energy to beam energy) and a target power cycle efficiency of 33% were assumed. At a 75% power factor, the production rate of the machine is 3300 kg/yr of plutonium, which is enough to provide fuel on an equilibrium basis for nine 1000-MW(electric) LWRs. Although the spallator target is subject to decay heat, it is a subcritical assembly that shuts down when the beam is turned off. In this respect it is safer than an LWR.

TABLE 1.—*The Spallator—Accelerator Spallation Reactor—Production Capacity and Design Characteristics*

Proton energy	2 GeV.
Net fissile atom yield for UO_2/Zr clad-H_2O cooled.	94 fissile atom/GeV proton.
Current cw	300 mA.
Beam power	600 MW.
Accelerator efficiency	50%.
Power to accelerator	1,200 MW(electric).
Power generated in target.	3,600 MW(thermal) (self-sufficient).
Plant factor	75%.
^{239}Pu FF production rate.	3,300 kg/yr.
FF needed for 1 to 1,000 MW(electric) LWR 75% power factor and 0.6 C.R.	360 kg/yr.
Number of 1,000-MW(electric) LWRs supported.	Nine.

Table II gives an estimate of the spallator cost and Table III shows a comparative cost analysis for (a) a spallator providing fuel for nine LWRs, (b) a conventional LWR economy without plutonium recycle, (c) an LWR economy with plutonium recycle, and (d) six breeders providing fuel for three supported LWRs to provide a total equalized power generation of 9000 MW(electric). The breeder has a doubling time of ~20 yr. The spallator/LWR economy indicates a 15% lower total lifetime capital investment than the breeder/LWR economy mainly because each breeder costs 70% more than each LWR (Ref. 9) and the inventory of fissile material for the breeder is higher than for the LWR. It also appears that, under present cost assumptions, the spallator is competitive with the present ^{235} U-fueled LWRs even with reprocessing. Besides being more economical, the spallator allows the utilities to continue using LWR technology, which has become commercialized, and is safe and licensable. The fast breeder reactor has not yet reached this position.

TABLE II.—*The Spallator—Accelerator Spallation Reactor—Capital Investment* [a]

Linear accelerator = $1000/kW(electric)[a] × 600 MW = ×	600×10^6
Target = 1200 MW(electric) × $1,000/kW(electric)[b] =	$1,200 \times 10^6$
Total cost	$1,800 \times 10^6$

[a] In 1980 dollars.

[a] Based on Refs. 2 and 6, the earlier estimates indicated a unit cost for the accelerator of $560/kW(electric) of beam power. For this comparative estimate, we practically doubled the cost to $1000/kW(electric) to account for escalation and contingencies.

[b] Target cost is assumed to be equal to an LWR power reactor in terms of unit power generation.

A flow sheet of the entire APEX process concept is given in Fig 3. The chelox fuel reprocessing scheme is shown in Fig. 4.

A possible disadvantage that might be cited against the APEX system is that radioactively hot elements would have to be handled for loading into the reactor. However, this should not be difficult since radioactive elements are handled when they are taken out of a reactor, so why can they not be handled when they are put into a reactor? Moreover, this would be an advantage from a proliferation point of view, because it would make diversion of hot elements much more difficult. It should also be noted that the NRFPs and SLFPs with <1- to 2-year half-life are stored in tanks for periods on the order of 20 yr to decay these isotopes to background before disposing of them in the environment or placing them back into the uranium mines as stable NRFPs. These may also be used for new stable isotope sources that are not available in nature.

Figures 5 and 6 show calculations for recycling the TUs and the cesium and strontium in accordance with the flow sheet shown in Fig 3. As can be seen, the TUs quickly reach equilibrium on recycling and also add FF in the normal way that a thermal reactor converts fertile fuel to FF, which then fissions and produces power. With internal fuel cycle storage of the cesium and strontium, these are decayed and reach near-asymoptotic values in the fuel cycle as given by the data shown in Fig. 5. The neutron economy penalty in the LWR is small because of the small thermal neutron cross sections and limiting the concentration through decay in intermediate process storage vessels. Most of the conversion of the cesium and stronti-

um is by means of the decay mechanism and a smaller portion is by transmutation through neutron absorption in the spallator and LWRs. Any transmutation will hasten the approach to an equilibrium concentration value for the LLFPs.

TABLE III.—NUCLEAR ENERGY ALTERNATIVE SYSTEMS COMPARISON*

	Spallator one spallator/nine LWR's	LWR with no recycle	LWR with recycle	Breeder (LMFBR) six breeder/three LWR
Number of reactors [1,000 MW(electric)]	Nine	Nine	Nine	Nine
Capital cost [$1,000/kW(electric)]:				
LWRs	$9.0 × 10⁹	$9.0 × 10⁹	$9.0 × 10⁹	$3.0 × 10⁹
Breeders				$10.2 × 10⁹ a
Capital cost of spallator	$1.8 × 10⁹			
Natural uranium feed (30 yr)	Negligible	54,000 tonnes	18,000 tonnes	Negligible
Enriched ²³⁵U fuel		243 tonnes (3.0%)	81 tonnes (33%)	
Total cost of natural uranium feed at $40/lb		$4.3 × 10⁹	$1.4 × 10⁹	
Cost of enrichment, $100/SWU		$2.9 × 10⁹	$1.6 × 10⁹	
Fissile material inventory b	61 tonnes	47 tonnes	47 tonnes	59 tonnes
Fissile inventory cost at $40/g	$2.4 × 10⁹	$1.9 × 10⁹	1.9 × 10⁹	$2.3 × 10⁹
Cost of reprocessing plant c	$0.3 × 10⁹		$0.3 × 10⁹	$0.3 × 10⁹
Cost of fuel fabrication plant c	$0.3 × 10⁹	Negligible	Negligible	$0.3 × 10⁹
Cost of waste storage	Negligible	$1.4 × 10⁹	Negligible	Negligible
Total cost	$13.8 × 10⁹	$19.5 × 10⁹	$14.2 × 10⁹	$16.1 × 10⁹

* Lifetime capital investment in 1980 dollars.
a There is a projected 70 percent cost differential between a 1,000-MW(electric) LWR ($1 × 10⁹) and a 1,000-MW(electric) LMFBR ($1.7 × 10⁹).
b Fissile material inventory for one spallator/nine LWRs = 50 tonnes (23.4 in-core and 23.4 out-of-core); for six breeder/three LWRs 59 tonnes (29.4 out-of-core) – (one LWR core contains 2.6 tonnes; one LMFBR core contains 3.6 tonnes).
c Estimated total cost of reprocessing plant is $1.5 × 10⁹ for reprocessing fuel from 60 LWRs. Hot fuel fabrication estimated to be equal to reprocessing.

The above process concept can also be applied very advantageously to a Th/^{233}U fuel cycle. The spallator would produce the ^{233}U inventory from natural thorium. Furthermore, since the conversion ratio in the ^{233}U LWR cycle is higher than in the U/^{239}Pu LWR cycle, more LWRs can be supplied from each spallator. There is also an advantage of the Th/^{233}U fuel cycle in that no long-lived TUs such as ^{239}Pu are formed.

The advantages of the APEX fuel cycle with chelox reprocessing are several-fold, as follows.

1. A nonaqueous fuel reprocessing system is proposed in contrast to that of the aqueous Purex process with all its difficulties of handling highly corrosive reagents.

2. We can afford to leave a small amount of stable FPs in the low concentration FF recycled so that high decontamination factors required of the discard stable waste product are more easily obtained. This is in contrast to the conventional Purex waste, which has to be sharply separated from the plutonium in order to maintain high plutonium purity (a holdover from weapons production). As a result, residual plutonium remains in the effluent waste. Additional decontamination of the waste by going through a second TBP extraction cycle is possible with Purex, but evidently has not been found worthwhile for the weapons program or even for further cleanup of the waste for the civilian power program.

3. The temperature of the chelox process is not very high, reaching a maximum on the order of 250°C in the chelate process. A chop-leach operation with the chelating agent is preferred because of less particulate contamination and lower temperature reprocessing.

4. The handling of radioactively hot recycled fuel elements can be a deterrent to FF diversion for weapons. Additionally, remote handling of nonaqueous concentrated fissile material may be less hazardous than remotely handling corrosive liquids and gases.

5. The entire process scheme supports a long-term LWR economy so that the electrical utilities do not have to learn a new technology and install new and more expensive reactors, e.g., the liquid metal fast breeder reactor (LMFBR).

6. The process system concept can be equally applied to uranium or thorium in an LWR fuel cycle economy through the production of either ^{239}Pu from uranium or ^{233}U from thorium in the spallator. A long-term supply of fuel is available without the necessity of developing the LMFBR.

7. The objective of the concept is that only stable FPs are discarded as a waste so the public does not have to be concerned about long-term terrestrial geological age storage of long-lived radioactive waste.

Table IV and V list additional advantages of the APEX fuel cycle with spallator fuel production and chelox reprocessing. The system solves the problem of fuel supply and waste management for a long-term LWR power reactor economy. It is recommended that an R&D program be initiated to (a) develop the reprocessing chemistry of the organic chelating process (b) develop in detail the entire APEX fuel cycle flow sheet design, and (c) make a realistic economic assessment.

It is realized that we are recommending a new approach for the nuclear industry that may take a good deal of development funds and a number of years to reach commercialization, however, it should take much less than the ~40 yr it took the United States to get to the present position, with the same unsolved problems of fuel and waste still facing us. Unless the nuclear industry takes a new approach and solves the problems of concern to the public, we may not have a nuclear industry to be concerned about. There is still some opportunity for country and industry to attempt to take a path divergent from the well-known path. We may find it to be a shortcut to establishing a firmer nuclear industry. The APEX system with spallator and chelox appears potentially technically sound and economically viable.

TABLE IV.—*Advantages of APEX Nuclear Fuel Cycle*

Producers long-term supply of nuclear fuel for the LWR power reactor economy

Produces initial reactor inventory for fuel cycle; either fissile ^{239} Pu from natural ^{238}U or fissile ^{233} U from natural ^{232} Th

Eliminates need for a long-term geological age storage of radioactive FP and TU waste

Eliminates need for enrichment plant

Potentially more economical than a fast breeder reactor power and fuel cycle

Utilities need no new power reactor technology

The conventional LWR power reactor technology is sustained. The utilities need essentially no new licensing and safety procedures

Relatively low temperature, nonaqueous, noncorrosive, nonmechanical, reprocessing (chelox) of fuel is employed

The APEX fuel cycle uses near-term technology. No need to demonstrate a scientific principle (e.g., fusion)

TABLE V.—*APEX Is a Safer, Economical, and More Proliferation Resistant Fuel Cycle*

All fissile material is maintained in dilute form (<4%).

Inventory is the lowest of any fuel cycle (less than breeder)

Thermal reactors are a known technology with an excelled safety record

Spallator target is a subcritical reactor

Spallator produces fuel only on demand—it is a single purpose machine. An LMFBR, which is a dual-purpose machine, produces power as well as fuel

The spallator is an independent machine—decoupled from any power grid except for startup; unlike LMFBR and enrichment plant, which depend on the power grid

The FP contamination of fissile materials is allowable in civilian fuel cycle. Plutonium for weapons requires high purity; contamination of plutonium is not allowable, resulting in plutonium contamination of FP waste

Fuel elements in and out of reactor are radioactive, making them more difficult to

divert for producing weapons material; also plutonium is isotopically contaminated making it a poor weapons-grade material.

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ON THE SUBJECT OF THE DEVELOPMENT AND RELATIONSHIP OF NUCLEAR POWER AND NUCLEAR WEAPONS—EVOLVING AN ACCEPTABLE NUCLEAR POWER FUEL CYCLE

(By Meyer Steinberg)

NUCLEAR WASTE MANAGEMENT

In any discussion with the public on nuclear power, questions arise concerning the disposal of radioactive waste from nuclear power plants and the nuclear fuel cycle. It should be noted that there are several kinds of waste from the nuclear fuel cycle. There is low-level waste usually incidental to operations of the nuclear power plant itself. Then there is high-level waste from the fuel reprocessing plants which originates from the fission fragments after fuel elements are burned in the reactor to make power. Now, here is where a grave mistake is being made by the nuclear energy establishment. As mentioned above, the civilian nuclear power fuel cycle has been adopted from the nuclear weapons program. As a result, the only method proposed is the solidification and encapsulation of the long-lived waste emanating from the fuel element reprocessing plants and ultimate storage in geologic-age formations for hundreds of thousands of years. A site, therefore, must be chosen for this purpose. A finite risk exists in any geologic-age storage system that something will go wrong that will cause contamination in the region. For this reason local and regional authorities are strongly opposed to having these waste repositories located in their neighborhoods. Is there an alternative? Yes, if one takes a fresh, objective, and unbiased view of the civilian nuclear fuel cycle. What is the difference between the civilian cycle and the military weapons fuel cycle? First, the civilian power fuel cycle needs only slightly enriched uranium or plutonium fissile fuel concentrations, as opposed to highly enriched fissile uranium or plutonium material needed by the military. Secondly, the military is not concerned with losses of fissile material into the waste streams from reprocessing plants, especially in times of crisis such as World War II, when thought about ultimate disposal was given to the waste stream from weapons materials production plants beyond storage for 20 years or more in engineered waste storage tanks, which is essentially what has been done.

The civilian program, however, is concerned with ultimate safe waste disposal. It is interesting to note that the military waste is not considered, under the Nuclear Waste Management Act of 1982, to be part of the civilian waste only because the military cannot be held responsible for ultimate waste disposal. Without military waste, the present waste management problem would hardly exist since civilian waste makes up less than 1% of the total high-level waste, mainly because reprocesssing of civilian reactor fuel has been severely limited and is currently not being done. The last statement, however, refers only to reprocessing plant wastes. In actual fact, we are building up a very large inventory of power reactor spent-fuel elements in storage awaiting disposal. These spent-fuel elements contain a concentration of a little over 1% fissile plutonium, which if not retrieved by reprocessing would have to be contained for a quarter of a million years to decay safely to acceptable background levels. The retrieved waste isolation facilities are being designed for 10,000-year storage which is assumed to be acceptable. However, who can really guarantee man-made safety for this long a period. The present Purex plant reprocessing high-level waste stream contains about 0.04% plutonium concentration which represents a loss of at least 1.0% of the plutonium in the fuel element. Reprocessing recovers a large portion of usable fuel in the form of fissionable plutonium and uranium and, thus, represents a considerable benefit in terms of the economics and fuel conservation. If the fuel elements are buried permanently without the possibility of retrieval some time in the future, the quantity of plutonium to be disposed of would amount to about 200 times that currently planned for storage of high-level radioactive reprocessed waste. If solidified and encapsulated high-level waste is not now acceptable for long-term storage, then unreprocessed fuel elements, which contain much higher concentration of Pu, should be even less acceptable. I believe that most responsible scientists and engineers are convinced that reprocessing will eventually be necessary for removal of plutonium and uranium from spent-fuel elements. The present plans for storage away from on-site power reactor water pools are being considered as intermediate repository sites for short-term safety. Further repositories of spent-fuel elements are being planned so that the spent-fuel elements can be retrieved eventually for reprocessing.

So we are still left with the problem of long-term geological-age storage of fuel reprocessing plant waste. The alternative I have been leading up to is a reprocessing plant design to produce only slightly enriched (low-concentration) fissile fuel material suitable for LWR civilian power reactor fuel which will result in a waste stream containing no plutonium or uranium. I am suggesting three principal departures from the existing military plutonium production reprocessing plants. One is to reduce the plutonium (and transuranics) content in the waste processing stream to zero, (defined as the equivalent of uranium mine tailings) thus eliminating the need for long-term geological-age storage which is currently unacceptable. The second principal departure is to control the separation of plutonium so that the resulting concentration is limited to no more than 3 or 4% in the recovered fuel. This concentration is sufficient for the operation of LWR power plants and would represent an additional safeguard against proliferation of weapons material in that nowhere in the fuel cycle would we have highly concentrated or pure plutonium. The question arises as to whether such a reprocessing plant with such specifications can be designed and made to function. There is no technical reason why such a plant cannot be achieved. It took many millions of dollars to develop the solvent extraction Purex process to produce an ultrapure weapons plutonium with a 1.0% waste stream loss. It may take additional millions to design a plant to produce an impure plutonium fuel material at a low concentration level with a waste stream that does not contain any plutonium, although I am not certain, even after all costs are included, that such a plant would cost more than a conventional Purex plant. But if it did, as the advertisements say, "it sure would be worth it." So far, I have been mainly considering the possibility that the present Purex plants could be designed to meet these specifications. However, even if another type of process is required, which would probably be costly to develop and put into operation, it would still be worthwhile. The avoidance of geological-age storage could make the difference between final acceptance or rejection of nuclear power.

The third principal departure is to recycle the plutonium transuranics and long-lived fission products back into the fuel elements and extract only short half-life (less than 2 years) and stable fission product.

To thoroughly understand the implications of my proposals, a further explanation of radioactive waste management is needed. There are several categories of fission product waste. The high-level radioactive waste consists of three categories (1) the long-lived plutonium and transuranics elements waste having half-lives on the order of tens of thousands of years, (2) the intermediate half-life wastes which are mainly the fission products cesium and strontium waste with half-lives on the order of tens of years (30 years for Cs and Sr), and (3) short half-life waste containing fission products with half-lives no greater than about 2 years. There is also a non-radioactive (stable) fission product waste which must also be disposed of.

Taking the radioactive waste categories in reverse order, and keeping in mind the rule of thumb that it takes about 20 half-lives to reduce the waste to background level, the short half-lived (<2-yr) waste can be stored for 20 years in ground-level tanks to decay to background much as is now being done. The intermediate (~30-yr) waste must be stored for 300 years, which is certainly more acceptable than the 240,000 years necessary for the plutonium and the transuranics.

However, even here an alternative exists and that is to recycle the intermediate waste into the fuel elements. This would be similar to recycling the plutonium and transuranics into the fuel elements so that there would be no release to the environment of both intermediate and long-lived waste. Thus, what would come out of a waste reprocessing site would be essentially only the nonradioactive, stable, fission product waste.

The concept of fuel reprocessing and waste management is, therefore, to decay out the short-lived waste, recycle the intermediate and long-lived waste, and extract only the nonradioactive stable waste. The questions to be asked are, what does this fission product recycling do to the light-water reactor fuel cycle and the operation of the civilian LWR power reactor? First, after reprocessing and fabrication of fresh fuel elements for insertion into the reactor, hot radioactive fuel elements would have to be loaded into the reactor. At present, essentially cold non-active fuel elements are inserted into the LWRs. Fabrication must be done remotely, which is feasible, and handling hot fuel elements as they go into the reactor is not bad at all, since this recycled fuel would be much less radioactive than the hot spent elements that are not taken out of the reactor. All the short-lived highly radioactive elements will have decayed and been removed. If highly radioactive fuel can be removed safely from the present reactors, then much lower level radioactive elements can be inserted into the reactor. Furthermore, there is some advantage to providing a fresh radioactive fuel element to be inserted into the reactor since it would be less prone to theft or vandalism, much as the present spent-fuel elements are thought to be better safeguarded because of their inherent radioactivity. The present nonradioactive fresh fuel elements are a concern for unscheduled removal and vandalism.

The second question is what happens to fission products with long and intermediate half-lives, and how do they affect reactor operations? The neutron physics of the fission products is such that the plutonium and transuranics have high thermal neutron absorption cross sections so that the even mass-numbered transuranics, which are not fissionable, absorb a neutron and become odd-mass-numbered transuranics, which are fissionable, and these in effect add to the reactivity and fuel value in the reactor. The uranium-plutonium transmutation chain is just such a typical example of this process. Uranium-238 (even) absorbs a neutron and becomes ^{239}U (odd) which fissions and creates the desired nuclear energy in the power reactor. The intermediate fission products mainly consisting of ^{137}Cs and ^{90}Sr have very low thermal neutron cross sections and as a result build up in concentration. However, these decay on a 30-year half-life basis to nonradioactive material which can be chemically separated as part of the stable waste in the reprocessing plants. Some amount of transmutation would take place in recycling through the power reactors; however, the Cs and Sr isotopes would mainly decay radioactivity and would be allowed to build up to a considerable concentration (possibly as high as 10%) in the reactor which should not affect the reactivity and the power level of the reactor by more than a few percent. The reason for this is that because the Cs and Sr have very low neutron cross sections they, in effect, act only as diluents in the fuel. If they did not act as diluents, they would never have survived in the reactor in the first place. The transmutation of the Cs and Sr will eventually take place through radioactive decay aided by some small amount of neutronic transmutation and reach an equilibrium concentration value over an extended period of time. It is also recognized that there are other amounts of radioactive elements that are difficult to handle as ^{85}Kr and ^{129}I; however, these can also be handled by recycling the fuel elements into the LWRs when we put our minds to it.

So what am I in effect advocating? I am advocating that the fuel cycle consist of recycling the high-level plutonium, transuranics, and intermediate-life Cs and Sr, storing the short-lived waste for 20 years in engineered ground-level storage tanks, and extracting only decayed stable nonradioactive waste. Some of the stable waste would actually be useful isotopes now scarce in nature such as Xe, Pd, and Rh. Reprocessing should be geared primarily to producing a clean waste rather than clean weapons material. In effect, all the radioactivity would be held in the well-shielded reactor core as it now exists during reactor operation and in the waste reprocessing plant and ancillary storage equipment as it is currently treated. At the end of a reactor's lifetime when it is decommissioned, the reactor core would be transferred to a new reactor power plant so that the nuclear power plant would, in addition to producing power, serve as aboveground monitored storage facilities for long-lived fission product fuel and waste. Radioactivity would be limited to in-reactor nuclear power plant sites and a few fuel reprocessing sites.

However, disposal of low-level waste will always be necessary. The low-level waste comes from small amounts of radioactivity from water cleanup and housekeeping systems at reactor power plants, from various chemical cleanup streams in the fuel reprocessing plants, and from the commercial and medical use (radiation tracer and radiopharmaceuticals) of radioisotopes. These must be given serious consideration, although they are of less concern to the public by orders of magnitude than the high-level fission product waste. Low-level wastes are usually very low in concentration and consist primarily of intermediate or short half-life material. Processes exist for concentrating their wastes to very small volumes which are acceptable.

THE CONCERN OF NUCLEAR WEAPONS

The initial manifestation of nuclear energy, as noted above, was from atomic bombs. It is no wonder that the public associates nuclear weapons with nuclear power. Certainly the same material that produces nuclear power also is used in making nuclear bombs. From the point of view of reactor safety, I believe the public has accepted the idea that nuclear reactors cannot blow up. The public, however, tends to believe that reactors can melt down and can leak, but they have to be reassured that this threat can be mitigated by safe practices in reactor design and operation. However, there is no way to mitigate the effect of atomic bombs. Atom bombs were originally produced to protect our society by destroying the enemy's military capability. That was fine until our perceived enemy achieved a nuclear stockpile of his own and thus we now live under the fear of mutual assured destruction (MAD), which is viewed by many as the principle that has kept peace. The present administration is attempting to alter this principle by proposing a "star wars" strategic defense initiative. This is very controversial and a long way from reality. There is even a further recently dramatized threat of a "nuclear winter" created by nuclear explosions, which would virtually jeopardize and destroy large portions of the world's population and cultural areas. With each of the superpowers possessing 30,000 nuclear weapons and still building more, is it any wonder that movements demanding a nuclear freeze and organizations for a sane nuclear policy have grown up around the world? A movement is currently underway to restart the nuclear arms agreement talks between the U.S. and U.S.S.R. An interesting proposal is being promoted by such well-known individuals as Dr. Glenn T. Seaborg, the discoverer of plutonium, and retired Rear Admiral Gene R. Laroque (USN), who are working to obtain a Comprehensive Test Ban (CTB) by the 40th anniversary of the bombing of Hiroshima and Nagasaki which took place in August 1945. A number of retired military men are also working to achieve a CTB as an important first step toward nuclear disarmament. Under the present political climate, it would be a miracle if CTB could be achieved by August 1985, although miracles of this type do happen from time to time.

Some day in the not too distant future, it is conceivable that both sides will agree on a reduction in the nuclear weapons stockpiles. Let us examine this possibility from a technical point of view. Each bomb contains about 20 pounds of plutonium so that the total stock pile consists of about 600 tons of plutonium in the world. We have about 300 tons and they have about 300 tons. How do we reduce this inventory? It is recognized that tritium is also a component of thermonuclear weapons, but this isotope is not of great concern because it cannot be made to explode alone, and because it decays relatively rapidly with a half-life of 13 years so that in about 100 years it is completely gone. The plutonium and transuranics are the primary causes of concern.

There are several suggested methods of dealing with the plutonium excessed from the disarmed weapons: (1) disposal into outer space, (2) burial in geological-age storage, (3) destruction by exploding underground or in outer space, (4) just leaving the warheads stored as they are now, and (5) using the plutonium for fuel elements in light-water reactors. The last method is the only disposal method that all would agree on. The risk of an abort in launching plutonium into outer space and the risk of contamination of outer space precludes outer space disposal. Underground explosion leaves residual radioactivity both of plutonium and fission product material. Building geological disposal sites is equally unacceptable, since this in effect produces a plutonium mine for future use as in the case for burial of fuel elements mentioned above. Burning plutonium in civilian power reactors is the only alternative. In effect, burning plutonium in power reactors transmutes the plutonium to short-life, less dangerous radioactive fission product elements. If we took our 300 tons of plutonium and burned it in our 80 reactors in the U.S. today we would have enough fuel to power these reactors for as long as 20 years. The bonus would be that we would generate much more energy from the plutonium than the large amount of energy we expended in producing the plutonium in the first place. Of course, the most important major step necessary to implement this procedure would be to obtain an agreement to carry out this arms reduction with our perceived enemy in a verifiable manner. This can be achieved by

each side actually supplying weapons plutonium to certain power reactors on a mutually agreed upon basis. The International Atomic Energy Association could early monitor this activity. The main point, I am making here is that unless the world has operating civilian power reactors, the world will not have the capability of reducing and permanently disposing of the huge stockpile of weapons plutonium and thus we will never be able to resolve our nuclear weapons dilemma. The antinuclear establishment should well recognize that if we are to find a way out of the nuclear age, we must first eliminate our nuclear weapons. If we do not have civilian power reactors to burn up these weapon materials, then the alternative is either a nuclear holocaust or the fear of one for the next quarter of a million years.

It is interesting to note that those that are concerned about proliferation fear that the civilian nuclear power reactors are a source of plutonium which can be fashioned into bombs. Although this is certainly a possibility, I believe the reverse is more than equally true. Civilian nuclear power reactors are a means of getting rid of bomb material. Leadership and education and a desire to settle our differences other than by force will certainly prove this to be the case.

At present, a controversy is raging concerning the need for nuclear power and that new nuclear reactors are costly. This has come about through a combination of factors including mismanagement on the part of utility plant constructors and operators and increasing conservation. Certainly many other countries have experienced these problems and are pursuing development of nuclear energy at a rapid rate. Most agree that in the next 50 years or so our fossil fuels will become exhausted and nuclear power supplemented by solar power will be needed and will become economical once more. However, even if there is no other reason to operate and build reactors today, there remains one compelling reason, and that is to continue to operate nuclear reactors to maintain the capability of burning up the nuclear weapons stockpile. The alternative is to live in fear of a nuclear disaster forever.

The bottom line is that the public should be strongly against nuclear weapons, which it is, and very much for nuclear power, which at present it is not. While we have the time, because of the present availability of nonnuclear energy resources, we should make civilian power reactors safer, we should revamp our nuclear fuel cycle to make it more acceptable, we should recycle our radioactive waste, we should operate a fuel reprocessing system to produce clean waste, we should produce fissionable plutonium and uranium only on demand by a non-reactor fuel production technique, and—most important—we should reduce the world's nuclear bomb stockpile by burning the plutonium weapons material in civilian power reactors.

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LONG-TERM STORAGE

Mr. HECHT. Mr. President, this past spring, I joined several of my colleagues in making an inspection trip to Europe, which involved visits to nuclear waste facilities in France and Sweden. I met with the top nuclear energy officials of these Nations and learned a lot about how the American nuclear waste program can be improved. The single most important lesson I learned, Mr. President, is that this Nation can take one very simple and inexpensive step which has huge payoffs in terms of improved safety and reduced costs.

In those countries that have successful nuclear waste programs, high level nuclear waste is first stored for 30 to 50 years, so it can cool down and become less radioactive before permanent disposal takes place. We should apply this safety lesson to our own nuclear waste program. However, the current plans of the Energy Department are to put nuclear waste into a repository after only 5 to 10 years of cooling. The European scientists told me that they would not dream of putting waste into a repository after only 10 years. They said it was unsafe, and I am convinced they are right.

Mr. President, I have made it very clear that I am opposed to deep geological disposal of spent fuel. I don't think it has been proven safe. I know it will be terribly expensive, and I don't see how the Congress can be so eager to rush off and spend about $40 billion of the American people's money when the stock market is undergoing a very difficult period, when the American people are waiting to see if the Federal Government can finally get its act together and do something about this disgraceful deficit. Do we really want to go full speed ahead on a program of unproven safety and huge costs, when we know that there is a safe and proven alternative readily available? What sort of message are we going to be sending to the American people here as we debate this bill?

High level nuclear waste should not be shipped to a repository until it has been aged for at least 40 years. At that age, spent fuel is much cooler, much less radioactive, and therefore less dangerous to the public health and safety and the environment. It will also make the waste safer, easier, and less expensive to handle and to transport.

Long-term storage deserves the support of not only those Senators from a State where a repository may eventually be located, but also those who represent the 35 or more States through which the waste would be transported on its way to any repository, whether it might be in Washington, Nevada, or Texas.

I understand that some of my colleagues think that a repository program is really the right way to go. Others may feel that while it may not really be the best policy for America. It's part of a compromise deal they agreed to back in 1982, and they now feel honor bound to follow through on that deal, no matter how sour it has turned out to be, no matter how bad a bargain it seems in hindsight. And so let me point out that one can be in favor of a repository program, even one similar to the latest schedule of the Energy Department, and still support long term storage. Long term storage of spent fuel will not kill the repository program, even though I am convinced that program is a serious mistake, and ought to be put out of its misery now.

Some have complained that they don't want to have spent nuclear fuel lying around their States for 40 years before it goes to a repository. They claim that is far too long a period of time. Yet they have no problem with forcing Nevadans to keep this waste in our State for 10,000 years! How can one justify putting this waste in an unproven facility in my State, not just for 10,000 years, but for all time, and at the same time object to keeping it a few short years where or near it is generated, in facilities that have already been licensed by the Nuclear Regulatory Commission, that are already in use here and abroad, that have already been proven safe?

Long term storage is practical. Sweden and France do it at MRS-type facilities, and American electric utilities are now capable of similar technology at the reactor site. Modular dry cask storage is already being used at the Surry Nuclear Powerplant in Virginia, and similar technology has been licensed in the Carolinas. Very recently, the Nuclear Regulatory Commission licensed the first American-made modular dry cask. Clearly, we have this technology here and now, ready to be used whenever it is required.

There are many excellent reasons to support long term storage of spent fuel:

First. Other countries, which have successful waste programs, have adopted long term storage as part of their plans. This is therefore an approach that is working elsewhere. We know it can work here, too. We should not try to reinvent the wheel with the American people's money.

Second. Transportation of older spent fuel will involve far fewer risks because it will be thermally and radioactively cooler. In contrast, under the current program, the Energy Department would ship 3,000 metric tons of

highly radioactive spent fuel, posing serious safety risks, through most of our States beginning about the year 2003. It only makes sense to start slow, and to start safe.

Third. After long term storage, there is less danger involved at the repository site, because the material being disposed of has already lost most of its radioactivity.

Fourth. The reprocessing option is realistic as long as the spent fuel is still accessible above ground. As a practical matter, if the fuel is in the ground, it's not going to come out again. Why not keep our options open? Reprocessing may not be economically attractive right now, but think how much energy prices have changed in this country over the last 40 years. Imagine how much higher they are likely to be 40 years from now, even 20 years from now! Sooner or later we are going to want, going to need, to recycle that spent fuel and make fuller use of its energy potential. Let's not rush off now and put this energy resource somewhere that is going to be awfully difficult to get to when we need to retrieve it.

Fifth. It may turn out that another disposal method, such as subseabed disposal, eventually is proven superior to deep geologic disposal in the continental United States. Long term storage allows the research on alternatives to be finished long before the waste actually needs to be disposed of, so our final decision will be a fully informed decision.

Mr. President, long term storage of spent fuel before shipment to a repository, or a reprocessing facility, is technology that is available now. It is being used successfully in other countries, and it is being used in America today.

Thank you Mr. President, I yield the floor.

Mr. REID addressed the Chair.

The PRESIDING OFFICER (Mr. CONRAD). The Senator from Nevada.

Mr. REID. Mr. President, I am prepared to discuss some additional matters which have been raised.

First, Mr. President, I compliment my senior Senator on his remarks. I also think it is important to comment on some of the statements made by the Senator from Idaho regarding transportation of nuclear waste.

Mr. President, the people of this country know that there are certain things that we must be aware of.

First of all, when someone tells us that the Federal Government will take care of you, our eyes should immediately become wide awake.

We know that the law in the area is that, of course, States can give comment to the Department of Transportation and the Nuclear Regulatory Commission as to how the transportation of nuclear waste should be. But we also know that a circuit court of appeals said when those are in conflict, basically whatever the Department of Transportation wants as relates to high-level nuclear waste prevails.

So the local entities can give any input they want, but if the Department of Transportation wants to disregard it, which they have done most of the time, then it has no bearing whatsoever.

It is clear to me that the words of Jefferson are more important now than ever when he said that the government closest to the people is the best.

This has been totally disregarded.

I would also state that in test, by test, by test, as to what they have done to protect these casks, or cannisters, we must recognize that the fire test, as I recall, is for 30 minutes. After 35 minutes, though, the test showed that the cannister would not hold. It caught fire and did, in effect, blow up.

So I think we are evading the point, the point being that all we have talked about here is transportation. Of course transportation is a concern because we spent several minutes in the week gone by talking about the concern people throughout this country should have, in St. Louis, in Buffalo, in Denver, in Salt Lake. All over this country people are concerned about transporting 40,000 pound casks through their streets and cities, understanding that in those casks is only a little bit of high-level nuclear waste, just a little bit. The 40,000 pounds, most of it, is the lead to protect the very small amount of nuclear waste in one of those casks.

We have right now, today, 70,000 metric tons of high-level nuclear waste that must be taken someplace according to some people.

I think also we have not talked about, Mr. President, what the DOE has done to ruin the 1982 act. Let us hear some talk about that. This bill, S. 1668, gives a blank check to the DOE for what they have done in the past. All the experts recognize how they have not followed the law passed by Congress, how they have not followed their own regulations, how they have not followed scientific findings. We should hear something about that.

It may be OK to the Department of Transportation and the Department of Energy, but it certainly is not OK to the American people.

Mr. President, I think to only elaborate and to further emphasize, the DOE is now telling us that they like S. 1668. Today, every Senator in this Chamber has a letter from the Department of Energy saying S. 1668 is a great piece of work, that they like it. So says the Secretary because it saves money. It has improved cost effectiveness.

We have heard a lot about saving money. That is not what we should be about in this Chamber. When we are dealing with nuclear waste and the Federal Government as it relates to nuclear waste, it is a very, very bad record, Mr. President.

We do not have to look at what happened in the last 2 weeks. Let us go back and look very briefly at what has transpired with the Federal Government as it has dealt with things nuclear over the past 60 years.

Today, the Secretary of Energy is telling us that anything nuclear is OK, that we need not worry. Mr. President, during the period from 1915 through the 1920's, there were salesmen that hawked patent medicine that had in it nuclear products—nuclear products, I think, Mr. President, that are quite interesting. They sold these products for all kinds of different things. they sold them for baldness. They sold them as things that would cure indigestion, bowel trouble, tuberculosis, diabetes, hemorrhoids, and even lagging sexual powers.

These people were not without the protection of the Federal Government. These salesmen who sold this stuff sold things called "lebarium," "caparium," which was a restorative for hair. Many physicians endorsed restoratives, as they were called.

I think it is interesting that the United States Bureau of Standards in March of 1976 was asked, "I wish to inquire whether your office certified all the ingredients in radium as to its activity." They replied that the material was found to be OK. The Bureau had never heard of any harmful effects due to drinking water which had been made radioactive.

Where this finding came to show that the Federal Government was not really protecting things as they dealt with things nuclear was from a man by the name of Byers, a fairly well-to-do steel manufacturer, even a national champion amateur golfer in the United States. He has decided 2 years prior to his death to start drinking a thing called "radathor," a radioactive substance that would do a whole lot of good things, said the salesman. Within a year Byers started to lose weight, complained of severe headaches, pain in his jaw, and his teeth dropped out. The substance literally destroyed this man. Other people had had the same thing happen. Because of his prominence, his death touched off Federal investigations and the Federal investigations really were not too substantive.

There were people who said that it really was not too bad, what was happening. In the midst of all this they started painting, Mr. President, luminous dials on watches. They did it because they glowed in the dark. They were very exciting. One woman by the name of Hazel Kooser had a job where she painted these luminous dials on

watches, and started doing this when she was 15 years old. To make the very fine painting she had to do, she would stick the brush in her mouth and paint away.

Well, this woman did not last long. She died, Mr. President, before she was 25 years of age, but only after 3 years she went to the doctor and they extracted her teeth. Her dentist noticed her jawbone rapidly decaying.

He said she had a radium jaw. He linked it to her work. She died as I indicated very soon thereafter. Industry rushed to support this company called United States Radium. They even said, regarding the golfer and this lady that painted the lunimous dials, that Madam Curie, who had been involved in this in her laboratory work for over two decades, was OK and they need not worry about her. Well, she died just a few years later, of course, with leukemia as a result of the work she did with radium.

Now, these were not high-level nuclear waste products. Certainly they were not. But, Mr. President, it did not stop the Federal Government from saying they would take care of everybody, that their standards were OK.

For the sake of making a little more progress, I am not going to go through the numerous cases such as the example of the golfer that I told this body about, about the woman who painted the luminous dials. There are numerous cases like that where the Federal Government said, "Don't worry," but we can come to even more modern times. We know in retrospect that these radium products, these nuclear products did not do anything for helping gout, rheumatism, chronic arthritis, et cetera.

In fact, Mr. President, we now know in hindsight how ridiculous it was that the Federal Government put its stamp of approval over something like this, saying, "Don't worry; it is not harmful." But in modern times we need not look at human beings; we can look at sheep. We know that in the fifties and sixties, atmospheric tests were taking place. We know at that time the Federal Government said, "Don't worry, you can watch them; if you a soldier, in the vicinity, the fallout won't hurt you." But what really brought the public's attention to this was in the State of Utah, about 150 miles from where the bomb was set off, where a sheep herder goes out to look at his sheep one morning, 4,000 of them, and they are all dead. Ranchers were concerned, and of course they realized it had to be something that dealt with the atomic tests because it is not certainly an ordinary thing that you go out one morning and all your sheep are dead.

Well, these people tried to get from the Federal Government what information it had relating to why these sheep died.

Mr. President, there was a coverup. The Federal Government said, "No, we have checked and these sheep could not have been killed from this little amount of radioactivity that took place." There was a lawsuit filed, and the ranchers lost the litigation. But what we know is that they really should not have lost because later a Federal judge ruled that the Federal Government had perpetrated a fraud upon the court by covering up things that related to the death of these 4,000 sheep. These sheep died as a result of poisoning from the atmospheric tests.

Again, Mr. President, without belaboring the point, we cannot always look to the Federal Government to protect us. We know that in the history of nuclear products, including nuclear waste, the Federal Government has really not protected the American public, and they are not going to do it in transportation. This is a hasty thing we are doing with this legislation. S. 1668 rewards the incompetence of the Department of Energy. It takes the pressure off the Department of Energy to do their job right.

It is my understanding. Mr. President, that the majority leader wishes that I withhold at this time.

Mr. BYRD. I thank the Senator.

ADJOURNMENT OF THE HOUSE OF REPRESENTATIVES

Mr. BYRD. Mr. President, I ask that the Senate proceed to the consideration of House Concurrent Resolution 215.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

A concurrent resolution (H. Con. Res. 215) providing for an adjournment of the House from November 10 to November 16, 1987.

The PRESIDING OFFICER. Are there amendments to the concurrent resolution? If not, the question is on agreeing to the concurrent resolution.

The resolution (H. Con. Res. 215) was agreed to.

OLDER AMERICANS ACT AMENDMENTS OF 1987—CONFERENCE REPORT

Mr. BYRD. Mr. President, I ask that the conference report on H.R. 1451, the Older Americans Act, be laid before the Senate.

The PRESIDING OFFICER. The clerk will report.

The legislative clerk read as follows:

The committee of conference on the disagreeing votes of the two Houses on the amendment of the Senate to the bill (H.R. 1451) to amend the Older Americans Act of 1965 to authorize appropriations for the fiscal years 1988, 1989, 1990, and 1991; to amend the Native Americans Programs Act of 1974 to authorize appropriations for such fiscal years; 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 of the conferees.

The PRESIDING OFFICER. Without objection, the Senate will proceed to the consideration of the conference report.

(The conference report is printed in the House proceedings of the RECORD of November 9, 1987.)

Mr MATSUNAGA. Mr. President, I rise to urge my colleagues to approve the conference report on H.R. 1451, the Older Americans Act Amendments of 1987.

Mr. President, this legislation, which will reauthorize programs under the Older Americans Act for 4 years, through 1991, was passed by the House on May 28, 1987, by a vote of 379 to 8. On August 6, 1987, the Senate bill, S. 887, which I was privileged to introduce, was passed by a vote of 98 to 0. Because of their earlier declared support for the measure, had the two absentees been present and voted, the vote would have been 100 to 0.

In many important respects, the House bill and the Senate bill were quite similar. Both bills, for example, included the following provisions, with only minor differences:

First, a new authorization for funds to provide nonmedical in-home services to the frail elderly;

Second, a number of modifications to the current title VI program of grants to Indian tribal organizations which will correct an unintended effect of current law and ensure that older American Indians can receive services under title III or title IV;

Third, a series of amendments which will strengthen the operation of the Long-Term Care Ombudsman Program, which has been a part of the law since 1978;

Fourth, a new separate authorization of appropriations with which to enable States to carry out programs for the prevention of abuse, neglect and exploitation of the elderly.

Fifth, several changes which will strengthen the administration of the act at both the Federal and local levels; and

Sixth, an authorization for the President to call a White House Conference on Aging in 1991.

The two bills did have some key differences, however. First, the House bill contained several new provisions for studies, including studies of national transportation needs, potential sources of revenue from cost savings due to the implementation of the prospective payment system, and unmet social service needs which could be provided through senior centers. The conferees agreed to drop the requirement for a transportation study, as it would duplicate several recent studies conducted by the Administration on

Aging and probably would provide little information for local authorities trying to solve their community transportation problems. The conferees also agreed to delete the required study of potential cost savings from the implementation of the prospective payment system, as this type of study is more appropriately undertaken and is being conducted by the Health Care Financing Administration. While the conferees agreed that an assessment of unmet social service needs of the elderly is warranted, they agreed to attempt to use information already required in each area agency's plan in order to evaluate the present situation. Should the documentation prove inadequate, the conference agreement requires the Commissioner to issue appropriate regulations with which to systematically collect such information.

The second major difference was a deemphasis in the House bill of health promotion and education activities. The House bill repealed the current title VII, which established a grant program to fund health promotion and education program development. The Senate bill, on the other hand, not only preserved title VII, but added a new subpart to title III in order to provide new funds for health promotion and education activities through area agencies, senior centers and other congregate settings, and amended the Public Health Service Act to provide a new in-home health care program. The conferees agreed to repeal title VII, but to preserve its intent by adding a provision to the current research and demonstration programs authorized under title IV. In addition, they agreed to include the new authorization for service delivery under title III, as contained in the original Senate bill, and to authorize demonstration programs under the Public Health Service Act in order to test new in-home health care delivery systems for the elderly and victims of Alzheimer's disease.

The third major area of disagreement was with regard to outreach programs for identifying and assisting individuals who are not currently taking advantage of Federal programs to which they may be entitled. The House bill contained a one-time $25 million authorization to conduct such an outreach effort. The Senate bill would have created a multiyear demonstration program to test the ability of the Older Americans Act system in reaching these individuals. With higher authorization levels, the conference agreement adopts the Senate view that this outreach program should not be a one-time effort and that it should include an evaluation of the program's success or failure.

Mr. President, the final issue which I wish to call to the attention of my colleagues is the resolution of differences between the two bills with respect to outreach and service delivery to special groups of the elderly, including minorities, the disabled, and those who have debilitating diseases, such as Alzheimers. The conference agreement adopts several new provisions of the Senate bill which will increase the awareness of problems of the elderly with disabilities and improve outreach to these individuals, provide a new program of service to all native Americans, including native Hawaiians, and authorize the delivery of employment services to the elderly through both a new Pacific-Asian and a new American Indian national program sponsor under title V.

Mr. President, since 1965, the Older Americans Act has provided the bedrock for constructing a vast network of supportive services for our Nation's senior citizens. This reauthorization continues and expands that solid foundation. I am proud to have been involved in the development of the original act, and am prouder still to have taken the lead in reauthorizing this important legislation in 1987 in the Senate.

Mr. President, before concluding, I would particularly like to commend and thank several people who have played key roles in the reauthorization process this year. they include:

The Senator from Mississippi, Mr. COCHRAN, ranking minority member of the Subcommittee on Aging, and his staff, Jackie Knox and Anne Cherry; They were extremely helpful in arriving at the conference agreement. Also, Congressman DALE KILDEE of Michigan, who led the House effort as chairman of the Subcommittee on Human Resources, and his staff, Susan Wilhelm and Tom Kelly; The senior Senator from Ohio, Mr. METZENBAUM, and the senior Senator from Rhode Island, Mr. PELL, both of whom, as members of the Subcommittee on Aging, took a keen interest in the development of this bill; The chairman of the Committee on Labor and Human Resources, Mr. KENNEDY, and the ranking minority member of the committee, Mr. HATCH, who played important roles in shaping the legislation, deserve heartfelt thanks; and the legislative counsel in the Senate, Blair Crownover, and the counsel in the house, Jean Harmann, both of whom worked diligently to ensure that the compromise bill was carefully and properly drafted and presented to the conferees. To them I also extend my gratitude.

Mr. President, it has been said by sages of the past that the greatness of any society can be accurately measured by the degree to which it cares for its elderly. I believe the legislation before us today greatly enhances existing programs for the elderly under the act, and authorizes additional programs which are essential in order to respond to the needs of our growing elderly population.

Mr. President, I urge my colleagues to join me in support of this important legislation and ask for approval of the conference report for H.R. 1451, the Older Americans Act Amendments of 1987.

Mr. COCHRAN. Mr. President, I thank the distinguished Senator from Hawaii [Mr. MATSUNAGA], who is the chairman of our Subcommittee on Aging. He has done an excellent job, in my opinion, in scheduling hearings during the early part of this session of Congress which were very helpful to our committee in understanding some of the changes that could be made to improve the administration of this important act.

We heard from administrators at the local level, from administration officials, from the population to be served by the programs authorized in this act. I think that because we did take time to listen to suggestions from others, we have improved the Older Americans Act considerably.

We have written into the law a new flexibility on the part of local managers and administrators. They can now identify in their local areas with a greater degree of freedom the programs and kinds of services that are most needed by the elderly population who are eligible.

We have also ensured that those who are served by the programs will actually have a place at the table where decisions about those programs are made.

We have provided in this bill, for example, that a majority of the Federal Council on Aging be made up of persons who are eligible for the programs authorized by this act. That is a new provision, and I think it is important.

As a matter of fact, this provision was suggested at a hearing by a constituent from Mississippi who was invited here to testify about how this program was working in our State. He observed that we needed more older Americans involved in the day-to-day administration and decisionmaking of these programs and services. So we have made that change at his recommendation, and it has been accepted and included in the conference report.

Senator HATCH, who is the senior Republican on the full Committee on Labor and Human Resources, was the one who pushed hard for the in-home health services. We have included in the conference report, I am glad to say, a new program of testing and evaluation, of new ways to provide in-home health services to the frail elderly. That is an important move in the right direction.

There are some other changes. The chairman of the subcommittee has described them, and I will not go into a repetition of the things he has already

said. But my impression of this process and the final legislative result is that we have a better program now for our older Americans under this reauthorization than we have had before.

There are goals we share with the elderly: to avoid unnecessary institutionalization; to make sure that those who cannot adequately provide for their own nutrition needs get help in their own communities, in their own homes; that there are opportunities for recreation; that there are opportunities for an exchange of expertise in local communities as volunteers, as part-time workers, in programs that are important to the community. These are all programs that are either authorized or encouraged in this legislation.

So I am very happy that this year I was given the opportunity to serve as the ranking Republican member of the Subcommittee on Aging.

As my friend, SPARK MATSUNAGA, I came to the Senate from the House of Representatives; and one of the most enjoyable aspects of my service as a House Member was on the Special Committee on Aging. I recall that with a great deal of pleasure.

I recall working on the legislation that did away with mandatory and arbitrary retirement dates for many of our older citizens in many occupations. We worked on a lot of issues together in the House that have changed the lives and opportunities of many older citizens today.

I think we have today brought to the Senate a piece of legislation that carries this one step further. It refines, improves, and modifies in a way that I think makes the legislation more sensitive to the real needs that many older citizens have in our modern society.

This bill does not solve all the problems, but we do recognize that there are new roles and responsibilities for the Federal Government in research in Alzheimer's disease, in ways to be innovative and imaginative in the use of our limited resources, in trying to deal with problems that our senior citizens have.

Under the unanimous-consent agreement that the majority leader announced earlier, it is my understanding that at the conclusion of our discussion here today, action on this measure will be postponed until Thursday morning and at that time we will have a vote on it. I hope it is unanimous. I do not know of any reason why any Senator cannot enthusiastically support the reauthorization of the Older Americans Act, under the legislation and the conference report we have worked out with the House of Representatives.

Again, Mr. President, I thank the distinguished Senator from Hawaii and the staff members who have worked so hard this year on this legislation. Jackie Knox and Anne Cherry, on my staff, have been really superb in the way they have tackled these problems and have tried to sort out the different viewpoints and come up with recommendations that have been included in this legislative package.

The staff of the majority side have been very cooperative with us, very helpful, very courteous, and for that I am very grateful.

(By request of Mr. MATSUNAGA, the following statement was ordered to be printed in the RECORD:)

● Mr. SIMON. Mr. President, I wish to congratulate the conference members and staff for their fine work on this important legislation. I am pleased that today we see the passage of the Older Americans Act. The Older Americans Act is crucial because it provides essential services, as well as serving as a reminder of our moral obligation to our Nation's seniors.

I believe this legislation will provide for a better coordination and expansion of services to our Nation's elderly in many vital areas. Let me mention a few of these noteworthy additions.

Alzheimer's disease and related dementias are a growing burden on our society. This disease imposes incredible physical and emotional hardships on the family, the primary caretaker of afflicted individuals. This legislation will offer relief in many forms both in the home and through Federal programs.

Appropriately, the needs of frail, older individuals have been recognized. This program provides for preventive health screening, health education, and promotion services. Another important group whose needs have been recognized is the disabled elderly.

I am pleased to say that the Pepper/Simon amendment on "assistance for the prevention of abuse of older individuals" was included. The problem is well documented; the statistics are shameful. Some 1.1 million elderly Americans are victims of financial, emotional, and physical abuse. This means that about 4 percent or 1 out of 25 of our Nation's elderly are victimized. Unfortunately, this number will increase unless something is done.

This bill is a first step toward providing help which is long overdue. This legislation would require that there be established in each State a competent program to prevent elder abuse and provide some assistance.

These programs would have to be strictly within the confines of pertinent State laws and be designed so as to complement and not duplicate any existing State or local elder abuse prevention and protection programs. Some States have shown great leadership in establishing meaningful elder abuse programs. My amendment would assure that these programs continued and were strengthened.

The aging of our population is a great success story, a result of economic growth, medical research, education, and public health policies. Now, we as a nation are challenged to improve the quality of those additional years of life. I believe the Older Americans Act is an essential part of meeting that challenge and something of which we can be proud.

Let me conclude by again congratulating my colleague and friend Senator MATSUNAGA and other members of the conference and their staff for their fine work.●

Mr. MELCHER. Mr. President, today the Senate is considering the conference report for the 1987 Older Americans Act Amendment, H.R. 1451, thereby reauthorizing one of the most significant pieces of legislation to address the needs of our country's older people. The Older Americans Act [OAA] was enacted in a period remembered for a great awareness of the needs of the poor and the elderly. In 1965, not only did the Older Americans Act come into being but Congress also passed titles XVIII and XIX of the Social Security Act which established the Medicare and Medicaid programs, respectively.

The overall objective of the Older Americans Act is to enhance the physical, mental, and social well-being of older Americans, and foster maximum independence, through the provision of a wide array of services. This act established the means for the organization and coordination of community based services for older persons. Congress has reaffirmed its support for the programs through subsequent reauthorizations. Since the act's enactment, it has grown from a program of small grants and projects to an aging network of 57 State units on aging and over 660 area agencies on aging. The programs under the act now provide a wide range of services: social, legal, nutritional, and various supportive services; educational opportunities; and employment. The act also supports research and training in the aging field.

Three of my amendments are included. The first amendment requires the Department of Labor to develop a separate Consumer Price Index for the elderly and to submit a report to Congress within 180 days after the act becomes law. I offered this amendment because I strongly believe, as do many of my older constituents, that last year's 1.3 percent cost-of-living adjustment for retirees did not reflect the inflation they faced. I think we need a more accurate index for inflation as it applies to the elderly.

Another of my amendments changes title V, the Senior Community Service Employment Program, to require that the Department of Labor provide national contractors under title V and their program enrollees with written information that will explain employees' rights under the Age Discrimina-

tion in Employment Act [ADEA]. In amending the ADEA last year to eliminate mandatory retirement for all but a few designated professions, Congress recognized that older Americans are among this country's most valuable resources. While many industries are also beginning to recognize the value of the older worker, many are not. More must be done to educate people about age discrimination and their rights.

My third amendment to the Older Americans Act amends the School Lunch Act and provides for an expansion of the Child Care Food Program to adult day care. This provides supplemental assistance for two meals and a snack per day on a means-tested basis to individuals in adult day care. The intent of this amendment is to provide more meals for those who need them most.

Mr. President, I urge my colleagues to pass the bill reported out of conference and send a message to all older Americans, that we in Congress recognize our responsibility to insure that individuals at every age have the opportunity for full enjoyment of life.

Mr. MATSUNAGA. Mr. President, I thank the Senator from Mississippi and commend him on his excellent statement. He brought back fond memories when he talked about our working together in the House on the Committee on Aging.

As a matter of fact, when I was first elected to the House, we had no Committee on Aging. I take great pride in the fact that, Representative CLAUDE PEPPER and I lobbied the Speaker very vigorously for creating such a committee.

It was at our urging that the Speaker agreed to it. It was a real pleasure to have the Senator from Mississippi [Mr. COCHRAN] serve on that committee with me.

Mr. President, I wish to include in my commendation the members of my own staff. Lois Fu, the director of the Subcommittee on Aging, has done an excellent job. She was ably assisted by Sarah Craven. My legislative director, David Fenig, has been very helpful in directing the legislative process in connection with this bill.

So to them I say mahalo nui loa, in Hawaiian meaning thank you, very, very much.

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

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

The Senator from North Dakota is recognized.

Mr. CONRAD. Mr. President, I ask unanimous consent that I be allowed to speak for not more than 5 minutes and that my remarks appear in conjunction with my earlier remarks on the budget resolution.

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

BUDGET

Mr. CONRAD. Mr. President, I have spoken about spending restraint and how we might accomplish that by an across-the-board cut on the numbers provided in the budget resolution, understanding that is not a cut from last year's spending, that that is less of an increase than we will otherwise experience.

Mr. President, there is another part of the package that involves revenue because revenue must be a component in an overall package to bring down the level of the budget deficit.

I do not think we should shrink from telling the American people the truth. I think they recognize when we are being straight with them, and I think they understand that in the circumstances we find ourselves in currently, we must not only have spending restraint, but we must have a revenue component to the package.

Mr. President, those are short-term measures.

In addition, we must make progress over the longer-term, and there are two major areas of opportunity I want to bring to the attention of my colleagues before we finish the discussion of the resolution that we have offered today.

The first opportunity is in the area of revenue without a tax increase. There is an enormous opportunity to recover additional revenue for this country in the area that we call the tax gap, the difference between what is owed and what is being paid. That tax gap is variously estimated at over $100 billion a year. The California Institute of Technology recently completed a study that indicated if we had the same level of audit, Mr. President, in 1985, that we had in 1977, we would have recovered $47 billion more in revenue in that year alone, $47 billion more in revenue without a tax increase.

Mr. President, there is one other point for the longer term opportunities that exist to close in on the budget deficit. That is what I call burden sharing. We are currently spending over $100 billion a year to provide the defense umbrella for Western Europe and Japan. That made sense after World War II when Japan lay in ruins and Europe was flattened but now that they are economically resurgent perhaps it is time, perhaps it is reasonable now to ask them to take on a greater part of that burden.

Mr. President, that expenditure of over $100 billion a year is one that our allies are starting to recognize they ought to be more fairly contributing to.

Our allies in Western Europe have been talking for some time about the need for them to take on a greater share of this burden.

One French defense official said this summer we cannot forever continue to expect 240 million Americans to protect 320 million Europeans from 280 million Soviets. That sums it up.

So, Mr. President, I think there are four steps that we have discussed that are part of this budget resolution in the sense of solutions that can lead us toward a balanced budget.

One, spending restraint; two, a revenue component; three, a fair share program to try to vigorously attack the tax gap; and, four, an approach to deal with the more even and more fair distribution of the defense burden among the allies.

I yield the floor.

The PRESIDING OFFICER. The distinguished majority leader is recognized.

Mr. BYRD. Mr. President, I thank the Chair.

REPRESENTATION BY SENATE LEGAL COUNSEL

Mr. BYRD. Mr. President, on behalf of myself and the distinguished Republican leader, Mr. DOLE, I send to the desk a resolution on representation by the Senate legal counsel and ask for its immediate consideration.

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

The legislative clerk read as follows:

A resolution (S. Res. 318) to direct Senate legal counsel representation in the case of United States v. Bardoff

The PRESIDING OFFICER. Is there objecton to the present consideration of the resolution?

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

Mr. BYRD. On July 9, 1987, several demonstrators were arrested in the Senate Caucus Room for disrupting a joint hearing of the Senate Select Committee on Secret Military Assistance to Iran and the Nicaraguan Opposition and the House Select Committee to Investigate Covert Arms Transactions with Iran. Yesterday, November 9, 1987, counsel for the defendant in a prosecution in the Superior Court of the District of Columbia arising from those arrests obtained subpoenas which call for the testimony of Senator INOUYE, Senator SARBANES, and Senator KERRY at the trial which is scheduled for November 12, 1987.

Senator INOUYE is chairman and Senator SARBANES is a member of the Select Committee. Senator KERRY is

not on that committee, but is chairman of the Subcommittee on Terrorism, Narcotics and International Operations of the Committee on Foreign Relations, which has been investigating allegations that proceeds from the sale of narcotics have been used to purchase military supplies for the Nicaraguan Contras. The demonstrators apparently were of the view that the select committee should also be investigating those allegations.

Since Capitol Police officers will be made available to testify about the demonstration, no testimony by Senators themselves is necessary to establish the events surrounding the arrests and the speech or debate clause precludes any judicial examination into how the Senate apportions investigatory authority among its committees. Accordingly, this resolution directs the Senate legal counsel to represent Senators INOUYE, SARBANES, and KERRY in this matter, without authorizing, pursuant to Senate Standing Rule VI(2), their absence from the Senate to appear as witnesses.

If there be no further debate, the question is on agreeing to the resolution.

The resolution (S. Res. 318) was agreed to.

The preamble was agreed to.

The resolution, with its preamble, reads as follows:

S. RES. 318

Whereas, in the case of *United States* v. *Bardoff*, Crim. No. M-8237-87, pending in the Superior Court of the District of Columbia, the defendant has obtained subpoenas for the trial testimony of Senator Daniel K. Inouye, Senator Paul S. Sarbanes, and Senator John F. Kerry;

Whereas, pursuant to sections 703(a) and 704(a)(2) of the Ethics in Government Act of 1978, 2 U.S.C. §§ 288b(a) and 288c(a)(2)(1982), the Senate may direct its counsel to represent Members of the Senate with respect to subpoenas issued to them in their official capacities: Now, therefore be it

Resolved, That the Senate Legal Counsel is directed to represent Senator Inouye, Senator Sarbanes, and Senator Kerry in the case of *United States* v. *Bardoff*.

WHERE THERE'S SMOKE—THERE'S ACID RAIN

Mr. KERRY. Mr. President, while firefighters have been battling ferocious forest fires sweeping across the Southeast, here in Washington the Senate Environment and Public Works Committee is preparing to bring to the floor a comprehensive Clean Air Act reauthorization. One might ask what does one have anything to do with the other? The answer is that a very strong correlation exists. In fact the smoke from the raging fires of the South has made its way northward in a pattern which meteorologists and scientists claim parallels very closely the transport of air pollution. While the scientific evidence has been clear on this for years, the smoke from the forest fires and how it has traveled has made the phenomenon of transboundary pollution clear for all to actually see.

The thick haze which lingered over the city of Boston for the past several days is a dramatic indication of how air pollution travels hundreds of miles bringing its damaging results with it. The fog has been directly linked to the smoke from Kentucky, West Virginia, Virginia, and other Southern States whose forests were ablaze. Smoke from these tragic fires represents, Mr. President, what I and several of my colleagues, as well as scientists, environmentalists, and experts have been arguing for some time. Acid rain originating in the Southeast and Midwest is traveling through the air to Northeastern parts of the United States and Canada. But more importantly Mr. President, we in the Northeast are suffering the devastating environmental and economic woes associated with acid deposition. Whether it is a single cause or a cumulative effect, acid rain has led to and continues to result in the death of our lakes, the killing of our streams, metals in our drinking water, high levels of mercury in our fish and fowl and the possible extinction of some of our forests. According to a recent report by the Northeast-Midwest Coalition, electric utilities and industries that burn fossil fuels emitted more than 26 million tons of sulfur [SO_x] in the air in 1980. The report stated:

These emissions are transformed in the atmosphere into acidic compounds known as acid rain. Prevailing winds, blowing generally in the northeasterly direction, deposit acid rain long distances downwind, where it damages lakes and building materials and possibly forests and human health.

Furthermore, Mr. President, last month I chaired a hearing in the Foreign Relations Committee on the implications of acid rain on our relationship with Canada. The Canadian Government views acid rain eminating from the United States as a real threat. I quote Prime Minister Brian Mulroney,

We know the cause of acid rain, we know the consequences and we know the cure. The Government of Canada is firmly determined to end the blight of acid rain—and expects the same genuine resolve from the United States of America.

The facts are before us, Mr. President, and so, I am pleased to note, are the solutions. At the beginning of the session I introduced S. 95, the Acid Rain Control Act of 1987. My legislation would amend the Clean Air Act to reduce annual sulfur dioxide emissions by 12 million tons and nitrogen oxides by 3 million tons nationwide by 1995. It does this by first requiring utilities and other industries to reduce emissions through such methods as coal washing or flue gas desulfurization, as well as the utilization of the whole new generation of clean coal technologies. I am pleased that the Senate Environment and Public Works Committee has adopted some of these key provisions from my legislation in their comprehensive Clean Air Act package.

There is one major difference between my legislation and the committee's acid rain provision which merits discussion. My bill focuses on the responsibility that we as a nation share to address the very devastating acid rain problem. In that respect my bill sets up a trust fund in which all utilities across the country contribute in order to defray capital costs incurred by facilities in meeting their reduction requirements. The trust fund is designed to provide equity while recognizing that in order to develop a feasible plan, the cost of emissions reduction must be shared. My trust fund payment proposal would also avoid coal miner job displacement and will encourage the use of newer and less costly clean technologies. So, Mr. President, the answers to acid rain are very real and are before the Senate. We have the opportunity and the responsibility to finally address the issue and I hope that we can address this issue as soon as possible.

In closing, Mr. President, I just want to say that for those individuals who in the past believed that there was insufficient scientific evidence to prove that acid precipitation is traveling from the Southeast and Midwest to the Northeast, that they merely take a good hard look at the facts. The smoke from the Southeastern region has drifted to the Northeast in an alarming fashion which is a clear model of how acid rain travels daily into the Northeast. Mr. President, I ask unanimous consent that the text of an article in today's Boston Globe on this very issue be printed in the RECORD.

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

[From the Boston Globe, Nov. 10, 1987]

CLUE TO ACID RAIN'S PATH SEEN IN HAZE

(By Larry Tye)

While smoke that hovered over New England this week should be gone by today, it left behind an enlivened debate over what causes acid rains that threaten the region's lakes and forests.

Meterologists say acid emissions blow into New England from the Southeast the same way that smoke blew in last weekend from forest fires raging in Kentucky and West Virginia. And environmentalists insist the only way to eliminate acid rain is to impose tough pollution controls on coal plants in Kentucky and neighboring states, which the Reagan administration has resisted.

"The average guy could go out and see the moon was orange and the sky was smoky and it all was coming from the Southeast," said Douglas Foy, director of the Conservation Law Foundation. "In simple and quite elegant fashion it clearly demonstrated what happens with acid rain."

But President Reagan has insisted that no one knows where acid rain comes from, and yesterday Thomas Duncan, president of the Kentucky Coal Association, accused environmentalists of misreading recent smoke signals.

"I don't think you can say whether 2 percent or 10 percent of the acid rain comes from Kentucky," Duncan said. "And you can't say whether a 2 percent reduction in emissions here will have a 2 percent effect in reducing acid rain anywhere."

There is no debate over where the smoke came from, however. Fires continued burning yesterday in Kentucky, West Virginia and several other southeastern states.

In Kentucky, more than 1,400 fires scorched about 130,000 acres of forest, mainly in the heavily-wooded eastern part of the state, said Townley Bergmann of the Division of Forestry. Rain helped more than 1,500 firefighters battle the blazes yesterday.

Meanwhile in West Virginia, there have been 556 fires in the last 10 days—destroying more than 150,000 acres, said Ralph Glover of the state Division of Forestry. "We've got them basically knocked down thanks to the rain, and now we are trying to make sure they stay under control and actually are put out," he said.

As the smoke rose, burning particles entered the air and were swept away on winds moving toward New England, said Randall Dole, a professor of meterology at the Massachusetts Institute of Technology. "That's the same mechanism that carries pollutants into this area. The air moves and carries with it whatever it traps," he said.

Daniel Golomb, a researcher at MIT's Energy Laboratory, said pollution from cars, power plants and industries starts in a gaseous forms as sulfur dioxide and nitrogen oxides, whereas most smoke is made up of tiny particles of pollution. But as the sulfur and nitrogen pollution moves through the atmosphere. It is chemically transformed into particles of nitrate and sulfate and falls to the ground as acid rain or snow.

The last several days of smoke pollution are "a natural experiment" for how acidic pollutants travel from the Southeast to New England, Golomb said.

Charles Foley, a meterologist at the National Weather Service in Boston, said the smoke problem is the worst he has seen here in recent years—even topping the haze near Boston after the volcano on Mount St. Helens erupted in 1980.

"It just demonstrates that pollution travels great distances," Foley said.

Richard Burkhart, a scientist at the US Environmental Protection Agency office in Boston, said the smoke should eliminate any remaining doubt about how acid emissions reach New England. But he added that more studies are needed to pinpoint precisely where the pollution comes from and how it can be eliminated.

"How much of the pollutants that make it to Massachusetts originate in New York City and how much in the Midwest?" he asked. "And will reducing emissions affect the acidity of rain fall?"

A SCOUTMASTER'S PRAYER

Mr. HELMS. Mr. President, I strongly suspect that few, if any, members of the Senate have not had their lives touched in a significant and meaningful way by the Boy Scouts of America. Certainly mine was, dating back to my boyhood in my little hometown of Monroe in what was then a largely rural section of North Carolina. I remember Reverend Fred Drane as our kind, patient and compassionate Scoutmaster. He taught us many things that we otherwise may never have learned.

Like the sons of many other Senators, my son Charles rose to Eagle Scout and today, nearly two decades later, spends much of his time working with youngsters in Scouting.

Mr. President, I mention all of this because there's a fine 87-year-old former Scoutmaster in Charlotte, NC, whose interest in Scouting is just as strong today as it ever was. His name is Martin Hullender. Fifty-two years ago, Mr. Hullender wrote a prayer which eloquently describes the devotion and service of Scoutmasters everywhere.

Mr. President, I ask unanimous consent that the text of that prayer be printed in the RECORD.

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

A SCOUTMASTER'S PRAYER

I don't have much to offer as I go along,
Just a cheerful word, a happy song.
I do not possess riches untold,
Nor do I own golden treasures of old.

If I can reach out and lend a hand,
To help some lad to go straight, to be a man,
That he might the virtues of the knights retain,
I will feel that my efforts are not in vain.

O Great Scoutmaster in Heaven above,
Look down on us in merry and love.
Guide and direct us, show us the way,
The True Trail that we should travel today.

THEO H. PITT, JR. ASSUMES CHAIRMANSHIP OF U.S. LEAGUE OF SAVINGS INSTITUTIONS

Mr. SANFORD. Mr. President, in New Orleans, LA, tomorrow, Theo H. Pitt, Jr. will be accorded the well-deserved recognition of his peers in the savings and loan business. Mr. Pitt will be installed to serve a 1-year term as chairman of the U.S. League of Savings Institutions, the business' principal trade association.

Theo, a native of Rocky Mount, NC, is chairman of the board, and president and chief executive officer of Pioneer Savings Bank, Inc., an institution with assets of $380 million, 20 offices and headquartered in Rocky Mount.

It was 26 years ago that Theo joined Pioneer Savings Bank, Inc.—then known as Home Savings and Loan Association—as a loan officer.

In the intervening years, he has made significant contributions to his community and his profession.

He has been active in the North Carolina League of Savings Institutions, serving as a director and chairman of several committees. He is the past chairman of the board of directors, and is a former chairman of the Savings and Loan Academy's board of trustees. He also has served as chairman of the board of directors of Capital Discount Brokerage, a wholly owned subsidiary of the North Carolina League.

On the national level, for the past year Mr. Pitt has served as vice chairman of the U.S. League of Savings Institutions. he has been an active member of the U.S. League's Legislative Committee and Legislative Policy Committee. He is the current chairman of the U.S. League's Committee on Economic Affairs. He has served on the Special Committee on Deregulation Policy, and as vice chairman of the Task Force on Home Ownership.

Theo is very active in civic affairs. He is a former president of the Rocky Mount Jaycees, and former vice president and national director of the North Carolina Jaycees. He has served as president of the Rocky Mount Kiwanis Club, Rocky Mount Family YMCA, and Rocky Mount Chamber of Commerce. He has also been chairman of the Board of Advisors for the Salvation Army, and served on the executive committee of the United Way.

Theo was instrumental in the formation of the Rocky Mount Central City Development Corp., and served as its first and only chairman. The corporation was formed to direct the revitalization of the central city of Rocky Mount. He now serves as a director of Downtown Renaissance, Inc., a private corporation involved in city revitalization.

Among his other activities, he is a member of the board of trustees, Meredith College; Board of Distinguished Visitors, North Carolina Weleyan College; board of trustees, Law Enforcement Officers Benefit and Retirement Fund; board of trustees of the Teachers' and State Employees' Retirement System; board of directors, Savers Live Insurance Company of Winston-Salem; and board of directors, Investors Title Insurance Co. of Chapel Hill.

Mr. Pitt is a charter member of the Lakeside Baptist Church, and has served as chairman of the Board of Deacons, and president of the Baptist Men. He currently is a member of the Board of Deacons and chairman of the Board of Finance.

He is a 1958 graduate of the University of North Carolina at Chapel Hill, and is a keyholder of the Indian University's Graduate School of Savings and Loan.

I know my colleagues join me in congratulating Theo F. Pitt, Jr., and wishing him, his wife, Molly, his daughter, Beth, and son, David, a successful tenure as first family of this Nation's savings institutions business.

VETERAN'S DAY TRIBUTE

Mr. SANFORD. Mr. President, I rise to give tribute to our Nation's veterans. Tomorrow our Nation will honor those who have given so much in her defense.

Many were called into the service. Many volunteered. All were prepared to make the ultimate sacrifice. So grateful are we for their service that a national holiday has been set-aside to recognize their valiant and selfless efforts.

My home State of North Carolina is home to some 680,000 veterans. They, as have all our veterans, have brought much honor to the people of North Carolina

I would also like to point out that North Carolina is home to many of the surviving members of our merchant marine fleet that so gallantly served during World War II. Little is known of the enormous contribution of the merchant seamen who helped supply American and Allied forces during World War II. Like their counterparts in the other services, they suffered very high losses of life and the ravages of prisoner of war camps. We should remember them, as we do all our veterans, and accord to them the same rights and privileges of veterans in the other services.

In closing, I ask that we remember those of the armed services that served our Nation in conflict but are listed as missing in action. There are still 2,416 Americans listed as missing or unaccounted for in Indochina. Of those, there are 61 from North Carolina.

Mr. President, I ask unanimous consent that the names, branch of service, rank, and home towns of these individuals be entered into the RECORD following these remarks.

Mr. President, the administration has stated that the return of our MIA's is one of the Nation's highest priorities, and I strongly support any effort being made on their behalves.

As a combat veteran of World War II, I sometimes reflect on my duties in the European theater and remember how thankful I was to have the folks back home supporting the war effort. I remember how appreciative our Nation was upon my return home. It is important to our active duty servicemembers to know of the support that the United States gives its veterans. They are the veterans of tomorrow and need to be assured that we, as a nation, will always be grateful for their service.

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

U.S. CASUALTIES IN SOUTH EAST ASIA—NORTH CAROLINA

[Alphabetic listing]

Military service	Country of casualty	Name	Loss rank	Date of incident	Date of birth	Home of record city
Marine Corps	VN	Avery, Robert Douglas	O2	May 03, 1968	Dec. 16, 1941	Morganton.
Navy	VN	Belknap, Harry John	O1	June 23, 1966	Oct. 06, 1939	Jonas Ridge.
Air Force	VN	Borden, Murray Lyman	O2	Oct. 13, 1966	Jan. 02, 1941	Goldsboro.
Navy	VN	Brice, Eric Parker	O3	June 04, 1968	Apr. 06, 1943	Rocky Mount.
Air Force	LA	Brown, Earl Carlyle	O3	Nov. 24, 1969	Jan. 10, 1943	Stanley.
Navy	VS	Brown, Edward Dean, Jr	O2	July 29, 1965	Mar. 21, 1930	Charlotte.
Air Force	VS	Brown, Wilbur Ronald	O3	Feb. 03, 1966	July 22, 1936	Wilmington.
Army	VS	Butler, James Edward	W1	Mar. 30, 1970	June 13, 1936	Buies Creek.
Navy	VS	Cahup, Franklin Harlee, Jr	E5	Jan. 14, 1967	June 02, 1928	Concord.
Air Force	LA	Clarke, Fred Lee	E6	Dec. 13, 1968	Jan. 28, 1932	Troutman.
Marine Corps	VS	Clay, William Clifton, III	O3	IkApr. 12, 1967	Sept. 29, 1941	Henderson.
Air Force	VS	Cook, Glenn Richard	O2	Oct. 21, 1969	Sept. 10, 1945	Charlotte.
Army	VS	Craven, Andrew Johnson	E3	May 12, 1968	Apr. 13, 1947	Wilmington.
Air Force	VN	Crews, John Hunter, III	O2	May 22, 1968	Dec. 31, 1941	Ashville.
Army	LA	Cristman, Frederick Lewis	W1	Mar. 19, 1971	Nov. 26, 1949	Salisbury.
Army	VS	Curlee, Robert Lee, Jr	E6	June 10, 1965	Sept. 26, 1930	Monroe.
Navy	VN	Davis, Donald Vance	O4	July 25, 1967	Oct. 08, 1934	Saltsbury.
Air Force	LA	Davis, Edgar Felton	O3	Sept. 17, 1968	Dec. 15, 1935	Goldsboro.
Navy	VN	Doughtie, Carl Louis	O2	June 10, 1965	Nov. 18, 1940	Tarboro.
Navy	VN	Elkins, Frank Callihan	O3	Oct., 12, 1968	May 25, 1939	Bladenboro.
Marine Corps	LA	Gardner, John G	O2	June 03, 1967	July 28, 1940	Hot Springs.
Air Force	VS	Gatwood, Robin F. Jr	O2	Apr. 02, 1972	Dec. 05 1946	Hickory.
Navy	VN	Gore, Paul Edwin	E6	Oct. 02, 1969	Nov. 11, 1939	Faison.
Air Force	VS	Gravitte, Connie Mack	O3	June 17, 1966	July 27, 1932	Ca-Vel.
Air Force	VS	Hall, Fredrick M	O2	Apr. 12, 1969	June 06, 1943	Waynesville.
Air Force	VN	Hall, James F	E5	July 29, 1966	Oct. 05, 1935	Greensboro.
Marine Corps	CB	Hargrove, Joseph N	E3	May 15, 1975	May 15, 1951	Mount Olive.
Army	VS	Harris, Harold Lee	E3	Oct. 22, 1966	Oct. 29, 1946	Durham.
Army	CB	Harrison, Larry Gene	E6	Feb. 26, 1971	Jan. 03, 1948	Williamston.
Army	LA	Hatley, Joel Clinton	E4	Mar. 05, 1971	Oct. 24, 1948	Aldemarle.
Army	VS	Howard, Luther Harris	E4	June 30, 1967	Sept. 25, 1947	Hamlet.
Air Force	LA	Howell, Carter A	O2	Mar.07, 1972	Apr. 08, 1947	Fayetteville.
Navy	VS	Huie, Litchfield Patterson	O3	Feb. 27, 1967	Oct. 31, 1939	Warsaw.
Air Force	VN	Huneycutt, Charles J., Jr	O2	Nov. 10, 1967	June 20, 1943	Charlotte.
Army	VS	Jamerson, Larry C	E4	Apr. 21, 1968	Feb. 11, 1943	Rosman.
Army	VS	Johnson, William D	E3	Jan. 19, 1968	Dec. 24, 1946	Rocky Mount.
Army	VS	Lewis, Charlie Gray	E7	May 17, 1967	Oct. 20, 1936	Fayetteville.
Navy	VS	Lewis, Larry Gene	O2	Feb. 27, 1971	Sept. 22, 1945	Asheville.
Army	VS	Luttrell, James M	E6	May 10, 1971	Dec. 14, 1935	Fayetteville.
Air Force	VS	McDaniel, John Lewis	O4	Apr. 26, 1968	July 08, 1933	Gibsonville.
Air Force	VN	Meadows, Eugene Thomas	O2	Oct. 13, 1966	Mar. 04, 1940	Hiddenite.
Army	VS	Millard, Charles Worth	W3	Apr. 19, 1968	June 08, 1933	Wilson.
Army	VS	Moore, Jerry L	E3	Feb. 16, 1969	Feb. 08, 1950	Cleveland.
Air Force	VS	Morgan, Edwin E	E6	Mar. 13, 1966	Sept. 04, 1927	Salisbury.
Army	VS	Morrow, Larry K	E4	May 29, 1972	June 13, 1951	Lowell.
Army	VS	Omelia, Dennis William	W1	Jan. 03, 1971	May 06, 1941	Smithfield.
Air Force	VN	Palmgren, Edwin D	O5	Apr. 22, 1968	Jan. 05, 1927	Winston-Salem.
Army	CB	Price, Bunyan Durant	E4	May 02, 1970	Feb. 09, 1950	Belmont.
Army	VS	Reno, Ralph Joseph	E8	July 03, 1966	Nov. 03, 1929	Fayetteville.
Army	LA	Shue, Donald Monroe	E4	Nov. 03, 1969	Aug. 29, 1949	Kannapolis.
Army	VS	Staton, Robert Milton Jr	E4	Nov. 11, 1967	Nov. 26, 1947	Jamesville.
Air Force	VN	Studderfield, Robert A	O3	May 06, 1965	Nov. 30, 1929	Richmond.
Air Force	VN	Sutton, William Carl	E7	Jan. 28, 1970	May 05, 1935	Goldsboro.
Army	VS	Walton, Wilbert	E2	Jan. 03, 1970	Mar. 15, 1947	Fayetteville.
Army	VS	Watson, Jimmy L	W2	Mar. 13, 1968	July 28, 1946	Lucama.
Army	VS	Weaks, Melvin Lee	E3	Aug. 18, 1971	Apr. 22, 1950	Concord.
Air Force	VS	Wellons, Phillip Rogerson	O4	Aug. 17, 1970	Feb. 19, 1932	Raleigh.
Navy	VN	Wilkins, George Henry	O4	July 11, 1966	July 14, 1931	Goldsboro.
Air Force	VN	Williams, James R	E4	Dec. 29, 1967	Mar. 28, 1945	Charlotte.
Marine Corps	VS	Wilson, Wayne V	E5	July 02, 1967	Oct. 04, 1945	Thomasville.
Navy	VN	Wood, Walter Sutton	O4	May 02, 1966	Feb. 08, 1952	Fort Bragg.

Total personnel: 61.

ARTHUR H. VANDENBERG

Mr. RIEGLE. Mr. President, this Saturday, November 14, it will be my honor to join with State and local officials from across Michigan in paying tribute to Michigan's eminent former U.S. Senator, Arthur H. Vandenberg. As many of my colleagues may know, Senator Vandenberg served Michigan in this distinguished body for 23 years until his death in 1951, longer than any other Senator from my State.

On this occasion, I would like to briefly comment on Senator Vandenberg's outstanding career.

Arthur Vandenberg lived the American dream. He was the son of a harnessmaker who lost all his savings in the panic of 1893. Because of his family's financial struggles, Vandenberg worked from the age of 9 selling vegetables, delivering newspapers, operating a lemonade stand and running a stamp trading business.

His interest in politics surfaced at an early age. In his latter years, he was proud to retell the story of how he was fired from his job as a billing clerk because he took an afternoon off to hear Teddy Roosevelt speak. He aspired to practice law, but was forced to drop out of the University of Michigan Law School after 1 year because of financial difficulties. Eventually, his friend and mentor, former U.S. Senator William Alden Smith, hired him as the editor of the Grand Rapids Press. He served in this capacity from 1906 until 1928.

On March 31, 1928, Vandenberg was appointed to the U.S. Senate by Gov. Fred Green following the death of Senator Woodbridge Ferris. Later that same year, he was elected to complete the short, unexpired term and the full 6-year term by the largest majority every previously received in a Michigan Senate race. He was reelected in 1934, 1940, and 1946.

From 1929 until his death, he served on the Foreign Relations Committee. In his early years, the situation in Europe moved him toward isolationism; he was convinced that our participation in World War I had been a mistake. He supported the isolationist Neutrality Acts of the 1930's and supported efforts to prevent any action by the President that might cause the United States to be drawn into war.

During World War II, Vandenberg's position on foreign policy changed dramatically. He gradually abandoned his isolationism and became a noted architect of a bipartisan foreign policy. His greatest dream was to advance the causes of peace and freedom throughout the world. In a famous 1945 Senate speech, he called for candor and cooperation between the administration and the Senate in establishing the United Nations. Subsequently President Roosevelt appointed Vandenberg to serve as a delegate to the United Nations Conference on International Organization which drafted the U.N. Charter. He later helped win Senate ratification of the U.N. Charter.

From 1945 until his death, Arthur Vandenberg was the chief Republican spokesman on foreign policy. He worked closely with Democrats as well as Republicans, since he firmly believed that an aggressive, united foreign policy was the best weapon against Soviet communism. In 1947, in the Republican controlled Senate, Vandenberg became chairman of the Foreign Relations Committee. During his tenure, he secured unanimous committee approval of 48 bills and treaties; guided the Marshall plan through the Senate and authored the Vandenberg resolution which became the basis for the North Atlantic Treaty Organization. He was also instrumental in implementing the Truman doctrine.

Undoubtedly one of the greatest statesmen of this century, Arthur Vandenberg also cared deeply about domestic matters. He authored the Federal Deposit Insurance Corporation, which to this day forms the backbone of our commercial banking system. He steered through the Senate a bill requiring automatic redistricting of the House of Representatives following each national census. This important law increased Michigan's representation in the House of Representatives.

Initially, a vocal supporter of President Herbert Hoover, he became discouraged with the administration's handling of the Great Depression. Following Franklin D. Rossevelt's election in 1932, Vandenberg supported a majority of the New Deal programs, including Social Security.

His peers recognized his leadership qualities. In 1935, he was elected minority leader, in 1936, he refused to permit his party to nominate him for the Vice Presidency and in 1947 he was elevated to President pro tempore of the Senate.

Arthur Vandenberg dedicated his life to public service. His recognition by the people of Michigan is a fitting tribute to his monumental contributions to this great Nation.

A LITTLE VERMONT INGENUITY

Mr. LEAHY. Mr. President, today I rise to pay tribute to a Vermonter who has shown what a little Vermont ingenuity can do.

A year ago, Sgt. John Ledoux of the Vermont National Guard was watching engineers from the Lockheed Aircraft Corp. test infrared lights they had installed on helicopters at the National Guard base in Burlington. To do this, they had to stand on the helicopters, often in precarious positions, while wearing special goggles that cost $4,500 a pair.

After seeing how difficult it was to check the helicopter lights, Sergent Ledoux spent about $9 in electronics parts at a local hardware store and constructed his own hand-held testing device. The Army says the unit not only performs as well as the $4,500 goggles, but it also reduces the time needed to test the lights. The savings in parts and manhours to the Army is expected to save an average of $6.3 million per year.

I join other Vermonters in congratulating Sergeant Ledoux for his ingenuity and the savings he has brought to the Army. So all Senators and their staffs can read about Sergeant Ledoux, I ask unanimous consent that an article from the Rutland Herald about his invention be printed in the RECORD.

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

VERMONTERS' SIMPLE INVENTION WILL SAVE THE ARMY $6 MILLION

(By Jill Arabas)

MONTPELIER.—A civilian who works at a National Guard base has concocted a device that could save the Army more than $6 million a year.

John Ledoux, a military technician and sergeant with the Vermont Army National Guard, has built a hand-held device that detects whether the infrared lights on a helicopter work.

His invention, which costs $8.70, replaces a $4,500 pair of special goggles. But the Army says the real savings will come from the far fewer hours needed to use Ledoux's device.

"I went down to Radio Shack and bought the parts," said Ledoux, an Alburg resident. "It was just a few bucks. It was no big deal."

To him. To the Army, it could mean an annual taxpayer savings of $6.3 million.

Ledoux came up with his invention a year ago when engineers with the Lockheed Aircraft Corp. were installing infrared lights on helicopters at the National Guard base in Burlington.

Ledoux said he watched an engineer stand on one of the helicopters, often in precarious positions, trying to check the lights using the goggles.

"Had he fallen off head first, he would have been killed for sure. At the very least, he would have smashed $5,000 in equipment right there."

So Ledoux went to the local electronics store and came out with a phototransistor, a lightemitting diode, a switch and a nine-volt battery.

"I puttered around on this for a couple of days. It wasn't like I had a brilliant idea right off," he said.

He finally got it right, and his base started using the device immediately.

But it took more than a telephone call to convince the Army.

"I sent them a schematic, like an engineer's drawing, and I guess they didn't really think it would fly."

Then he sent the gizmo.

"They called back. They were all excited. They said, 'Boy, that's great.'"

The Army estimates the device will save 987,000 hours of labor a year, for a total of $6.86 million. Subtract the costs of materi-

als and implementation, and the net savings should be as average $6.3 million a year.

For his efforts, Maj. Gen. Donald Edwards, the adjutant general of Vermont, presented Ledoux with a $10,000 incentive award. In addition, he has been recommended for another $25,000 prize, the largest sum given out through the military's incentive program.

The Army has approved the device's use and is incorporating the design into its technical manuals.

Ledoux, who works full-time at the Burlington base, said he was pleased, especially after congressional reports that the Pentagon had spent $9,609 for a wrench and $748 for a pair of pliers.

VETERANS DAY 1987

Mr. CRANSTON. Mr. President, on this eve of Veterans Day, brave young Americans are putting their lives on the line in the Persian Gulf and throughout the world. We all should pause in the rush of our day-to-day business to reflect on those who, often at great personal sacrifice, have stood—and continue to stand—in defense of our Nation. Whether they faced the terrible horror of combat or stood ready to do so if called, the men and women who have served in our Armed Forces deserve our heartfelt thanks and appreciation.

This year's Veterans Day national theme is "Veterans, You Are America." It is a most appropriate theme. As Americans gather together around the Nation as free citizens, we need to remember the sacrifices of those valiant men and women who have served our Nation so well in its hours of need. Each of us privately remembers. All of us together as a grateful Nation remember. We remember the millions who answered the call to defend American ideals.

Too often, as we debate expenditures of billions for this program or that, we lose sight of the individuals these programs are designed to serve. This special day, Veterans Day, helps refocus our thoughts and rediscover important elements in our national makeup and gives us the opportunity to rededicate ourselves to important causes.

America has a tradition of honoring its veterans, but too often the initial fervor and support for those who served in our defense fades as we move further from a period of war. Perhaps no one has captured that tendency better than Kipling in his famous poem "Tommy" where he wrote:

For it's Tommy this, an' Tommy that
an' "Chuck him out, the brute!"
But it's "Savior of 'is Country",
When the guns begin to shoot. . . .

On this Veterans Day, let us pledge to keep America's support for our veterans strong, both through expressions of support and through tangible programs of benefits and services. These benefits and services to veterans are truly "earned opportunities"—bought and paid for by America's veterans through honorable service to our country.

I recognize that a current overriding concern of this body—as it must be given our current fiscal, monetary, and economic problems—involves ongoing efforts to reduce Federal expenditures so as to curb the enormous Federal deficits that are choking our economy. Thus, in urging rededication to the support of programs of benefits and services for veterans, I want to be clear that I am not suggesting that those programs must not be considered as we seek ways to reduce Federal spending. Indeed, veterans' programs have borne their share of cuts in this effort in recent years and continue to do so.

What I am urging is that, as we make the many hard choices that lie ahead, veterans not be dismissed as just one more special interest group pleading their case. Veterans are not a special interest group—veterans are America. In a very real sense, our Nation's veterans have made it possible for the future of all other programs and concerns to be debated. Without the dedication and commitment of our veterans—their very real sacrifices, including the ultimate sacrifice for many—over the years, when our Nation's national security was in peril, we Americans would not enjoy the great freedoms that we so often take for granted.

The vast majority of our veterans returned from their service unmarked by long-term injury or illness. For them, assistance in readjusting to civilian life and a sincere act of recognition and thanks is generally all that is needed to let them know, in appropriate ways, that their sacrifices are appreciated.

For those who returned from their service with disabilities—both tangible and hidden—and for the survivors of those who gave their lives, much more is needed. Ernest Hemingway once wrote that "life often breaks us and, afterwards we are strong at the broken places." The extraordinary resolve, particularly of catastrophically disabled veterans and of survivors, makes so many of them, truly "strong at the broken places." I deeply admire them. We must reverify and reaffirm the historic commitment, expressed so eloquently by President Lincoln in his second inaugural address, "to care for him who shall have born the battle, and for his widow and his orphan."

This commitment—which is the motto of the Veterans' Administration—is a moral commitment of the highest order. It must be maintained.

I believe it is fair to say that there is general agreement in the Congress that national defense is a legitimate, high priority of the Federal Government—indeed, or collective defense can only be met on a national level.

America has remained strong—the strongest nation in the world, yes stronger than the Soviet Union, whose Secretary General soon will visit our President—because in addition to our enormous military strength we have the strength of our economic and social system and the strength of the allies of the free world, the mightiest aggregate of nations ever assembled.

What is not understood by some, however, is that the great costs of providing for our defense do not end when the guns cease firing.

Providing benefits and services to meet the needs of veterans and their survivors is a continuing cost of war—a continuing obligation of waging war—and must be recognized as such.

Health care must be provided to heal the wounds of war.

Adequate compensation must be provided for those with disabilities incurred during their service.

Programs of educational support, counseling, and employment and training assistance are needed to help veterans readjust to civilian life.

Programs to assist the survivors of those who gave their lives are vital to help replace their great loss in the limited ways we can.

The fatal casualities recently suffered by 37 heroic American sailors serving on the U.S.S. *Stark* in the Persian Gulf serve as a grim reminder of the vital importance of our veterans' programs and of the Veterans' Administration. Working closely with the Navy casualty affairs program, dedicated VA veterans benefits counselors throughout the country immediately contacted family members of the casualties to expedite processing of claims for Death Indemnity Compensation, Dependents' Educational Assistance, and Servicemembers' Group Life Insurance [SGLI]. Within 48 hours, life insurance benefits were paid to the survivors of the lost sailors.

Mr. President, one final matter. Today I visited the White House where I, along with a number of our colleagues and representatives of veterans service organizations, met with the President. During this meeting, the President expressed his support for making the VA a Cabinet-level agency.

I am delighted with this result and I have long advocated this approach. President Carter started the ball rolling in this direction by inviting the Administrator to all Cabinet meetings, but this was not a full participatory status. When the present administration began, I urged President Reagan to continue or extend further the Carter policy. That was not done. Hence in 1983, Congress enacted, as section 501 of Public Law 98-160, a provision I authorized to express the sense of the Congress that the Administrator of Veterans' Affairs should be

designated "as a member of, and a full participant in all activities of, the Cabinet."

In light of the President's announced position, I urge him to issue an Executive order as soon as possible to make the Administrator a full-fledged member of the Cabinet. Such an action can be accomplished in very short order without the need for further action by the Congress.

Finally, I congratulate my colleagues on the Veterans' Affairs Committee, Senator THURMOND and Senator MURKOWSKI, and the chairman and ranking minority member of our counterpart committee in the House, Representatives "SONNY" MONTGOMERY and GERRY SOLOMON, for the success of their efforts in this Congress to move forward with legislation to bring about the elevation of the head of the VA.

Mr. President, as this eve of the 11th day of the 11th month draws near, as chairman of the Committee on Veterans' Affairs in the Senate, I ask all my colleagues and all Americans to join with me in renewing our commitments to our Nation's veterans and their survivors. Let us renew our commitments to repaying the debts we owe our veterans because "Veterans, You Are America."

MESSAGES FROM THE PRESIDENT RECEIVED DURING ADJOURNMENT

Under the authority of the order of the Senate of February 3, 1987, the Secretary of the Senate, on November 9, 1987, during the adjournment of the Senate, received a message from the President of the United States, transmitting sundry nominations, which were referred to the appropriate committees.

(The nominations received on November 9, 1987, are printed in today's RECORD at the end of the Senate proceedings.)

PROPOSED AGREEMENT BETWEEN THE UNITED STATES AND JAPAN CONCERNING PEACEFUL USES OF NUCLEAR ENERGY—MESSAGE FROM THE PRESIDENT RECEIVED DURING ADJOURNMENT—PM 84

Under the authority of the order of the Senate of February 3, 1987, the Secretary of the Senate, on November 9, 1987, during the adjournment of the Senate, received the following message from the President of the United States, together with accompanying papers; which was referred to the Committee on Foreign Relations:

To the Congress of the United States:

I am pleased to transmit to the Congress, pursuant to sections 123 b. and 123 d. of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2153(b), (d)), the text of a proposed Agreement for Cooperation Between the Government of the United States of America and the Government of Japan Concerning Peaceful Uses of Nuclear Energy, including an implementing agreement pursuant to Article 11 of the proposed agreement. I am also pleased to transmit my written approval, authorization and determination concerning the agreement, and the Nuclear Proliferation Assessment Statement by the Director of the United States Arms Control and Disarmament Agency concerning the agreement. The joint memorandum submitted to me by the Departments of State and Energy, which includes a summary of the provisions of the agreement, the views of the Director of the United States Arms Control and Disarmament Agency, and an analysis of the approvals and consents contained in the agreement, including the implementing agreement, and associated subsequent arrangements are also enclosed.

I also enclose for your information the texts of a proposed subsequent arrangement under the United States-Norway Revised Agreement for Cooperation Concerning Peaceful Uses of Nuclear Energy and a proposed subsequent arrangement under the United States-EURATOM Additional Agreement for Cooperation Concerning Peaceful Uses of Atomic Energy. These subsequent arrangements are designed to give effect to certain provisions of the United States-Japan implementing agreement and will enter into force only after the agreement enters into force. They are being processed by the Department of Energy in accordance with the applicable provisions of the Atomic Energy Act of 1954, as amended.

The proposed agreement with Japan, including the implementing agreement, has been negotiated in accordance with the Nuclear Non-Proliferation Act of 1978 (NNPA). In my judgment it meets all statutory requirements. It will supersede our 1968 agreement with Japan and, given the magnitude of our long-standing cooperation with Japan in the peaceful uses of nuclear energy, will represent the most significant achievement to date in our program initiated pursuant to section 404(a) of the NNPA to update all existing agreements for peaceful nuclear cooperation to include the more stringent standards established by that Act.

I believe that the new agreement will strengthen the basis for continued close cooperation between the United States and Japan in the peaceful nuclear area and that it will further the non-proliferation and other foreign policy interests of the United States. The implementing agreement provides Japan advance, long-term consent for reprocessing, transfers, alteration, and storage of nuclear material subject to the agreement, provided that the reprocessing and subsequent use of the recovered plutonium meet and continue to meet the criteria set out in U.S. law, including criteria relating to safeguards and physical protection. These arrangements should enable Japan to plan for its long-term energy needs on a more assured, predictable basis, while at the same time embodying the most advanced concepts of physical security and safeguards of any agreement. This step forward in our cooperative relations with Japan will be consistent with the NNPA's injunction to take such actions as are required to confirm the reliability of the United States as a nuclear supplier consistent with non-proliferation goals.

Japan is not only a close ally of the United States but is also a party to the Treaty on the Non-Proliferation of Nuclear Weapons and has long been one of the strongest supporters of the international non-proliferation regime. Moreover, the United States and Japan have a substantial identity of views and intentions with regard to preventing nuclear proliferation and are prepared to work together on measures that will contribute to the prevention of proliferation consistent with the peaceful uses of nuclear energy. An exchange of letters between the United States and Japan, the text of which is included in the agreement package, sets forth in detail our shared views on non-proliferation.

I have considered the views and recommendations of the interested agencies in reviewing the proposed agreement and have determined that its performance will promote, and will not constitute an unreasonable risk to, the common defense and security. Accordingly, I have approved the agreement and authorized its execution and urge that the Congress give it favorable consideration.

I have also found that this agreement meets all applicable requirements of the Atomic Energy Act, as amended, for agreements for peaceful nuclear cooperation, and therefore, I am transmitting it to the Congress without exempting it from any requirement contained in section 123 a. of that Act. This transmission shall constitute a submittal for purposes of both sections 123 b. and 123 d. of the Atomic Energy Act. The Administration is prepared to begin immediately the consultations with the Senate Foreign Relations and House Foreign Affairs Committees as provided in section 123 b. Upon completion of the 30-day continuous session period provided in section 123 b., the 60-day continuous session period provided for in section 123 d. shall commence.

RONALD REAGAN.

THE WHITE HOUSE, *November 9, 1987.*

MESSAGES FROM THE PRESIDENT

Messages from the President of the United States were communicated to the Senate by Ms. Emery, one of his secretaries.

EXECUTIVE MESSAGES REFERRED

As in executive session, the Presiding Officer laid before the Senate messages from the President of the United States submitting sundry nominations, which were referred to the appropriate committees.

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

CHILD PROTECTION AND OBSCENITY ENFORCEMENT ACT—MESSAGE FROM THE PRESIDENT—PM 85

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, together with accompanying papers; which was referred to the Committee on the Judiciary:

To the Congress of the United States:

I am pleased to transmit today for your immediate consideration and enactment the "Child Protection and Obscenity Enforcement Act of 1987." This bill is a direct outgrowth of a deep concern this Administration has had about the effects of obscenity and child pornography in our Nation. In 1984 I signed legislation isolating child pornography as a uniquely tragic and distinct criminal offense. The bill I now present expands on these concerns, addressing both child pornography and adult obscenity. The goals of this proposed legislation are twofold: first, to update the law to take into account technologies newly utilized by the pornography industry; and second, to remove the loopholes and weaknesses in existing Federal law, which have given criminals in this area the upper hand for far too long.

A little over 3 years ago, I announced the creation of a national commission to study the scope and nature of pornography in the United States. After 14 long months of careful and objective study, including the taking of hundreds of hours of testimony from citizens on all sides of the issue, the Attorney General's Commission on Pornography released its Final Report in July 1986. In that report were numerous recommendations for changes in Federal law, many of which are reflected in the bill I am proposing today. This bill represents one point of a seven-point plan created by Attorney General Edwin Meese to crack down heavily on the producers, distributors, and retailers of obscene material.

In the last several years, distributors of obscenity and child pornography have expanded into new areas. They are employing new technologies and reaching new audiences. This is how any business grows and develops, except that this business is illegal. Neither our Constitution, our courts, our people, nor our respect for common decency and human suffering should allow the trafficking in obscene material—which exploits women, children, and men alike—to continue. With this bill, and the implementation of the Attorney General's seven-point plan—in which the creation of the National Obscenity Enforcement Unit is the centerpiece—this Administration is putting the purveyors of illegal obscenity and child pornography on notice: your industry's days are numbered.

The "Child Protection and Obscenity Enforcement Act of 1987" proposes changes in 11 basic areas. A brief overview of these proposals will demonstrate the loopholes and weaknesses in existing law that this bill so admirably addresses.

SEXUAL EXPLOITATION OF CHILDREN THROUGH CHILD PORNOGRAPHY

Use of computers in child pornography. Child molesters, pedophiles, and collectors of child pornography have developed a complex, computerized, nationwide network to traffic in child pornography. This bill would clarify the existing sexual exploitation of children statutes to prohibit the use of computers for such deviant purposes.

Buying or selling of children to produce child pornography. Sadly, current Federal law does not forbid a parent or other adult with custody of a minor from selling that child for use in the production of pornography. When this bill is passed, a grievous situation will have thus been corrected.

Record-keeping requirements. Many of the individuals addicted to pornography are attracted to obscene depictions of children. To meet this demand, pornographers have often used minors to produce sexually explicit materials. This violates Federal laws that protect all persons under 18 years of age from exploitation. But because pornographers have not been required to keep appropriate records, proof of age has often been impossible. This bill will mandate the keeping of verifiable records as to the actual age and identity of each performer. If a producer fails to keep such records, or if a distributor sells the material without it containing a statement as to where such records may be found, the burden in any subsequent criminal prosecution will be on him or her to prove the performer was not a minor.

Child pornography and organized crime. There is a growing commercial market for child pornography in this country. Much of it is produced and distributed by networks of pedophiles and child molesters who are well organized. It is therefore appropriate for this bill to amend the RICO statute to include child pornography offenses. The RICO (Racketeer Influenced and Corrupt Organizations) statute, which was amended in 1985 to include obscenity, is a tool long needed by prosecutors of the highly organized, multibillion dollar pornography industry. It provides strong criminal penalties and fines and brings forfeiture provisions into play, allowing the seizure and sale of all assets used in or obtained through organized criminal activity.

OBSCENITY

Receipt or possession of obscene matter for sale or distribution. Another loophole that has long needed closing is the fact that, while it is currently illegal under Federal law to transport obscene material over State lines, it is not illegal to receive or possess that same material with intent to sell it or transfer it, or to offer to do so. This bill will close that loophole tight.

"Syndicate buster" amendments. Organized crime controls the majority of the obscenity market. According to law enforcement estimates, organized crime's revenues in these areas exceed seven to ten billion dollars per year. A set of three "Syndicate Buster" amendments will block these illicit enterprises from taking advantage of additional inconsistencies in existing Federal law. When passed, the first of these amendments will prohibit the use of Federal roads, interstate railroads, motor vehicles, boats, airplanes, or other methods for obscenity trafficking across State lines. The second will inject a little common sense into the law by allowing a jury to presume, without the prosecutors having to prove it, that obsenity produced in one State and now located in another State has, in fact, travelled in interstate commerce. This will apply in similar fashion to material produced in a foreign country. The third of these amendments will make illegal *in and of itself* any interstate or international activity or communication regarding the furtherance of acts that are illegal under State or Federal obscenity and child pornography laws. This means, for example, that an interstate phone call from a retailer to a distributor regarding an interstate shipment of obscenity would itself be a criminal offense, as would be the use of the mails to pay for such a shipment.

Obscenity forfeitures. Civil and criminal forfeiture provisions for Federal obscenity violations are also provided for in the bill. It has been proven time and again that the best way to dismantle any organized criminal operation is to confiscate its illgotten gains. Prosecution of national and international drug cartels has underscored this point on numerous oc-

casions. Forfeiture also provides much-needed funds and equipment to the Federal efforts and, as in drug forfeiture, allows for sharing of forfeited assets with State and local law enforcement organizations involved in joint investigations.

Possession and sale of obscene material and child pornography on Federal properties. Today, there are seven States that have no obscenity laws whatsoever (Alaska, Maine, New Mexico, Oregon, South Dakota, Vermont, and Wisconsin). Of these, several contain major military bases or other large tracts of Federal land. Obscenity and child pornography are all too common on Federal lands in general. This bill will make the sale of such material on any Federal lands a felony; and the mere possession of child pornography or obscene visual depictions on these lands will itself become a misdemeanor.

Adding obscenity to the wiretap statute. When it comes to court orders for such things as wiretaps, the government can get them in cases involving drug trafficking, extortion, and many other crimes, but it cannot do so for felony obscenity offenses. This bill will rectify that needless deficiency.

CHILD PROTECTION AMENDMENTS

Cable porn. In the interest of protecting those most vulnerable and impressionable members of our society, our children, this bill will prohibit transmission of obscenity over cable or subscription television.

Dial-a-porn. Finally, this bill will give prosecutors a powerful new weapon to attack "Dial-A-Porn" businesses that profit from obscenity. I have read statistics that just one company in just one city has received up to 800,000 calls per day—180 million calls in a single year. Moreover, law enforcement officials have estimated that a great number of these calls are made by children. A child who calls one of these numbers hears an explicit sexual message. The bill would make it a felony for these companies to transmit obscene messages.

CONCLUSION

At a dark hour in British history, Winston Churchill said, "Give us the tools and we will finish the job." Federal prosecutors and law enforcement officials are saying the same thing today. The Commission has recommended it. The public is demanding it. Yet, as I have described to you, under current Federal law some very basic tools are being withheld. The legislation I propose today will give these men and women the tools they need to get the job done efficiently, fairly, and thoroughly. The producers and distributors of this material—the heartless victimizers of women and children—have had a huge legal advantage, and they have used it to the fullest. They have also employed the latest technologies, while Federal law has failed to keep pace. It is high time these inequities are corrected.

When the "Child Protection and Obscenity Enforcement Act of 1987" is passed we will all be able to go about the business of cleaning up some of the filth that floods our Nation. Right now, in the Department of Justice, this task is already well under way. The newly created National Obscenity Enforcement Unit is coordinating and spearheading nationwide prosecutions of a scope never before attempted in our Nation's history. They have my full support, but they need more. They need strong, loophole-free Federal laws, and they need the assistance of the American people. The industry they seek to shut down is very large, very powerful, and very harmful. The Federal Government alone just does not have the resources to do the whole job. We will need all the help we can get from decent-minded citizens across the country who know when it is time to stand up and be counted. And I am confident we will get that help. I look also to State and local law enforcement authorities to join with us in a total effort to rid our communities of this criminal element among us.

But the first step in this critical task is the legislation I set before you today. I look forward to you, the elected representatives of the American people, assisting me in this effort to help protect all Americans from the corruption, the disease, the violence, degradation, and victimization that flows from this despicable industry.

RONALD REAGAN.

THE WHITE HOUSE, *November 10, 1987.*

REPORT ON NATIONAL EMERGENCY WITH RESPECT TO IRAN—MESSAGE FROM THE PRESIDENT—PM 86

The PRESIDING OFFICER laid before the Senate the following message from the President of the United States, together with accompanying papers; which was referred to the Committee on Banking, Housing, and Urban Affairs:

To the Congress of the United States:

Section 202(d) of the National Emergencies Act (50 U.S.C. 1622(d)) provides for the automatic termination of a national emergency unless, prior to the anniversary date of its declaration, the President publishes in the *Federal Register* and transmits to the Congress a notice stating that the emergency is to continue in effect beyond the anniversary date. In accordance with this provision, I have sent the attached notice, stating that the Iran emergency is to continue in effect beyond November 14, 1987, to the *Federal Register* for publication. Similar notices were sent to the Congress and the *Federal Register* on November 12, 1980, November 12, 1981, November 8, 1982, November 4, 1983, November 7, 1984, November 1, 1985, and November 12, 1986.

The crisis between the United States and Iran that began in 1979 has not been fully resolved. Although the international tribunal established to adjudicate claims of U.S. nationals against Iran and of Iranian nationals against the United States continues to function, normalization of commercial and diplomatic relations between the United States and Iran has not been achieved. In these circumstances, I have determined that it is necessary to maintain in force the broad authorities that may be needed in the process of implementing the January 1981 agreements with Iran and in the eventual normalization of relations with that country.

RONALD REAGAN.

THE WHITE HOUSE, *November 10, 1987.*

PRESIDENTIAL APPROVALS

A message from the President of the United States announced that he had approved and signed the following bills and joint resolutions:

On September 24, 1987:

S.J. Res. 22. Joint resolution to designate the period commencing September 21, 1987, and ending on September 27, 1987, as "National Historically Black Colleges Week".

On September 28, 1987:

S. 1596. An act to extend the period for waivers of State eligibility requirements to enable certain States to qualify for child abuse and neglect assistance.

S.J. Res. 135. Joint resolution to designate October 1987 as "Polish American Heritage Month".

On September 30, 1987:

S.J. Res. 191. Joint resolution to provide for the extension of certain programs relating to housing and community development, and for other purposes.

On October 5, 1987:

S. 1532. An act relating to the payment for telecommunications equipment and certain services furnished by the Sergeant at Arms and Doorkeeper of the Senate.

S.J. Res. 84. Joint resolution to designate October 1987 as "National Down Syndrome Month".

On October 8, 1987:

S.J. Res. 142. Joint resolution to designate the day of October 1, 1987, as "National Medical Research Day".

On October 14, 1987:

S.J. Res. 72. Joint resolution to designate the week of October 11, 1987, through October 17, 1987, as "National Job Skills Week".

S.J. Res. 110. Joint resolution to designate October 16, 1987, as "World Food Day".

On October 16, 1987:

S. 1691. An act to provide interim extensions of collection of the Veterans' Administration housing loan fee and of the formula for determining whether, upon foreclosure, the Veterans' Administration shall acquire the property securing a guaranteed loan, and for other purposes.

On October 21, 1987:

S. 1574. An act to combine the Senators' Clerk Hire Allowance Account and the Senators' Official Office Expense Account into a combined single account to be known as the "Senators' Official Personnel and Office Expense Account", and for other purposes.

On October 26, 1987:

S. 1666. An act to amend title 5, United States Code, to provide for the extension of physicians comparability allowances and to amend title 37, United States Code, to provide for special pay for psychologists in the commissioned corps of the Public Health Service.

On October 28, 1987:

S.J. Res. 163. Joint Resolution to designate the month of November 1987, as "National Family Bread Baking Month".

S.J. Res. 168. Joint resolution designating the week beginning October 25, 1987, as "National Adult Immunization Awareness Week".

S.J. Res. 198. Joint resolution to designate the week beginning on November 2, 1987, and ending on November 8, 1987, as "National Tourette Syndrome Awareness Week".

On October 29, 1987:

S. 1417. An act to amend the Developmental Disabilities Assistance and Bill of Rights Act to extend the programs established in such act, and for other purposes.

On October 30, 1987:

S. 1628. An act to extend the Aviation Insurance Program for five years.

On November 5, 1987:

S.J. Res. 209. Joint resolution to provide for the extension of certain programs relating to housing and community development, and for other purposes.

On November 6, 1987:

S.J. Res. 171. Joint resolution designating the week beginning November 8, 1987, as "National Women Veterans Recognition Week".

On November 9, 1987:

S. 442. An act to amend chapter 9 of title 17, United States Code, regarding protection extended to semiconductor chip products of foreign entities.

MESSAGES FROM THE HOUSE RECEIVED DURING ADJOURNMENT

ENROLLED BILLS AND JOINT RESOLUTIONS SIGNED

Under the authority of the order of the Senate of February 3, 1987, the Secretary of the Senate, on November 9, 1987, during the adjournment of the Senate, received a message from the House of Representatives announcing that the Speaker has signed the following enrolled bills and joint resolutions:

S. 423. An act for the relief of Kil Joon Yu Callahan;

H.R. 3428. An act to provide for the distribution within the United States of the film entitled "America The Way I See It";

H.J. Res. 368. Joint resolution designating the week of November 8 through November 14, 1987, as "National Food Bank Week"; and

H.J. Res. 394. Joint resolution making further continuing appropriations for the fiscal year 1988, and for other purposes.

Under the authority of the order of the Senate of February 3, 1987, the enrolled bills and joint resolutions were signed on November 9, 1987, during the adjournment of the Senate, by the President pro tempore [Mr. STENNIS].

MESSAGES FROM THE HOUSE

At 9:10 a.m., a message from the House of Representatives, delivered by Mr. Berry, one of its reading clerks, announced that the House agrees to the report of the committee of conference on the disagreeing votes of the two Houses on the amendments of the House to the bill (S. 825) to amend and extend certain laws relating to housing.

The message also announced that the House has passed the following bill and joint resolution, without amendment:

S. 247. An act to designate the Kern River as a national wild and scenic river; and

S.J. Res. 205. Joint resolution expressing the sense of the Congress that United Nations General Assembly Resolution 3379 (XXX) should be overturned, and for other purposes.

ENROLLED BILLS AND JOINT RESOLUTIONS SIGNED

At 12:19 p.m., a message from the House of Representatives, delivered by Mr. Berry, one of its reading clerks, announced that the Speaker has signed the following enrolled bills and joint resolution:

H.R. 3295. An act for the relief of Nancy L. Brady;

H.R. 3457. An act to amend the Packers and Stockyards Act, 1921, to provide financial protection to poultry growers and sellers, and to clarify Federal jurisdiction under such act; and

S.J. Res. 205. Joint resolution expressing the sense of the Congress that United Nations General Assembly Resolution 3379 (XXX) should be overturned, and for other purposes.

The enrolled bills and joint resolution were subsequently signed by the President pro tempore [Mr. STENNIS].

At 2:18 p.m., a message from the House of Representatives, delivered by Mr. Berry, one of its reading clerks, announced that the House disagrees to the amendment of the Senate to the bill (H.R. 2939) to amend title 28, United States Code, with respect to the appointment of independent counsel; it agrees to the conference asked by the Senate on the disagreeing votes of the two Houses thereon, and appoints Mr. RODINO, Mr. FRANK, Mr. GLICKMAN, Mr. SHAW, and Mr. SWINDALL as managers of the conference on the part of the House.

The message also announced that the House has passed the following bills, in which it requests the concurrence of the Senate:

H.R. 519. An act to direct the Federal Energy Regulatory Commission to issue an order with respect to Docket No. EL-85-38-000;

H.R. 585. An act to establish evidentiary standards for Federal civil antitrust claims based on resale price fixing;

H.R. 2210. An act to prohibit the use of certain organotin-based antifoulant paints and the use of organotin compounds, purchased at retail, used to make such paints;

H.R. 2583. An act to authorize additional appropriations for the San Francisco Bay National Wildlife Refuge; and

H.R. 2752. An Act to encourage the use of program crop acreage for the purpose of creating game and wildlife habitats, feeding areas, and sanctuaries by protecting farm program crop base acreage and program payment yields.

The message further announced that the House has agreed to the following concurrent resolution, in which it requests the concurrence of the Senate:

H. Con. Res. 209. A concurrent resolution expressing the sense of the Congress with respect to demonstrations in Latvia commemorating Latvian Independence Day.

At 5:06 p.m., a message from the House of Representatives, delivered by Ms. Goetz, one of its reading clerks, announced that the House has agreed to the following concurrent resolution, in which it requests the concurrence of the Senate:

H. Con. Res. 215. A concurrent resolution providing for an adjournment of the House from November 10 to November 16, 1987.

MEASURES REFERRED

The following bills were read the first and second times by unanimous consent, and referred as indicated:

H.R. 585. An act to establish evidentiary standards for Federal civil antitrust claims based on resale price fixing; to the Committee on the Judiciary.

H.R. 2210. An act to prohibit the use of certain organotin-based antifoulant paints and the use of organotin compounds, purchased at retail, used to make such paints; to the Committee on Environment and Public Works.

H.R. 2583. An act to authorize additional appropriations for the San Francisco Bay National Wildlife Refuge; to the Committee on Environment and Public Works.

H.R. 2752. An act to encourage the use of program crop acreage for the purpose of creating game and wildlife habitats, feeding areas, and sanctuaries by protecting farm program crop base acreage and program payment yields; to the Committee on Agriculture, Nutrition, and Forestry.

MEASURES PLACED ON THE CALENDAR

The following concurrent resolution was read, and placed on the calendar:

H. Con. Res. 209. A concurrent resolution expressing the sense of the Congress with respect to demonstrations in Latvia commemorating Latvian Independence Day.

ENROLLED BILL AND JOINT RESOLUTION PRESENTED

The Secretary of the Senate reported that on today, November 10, 1987, he had presented to the President of the United States the following enrolled bill and joint resolution:

S. 423. An act for the relief of Kil Joon Yu Callahan; and

S. J. Res. 205. Joint resolution expressing the sense of the Congress that United Na-

tions General Assembly Resolution 3379 (XXX) should be overturned, and for other purposes.

EXECUTIVE AND OTHER COMMUNICATIONS

The following communications were laid before the Senate, together with accompanying papers, reports, and documents, which were referred as indicated:

EC-2103. A communication from the Assistant Secretary of Defense (Comptroller), transmitting, pursuant to law, a report on the transfer of certain funds within the Department of Defense; to the Committee on Appropriations.

EC-2104. A communication from the Deputy Secretary of Defense and the Secretary of Education, transmitting jointly, pursuant to law, a report on the study of the construction and repair needs of military dependent educational facilities on military installations in the United States; to the Committee on Armed Services.

EC-2105. A communication from the Director of the Office of Management and Budget, Executive Office of the President and the Chairman of the Export-Import Bank of the United States, transmitting jointly, pursuant to law, a report on U.S. Government involvement in export credit insurance; to the Committee on Banking, Housing, and Urban Affairs.

EC-2106. A communication from the Chairman and Members of the Interagency Committee on Cigarette and Little Cigar Fire Safety, transmitting, pursuant to law, the final technical report of the Committee; to the Committee on Commerce, Science, and Transportation.

EC-2107. A communication from the Secretary of Commerce, transmitting, pursuant to law, the annual report regarding the administration of the Marine Mammal Protection Act for the period April 1, 1986 through March 31, 1987; to the Committee on Commerce, Science, and Transportation.

EC-2108. A communication from the Secretary of Energy, transmitting, pursuant to law, a comprehensive report on a project under the Clean Coal Technology Demonstration Program entitled "Prototype Commercial Coal/Oil Co-processing Plant"; to the Committee on Energy and Natural Resources.

EC-2109. A communication from the Secretary of Energy, transmitting, pursuant to law, an update to the Comprehensive Ocean Thermal Technology Application and Market Development Plan; to the Committee on Energy and Natural Resources.

EC-2110. A communication from the Administrator of General Services, transmitting, pursuant to law, informational copies of an amended prospectus for the purchase of the Thousand Island Bridge U.S. Border Station complex; to the Committee on Environment and Public Works. .

EC-2111. A communication from the Chairman of the U.S. Merit Systems Protection Board, transmitting, pursuant to law, a report entitled "Reduction in Force: The Evolving Ground Rules"; to the Committee on Governmental Affairs.

EC-2112. A communication from the Chairman of the U.S. Merit Systems Protection Board, transmitting, pursuant to law, a report entitled "In Search of Merit: Hiring Entry-Level Federal Employees"; to the Committee on Governmental Affairs.

EC-2113. A communication from the Chairman of the U.S. Merit Systems Protection Board, transmitting, pursuant to law, the seventh annual report of the Board's appeals decision; to the Committee on Governmental Affairs.

EC-2114. A communication from the Chairman of the U.S. Merit Systems Protection Board, transmitting, pursuant to law, a report entitled "The Office of Special Counsel: Judicial Views on Prosecution of Prohibited Personnel Practices"; to the Committee on Governmental Affairs.

EC-2115. A communication from the Independent Counsel, Office of Independent Counsel, transmitting, pursuant to law, a report on a new Privacy Act system of records; to the Committee on Governmental Affairs.

EC-2116. A communication from the Chairman of the Consumer Product Safety Commission, transmitting, pursuant to law, the annual report of the Commission under the Government in the Sunshine Act for calendar year 1986; to the Committee on Governmental Affairs.

EC-2117. A communication from the Chief Immigration Judge, Executive Office for Immigration Review, Department of Justice, transmitting, pursuant to law, a report on the suspension of deportation of certain aliens under sections 244(a)(1) and 244(a)(2) of the Immigration and Nationality Act; to the Committee on the Judiciary.

EC-2118. A communication from the Comptroller General of the United States, transmitting, pursuant to law, a report entitled "Immigration Reform: Status of Implementing Employer Sanctions After One Year"; to the Committee on the Judiciary.

EC-2119. A communication from the Adjutant General, Military Order of the Purple Heart, transmitting, pursuant to law, the report of the financial audit of the Order dated June 30, 1987; to the Committee on the Judiciary.

EC-2120. A communication from the Chief Counsel for Advocacy, U.S. Small Business Administration, transmitting, pursuant to law, a report entitled "The State of Small Business; A Report of the President, 1987"; to the Committee on Small Business.

PETITIONS AND MEMORIALS

The following petitions and memorials were laid before the Senate and were referred or ordered to lie on the table as indicated:

POM-355. A resolution adopted by the Alpena County Board of Commissioners, Alpena, Michigan, urging the adoption of legislation to correct the "Notch" effect in the Social Security Act; to the Committee on Finance.

POM-356. A resolution adopted by the House of Representatives of the State of Illinois; to the Committee on Finance.

"HOUSE RESOLUTION No. 868

"Whereas, Canada is a close ally of the United States in the defense of North America, and, through membership in NATO, of the Western Democracies; and

"Whereas, There are substantial historical, culture, and economic links between the State of Illinois and Canada; and

"Whereas, Canada is the United States' and the State of Illinois' major trading partner; in 1986, Illinois imported from, and exported to, Canada more than $3 billion in merchandise; and

"Whereas, More than 200 companies headquartered in Illinois have invested in Canada, and that many Canadian companies have invested in the State, and others are contemplating such investment; and

"Whereas, Illinois is advantaged in trading with Canada by reason of proximity, as well as by the existence of excellent transportation, communication, and financial service links with that country; and

"Whereas, Tariff and non-tariff carriers continue to impede trade and distort investment location between the United States and Canada, to the detriment of both countries and the State of Illinois; and

"Whereas, An agreement in principle was reached between the United States and Canada on October 4, 1987, to establish a free trade area; and

"Whereas, This Free Trade Agreement, when enacted, would remove, on a phased basis, all tariff barriers between Canada and the United States; would reduce the trade-distorting effects of non-tariff barriers,; would establish new international rules for services; would remove all limitations on cross-border trade in energy products; and would lead to a more secure and fair North American investment climate; and

"Whereas, Implementation by both the United States and Canada of the measures set out in the October 4, 1987, accord would be advantageous to the State of Illinois in terms of job creation by promoting rationality, improved productivity, and greater competitiveness; therefore be it

"Resolved, by the House of Representatives of the Eighty-fifth General Assembly of the State of Illinois, that the President is urged to enter into a Free Trade Agreement with Canada; and be it further

"Resolved, That the members of the United States Congress are urged to give favorable consideration to the Free Trade Agreement with Canada when it is referred to the Senate and House of Representatives for adoption; and be it further

"Resolved, That copies of this resolution be delivered to the President, Speaker of the United States House of Representatives, the President of the United States Senate, and all members of the Illinois Congressional Delegation."

POM-357. A resolution adopted by the General Assembly of the Christian Church (Disciples of Christ) concerning procedures to establish a firm and lasting peace in Central America; to the Committee on Foreign Relations.

INTRODUCTION OF BILLS AND JOINT RESOLUTIONS

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

By Mr. MURKOWSKI:

S. 1859. A bill to eliminate cost-of-living increases for Federal programs in fiscal year 1988; to the Committee on Governmental Affairs.

By Mr. MURKOWSKI:

S. 1860. A bill to establish a Commission on National Debt Reduction and to examine the importance of savings to economic growth and stability, and for other purposes; to the Committee on the Budget and the Committee on Governmental Affairs, jointly, pursuant to the order of August 4, 1977, with instructions that if one Committee reports, the other Committee have 30

days of continuous session to report or be discharged.

By Mr. DECONCINI (for himself, Mr. D'AMATO, Mr. WILSON, Mr. NUNN, Mr. HEINZ, Mr. CRANSTON, Mr. MCCAIN, Mr. DIXON, and Mr. GRAHAM):

S. 1861. A bill to amend the Controlled Substances Act to suppress the diversion and trafficking of precursor chemicals and essential chemicals utilized in the illicit manufacture of controlled substances; to the Committee on the Judiciary.

By Mr. DURENBERGER (for himself, Ms. MIKULSKI, Mr. LUGAR, Mr. KENNEDY, Mrs. KASSEBAUM, Mr. BURDICK, Mr. BOSCHWITZ, Mr. METZENBAUM, and Mr. PRESSLER):

S.J. Res. 215. Joint resolution to authorize the Vietnam Women's Memorial Project, Inc., to establish a memorial to women of the Armed Forces of the United States who served in the Vietnam war; to the Committee on Energy and Natural Resources.

By Mr. JOHNSTON (by request):

S.J. Res. 216. Joint resolution approving the location of the Black Revolutionary War Patriots Memorial; to the Committee on Energy and Natural Resources.

By Mr. ADAMS:

S.J. Res. 217. Joint resolution providing specific authorization under the War Powers Resolution for the continued use of U.S. Armed Forces in the Persian Gulf, consistent with the foreign policy objectives and national security interest of the United States; to the Committee on Foreign Relations.

SUBMISSION OF CONCURRENT AND SENATE RESOLUTIONS

The following concurrent resolutions and Senate resolutions were read, and referred (or acted upon), as indicated:

By Mr. BOSCHWITZ (for himself, Mr. CONRAD, Mr. HEFLIN, Mr. BOND, Mr. LEVIN, Mrs. KASSEBAUM, Mr. SPECTER, Mr. ROCKEFELLER, Mr. PELL, and Mr. SHELBY):

S. Res. 317. Resolution to express the sense of the Senate with respect to the current budget reduction negotiations between the Congress and the President; to the Committee on Budget and the Committee on Governmental Affairs, jointly, pursuant to the order of August 4, 1977, with instructions that if one Committee reports, the other Committee has 30 days of continuous session to report or be discharged.

By Mr. BYRD (for himself and Mr. DOLE):

S. Res. 318. Resolution to direct the Senate Legal Counsel representative in the case of United States versus Bardoff; considered and agreed to.

STATEMENTS ON INTRODUCED BILLS AND JOINT RESOLUTIONS

By Mr. MURKOWSKI:

S. 1859. A bill to eliminate cost-of-living increases for Federal programs in fiscal year 1988; to the Committee on Governmental Affairs.

S. 1860. A bill to establish a Commission on National Debt Reduction and to examine the importance of savings to economic growth and stability, and for other purposes; pursuant to the order of August 4, 1977, referred jointly to the Committee on the Budget and the Committee on Governmental Affairs.

LONG-TERM SOLUTION TO THE NATIONAL DEBT

Mr. MURKOWSKI. Mr. President, I am today introducing two legislative measures:

The first would apply a 1-year, across-the-board freeze on cost-of-living adjustments for salaries and benefits paid by the Federal Government for the balance of this fiscal year.

The second creates a 12-month Presidential Commission to provide the Congress with a blueprint to correct our Nation's long-term fiscal economic policies, including savings enhancement measures and deficit and debt reduction initiatives.

This legislation takes us from just "talking about" the deficit to "taking action" to reduce the deficit.

In my view, the American people are tired:

They are tired of Congress' philosophy of "borrow-borrow-borrow-spend-spend-spend."

They are tired of the games we politicians play when it comes to cutting spending—delaying benefit checks 1 day so that cost will be shifted to the next fiscal year and thereby allowing us to say, "we achieved deficit reduction in the current year." It's a sham! And we are all guilty.

The American people are tired of our criticizing each other's party without ever coming up with a true deficit reduction plan.

They are tired of our saying that some programs are on the table and others are off the table because we fear the political consequences.

Our political fears, our exercises with smoke and mirrors, have led us to:

An accumulated $2.3 trillion debt;

Huge and rising deficits;

A receding GNP;

Dwindling savings for capital growth;

Burdensome interest rates; and

A very, very nervous stock market.

The $23 billion in deficit savings that is being discussed in administration/White House budget summit negotiations is simply not enough: Even if we achieve it—we will still be spending more than ever.

Mr. President, I have said in front of this body many times that when I came to the Senate the accumulated debt of this Nation was about $757 billion. The reason I remember that, Mr. President, is I had the occasion to buy a padlock. In Alaska we ordinarily do not have keys, so I bought a tumbler lock with a combination. I had been to a budget meeting and I recalled the accumulated debt of this country in about March of 1981 was $757 billion. Well, today at $2.3 trillion I obviously cannot find a padlock with that many tumblers, but every time I use that lock I realize how far we have come in the wrong direction.

We will still have no real deficit reduction—and still have uncontrollable debt.

Each of us, when we ran for office, knew we would have to make hard decisions as U.S. Senators. This is the time to make one of those hard decisions.

That is why I am introducing a bill that I believe can enable us to begin to deal with the problem—directly and without playing games.

This legislation will have an immediate impact. Savings from a 1-year COLA freeze will yield $12 billion in savings this year and $40 billion over 3 years. While it is only part of the solution, it is an important first step in slowing growth in the deficit.

This legislation is broad based. No one is exempted—the COLA freeze would apply to everyone—Social Security recipients, veterans, Federal employees, military personnel and Federal retirees, and, most importantly, Members of Congress. Everyone is treated equally—fairly. Everyone makes do with what they currently receive. So, Mr. President, it is important to point out that no one is cut.

Yes, there is a sacrifice we must be willing to make if we are serious about reducing the deficit and the debt in any meaningful way. However, with an across-the-board freeze in COLA's the sacrifice is kept to a minimum because the burden is spread evenly over a large population.

To illustrate in actual dollar figures what the sacrifice would be to the average COLA recipient, let me cite four examples, keeping in mind again that these are not cuts but rather freezes at current levels:

Social Security retired workers would forego $21 a month or an average of 70 cents per day.

Disabled Veterans would forego in benefits $15 a month or an average of 50 cents per day.

Military retirees would forego $25 a month or an average of 84 cents per day.

Civil service retirees would forego $45 a month or an average of $1.50 per day.

The sacrifice is small but generates real and considerable savings in the process; $12 billion in fiscal year 1988 and $40 billion over the next 3 years by just freezing—not cutting benefits at current levels for the remaining 10 months of this year alone.

I hear it said that a freeze on Social Security benefits should not be even discussed—and yet, no Federal program is more worthy of a COLA than veterans benefits. And yet, who were the first to step forward and volunteer to share in the burden of deficit reduction—our Nation's veterans. The leadership of the American Legion, VFW,

DAV, AMVET's, and PVA have told me of their willingness to sacrifice again to save our financial system—but only if it is fair and equlitable—equal across-the-board.

Survival of our system is at stake and those in greatest danger are our senior citizens. Need I remind my colleagues that pension funds provide the financial security for Americans of all ages, especially those recipients of pensions who are dependent on a prosperous economy and a sound financial market. A short-term sacrifice in a COLA for everyone—which would yield substantial deficit reduction—would be more than offset by the long-term security of a prosperous economy for the young and old of this Nation.

I submit, Mr. President, if we are truly concerned about the well-being of our senior citizens—and not just the political consequences—we will make the tough decisions to protect their life savings, their pension funds, their investments, that are being eroded by the uncontrolled debt of this Nation.

I think we only have to reflect on "Black Monday" when approximately $210 billion in pension funds were lost on Wall Street.

Mr. President, this past week I have emphasized seveal points in addressing my colleagues.

Real reform will require sacrifice, but sacrifice will only be acceptable if it: is universally applied, and produces real and significant reductions in the deficit for fiscal year 1988, and most importantly, takes steps to address the causes for our $2.3 trillion debt.

Prompt action is required. Current volatility and trends in world financial markets are clear evidence of that fact. Neither talk nor good intentions will be effective in restoring confidence in Congress' ability to make the tough budgetary decisions regarding spending and revenues.

Failure to act will have drastic consequences for our country and our society—now and in the future:

A subsequent collapse of public confidence will ripple far beyond the stock market.

If we fail to act, those upon whom we depend to finance our debt will enentually lose confidence in our ability to repay—and turn off the tap.

Those Americans—both present and future generations—who have entrusted the Congress with their destiny, will hold the Congress responsible and justifiably so.

All Americans, not just those who earn stocks and bonds, have a stake in the economy—whether measured in terms of their pension funds or the purchasing power of their dollar.

It is futile to provide a COLA if it is diminished by a collapsing economy.

There is $2.5 trillion in pension funds on Wall Street—22 percent of Wall Street's value.

For millions of Americans, recipients of union and employer plans—current and future retirees—their financial security is tied to those funds.

And, we have just learned what can happen in a single day—$210 billion in losses to pension plans.

Mr. President, short-term action to balance our budget will be difficult, and long-term solutions to the debt will be even more difficult. That is why I am proposing a two-pronged attack, aimed at immediate short-term reduction in the deficit and a broad-based, bipartisan Presidential Commission to look at solutions including long-term savings enhancement as a way to control the national debt.

My second bill looks to the long term. The Presidential Commission, created under this bill, would analyze our fiscal policies as part of a long-term strategy to deal with the $2.3 trillion debt. A debt that is due to grow to nearly $3 trillion by the spring of 1989 under current spending and revenue policies. A debt that hampers our growth and cuts into our ability to fund needed budget programs.

This Commission will be broad-based—including economic, financial, tax, legal, business and labor leaders. The Commission's success will depend upon the support of the American people and their voices must be reflected in the Commission's deliberations.

This Commission will be working to develop solutions prior to the end of this fiscal year—so that we can adopt long term measures in a timely manner.

This Commission will be given a critical assignment to analyze and recommend to the Congress ways to bring about a much needed long-term correction in U.S. fiscal policy. The Commission must address the importance of savings to this country.

Savings stimulate growth, stabilize debt, makes us less reliant on foreign capital, and can help firm up Wall Street, and cut the deficit.

Savings in this country are at its lowest point in 40 years.

Savings as a percent of disposable income has steadily shrunk from 6.8 percent in 1982 to 3 percent; this last quarter of 1987.

SAVINGS IS CRITICAL FOR LONG-TERM HEALTHY ECONOMY

Savings drive interest rates down by making capital affordable. This opens the door to opportunity, lower debt costs, jobs, and growth for business and reinvestment, an increased tax revenues and lower borrowing costs for government to help stabilize debt and pay for deficit.

Savings avoid the need for artificial Federal Reserve stimulants to keep interest rates down—actions that risk inflation—or even recession given our excessive over-dependence on borrowed foreign capital.

Mr. President, the way to get interest rates down is through savings. Low-interest rates built this country—from railroads, to farms, to homes, to roads, to universities.

Our current system encourages spending . . . debt not saving. We tax interest on savings and deduct interest on debt. That is backwards.

Incentives to save, not spend, are needed.

This bill requires a fundamental rethinking of this country's fiscal economic policies.

Mr. President, the legislation I introduce today creates the means to begin the process of reducing the deficit and, in addition, devise and implement the long-term strategy we must have to succeed. A COLA and pay freeze alone will not achieve the level of savings necessary to reduce the deficit to an acceptable level this year, but it is a start and when coupled with other initiatives and the implementation of a long-term strategy, meaningful deficit reduction will take place. There may be those who argue that the legislation goes too far or that it does not go far enough. That may be, except in comparison with the alternative—which is to do nothing—what we have done to date.

I seek action—I see a cure for the cancerous debt that is eating away our economy. A demand for a perfect cure is a demand for inaction. And inaction is the prescription for failure.

This legislation is broad based and long term.

It will have both an immediate effect and long-term impact by freezing COLA's now for the balance of our current fiscal year and second to use that time constructively for a Presidential Commission to present Congress with long-term solutions emphasizing savings enhancement.

The legislation I propose is truly a commitment to effective action to ensure we attain fiscal discipline and save our financial system.

Mr. President, we are constantly talking in this body about putting everything on the table. If we do not talk about freezing COLA's we are shying away from the hard issues. Our political advisers would tell us to head for the exits when faced with the prospect of COLA freezes. I would hope that my colleagues would ignore all that and step forward and support these measures which go a long way toward taking a meaningful first step to save our system.

If there is a collapse of the system we will not escape the consequences and we in Government will appropriately be held responsible.

Mr. President, yesterday, we called upon America's veterans to save our liberties. Today those veterans stand ready again to sacrifice to save our Nation's financial system from ruinous

debt. And it is crucial that the rest of America stand tall with them.

Lest we be considered to be a voice shouting in the wilderness.

I ask unanimous consent to include in the RECORD an editorial from the Washington Post and an ad from the New York Times.

I ask unanimous consent that copies of my two bills be printed in the RECORD at this point.

I thank the Chair.

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

S. 1859

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

SECTION 1. COST-OF-LIVING INCREASES.

(a) Notwithstanding any other provision of law, no increase shall be made in payments or benefit amounts under any provision of law which would otherwise require such increase or change to become effective during fiscal year 1988 as a result of changes in—

(1) the Consumer Price Index (or any component thereof); or

(2) any other index which measures costs, prices, or wages.

(b) No person shall be entitled to any increase in payments or benefit amounts under any provision of law if payment thereof is denied by reason of this section.

(c) Notwithstanding any other provision of law, any change in—

(1) the Consumer Price Index (or any component thereof); or

(2) any other index which measures costs, prices, or wages,

which would have resulted in any increase in payments or benefit amounts during fiscal year 1988 but for the provisions of subsection (a), shall not be taken into account for purposes of determining any increase in payments or benefit amounts during fiscal year 1989 or any fiscal year thereafter.

S. 1860

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

SECTION 1. ESTABLISHMENT OF COMMISSION.

(a) There is hereby established a commission to be known as the Commission on National Debt Reduction, Savings, and Economic Reform (hereafter referred to as the "Commission").

(b)(1) The Commission shall consist of—

(A) five members to be appointed by the President, in consultation with the Majority and Minority Leaders of the Senate and the House of Representatives, one of whom shall, at the time of appointment, be designated as Chairman of the Commission;

(B) two members to be appointed by the Speaker of the House of Representatives, in consultation with the Minority Leader; and

(C) two members to be appointed by the Majority Leader of the Senate, in consultation with the Minority Leader.

(2) At no time shall more than three of the members appointed by the President, one of the members appointed by the Speaker of the House of Representatives, or one of the members appointed by the President pro tempore of the Senate be members of the same political party.

(3) The membership of the Commission shall consist of individuals who are of recognized standing and distinction and who possess the demonstrated capacity to discharge the duties imposed on the Commission, and shall include economists and other academics, tax experts, and investment and finance experts from diverse areas of the economy. No individual who is otherwise an officer or full-time employee of the United States shall serve as a member of the Commission.

(4) The Chairman of the Commission shall designate a member of the Commission to act as Vice Chairman of the Commission.

(5) A majority of the members of the Commission shall constitute a quorum, but a lesser number may conduct hearings.

(6) Members of the Commission shall be appointed for a term which shall end 12 months after the date all members are first appointed to the Commission.

(7) A vacancy in the Commission shall not affect its powers, but shall be filled in the same manner as that herein provided for the appointment of the member first appointed to the vacant position.

(c) Members of the Commission shall receive $138 per diem while engaged in the actual performance of the duties vested in the Commission, plus reimbursement for travel, subsistence, and other necessary expenses incurred in the performance of such duties.

(d) The Commission shall meet at the call of the Chairman, or at the call of a majority of the Commission; but meetings of the Commission shall be held not less frequently than once each calendar month.

SEC. 2. DUTIES OF THE COMMISSION.

(a) It shall be the duty and function of the Commission to conduct a study and review of, and to make recommendations regarding, the causes and elimination of the national debt and budget deficit.

(b) The study and review required by this section shall include—

(1) an analysis of the causes of the national debt and budget deficit;

(2) an evaluation of alternative solutions to reduction of the national debt and budget deficit, including the encouragement of savings and capital formation;

(3) fiscal, economic, and tax policy recommendations that will encourage savings and capital formation, promote economic growth and debt stability, achieve deficit reduction, and reduce the national debt; and

(4) propose specific methods for implementing such recommendations.

(c) In order to provide an effective opportunity for the general public to participate fully in the study, investigation, and review under this section, the Commission, in conducting such study, investigation, and review, shall solicit and receive the views and recommendations from as many public, private, and academic sectors of the country as possible.

SEC. 3. REPORT.

No later than 12 months after the date all of the members of the Commission have been first appointed, the Commission shall submit to the President and the Congress a final report of the Commission on the study, investigation, and review required by this Act, and shall include its final recommendations. The Commission shall cease to exist 12 months after the date all members of the Commission have been first appointed.

SEC. 4. EXECUTIVE DIRECTOR AND STAFF.

(a) The Commission shall appoint an Executive Director of the Commission who shall be compensated at a rate fixed by the Commission, but which shall not exceed the rate established for level V of the Executive Schedule by title 5.

(b) In addition to the Executive Director, the Commission shall have the power to appoint and fix the compensation of such personnel as it deems advisable, in accordance with the provisions of title 5 governing appointments to the competitive service, and the provisions of chapter 51 and subchapter III of chapter 53 of such title, relating to classification and General Schedule pay rates.

SEC. 5. POWERS OF COMMISSION.

In carrying out its duties under this section, the Commission, or any duly authorized committee thereof, is authorized to hold such hearings, sit and act at such times and places, and take such testimony, with respect to matters with respect to which it has a responsibility under this section, as the Commission or such committee may deem advisable. The Chairman of the Commission or any member authorized by him may administer oaths or affirmations to witnesses appearing before the Commission or before any committee thereof.

SEC. 6. ASSISTANCE FROM FEDERAL AGENCIES AND DEPARTMENTS.

The Commission may secure directly from any department or agency of the United States such data and information as may be necessary to enable it to carry out its duties under this Act. Upon request of the Chairman of the Commission, any such department or agency shall furnish any such data or information to the Commission.

SEC. 7. SUPPORT SERVICES.

The General Services Administration shall provide to the Commission, on a reimbursable basis such administrative support services as the Commission may request.

SEC. 8. AUTHORIZATION OF APPROPRIATIONS.

There are hereby authorized to be appropriated such sums as may be necessary to carry out this Act.

[From the Washington Post, Nov. 9, 1987]

CUTTING SOCIAL SECURITY

Social Security is a fifth of the federal budget. To wall it off from the deficit-reduction talks as the president did when he finally consented to those negotiations two weeks ago was wrong. Exempting Social Security only adds to the burdens that must be borne by other programs, many equally worthy.

The very size of the program is, strangely, what protects it. A seventh of the population now lives off Social Security in whole or in part. A politician who proposes to tamper with this Mississippi of income for even the best of reasons is thought to run enormous risks. Democrats and Republicans are both poised to demagogue on the issue; the president has been burned before.

But the elderly are not all needy. Fairness does not require that they be exempt. On the contrary, their poverty rate is now lower than that of the population as a whole. In many recent years, thanks precisely to Social Security, they have done better than the work force that has supported them. Benefits have kept up with inflation while wages have fallen behind. Social Security could also be the key to lucrative cuts in the other major retirement programs. It would hardly be fair to cut such items as civil service and military retirement but not Social Security; the one opens the way to the others.

The fairest way to wring more money out of Social Security would be to subject a greater share of benefits to the income tax. Currently, half are subject to tax if total income is over certain thresholds. At a minimum the thresholds should be abolished. There are thresholds enough in the income tax to protect the poor.

The method some brave, albeit mostly anonymous souls in Congress have discussed is limiting the annual cost-of-living increase—instead of raising benefits the full amount of inflation, perhaps raising them 2 percentage points less. The virtue of this is that it is simple and applicable to the other indexed benefit programs. The defect is that it would affect poor and rich alike; more elderly people would drop back below the poverty line.

Congress should acquiesce in such a second-best alternative only if 1) the cost-of-living limitations are clearly temporary, 2) the SSI, or Supplemental Security Income program, is firmed up to protect the neediest elderly and 3) the cost-of-living limitations can be parlayed into serious deficit reduction—a plan that also includes a meaningful tax increase and defense and other domestic spending restraint. Deficit reduction is essential to economic health. The elderly have as much to gain from that as they will lose in benefit cuts. The politicians should summon the courage to tell them that.

[From the New York Times, Nov. 9, 1987]

TO THE CONGRESS, THE ADMINISTRATION, AND THE AMERICAN PEOPLE: TIME FOR DECISIVE ACTION: A BIPARTISAN BUDGET PLAN

We have joined together to urge our fellow Americans and this Nation's leaders to rise above politics as usual, to set aside differences—of party, region, ideology, and even immediate self-interest—in order to resolve our worsening economic problems before it is too late. Though Presidents and Congresses going back many years must share in the blame, we have no interest in finger-pointing; our mutual interest now lies in contributing to the solution.

The recent upheavals on Wall Street dramatize our unbalanced and increasingly risky economy. Although we believe in the underlying strength of the economy, we have for too long consumed more than we have produced, forcing a dangerous dependence on massive foreign borrowing. Our budget and trade deficits raise the risks of a huge interest rate increase and rising inflation, an economic slowdown with growing unemployment, a resurgence of the Third World debt crisis, a global trade pullback, or even a deep worldwide recession. Our concern is not just where the stock market is today, but where our economy, our standard of living, and our world standing will be tomorrow.

Together—we, the American people, and our leaders—can set in motion basic changes to cure this condition. That is the way to prevent a stock market collapse from spreading to the broader economy. Fiscal reform is the indispensable key to solving our immediate problem, to reducing both long- and short-term interest rates, and to laying the foundations for healthy and sustainable economic growth. Congress and the Administration must:

1. Cut federal budget deficits so that the markets believe the long term problem is really being solved.

The deficit reductions must be significant, at least $30-40 billion in the first year.

The cuts must be credible, multi-year and increasing so that the budget can move toward balance by 1992.

One-shot measures must be avoided; cuts must be permanent and grow over time.

The plan must be based on extremely prudent economic projections.

2. Put everything on the table—except programs for the poor.

Spending cuts of all kinds should be top priority.

Defense spending must be restrained to levels consistent with our essential national security needs.

Cuts must be made in non-defense programs, especially all the other entitlement, transfer, and subsidy programs that are not means-tested. In particular, reductions should come from the benefits received by upper income groups in excess of their accumulated contributions. COLA modifications should also be part of any long-term budget reform.

Only when larger spending cuts are assured should revenue increases be considered, and any such revenues should be raised in ways that discourage consumption and encourage savings and investment.

The burdens of deficit reduction should be shared fairly among all of us who can afford them.

3. Rapidly adopt a credible deficit reduction plan to give the President a stronger hand in negotiations for more global economic cooperation.

Get our economic allies to stimulate domestic demand and boost their imports.

Work out coordinated interest rate reductions with Europe and Japan.

Renew our collective commitment to fight protectionism.

Stimulate a flow of capital to Third World countries to help them grow and to service their debts by exporting to more open markets in the developed world; in turn, this will permit Third World countries to become significant export markets for goods and services from developed countries.

Work toward increased military and economic burden-sharing by our allies.

We recognize that the bold political action now needed is impossible unless the people allow it—indeed, unless they demand it. For us, for our children, and for our grandchildren, we must work together, as Americans, to rescue our economy . . . and our country.

We pledge a national, bipartisan effort to help persuade the American people to let their leaders know that they are ready to support the immediate adoption of a program like that outlined above.

SUPPORTERS OF THE BIPARTISAN BUDGET PLAN

FOUNDING MEMBERS OF THE BIPARTISAN BUDGET APPEAL

The Hon. W. Michael Blumenthal, Secretary of the Treasury, 1977-79.

The Hon. John B. Connally, Secretary of the Treasury, 1971-72.

The Hon. C. Douglas Dillon, Secretary of the Treasury, 1961-65.

The Hon. Henry H. Fowler, Secretary of the Treasury, 1965-68.

The Hon. Peter G. Peterson, Secretary of Commerce, 1972-73.

The Hon. William E. Simon, Secretary of the Treasury, 1974-76.

FORMER PUBLIC OFFICIALS

The Hon. Joseph W. Barr, Secretary of the Treasury, 1968-69.

The Hon. Harold Brown, Secretary of Defense, 1977-81.

The Hon. Zbigniew Brzezinski, Assistant to the President for National Security Affairs, 1977-81.

The Hon. William T. Coleman, Jr., Secretary of Transportation, 1975-77.

The Hon. Lloyd N. Cutler, General Counsel to President Carter, 1979-80.

The Hon. Martin Feldstein, Chairman, Council of Economic Advisors, 1982-84.

The Hon. Sol M. Linowitz, Ambassador, 1977-80.

General David C. Jones, Chairman, Joint Chiefs of Staff.

The Hon. David M. Kennedy, Secretary of the Treasury, 1968-71.

The Hon. Charles Mac Mathias, United States Senator, Maryland.

The Hon. Robert S. McNamara, Secretary of Defense, 1961-68.

The Hon. Edmund S. Muskie, Secretary of State, 1980-81.

The Hon. David Packard, Deputy Secretary of State, 1969-71.

The Hon. Charles H. Percy, United States Senator, Illinois.

The Hon. Robert V. Roosa, Under Secretary of the Treasury for Monetary Affairs, 1961-64.

The Hon. Robert S. Strauss, Special Representative for Trade Negotiations, 1977-79.

The Hon. David Stockman, Director, Office of Management and Budget.

The Hon. Cyrus R. Vance, Secretary of State, 1977-80.

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T.A. Wilson, Chairman, The Boeing Company.

John A. Young, President & CEO, Hewlett-Packard Company.

Mortimer Zuckerman, Editor-in-Chief, US News & World Report.

By Mr. DECONCINI (for himself, Mr. D'AMATO, Mr. WILSON, Mr. NUNN, Mr. HEINZ, Mr. CRANSTON, Mr. MCCAIN, Mr. DIXON, and Mr. GRAHAM):

S. 1861. A bill to amend the Controlled Substances Act to suppress the diversion and trafficking of percursor chemicals and essential chemicals utilized in the illicit manufacture of controlled substances; to the Committee on the Judiciary.

CHEMICAL DIVERSION AND TRAFFICKING ACT

● Mr. DECONCINI. Mr. President, on June 11 I introduced, along with my distinguished colleagues Senators D'AMATO and WILSON, the Chemical Diversion and Trafficking Act of 1987. That piece of legislation, crafted by the Drug Enforcement Administration, would amend the Controlled Substances Act to suppress the diversion and trafficking of precursor chemicals and essential chemicals utilized in the illict manufacture of controlled substances. Our law enforcement agencies need tougher laws to enable them to track down the criminal operators of illegal drug labs. In fiscal year 1987, law enforcement agencies in the United States seized over 650 clandestine drug labs. In 1982, fewer than 200 were found.

During the past few months, my staff, along with representatives from Senator D'AMATO's office, DEA, and the chemical industry have met several times to insure that the ability of the U.S. chemical industry to compete with foreign competition is not hindered. I feel that we have attempted to address the Congress of all parties involved without seriously damaging the original intent of this legislation. Mr. President, today I introduce the revised version of the Chemical Diversion and Trafficking Act of 1987. Cosponsors of the bill include Senators D'AMATO, WILSON, NUNN, HEINZ, MCCAIN, CRANSTON, DIXON, and GRAHAM. I ask unanimous consent that the full text of the bill 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. 1861

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

SECTION 1. SHORT TITLE.

This Act may be cited as the "Chemical Diversion and Trafficking Act of 1987".

SEC. 2. PRECURSOR CHEMICALS AND ESSENTIAL CHEMICALS.

Section 310 of the Controlled Substances Act (21 U.S.C. 830) is amended to read as follows:

"PRECURSOR CHEMICALS AND ESSENTIAL CHEMICALS

"SEC. 310. (a)(1)(A) Except as provided under paragraph (3), any person who manufactures, distributes, imports or exports a substance listed under subsection (d) shall maintain records and make reports as the Attorney General may by regulation require concerning the distribution, receipt, sale, importation or exportation of the listed substances.

"(B) Records required by this paragraph—

"(i) shall be in a form that is readily retrievable from ordinary business records; and

"(ii) shall be kept and made available for inspection and copying by officers or employees of the United States authorized by the Attorney General, with regard to substances listed in subsection (d)(2), for 2 years and, with regard to substances listed in subsection (d)(1), for no less than 2 years and no more than 5 years as determined by regulation of the Attorney General.

"(C) In establishing regulations concerning required records and reports under this paragraph, the Attorney General may establish a threshold quantity for record-keeping and reporting requirements for each listed chemical. Reports required by the Attorney General shall be limited to those necessary for the effective implementation of this title, such as reports of suspicious purchases.

"(D) The Attorney General may include in the information required to be maintained or reported under this paragraph the following:

"(i) The quantity, form, and manner in which, and date on which, the substance was distributed, imported or exported.

"(ii)(I) In the case of the distribution or exportation to an individual, the name, address, and age of the individual and the type of identification presented to establish the identity of the individual.

"(II) In the case of the distribution or exportation to an entity other than an individual, the name and address of the entity and the name, address, and title of the individual ordering or receiving the substance and the type of identification presented to establish the identity of the individual and of the entity.

"(2)(A) Except as provided under paragraph (3), no person may distribute a substance listed under subsection (d) unless the recipient or purchaser presents to the distributor a certification of lawful use and identification in order to establish the identity of the recipient or purchaser (and any entity which the recipient or purchaser represents).

"(B) The certification of lawful use and identification shall be of such a type as the Attorney General establishes by regulation.

"(3) Under such conditions and to such extent as the Attorney General establishes, paragraphs (1) and (2) shall not apply to—

"(A) the distribution of listed substances between agents or employees within a single facility (as defined by the Attorney General), if such agents or employees are acting in the lawful and usual course of their business or employment;

"(B) the delivery of listed substances to or by a common or contract carrier for carriage in the lawful and usual course of its business, or to or by a warehouseman for storage in the lawful and usual course of its business; but where such carriage or storage is in connection with the distribution, importation, or exportation of substances to a third person, this subparagraph shall not relieve the distributor, importer, or exporter from compliance with paragraph (1) or (2);

"(C) any distribution, importation, or exportation with respect to which the Attorney General determines that the reports or records required by paragraph (1) or the presentation of identification or certification required by paragraph (2) is not necessary for the enforcement of this subchapter; or

"(D) any distribution, importation, or exportation of any drug product which contains a listed substance and which can be lawfully marketed or distributed in the United States under the provisions of the Food, Drug, and Cosmetic Act.

"(b) It shall be unlawful for any person knowingly or intentionally—

"(1) to import into the customs territory of the United States from any place outside thereof (but within the United States), or to import into the United States from any place outside thereof, any substance listed under subsection (d) unless the substance is imported for commercial, scientific, or other legitimate uses, and is imported pursuant to such notification or declaration requirements as the Attorney General may by regulation prescribe; and

"(2) to export from the United States to any other country a substance listed under subsection (d) unless there is furnished (before export) to the Attorney General documentary proof that exportation is not contrary to the laws or regulations of the country of destination for consumption for medical, commercial, scientific, or other legitimate purposes, and is exported pursuant to such notification or declaration requirements as the Attorney General may by regulation prescribe.

"(c) The Attorney General may by rule—

"(1) add substances to the list in subsection (d) if the Attorney General finds that—

"(A) such substance is a precursor or essential chemical which can be used to manufacture a controlled substance; and

"(B) such substance is being used in the manufacture of controlled substances in violation of this title; or

"(2) delete a substance listed in subsection (d) or added to the list by rule if the Attor-

ney General finds that its listing no longer meets the criteria set forth in paragraph (1).

"(d) The provisions of this title shall apply to the following:

"(1) Precursor chemicals:

"(A) N-Acetylanthranilic acid.

"(B) Anthranilic acid.

"(C) Ergotamine tartrate.

"(D) Ergonovine maleate.

"(E) Phenylacetic acid.

"(F) Ephedrine.

"(G) Pseudoephedrine.

"(H) Benzyl cyanide.

"(I) Benzyl chloride.

"(J) Piperidine.

"(2) Essential chemicals:

"(A) Potassium permaganate.

"(B) Acetic anhydride.

"(C) Acetone.

"(D) Ethyl ether.

"(e) Any information which is reported to or otherwise obtained by the Attorney General under this section and which is exempt from disclosure pursuant to subsection (a) of section 552 of title 5, United States Code, by reason of subsection (b)(4) thereof shall be considered confidential and shall not be disclosed, except that such information may be disclosed to officers or employees of the United States concerned with carrying out this title or title III or when relevant in any proceeding for the enforcement of this title or title III or when necessary to meet United States treaty obligations.

"(f) For purposes of this title:

"(1) The term 'import' has the meaning given such term in section 1001 of title III (21 U.S.C. 951(a)(1)).

"(2) The term 'customs territory of the United States' has the meaning assigned to such term by section 1001 of title III (21 U.S.C. 951(a)(2)).

"(g)(1) No person may distribute, sell, import, export, or otherwise transfer to another person any commercial tableting machine or encapsulating machine unless the purchaser, recipient, transferee, or his agent presents to the distributor or supplier a certification of lawful use and identification to establish the identity of the recipient or purchaser (and any entity which the recipient or purchaser represents) of such a type as the Attorney General by regulation may establish.

"(2) Any person who distributes, sells, imports, exports, or otherwise transfers to another person any commercial tableting machine or encapsulating machine shall report the transfer to the Attorney General in such a form as the Attorney General may by regulation require. The Attorney General may require such information as the date of sale or transfer, name and address of transferee, purpose for which the machine is intended, and the serial numbers and make and model of the machine.

"(h) An interested person (by petition) or the Attorney General may initiate action to add or delete chemicals pursuant to subsection (c).".

SEC. 3. CRIMINAL PENALTIES.

(a) Section 401(d)(1) (21 U.S.C. 841(d)(1)) of the Controlled Substances Act is amended by—

(1) striking out "piperidine" and inserting in lieu thereof "precursor chemical or essential chemical listed under section 310(d)"; and

(2) striking out "phencyclidine" and inserting in lieu thereof "any controlled substance".

(b) Section 401(d)(2) (21 U.S.C. 841(d)(2)) of the Controlled Substances Act is amended by—

(1) inserting "or distributes" after "possesses";

(2) striking out "piperidine" the first place it appears and inserting in lieu thereof "precursor chemical or essential chemical listed under section 310(d)";

(3) striking out "piperidine" the second place it appears and inserting in lieu thereof "precursor chemical or essential chemical"; and

(4) striking out "phencyclidine" and inserting in lieu thereof "any controlled substance".

(c) Section 401(d) (21 U.S.C. 841(d)) of the Controlled Substances Act is amended by—

(1) striking out "or" after the comma in paragraph (1); and

(2) adding new paragraphs (3), (4), and (5) as follows:

"(3) manufactures, distributes, imports, or exports a precursor chemical or essential chemical listed under section 310(d) except as provided for by this title,

"(4) possesses any precursor chemical or essential chemical listed under section 310(d), with knowledge that the recordkeeping or reporting requirements of section 310(a) or regulations issued pursuant to section 310(a) have not been complied with, or

"(5) with the intent of causing the evasion of the recordkeeping or reporting requirements of section 310(a) of the regulations issued thereunder, receives or distributes a reportable amount of any chemical listed under section 310(d) in units small enough so that the making of records or filing of reports under section 310(a) is not required.".

(d) Section 402(a)(9) (21 U.S.C. 842(a)(9)) of the Controlled Substances Act is amended by—

(1) striking out "or sell piperidine" and replacing it with "a precursor chemical or essential chemical listed under section 310(d)"; and

(2) adding "or certification" after "identification".

(e) Section 402(c)(2) (21 U.S.C. 842(c)(2)) of the Controlled Substances Act is amended by striking out subparagraph (C).

(f) Section 403(a) (21 U.S.C. 843(a)) of the Controlled Substances Act is amended—

(1) in paragraph (4)(B) by striking out "piperidine" and inserting in lieu thereof "a precursor chemical or essential chemical listed under section 310(d)";

(2) in paragraph (4)(B) by adding "or certificate" after "identification" where it appears;

(3) in paragraph (4) by striking out "or" after the semicolon;

(4) in paragraph (5) by striking out the period and inserting in lieu thereof "; or"; and

(5) by adding the following paragraphs at the end thereof:

"(6) to possess any drug manufacturing equipment, tableting or encapsulating machines, or gelatin capsules with intent to manufacture a controlled substance except as authorized by this title; or

"(7) to manufacture, distribute, or import any drug manufacturing equipment, tableting or encapsulating machines, or gelatin capsules knowing, or having reasonable cause to believe, that they will be used to manufacture a controlled substance except as authorized by this title.".

(g) Section 403(c) (21 U.S.C. 843(c)) of the Controlled Substances Act is amended by adding at the end of the paragraph the following: "In addition, any person convicted of a violation of this section or section 401 relating to the receipt, distribution, importation, or exportation of substances listed in section 310(d) may be enjoined from conducting business activities with such substances for a minimum of 10 years.".

SEC. 4. FORFEITURES.

Section 511(a) of the Controlled Substances Act (21 U.S.C. 881) is amended by adding a new paragraph (9) as follows:

"(9) All chemicals listed under section 310(d), all drug manufacturing equipment, all tableting or encapsulating machines, and all gelatin capsules, which have been imported, exported, manufactured, possessed, distributed, or intended to be distributed, in violation of this title, as well as all conveyances and equipment, including aircraft, vehicles, or vessels, which are used, or are intended for use, to transport, or in any way facilitate the transportation, distribution, receipt, possession, or concealment of precursor chemicals and essential chemicals, drug manufacturing equipment, tableting or encapsulating machines, or gelatin capsules, in violation of this title, except as provided for under subparagraphs (A) and (B) of paragraph (4).".

SEC. 5. DEFINITIONS.

Section 102 (21 U.S.C. 802) of the Controlled Substances Act is amended—

(1) in paragraph (11), by inserting after "a controlled substance" both places it appears the following: "or a precursor chemical or essential chemical listed under section 310(d)";

(2) in paragraph (8), by inserting "or a precursor chemical or essential chemical" after "a controlled substance"; and

(3) by adding at the end thereof the following new paragraphs:

"(33) The term 'precursor chemical' means a substance that may be used in the chemical process of manufacturing controlled substances and which is incorporated into the final product and is therefore critical to its manufacture.

"(34) The term 'essential chemical' means a substance that may be used in the chemical process of manufacturing controlled substances as a solvent, reagent, or catalyst.".

SEC. 6. TECHNICAL AMENDMENTS.

(a) Section 506(a) (21 U.S.C. 876(a)) of the Controlled Substances Act is amended by adding "or precursor chemicals or essential chemicals" after "with respect to controlled substances".

(b) The table of sections for part C of the Controlled Substances Act is amended by deleting the item relating to section 310 and inserting the following in lieu thereof:

"310. Precursor chemicals and essential chemicals.".

SEC. 7. ACTIVE DOJ CONTROL PROGRAM.

The Attorney General shall maintain an active program, both domestic and international, to curtail the diversion of precursor chemicals and essential chemicals used in the illicit manufacture of controlled substances. This program shall include appropriate controls on the purchase, sale, import, and export of these chemicals and development of cooperative efforts with foreign drug control authorities.

SEC. 8. EFFECTIVE DATE.

This Act shall take effect 120 days after the date of enactment of this Act.●

By Mr. DURENBERGER (for himself, Ms. MIKULSKI, Mr. LUGAR, Mr. KENNEDY, Mrs.

KASSEBAUM, Mr. BURDICK, Mr. BOSCHWITZ, Mr. METZENBAUM, and Mr. PRESSLER):

S.J. Res. 215. Joint resolution to authorize the Vietnam Women's Memorial Project, Inc., to establish a memorial to women of the Armed Forces of the United States who served in the Vietnam war; to the Committee on Energy and Natural Resources.

CONSTRUCTION OF MEMORIAL TO WOMEN VETERANS OF THE VIETNAM WAR

● Mr. DURENBERGER. Mr. President, I rise today to introduce legislation that would authorize the construction of a statue honoring the women who served our Nation in the Armed Forces in the Vietnam war.

As many of my colleagues are aware, the Vietnam Women's Memorial project was founded in 1984 by Donna Marie Boulay, a Minneapolis attorney, nurse, and Vietnam veteran. The purpose of the project is to educate the public about the service of women during the Vietnam war and to build a memorial honoring their service.

Though 10,000 women served in the Vietnam conflict—both in the military and as civilians—their unique contributions have not been acknowledged by our Nation. The Vietnam Women's Memorial project has made tremendous advances in educating Americans and showing that women do serve, do participate, do sacrifice and do deserve recognition for their efforts on behalf of their fellow citizens and to their country in war and in peace.

The proposed statue was designed by Rodger Brodin, also of Minneapolis, MN, and is compatible in size and detail with the statue of the three infantrymen which has been placed on the grounds of the Nation's Vietnam Veterans Memorial next to Maya Ying Lin's "the Wall."

The Vietnam Women's Memorial project is in the process of raising funds for educational purposes and to cover the costs of constructing the monument. They received a major donation today from the Stuart Corp. The project has gained the support of many organizations including the American Legion, the Veterans of Foreign Wars, Vietnam Veterans of America, the American Nurses Association, the Disabled American Veterans, the Jewish War Veterans, the Association of Critical Care Nurses, the Reserve Officer Association, the Vietnam Veterans' Memorial Fund, the Association of Operating Room Nurses, and the Military Order of the Purple Heart.

The Vietnam Women's Memorial project also has many supporters in Congress. I sponsored an opportunity for my colleagues to see a scale model of the proposed statue earlier this year. Numerous Senators and Congressmen have expressed their support for this project. A major milestone was in the approval process was achieved last month when Secretary of the Interior model, after consultation with National Park Service chief William Mott, recommended to the Commission of Fine Arts that the Vietnam Veterans' Memorial be completed with a statue honoring the contribution of women who served.

After receiving the support of the Interior Department, the project moved to the Commission of Fine Arts. In spite of Secretary Hodel's endorsement, the support of all the major national veterans groups, and a tremendous outpouring of grassroots support, the Commission of Fine Arts voted against the proposal on October 22, 1987. I testified at that meeting and was shocked and disappointed by the action of the Commission. I said at the time that when the history of the Vietnam Women's Memorial is written, the October 22d decision will be a mere footnote.

I felt that the Reagan administration appointees on the Commission missed a tremendous opportunity to honor the women who served in Vietnam. And I felt that the Commission missed the point—which was to honor women in the same way as men are honored, not to open the door to "the Scout Dogs Association" as the Commission Chairman alluded to at the hearing. As I heard one Vietnam veteran say this morning, "Would men feel recognized if the existing statues were of three women?"

The Commission of Fine Arts, along with the National Capital Planning Commission and the Secretary of the Interior, is named in Public Law 96-297 as having responsibility for approving the plans for the Nation's Vietnam Veterans' Memorial. Secretary Hodel correctly interpreted Public Law 96-297 as containing adequate authorization for the addition of a statue of a woman Vietnam veteran. But a small minority seem to view the statue as an afterthought that would prove to be disappointing.

In making their decision, the Commission barely commented on the merits of the design and location of the statue. Instead, they expressed a view that women are just another "special interest group" that cannot be appeased for fear of starting an avalanche of new statuary on the mall. In an opinion piece published in the Washington Post on November 8, the Commission's Chairman, J. Carter Brown, makes it very clear that he will never support the addition of a statue honoring the women who served in Vietnam. I ask unanimous consent that this article be inserted in the RECORD at the close of my remarks along with the article by Secretary Hodel endorsing the statue.

Because the Commission of Fine Arts seems determined to ignore the desires of all major veterans groups and the broad, bipartisan support from Members of Congress, I am today introducing legislation which would specifically authorize and direct the Secretary of the Interior to establish a statue of a woman Vietnam Veteran in the Vietnam veterans' Memorial site. While the Secretary is directed to consult with the Commission of Fine Arts he is not required to seek their final approval. The National Capital Planning Commission remains in the formal approval process. Through this legislation, the Commission of Fine Arts is given adequate opportunity to make comments within their mandate as to placement, design, and other relevant factors. But because of the steadfast position of the Commission of Fine Arts, I have drafted this legislation to specifically deny the CFA "veto power" over this long overdue memorial.

Since the rejection of the proposed statue by the Commission of Fine Arts, I have been deluged with letters and phone calls from around the country. I have received moving and eloquent testimony from a handful of the Americans who support this project. One Vietnam veteran said:

I would not be here if it was not for the caring and skill of those brave women.

Another wrote to say:

That wall would contain many more than 58,000 names were it not for them.

It is sentiments like these that led to my efforts to honor the unsung heroines of the Vietnam war.

Mr. President, I was deeply moved by the statue when I first saw it and its power reinforced my commitment to do what I can to make sure that the women who served so bravely in Vietnam get the recognition they so richly deserve. I urge my colleagues to join with me and the original cosponsors of Senate Joint Resolution 215—Senators MIKULSKI, LUGAR, KENNEDY, KASSEBAUM, BURDICK, BOSCHWITZ, METZENBAUM, and PRESSLER—in providing the recognition for women Vietnam veterans that is so long overdue. I believe that making the proposed statue a reality will not only honor the women who served in Vietnam but will also, in the words of the Vietnam Women's Memorial project, contribute to a "legacy of healing and hope."

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

[From the Washington Post, Nov. 8, 1987]

A VIETNAM MEMORIAL FOR WOMEN?—A MOST APPROPRIATE WAY TO REMEMBER

We approach Veterans Day 1987 with a significant, unresolved question regarding this nation's willingness to honor all its veterans: whether to expand the existing Vietnam Veterans Memorial in Washington to include a statue of a woman to represent the many thousands of women who served so nobly in that conflict.

My support for this proposal, and my positive recommendation to the Commission of Fine Arts, is based on my belief that American women made outstanding contributions

during the Vietnam War and that this statue is a most appropriate way to remember and to honor their participation.

This proposal has widespread support across America, including many veterans' organizations. Under the regulations that pertain to the modification of existing national memorials, the expansion—which would be in the form of a statue of a woman placed to the east of the statue of the three soldiers—must be approved by the Commission of Fine Arts, the Nationl Capital Planning Commission and the Secretary of the Interior. The Commission of Fine Arts recently voted against it. Unfortunately, there is no indication that the commission is interested in reviewing or reconsidering its action in the immediate future.

I was the Under Secretary of the Interior at the time of the lengthy debate on the original Vietnam Memorial and am well aware that, when it comes to public monuments commemorating major events, there always are contentious and competing points of view. The debate preceding the negative vote by the Commission of Fine Arts is a case in point.

I am not an expert in the design or aesthetics of outdoor monuments; I therefore consulted those who are before making my final decision. William Penn Mott, Jr., director of the National Park Service, provided me with advice that was both clear and unequivocal: the statue of a woman could be added to the Vietnam Memorial without impairing the integrity of the memorial. In fact, it would provide an overall balance. That conclusion was reached after extensive consultation with veterans and other interested groups, whose support for the concept of a statue representing women's contributions is overwhelming.

The proposal to balance the memorial with a commemoration of the effort of the women who served in Vietnam is sponsored by the Vietnam Women's Memorial Project, Inc., a volunteer group that has worked for several years to build support for this idea. The project also would lead the private, national fund-raising campaign which would fund the statue and the costs of placing it in the memorial. Financial support for the implementation of this noble idea should come not from the U.S. Treasury, but from individual citizens supporting an idea that has stirred the hearts of so many of us.

My recommendation is only one of three that affect this issue. The negative vote of the Commission of Fine Arts has brought the decision-making process to a halt, at least for the time being. Despite that decision, I shall continue to support the addition of the statue of a woman to the Vietnam memorial, one representing all of the brave women who served in that conflict and whose contributions and sacrifices made them an integral part of that heroic effort.—Donald Hodel.

WE SHALL NEVER BE ABLE TO SATISFY EVERYONE'S SPECIAL INTEREST

Of course this nation should be grateful to the women who gallantly served in the Vietnam War. That is why Congress has enacted a bill authorizing the establishment of a memorial on federal land for just this purpose, to honor these and all womem who have served in the Armed Forces. Its scope would transcend the existing Vietnam memorial, "to commemorate devoted service to country and humanity by Army, Navy and Air Force Nurses," not far away in Arlington Cemetery.

The recent proposal to add on to the Vietnam Veterans Memorial in Constitution Gardens carried with it all the earmarks of an afterthought. By its remote placement on a path leading away from the memorial, it would have ended up slighting the very constituency it was attempting to please.

When the existing sculpture of the three soldiers was conceived, the thought was that the infantrymen, who bore the brunt of the battle, would stand for all those who served. A great deal of thought and study went into its placement, and to the resulting delicate balance it sets up with Maya Lin's brilliantly conceived wall. We cannot fail to recognize that there are many other categories of veterans, all of whom performed valiant service, too many to be literally depicted. Once the principle of the part standing for the whole is abandoned, how can one ever justify denying any of these worthy groups their own effigies in bronze on that site?

The existing memorial does not picture any member of the Air Force, for example, or the Navy, or the Marines, not to mention other categories of people who have already protested, such as Native Americans. Are we to understand that all these gallant people are therefore excluded? If a lone statue of a white Army nurse, then why no others recognizing Navy nurses, or all the women who served who were not nurses? How about black women?

The existing memorial is, in fact, unusually inclusive. It lists names of every one of the fallen. Of the 58,156, the names of the eight women who died are duly inscribed. In addition, on the memorial are the words for all to see: "In honor of the men and women of the Armed Forces of the United States who served in the Vietnam War."

The memorial is extraordinarily successful as it stands—one of the most moving and artistically powerful memorials ever built. Let's preserve it. Let's not start tinkering; we shall never be able to satisfy everyone's special interest. Art is not legislation, subject to endless amendments by others after the fact.

We have our chance now, from the start, to build a memorial to the women who have served this country in war. All of us who care deeply about the sacrifices women have made for our country should put our effort toward this. A thing worth doing is worth doing right.—J. Carter Brown.●

● Ms. MIKULSKI Mr. President, I rise as a cosponsor of the legislation offered by the Senator from Minnesota. This legislation would authorize construction of a statue commemorating the service of women in the Vietnam war.

Approximately 10,000 women served with valor and distinction in Vietnam. Eight of those military women died there while on active duty.

Too few Americans remember that throughout this Nation's history, and especially during the Vietnam conflict, women served in the military with bravery, professionalism, and effectiveness. They should be honored with the same appreciation we give to all veterans.

I have seen the proposed statue. I believe it is appropriate and it commemorates the valor and sacrifice of women veterans who served in Vietnam. Its construction would be financed completely with donations, so this legislation would not cost the taxpayers a single dollar.

Patriotism and service know no gender boundaries. I believe this legislation will advance the cause of equity and honor in the military. I urge my colleagues to support it.●

By Mr. JOHNSTON (by request):

S.J. Res. 216. Joint resolution approving the location of the Black Revolutionary War Patriots Memorial; to the Committee on Energy and Natural Resources.

APPROVING THE LOCATION OF THE BLACK REVOLUTIONARY WAR PATRIOTS MEMORIAL

● Mr. JOHNSTON. Mr. President, at the request of the Department of the Interior, I send to the desk a joint resolution approving the location of the Black Revolutionary War Patriots Memorial.

Mr. President, this draft legislation was submitted and recommended by the Department of the Interior, and I ask unanimous consent that the joint resolution, and the communication which accompanied the proposal from the Secretary be printed in the RECORD.

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

S.J. RES. 216

Whereas section 6(a) of the Act entitled "To provide standards for placement of commemorative works on certain Federal lands in the District of Columbia and its environs, and for other purposes," approved November 14, 1986 (100 Stat. 3650, 3651), provides that the location of a commemorative work in the area described therein as Area I shall be deemed disapproved unless, not later than 150 days after the Secretary of the Interior or the Administrator of General Services notifies the Congress of his determination that the commemorative work should be located in Area, I, the location is approved by law;

Whereas the Joint Resolution approved October 27, 1986 (100 Stat. 3144), authorizes the Black Revolutionary War Patriots Foundation to establish a memorial on Federal land in the District of Columbia and its environs to honor the estimated five thousand courageous slaves and free black persons who served as soldiers and sailors or provided civilian assistance during the American Revolution and to honor the countless black men, women, and children who ran away from slavery or filed petitions with courts and legislatures seeking their freedom; and

Whereas the Secretary of the Interior has notified the Congress of his determination that the memorial authorized by the said Joint Resolution approved October 27, 1986, should be located in Area I: Now, therefore,

Be it resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the location of a commemorative work to honor the slaves and free black persons who served as soldiers and sailors or provided civilian assistance during the American Revolution and to honor the black men, women, and children who ran away from slavery or filed

petitions with courts and legislatures seeking their freedom, authorized by the Joint Resolution approved October 27, 1986 (100 Stat. 3144), in the area described in the Act approved November 14, 1986 (100 Stat. 3650), as Area I, is hereby approved.

THE SECRETARY OF THE INTERIOR,
Washington, November 9, 1987.

Hon. GEORGE BUSH,
President of the Senate, Washington, DC.

DEAR MR. PRESIDENT: The joint resolution approved October 27, 1986 (100 Stat. 3144), authorizes the Black Revolutionary War Patriots Foundation to establish a memorial on Federal land in the District of Columbia and its environs to honor the slaves and free black persons who served as soldiers and sailors or provided civilian assistance during the American Revolution and to honor the black men, women, and children who ran away from slavery or filed petitions with courts and legislatures seeking their freedom.

The Black Revolutionary War Patriots Foundation has proposed that the memorial be located in area I, the area comprising the central monumental core of the District of Columbia and its environs, which is defined by the act approved November 14, 1986 (100 Stat. 3650). Section 6(a) of that act provides that the Secretary of the Interior may approve the location of a commemorative work in area I only if he finds that the subject to the work is of preeminent historical and lasting significance to the Nation. That section further provides that the Secretary, after consultation with the National Capital Memorial Commission, shall notify the Congress of his determination that a commemorative work should be located in area I; and the location in area I shall be deemed disapproved unless within 150 days of the notification it is approved by law.

At its fourth meeting on June 16, 1987, the National Capital Memorial Commission recommended to me that the Black Revolutionary War Patriots Foundation memorial be located in area I. Because this proposed memorial represents a significant part of the fundamental military struggle that gave birth to the United States as a separate and free Nation, I find the subject to be of preeminent historical and lasting significance to the Nation, and I have determined that the Black Revolutionary War Patriots Foundation memorial, authorized by the Joint Resolution approved October 27, 1986, should be located in area I.

In accordance with section 6(a) of the act November 14, 1986 (100 Stat. 3650, 3651), notice is hereby given that I have approved the location of this proposed memorial in area I, that through my designee I have consulted with the National Capital Memorial Commission, and that I have determined that the memorial should be located in area I. Under section 6(a) of that act, the location is approved by law deemed disapproved unless the location is approved by law not later than 150 days after this notification.

Enclosed is a draft of a joint resolution which, if enacted within 150 days, would have the effect of approving the location of this memorial in area I. We recommend that it be introduced and referred to the appropriate committee for consideration, and we recommend its timely enactment.

The Office of Management and Budget has advised that there is no objection to the enactment of the enclosed draft joint resolution from the standpoint of the administration's program.

Sincerely,

DONALD PAUL HODEL.

By Mr. ADAMS:

S.J. Res. 217. Joint resolution providing specific authorization under the War Powers Resolution for the continued use of U.S. Armed Forces in the Persian Gulf, consistent with the foreign policy objectives and national security interests of the United States; to the Committee on Foreign Relations.

AUTHORIZATION UNDER THE WAR POWERS RESOLUTION FOR CONTINUED USE OF U.S. ARMED FORCES IN THE PERSIAN GULF

● Mr. ADAMS. Mr. President, on November 6 I introduced Senate Joint Resolution 213, pursuant to the terms of Public Law 93-148, the War Powers Resolution. Senate Joint Resolution 213 is designed to constitute the constitutionally required congressional response to the situation in the Persian Gulf. As I indicated in my statement accompanying the introduction of that resolution, it reflects my present sentiments and that of those who cosponsored it regarding what our policy in the Persian Gulf should be.

It is my understanding that because of some of the provisions included in the bill as introduced, some might raise a debatable procedural point relative to whether or not that particular resolution should be afforded the expedited procedures intended by the War Powers Resolution. Clearly I believe that Senate Joint Resolution 213 is entitled to be considered under the expedited procedures and would be more than willing to argue the point. But I also believe that the Senate has spent too much time debating procedures surrounding the War Powers Resolution and too little time debating what our policy ought to be in the Persian Gulf. This Senator has no desire to create another unclear situation with respect to Senate procedure under the War Powers Resolution. Rather, I am and have always been interested in a timely debate on what our policy should be toward the present circumstances in the Persian Gulf.

Accordingly, in order to eliminate any doubt that such a policy resolution should be accorded expedited procedures under the law, I am today introducing this simplified resolution. It is my understanding that, given the precedents established during the consideration of Senate Joint Resolution 159 which was introduced in 1983 to deal with the multinational peacekeeping force in Lebanon, this resolution is clearly protected by the expedited procedures established in Public Law 93-148.

Introduction of this resolution today should remove any doubt about whether or not a resolution addressing the conditions under which Congress is willing to authorize or terminate U.S. involvement in the Persian Gulf is subject to expedited procedures contained in Public Law 93-148. I am hopeful that we can now move forward both in the Senate Foreign Relations Committee and on the Senate floor to debate what our policy should be in the Persian Gulf.

Mr. President, I ask unanimous consent that the text of this joint resolution, as well as the joint resolution I introduced last week, appear in the RECORD.

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

S.J. RES. 217

Whereas keeping the Persian Gulf sea lanes open to international commerce is critical to the national security of the United States;

Whereas beginning in July 1987 the United States Armed Forces began the convoying or escorting in the Persian Gulf of vessels formerly owned by Kuwait or Kuwaiti nationals which had been reregistered under the flag of the United States;

Whereas on October 19, 1987, United States Armed Forces fired upon and destroyed an armed Iranian platform in the Persian Gulf in retaliation for an Iranian missile attack on October 15, 1987, against a United States-flag tanker and this clearly indicates a situation of hostilities or imminent involvement in hostilities by United States forces, as contemplated by section 4(a)(1) of Public Law 93-148;

Whereas section 4(a)(1) of Public Law 93-148 requires that United States Armed Forces may not be introduced into hostilities or into situations in which imminent involvement in hostilities is clearly indicated by the circumstances for longer than the 60-day period described in section 5(b) of such resolution without the specific authorization of Congress, a declaration of war, or other extenuating circumstances: Now, therefore, be it

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. This joint resolution may be cited as the "Persian Gulf Navigation Protection Act of 1987".

SEC. 2. For the purpose of this authorization, the 60-day period specified in section 5(b) of Public Law 93-148 is determined to have begun on October 19, 1987.

SEC. 3. The President is specifically authorized, for purposes of section 5(b) of Public Law 93-148 to continue to deploy United States Armed Forces in the Persian Gulf, except that the use of United States Armed Forces to convoy or escort vessels owned by any government or national of a country bordering the Persian Gulf as of June 1, 1987, may continue only until the date which is 6 months from the expiration of the 60-day period specified in section 5(b) of Public Law 93-148.

S.J. RES. 213

Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This joint resolution may be cited as the "Persian Gulf Navigation Protection Act of 1987".

SEC. 2. FINDINGS AND PURPOSES.

(a) FINDINGS.—The Congress finds that—

(1) keeping the Persian Gulf sea lanes open to international commerce is critical to the national security of the United States;

(2) beginning in July 1987 the United States Armed Forces began the convoying or escorting in the Persian Gulf of vessels formerly owned by Kuwait or Kuwaiti nationals which had been reregistered under the flag of the United States;

(3) on October 19, 1987, United States Armed Forces fired upon and destroyed an armed Iranian platform in the Persian Gulf in retaliation for an Iranian missile attack on October 15, 1987, against a United States-flag tanker;

(4) the War Powers Resolution requires that United States Armed Forces may not be introduced into hostilities or into situations in which imminent involvement in hostilities is clearly indicated by the circumstances for longer than the 60-day period described in section 5(b) of such Resolution without the specific authorization of Congress, a declaration of war, or other extenuating circumstances; and

(5) the United States must continue to maintain a military presence in the Persian Gulf to protect United States national security interests.

(b) DECLARATION.—The Congress declares that the requirements of section 4(a)(1) of the War Powers Resolution became operative on October 19, 1987.

(c) PURPOSES.—The purposes of this joint resolution are—

(1) to provide specific authorization under section 5(b) of the War Powers Resolution for the continued deployment of United States Armed Forces in the Persian Gulf to achieve United States foreign policy objectives and to protect United States security interests; and

(2) to clarify United States goals and policy toward the continued deployment of United States armed forces in the Persian Gulf.

SEC. 3. STATEMENT OF POLICY IN THE PERSIAN GULF.

It shall be the United States policy in the Persian Gulf—

(1) to keep the sea lanes open to international commerce;

(2) to remain neutral in the war between Iran and Iraq and to seek a just end to that conflict;

(3) to preserve the integrity of other nonbelligerent countries bordering the Persian Gulf;

(4) to prevent a strategic gain by the Soviet Union in the region;

(5) to urge United States allies, whether within or outside the Persian Gulf region, to participate more fully in sharing the burden of achieving and preserving peace in the Persian Gulf region;

(6) to defend United States Armed Forces against aggression by any country bordering the Persian Gulf which threatens the peaceful United States presence in the Gulf and the policy set forth in this section; and

(7) to pursue efforts through the United Nations to implement a cease-fire in the war between Iraq and Iran and other actions which will contribute to a lessening of hostilities in the Persian Gulf.

SEC. 4. SPECIFIC AUTHORIZATION FOR CONTINUED DEPLOYMENT OF UNITED STATES ARMED FORCES IN THE PERSIAN GULF.

The President is specifically authorized, for purposes of section 5(b) of the War Powers Resolution, to continue to deploy United States Armed Forces in the Persian Gulf, subject to the restrictions of section 5 of this joint resolution.

SEC. 5. RESTRICTIONS ON PRESIDENTIAL AUTHORITY.

The restrictions referred to in section 4 are as follows:

(1) Notwithstanding any other provision of law, on or after the date of enactment of this joint resolution no vessel owned by a government or national of a country bordering the Persian Gulf may be reregistered under the flag of the United States, except that any such vessel first so reregistered before such date may continue to be so reregistered.

(2)(A) On and after the date of enactment of this joint resolution, the use of United States Armed Forces to convoy or escort vessels owned by any government or national of a country bordering the Persian Gulf as of June 1, 1987, may continue—

(i) only if the government of such country agrees to reimburse the United States for the costs incurred in such use of the United States Armed Forces; and

(ii) only until the date which is 6 months after the date of enactment of this joint resolution, except that such date may be extended by additional periods of 6 months if for each such period the Congress enacts, in accordance with subparagraph (B), a joint resolution authorizing the use of United States Armed Forces for such period of time for the purposes authorized by this joint resolution.

(B) A joint resolution described in subparagraph (A)(ii) shall be considered in the House of Representatives and in the Senate in accordance with the procedures applicable to joint resolutions under paragraphs (3) through (7) of section 8066(c) of the Department of Defense Appropriations Act, 1985 (as contained in Public Law 98-473), except that references in such paragraphs to the Committee on Appropriations shall be deemed to be references in the House of Representatives to the Committee on Foreign Affairs and in the Senate to the Committee on Foreign Relations.

(3) The President shall consult with the Congress before using United States Armed Forces in hostilities under this joint resolution (other than actions necessary to repel attacks against United States Armed Forces or United States-flag vessels).

SEC. 6. REPORTING REQUIREMENT.

In addition to the reports required by section 4(c) of the War Powers Resolution, beginning 30 days after the date of enactment of this Act, and every 30 days thereafter, the President shall prepare and transmit to the Speaker of the House of Representatives and the President pro tempore of the Senate a report on the progress made in implementing the policy set forth in this joint resolution.

SEC. 7. INTERPRETATION OF THIS JOINT RESOLUTION.

(a) APPLICATION OF PRESIDENTIAL AUTHORITY.—(1) Nothing in this joint resolution shall preclude the President from withdrawing United States Armed Forces from the Persian Gulf if circumstances warrant their withdrawal.

(2) Nothing in this joint resolution requires the President totally to withdraw United States Armed Forces from the Persian Gulf if such Forces are not used in connection with the escorting or convoying of vessels reregistered under the United States flag.

(b) APPLICATION OF THE WAR POWERS RESOLUTION.—Nothing in this joint resolution shall have the effect of modifying, limiting, or superseding any provision of the War Powers Resolution.●

ADDITIONAL COSPONSORS

S. 9

At the request of Mr. CRANSTON, the name of the Senator from South Dakota [Mr. PRESSLER] was added as a cosponsor of S. 9, a bill to amend title 38, United States Code, to increase the rates of disability compensation and dependency and indemnity compensation for veterans and survivors; to provide additional eligibility for certain educational or rehabilitation assistance to veterans and other eligible individuals with drug or alcohol abuse disabilities; to increase the maximum amount of a home loan which is guaranteed by the Veterans' Administration; to improve housing, automobile, and burial assistance programs for service-disabled veterans; and to extend and establish certain exemptions from sequestration for certain veterans' benefits; and for other purposes.

S. 39

At the request of Mr. MOYNIHAN, the name of the Senator from Maine [Mr. COHEN] was added as a cosponsor of S. 39, a bill to amend the Internal Revenue Code of 1986 to make the exclusion from gross income of amounts paid for employee educational assistance permanent.

S. 143

At the request of Mr. INOUYE, the name of the Senator from Idaho [Mr. SYMMS] was added as a cosponsor of S. 143, a bill to establish a temporary program under which parenteral diacetylmorphine will be made available through qualified pharmacies for the relief of intractable pain due to cancer.

S. 464

At the request of Mr. CRANSTON, the name of the Senator from Illinois [Mr. SIMON] was added as a cosponsor of S. 464, a bill to prohibit discrimination on the basis of affectional or sexual orientation, and for other purposes.

At the request of Mr. CRANSTON, the name of the Senator from Michigan [Mr. RIEGLE] was added as a cosponsor of S. 556, a bill to prohibit investments in, and certain other activities with respect to, South Africa, and for other purposes.

S. 708

At the request of Mr. PROXMIRE, the name of the Senator from Massachusetts [Mr. KERRY] was added as a cosponsor of S. 708, a bill to require annual appropriations of funds to support timber management and resource conservation on the Tongass National Forest.

S. 1382

At the request of Mr. METZENBAUM, the name of the Senator from Pennsylvania [Mr. HEINZ] was added as a cosponsor of S. 1382, a bill to amend the National Energy Conservation Policy Act to improve the Federal Energy Management Program, and for other purposes.

S. 1489

At the request of Mr. MOYNIHAN, the names of the Senator from New Mexico [Mr. BINGAMAN], the Senator from Idaho [Mr. MCCLURE], the Senator from North Dakota [Mr. BURDICK], and the Senator from Wisconsin [Mr. KASTEN] were added as cosponsors of S. 1489, a bill to amend section 67 of the Internal Revenue Code of 1986 to exempt certain publicly offered regulated investment companies from the disallowance of indirect deductions through pass-thru entities.

S. 1630

At the request of Mr. HEFLIN, the name of the Senator from Minnesota [Mr. DURENBERGER] was added as a cosponsor of S. 1630, a bill to provide for retirement and survivors' annuities for bankruptcy judges and magistrates, and for other purposes.

S. 1678

At the request of Mr. HATCH, the names of the Senator from Mississippi [Mr. COCHRAN], and the Senator from Minnesota [Mr. BOSCHWITZ] were added as cosponsors of S. 1678, a bill to establish a block grant program for child care services, and for other purposes.

S. 1711

At the request of Mr. BENTSEN, the names of the Senator from New Mexico [Mr. BINGAMAN], the Senator from Missouri [Mr. BOND], the Senator from Vermont [Mr. LEAHY], and the Senator from Connecticut [Mr. WEICKER] were added as cosponsors of S. 1711, a bill to amend the Social Security Act to establish a National Commission on Children.

S. 1752

At the request of Mr. BAUCUS, the names of the Senator from Vermont [Mr. STAFFORD], the Senator from Illinois [Mr. SIMON], the Senator from Tennessee [Mr. SASSER], the Senator from North Dakota [Mr. BURDICK], the Senator from Arizona [Mr. DECONCINI], the Senator from Maine [Mr. MITCHELL], the Senator from Oklahoma [Mr. BOREN], the Senator from Arkansas [Mr. PRYOR], the Senator from Colorado [Mr. WIRTH], the Senator from South Dakota [Mr. DASCHLE], the Senator from Iowa [Mr. GRASSLEY], the Senator from Nevada [Mr. REID], the Senator from Washington [Mr. ADAMS], and the Senator from North Dakota [Mr. CONRAD] were added as cosponsors of S. 1752, a bill to establish a Commission to study the effects of deregulation of the airline industry.

S. 1788

At the request of Mr. TRIBLE, the name of the Senator from Maryland [Ms. MIKULSKI] was added as a cosponsor of S. 1788, a bill to protect the aquatic environment from certain chemicals used in antifoulant paints, and for other purposes.

S. 1794

At the request of Mr. MOYNIHAN, the name of the Senator from Rhode Island [Mr. PELL] was added as a cosponsor of S. 1794, a bill to establish, within the Department of Transportation, the High-Speed Ground Transportation Office; to develop the technology for a magnetically levitated superconducting transportation system; and for other purposes.

SENATE JOINT RESOLUTION 141

At the request of Mr. NICKLES, the name of the Senator from Minnesota [Mr. BOSCHWITZ] was added as a cosponsor of Senate Joint Resolution 141, a joint resolution designating August 29, 1988, as "National China-Burma-India Veterans Appreciation Day".

SENATE JOINT RESOLUTION 169

At the request of Mr. MOYNIHAN, the names of the Senator from Missouri, [Mr. BOND], the Senator from Oklahoma [Mr. BOREN], the Senator from New Jersey [Mr. BRADLEY], the Senator from Arkansas [Mr. BUMPERS], the Senator from North Dakota [Mr. BURDICK], the Senator from California [Mr. CRANSTON], the Senator from New York [Mr. D'AMATO], the Senator from Arizona [Mr. DECONCINI], the Senator from Illinois [Mr. DIXON], the Senator from New Mexico [Mr. DOMENICI], the Senator from Minnesota [Mr. DURENBERGER], the Senator from Ohio [Mr. GLENN], the Senator from Tennessee [Mr. GORE], the Senator from Utah, [Mr. HATCH], the Senator from Oregon [Mr. HATFIELD], the Senator from Massachusetts [Mr. KENNEDY], the Senator from Massachusetts [Mr. KERRY], the Senator from New Jersey [Mr. LAUTENBERG], the Senator from Michigan [Mr. LEVIN], the Senator from Hawaii [Mr. MATSUNAGA], the Senator from Ohio [Mr. METZENBAUM], the Senator from Maryland [Ms. MIKULSKI], the Senator from Maine [Mr. MITCHELL], the Senator from Oklahoma [Mr. NICKLES], the Senator from Georgia [Mr. NUNN], the Senator from Rhode Island [Mr. PELL], the Senator from Michigan [Mr. RIEGLE], the Senator from Maryland [Mr. SARBANES], the Senator from Vermont [Mr. STAFFORD], the Senator from Illinois [Mr. SIMON], the Senator from Pennsylvania [Mr. SPECTER], and the Senator from Idaho [Mr. SYMMS] were added as cosponsors of Senate Joint Resolution 169, a joint resolution designating October 2, 1988, as a national day of recognition for Mohandas K. Gandhi.

SENATE JOINT RESOLUTION 172

At the request of Mr. BRADLEY, the name of the Senator from California [Mr. CRANSTON] was added as a cosponsor of Senate Joint Resolution 172, a joint resolution to designate the period commencing February 21, 1988, and ending February 27, 1988, as "National Visiting Nurse Association Week".

SENATE JOINT RESOLUTION 181

At the request of Mr. WILSON, the name of the Senator from Michigan [Mr. RIEGLE] was added as a cosponsor of Senate Joint Resolution 181, a joint resolution designating the week beginning February 1, 1988, as "National VITA Week."

SENATE JOINT RESOLUTION 206

At the request of Mr. DOMENICI, the names of the Senator from Alaska [Mr. STEVENS], the Senator from Illinois [Mr. SIMON], and the Senator from Oklahoma [Mr. BOREN] were added as cosponsors of Senate Joint Resolution 206, a joint resolution to declare Dennis Chavez Day.

SENATE CONCURRENT RESOLUTION 23

At the request of Mr. CRANSTON, the name of the Senator from Iowa [Mr. GRASSLEY] was added as a cosponsor of Senate Concurrent Resolution 23, a concurrent resolution designating jazz as an American national treasure.

At the request of Mr. D'AMATO, his name was added as a cosponsor of Senate Concurrent Resolution 23, supra.

SENATE CONCURRENT RESOLUTION 87

At the request of Mr. RIEGLE, the names of the Senator from Maine [Mr. MITCHELL], the Senator from Nevada [Mr. REID], and the Senator from Nebraska [Mr. KARNES] were added as cosponsors of Senate Concurrent Resolution 87, a concurrent resolution expressing the sense of the Congress with respect to demonstrations in Latvia commemorating Latvian Independence Day.

SENATE RESOLUTION 315

At the request of Mr. ADAMS, the name of the Senator from Utah [Mr. GARN] was added as a cosponsor of Senate Resolution 315, a resolution expressing the sense of the Senate concerning Brazilian trade and investment informatics policies.

SENATE RESOLUTION 317—SENSE OF THE SENATE WITH RESPECT TO CURRENT BUDGET REDUCTION NEGOTIATIONS

Mr. BOSCHWITZ (for himself, Mr. CONRAD, Mr. HEFLIN, Mr. BOND, Mr. LEVIN, Mrs. KASSEBAUM, Mr. SPECTER, Mr. ROCKEFELLER, Mr. PELL, and Mr. SHELBY) submitted the following resolution; which, pursuant to the order of August 4, 1977, was referred jointly to the Committee on the Budget and the Committee on Governmental Affairs:

S. RES. 317

Whereas the Congress and the President of the United States, acting in a spirit of bipartisan cooperation, have a unique opportunity to make meaningful, long-term reductions in the deficit;

Whereas the leadership and involvement of the President of the United States, the Senate, and the House of Representatives are crucial to developing and enacting a meaningful deficit reduction package;

Whereas the economic long-term well-being of our country and conditions under which our children and grandchildren will live is tied directly to our decisions on budgetary matters;

Whereas in the aftermath of the stock market's turbulence, it is imperative to send a strong signal to the American public, the financial community, and the rest of the world that the United States will make substantial progress to reduce its budget deficit; and

Whereas the strongest signal we could send would be to enact a balanced multiyear package for steady reductions in the Federal deficit, on a year-to-year basis: Now, therefore, be it

Resolved, That it is the sense of the Senate that—

(1) as part of a long-term plan for reducing the deficit, Senate leadership should seek a budget resolution plan that contains savings in fiscal year 1988 in excess of $23,000,000,000 and the plan should extend for at least two years; and

(2) the House should consider adopting a similar approach and that the President should become personally involved in the negotiations with leaders of Congress to ensure that a meaningful deficit reduction package will be enacted.

YEAR-TO-YEAR BUDGET DEFICIT REDUCTION

Mr. CONRAD. Madam President, I send a resolution to the desk for the purpose of introduction on behalf of Senator BOSCHWITZ and myself. I want to indicate that Senator BOSCHWITZ is the one who has taken the lead on this matter and that the resolution so reflects.

Madam President, this resolution is a very simple resolution that calls on our colleagues who are negotiating on behalf of the Senate, the House, and the Presidency to reduce the Federal budget deficit. In this resolution, Madam President, we are asking those who are negotiating on behalf of the House, the Senate, and the President to go beyond $23 billion of deficit reduction in fiscal 1988, to develop a multiyear plan that will assure us of year-to-year deficit reduction.

The first question that presents itself, Madam President, is, Why are we asking for more than $23 billion of deficit reduction in fiscal 1988?

The reason for that, Madam President, is very, very simple. The reason is $23 billion is not enough, and it is not enough because $23 billion of deficit reduction, contrary to many reports that have been seen in the media, will not provide year-to-year deficit reduction or, more precisely, the assurance of real year-to-year deficit reduction.

I think when many people in this country read in the paper day after day that there is going to be $23 billion of deficit reduction, they believe that $23 billion is a reduction from the deficit accumulated last year. Not so. In fact, the $23 billion that has been talked about over and over and over in the press is a $23 billion reduction from a projection of next year's deficit. It is not a reduction from last year's deficit.

The facts are just this. In fiscal 1987, we had a budget deficit of $148 billion. In 1988, CBO says we will have a budget deficit of $179 billion absent congressional action. If you take $23 billion from $179 billion, you come up with a budget deficit of $156 billion for fiscal 1988. That is an increase in the deficit, not a reduction. And that is precisely why we have introduced this resolution. The Federal Reserve Board must be accommodative in monetary policy if we are going to avoid slipping into a recession when we are reducing the fiscal stimulus in this economy, and certainly when we reduce the budget deficit we are reducing stimulus, we are pushing us more toward recession. The only way to avoid that is to do two things: To convince the Federal Reserve Board to be even more expansionary in terms of monetary policy, and to convince our allies of Western Europe and Japan that they, too, must be more expansionary in terms of their policy.

In my judgment there is absolutely no way to convince our own Federal Reserve Board or to convince West Germany and Japan to be more expansionary unless we show that we can get our own fiscal house in order, and that is why we are introducing this resolution, a resolution based on a bipartisan basis in an attempt to encourage those who are negotiating—the House, the Senate, and the President—to come out of their trenches, come out of their fixed positions and do what must be done to put this country back on a track that makes some sense.

I now yield the floor so that my distinguished colleague from Minnesota can more formally introduce the resolution.

The PRESIDING OFFICER. The Senator from Minnesota is recognized for 10 minutes.

Mr. BOSCHWITZ. Madam President, for purposes of introduction I send a resolution to the desk. I do so for myself and Mr. CONRAD, and also Senators HEFLIN, BOND, LEVIN, KASSEBAUM, SPECTER, ROCKEFELLER, PELL, and SHELBY. I believe that more cosponsors will be forthcoming as time passes.

The Senator from North Dakota really has put the whole matter very well. The Senator from North Dakota has noted that the budget rises and that the deficit is rising and that the reductions that are being talked about really are reductions from a new figure.

Madam President, I have a chart here that shows the outlays of the Federal Government each year from 1985 to 1988. The outlay in 1985 was $950 billion, in 1986 it was $988 billion, $1,002 billion in 1987, and now in 1988, $1,080 billion. And it is from this figure that we make cuts.

The average American would think that if you are cutting the budget, you are going to spend less than last year. Not so when it comes to the Federal Government. First you have to take inflation increases, civilian and military pay raises, the cost of new programs that have been passed, and it all comes to $1,080 billion. And then you start making reductions. So even if you were to make $23 billion in reductions, you still would be spending $55 billion more than last year, and yet on the terminology of the Federal budget those things are called cuts.

The American people would resoundingly say that a cut means a reduction from what you spent last year. Many people have gone through that in their lives—certainly I have—a situation where your income goes down from a year before and where you have to make adjustments and where you have to go without. Not so with the Federal Government. We are going to spend probably $70 billion more than last year and still say that we cut the budget by $10 billion. In a way if the American people properly understood the figures and how they are composed, they would be outraged, and properly so.

The resolution calls for several things, as the distingushed Senator from North Dakota has mentioned. First, it calls for reductions in excess of $23 billion, whether they be reductions in spending or, indeed, some increases in revenues, but we do need to get beyond the $23 billion mark. The $23 billion mark is really just a reflection of the Gramm-Rudman requirements.

Second, the resolution calls for a multiyear reduction, not just a single year reduction. That, too, makes good sense because in the outyears the reductions become larger. Furthermore, it is important that we treat the budget not as a 1-year endeavor but, rather, as a longer term endeavor because the deficit is not going to go away in 1 year.

Here on this chart where it shows that spending went up very modestly from 1986 to 1987—spending went up only $14 billion—in 1987 to 1988, spending is going to go up $78 billion. But because of that small rise from 1986 to 1987, 1½ percent, we made remarkable progress in reducing the budget deficit in 1987. The budget deficit went down by $73 billion. What we hope to do is to have a repeat perform-

ance in 1988—it is improbable, but we would like to have at least a better performance than $23 billion, and then carry that forward into the succeeding years.

Then our resolution also calls for the personal involvement of the President. Indeed, the President has been personally involved but not with all of the negotiations. It is our judgment, speaking for the Senator from North Dakota and myself, that the President ought to get negotiators from both sides in a limited number and put together an agreement hopefully that affects all elements of the budget, not just a narrow range of budget functions but every function of the budget.

If every function of the budget is included in the package of spending restraint, no one function will be hurt very badly. Every participant in Government programs may not get as much as they expected, but they will get more than last year. And that, indeed, should and hopefully will be acceptable. Not everybody will accept it, but the mass of the American people surely will.

The fairness of the approach of including absolutely everybody, not excluding anybody—and that is not in our resolution and perhaps at that point I speak for myself, Mr. President, but the idea of including the entire length and breadth of the budget in the adjustments is an important element of my approach at least to the budget.

I hope the President does get intimately involved with the leaders of both parties because I think if he does, we will very quickly proceed to a resolution of the budget crisis.

It is clear that we should have quickly proceeded to a resolution of what truly is a crisis in our society. The budget that seems to be so difficult to cope with really is not difficult to cope with if these figures proceed up slowly. If the spending figures proceed slowly, we can indeed do to the budget and do to the deficit what must be done.

In talking to Senators from both sides of the aisle, I find virtual unanimity, Mr. President, among Senators that they are willing to vote for a package and make votes that they may not have made at other times in their career here in the Senate, that they are willing to make votes particularly if they have some leadership from all of the leadership of both sides and the President because there is a certain reluctance to be out front. There is a certain reluctance to say people who have pensions or Social Security should be included in such spending constraints.

So that in the event our leadership says to us march forward in unison to a very broad budget restraint, it is my feeling—and I know the Senator from North Dakota shares the feeling—that Senators on our side and on his side are going to march forward with the leadership making votes as they thought they never would before.

Madam President, there is a letter that I have before me from the Disabled American Veterans. It is my understanding that other veterans groups share the same attitude. It says in the letter that so long as such an action would be uniformly applied to all Federal entitlement programs, they would take whatever is uniformly applied.

Madam President, I ask unanimous consent that the letter be put into the RECORD at this point.

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

NATIONAL SERVICE AND
LEGISLATIVE HEADQUARTERS,
Washington, DC, November 5, 1987.

HON. RUDY E. BOSCHWITZ,
U.S. Senate, Hart Senate Office Building, Washington, DC.

DEAR SENATOR BOSCHWITZ: In response to the current crisis that has rocked our nation's financial community and seriously impaired confidence—both home and abroad—in the American economy, key members of the Congress and the Executive Branch are involved in discussions aimed at achieving agreement upon a meaningful "deficit reduction package" for the coming fiscal year.

Certainly all Americans—including those who have served in our nation's Armed Forces—wish them Godspeed and success in this most difficult task.

As these deliberations most assuredly will include scrutiny of federal entitlement programs as one area in which to achieve reduced expenditures, I wish to inform you that the 1.1 million members of the Disabled American Veterans are willing to accept a delay, reduction or cancellation of the cost of living adjustments now being considered for VA service-connected disability compensation and nonservice-connected pension benefits, so long as such an action would be uniformly applied to all federal entitlement programs, including those administered by the Social Security Administration.

As you are most aware, the President has indicated his willingness to put all entitlement programs "on the table" with the exception of Social Security benefits. The Congress, however, in dealing with this same vexing problem under the sequestration provisions of Gramm/Rudman/Hollings, has previously decided that if some exceptions to across the board cuts are to be made, veterans' programs, such as disability compensation and pension benefits, must be included.

The members of the Disabled American Veterans are certainly no strangers to sacrifice and, as indicated above, we are once again willing to place the welfare of our country above self-interest. We simply insist that all others be required to share in shouldering this burden.

If the FY 1988 deficit reduction proposal should include a freeze in federal entitlements that is applied equally across the board, so be it. However, if exceptions are to be made, I urge your support for a proposal that does not forget, or impact upon, the benefits of those veterans and survivors of veterans who have incurred disabilities or death in defense of America.

Sincerely,

GENE A. MURPHY,
National Commander.

Mr. BOSCHWITZ. Madam President, perhaps the Senator from North Dakota has some remarks. I reserve the remainder of my time.

Mr. CONRAD. Madam President, will the Chair advise as to the amount of time remaining?

The PRESIDING OFFICER. A minute and a half.

Mr. CONRAD. Madam President, let me briefly sum up by saying that now is the time for bold leadership on the part of the President, bold leadership on the part of the Senate and House leadership from both sides of the aisle. This is the time. History will judge us very harshly if in this hour we do not make maximum use of the opportunity that is before us to present an incredible program of deficit reduction in 1988, and a multiyear plan to bring us to a balanced budget to convince the Federal Reserve Board that they can be more accommodating with our monetary policy and to convince our allies in Western Germany and Japan that they can be expansionary to pick up the slack in the world economy that will be left by our retrenchment.

Madam President, let me conclude by saying earlier this year the Senator from Minnesota and I proposed an across-the-board cut, left out Social Security—an across-the-board cut that would have saved $11 billion. That same kind of across-the-board cut was only 2 percent. It could save $11 billion. With 3 percent we could save $17 billion. And that was leaving off Social Security.

We have been through the debate on dividing up the pie. We spent 9 or 10 months on that in the Senate. Now is the time to go back and shrink the pie across-the-board dealing with all of those programs and the important point I think, a fact I would leave with people, is this does not mean a cut from last year's spending. It is a reduction in the growth rate.

With that we could reduce the deficit and get us back on a sound track fiscally.

Thank you, Madam President.

The PRESIDING OFFICER. All time has expired.

Mr. McCLURE. Madam President, I ask unanimous consent that the Senator from Minnesota be permitted an additional 30 seconds on the resolution.

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

Mr. BOSCHWITZ. Madam President, I concur with my colleague from North Dakota that this indeed is the time for bold action, that this is a time for the leadership, that this is a time that the budget needs to be constrained, that if we are ever going to

do it now is the time as we feel the pulse of the Senate and as we feel the pulse of the Congress. Indeed they are ready. If the leadership is divided—and we urge the leadership to move forward—indeed we will cast votes that are necessary.

SENATE RESOLUTION 318—AUTHORIZING REPRESENTATION BY THE SENATE LEGAL COUNSEL

Mr. BYRD (for himself and Mr. DOLE) submitted the following resolution; which was considered and agreed to:

S. RES. 318

Whereas, in the case of *United States* v. *Bardoff,* Crim. No. M-8237-87, pending in the Superior Court of the District of Columbia, the defendant has obtained subpoenas for the trial testimony of Senator Daniel K. Inouye, Senator Paul S. Sarbanes, and Senator John F. Kerry;

Whereas, pursuant to sections 703(a) and 704(a)(2) of the Ethics in Government Act of 1978, 2 U.S.C. §§ 288b(a) and 288c(a)(2) (1982), the Senate may direct its counsel to represent Members of the Senate with respect to subpoenas issued to them in their official capacities: Now, therefore be it

Resolved, That the Senate Legal Counsel is directed to represent Senator Inouye, Senator Sarbanes, and Senator Kerry in the case of *United States* v. *Bardoff.*

AMENDMENTS SUBMITTED

ENERGY AND WATER DEVELOPMENT APPROPRIATIONS, FISCAL YEAR 1988

DOMENICI (AND OTHERS) AMENDMENT NO. 1142

(Ordered to lie on the table.)

Mr. DOMENICI (for himself, Mr. DECONCINI, and Mr. BINGAMAN) submitted an amendment intended to be proposed by them to the bill (H.R. 2700) making appropriations for energy and water development for the fiscal year ending September 30, 1988, and for other purposes; as follows:

On page 37, line 5, strike "$2,056,207,000, to remain available until expended;" and insert in lieu thereof "$2,062,007,000, to remain available until expended; of which $5,800,000 is available for collaborative efforts of the national laboratories, with private industry and universities, to advance the processing of semiconductors in an ultra clean environment: Provided, that the amount appropriated for departmental administration activities of the Department of Energy shall not exceed $419,395,000;"

DOMENICI AMENDMENT NO. 1143

(Ordered to lie on the table.)

Mr. DOMENICI submitted an amendment intended to be proposed by him to the bill H.R. 2700, supra; as follows:

On page 19, line 9, after "$16,945,000" add the following: ", of which $200,000 shall be made available for the Alamogordo Municipal and Industrial Water Supply Study, Alamogordo, New Mexico, and $250,000 for the Ute Lake Pipeline Study, New Mexico"

HIGH RISK OCCUPATIONAL DISEASE NOTIFICATION AND PREVENTION ACT

QUAYLE AMENDMENT NOS. 1144 THROUGH 1156

(Ordered to lie on the table.)

Mr. QUAYLE submitted thirteen amendments intended to be proposed by him to the bill (S. 79) to notify workers who are at risk of occupational disease in order to establish a system for identifying and preventing illness and death of such workers, and for other purposes; as follows:

AMENDMENT No. 1144

On page 35, between lines 8 and 9 insert the following:

(5) SMALL EMPLOYER.—The term "small employer" means, with respect to a calendar year, an employer which employs an average number of employees of less than 100.

On page 35, line 9, strike out "(5)" and insert in lieu thereof "(6)".

On page 35, line 14, strike out "(6)" and insert in lieu thereof "(7)".

On page 35, line 17, strike out "(7)" and insert in lieu thereof "(8)".

On page 35, line 21, strike out "(8)" and insert in lieu thereof "(9)".

On page 36, line 13, strike out "(9)" and insert in lieu thereof "(10)".

On page 36, line 17, strike out "(10)" and insert in lieu thereof "(11)".

On page 37, line 4, strike out "(11)" and insert in lieu thereof "(12)".

On page 68, between lines 22 and 23, insert the following:

(e) The provisions of this section shall not apply to small employers.

On page 64, line 2, strike "(1)".

On page 64, strike lines 18 through page 65, line 2.

On page 68, strike lines 3 through 12.

AMENDMENT No. 1145

On page 36, strike out lines 1 through 12 and insert in lieu thereof the following: "workplace, for which there is a reasonable probability from clinical or epidemiologic evidence (conducted, analyzed, and interpreted in accordance with established scientific principles) that chronic health effects have occurred in individuals exposed to such agent or process and that the health effects are casually associated with such exposures.".

AMENDMENT No. 1146

On page 36, strike out lines 20 through 24, and insert in lieu thereof the following:

(A) exposed to an occupational health hazard under working conditions in which the exposure is comparable to the exposure of the exposed individuals in whom chronic health effects have occurred as referred to in paragraph (9);

On page 41, line 19, strike out "may be" and insert in lieu thereof "are".

ON page 41, line 22, beginning with the parenthetical, strike out through line 24 and insert in lieu thereof the following: "in which the exposure is comparable to the exposure of exposed individuals in whom chronic health effects pursuant to paragraph (9) of section 3, have occurred;".

On page 42, line 3, strike out "may be" and insert in lieu thereof "are".

On page 42, beginning with line 10, strike out through the word "be" in line 11 and insert in lieu thereof the following: "in which the exposure is comparable to the exposure of exposed individuals in whom chronic health effects pursuant to paragraph (9) of section 3, have occurred that are".

AMENDMENT No. 1147

On page 37, line 11, strike out "7" and insert in lieu thereof "8".

On page 37, line 16, strike out "Four" and insert in lieu thereof "Three".

On page 37, line 18, strike out "Three" and insert in lieu thereof "Five".

On page 37, line 22, strike out "an epidemiologist" and insert in lieu thereof "2 epidemiologists".

On page 37, line 24, after the period insert the following: "Members of the Board appointed pursuant to the preceding sentence must have State Board certification or similar qualifications."

On page 38, line 12, strike out the number "1" and insert "2".

On page 39, line 6, strike out "through the Director of the institute".

AMENDMENT No. 1148

On page 37, line 2, strike out "Board" and insert in lieu thereof "Secretary".

On page 39, line 6, strike out "through the Director of the Institute".

On page 44, line 13, beginning with the hyphen, strike out through line 19 and insert in lieu thereof the following: "transmit to the Secretary a notice of proposed determination together with all the materials supporting such determination.".

On page 44, line 1, beginning with "Board" strike out through the comma in line 2 and insert in lieu thereof "the Secretary".

On page 44, line 23, strike out "Board" and insert in lieu thereof "Secretary".

On page 45, line 14, strike out "Board" and insert in lieu thereof "Secretary".

On page 45, line 15, strike out "Board" and insert in lieu thereof "Secretary".

On page 45, line 20, strike out "Board" and insert in lieu thereof "Secretary".

On page 46, line 14, strike out "issue" and insert in lieu thereof "prepare".

On page 46, line 15, before the period insert "to be tramsmitted to the Secretary".

On page 49, line 6, strike out "Institute" and insert in lieu thereof "Secretary".

On page 49, line 12, strike out "Institute" and insert in lieu thereof "Secretary".

On page 49, lines 16-17, beginning with "the" strike out through "consider" and insert in lieu thereof "the Secretary considers".

On page 51, line 3, strike out "Board" and insert in lieu thereof "Secretary".

On page 51, line 20, strike out "Board" and insert in lieu thereof "Secretary".

On page 51, line 24, strike out "Board" and insert in lieu thereof "Secretary".

On page 52, line 2, strike out "Board" and insert in lieu thereof "Secretary".

On page 63, line 12, strike out "Board" and insert in lieu thereof "Secretary".

On page 64, line 7, strike out "Board" and insert in lieu thereof "Secretary".

On page 68, beginning with "require" in line 24, strike out through "or" in line 25

and insert in lieu thereof the following: "maintain records and shall require record-keeping".

On page 70, line 25, strike out "Board" and insert in lieu thereof "Secretary".

AMENDMENT No. 1149

On page 43, line 5, beginning with "consider" strike through 10 and insert in lieu thereof the following: "only designate populations which may derive health benefits from receipt of notification.".

AMENDMENT No. 1150

On page 45, line 16, beginning with "60" through "after" and insert in lieu thereof "120 days after completion of".

On page 46, line 1, strike out "150" and insert in lieu thereof "365".

On page 46, strike out lines 3 through 7.

AMENDMENT No. 1151

On page 47, strike out lines 9 through 15 and insert in lieu thereof:

(a) NOTIFICATION OF A POPULATION AT RISK.—

(1) GENERAL.—Pursuant to the issuance of a final determination by the Secretary that a given class or category of employees is a population at risk of disease to be notified pursuant to this Act, the Secretary shall—

(A) publish a notice identifying either individually or by reasonably specific class the employees of the employers whom the Secretary intends to notify.

(B) make every reasonable effort to ensure that each individual within the population at risk is notified of the risk.

The Secretary shall direct the notification required by this section.

(2) HEARINGS.—Any employer of employees described in subsection (a) may petition the Secretary within 30 days of the receipt of such intended notification for a hearing to challenge such intended notification for either individual employees or groups of employees on the basis that the working conditions of such employees did not result in exposures to such employees comparable to the exposure of the exposed individuals in whom chronic health effects have occurred pursuant to section 3.

(3) CONSIDERATIONS FOR DECISION.—In deciding such a petition, the Secretary shall consider—

(A) whether the employee or group of employees have been exposed to the occupational health hazard under fundamentally different conditions of exposure than that relied upon by the Secretary in determining a population to be at risk; and

(B) whether there are substantial mitigating factors for such employees such as work practices, protective equipment, and health and safety programs that significantly lessen the risk of developing the diseases associated with the notice.

(4) JUDICAL REVIEW.—Such employers have a right to judicial review of the decision of the Secretary under this subsection within 30 days of the Secretary's decision.

On page 55, strike lines 10 through page 57, line 12.

AMENDMENT No. 1152

On page 50, line 17, beginning with the hyphen, strike out through line 25, and insert in lieu thereof the following: "any employer or government action pursuant to section 6, for any act or omission that is knowing or reckless violation of a provision of this Act.".

AMENDMENT No. 1153

On page 58, strike out line 21.

On page 58, line 22, strike out "(1)" and insert in lieu thereof "(a)".

On page 59, line 4, strike out "(A)" and insert in lieu thereof "(1)".

On page 59, line 7, strike out "(B)" and insert in lieu thereof "(2)".

On page 59, line 10, strike out "(C)" and insert in lieu thereof "(3)".

On page 59, line 16, strike out "(D)" and insert in lieu thereof "(4)".

On page 59, line 20, strike out "(E)" and insert in lieu thereof "(5)".

On page 59, line 23, strike out "(2)" and insert in lieu thereof "(b)".

On page 60, beginning with line 3, strike out through line 6 on page 63.

On page 78, line 17, strike out "(a) IN GENERAL.—".

On page 78, insert "." after "Act" on line 23 and strike "and section 788A of the Public Health Service Act."

On page 79, strike lines 1 through 3.

AMENDMENT No. 1154

On page 63, line 10, beginning with "is" the first time it appears, strike out through "Board" on line 12 and insert in lieu thereof the following: "has been individually notified under section 5 or 6 that the employee is a member of a population that is determined by the Secretary".

On page 64, line 15, after "maintains" insert "for a 12-month period".

On page 65, line 12, strike out "10" and insert in lieu thereof "15".

On page 65, line 20, after "job" insert "for a period of 12 months".

On page 66, line 5, strike out "14" and insert in lieu thereof "20".

On page 66, line 9, strike out "21" and insert in lieu thereof "35".

On page 67, line 22, before the period insert "and on the active search of the employee for nonexposed employment".

On page 66, line 12, strike out "14" and insert in lieu thereof "20".

On page 66, line 17, strike out "21" and insert in lieu thereof "35".

AMENDMENT No. 1155

On page 63, line 23 strike "or has reason to know"

On page 67, lines 3-4, strike "or has reason to know"

AMENDMENT No. 1156

On page 74, beginning with line 14, strike out through line 5 on page 76 and insert in lieu thereof the following:

(g) EFFECT ON OTHER LAWS: PROHIBITION ON THE USE OF BOARD DETERMINATIONS UNDER THE ACT.—

(1) GENERAL RULE.—Whenever there is—

(A) a finding or determination by the Board that an employee or an employee population is or is not a member of or is or is not a population at risk of disease as determined under this Act;

(B) evidence that an employee or employee population is or is not to receive (or has or has not received) notification under this Act; or

(C) evidence that medical evaluation or monitoring is or is not to be initiated (or has or has not been initiated) under this Act,

the finding, determination, or evidence (including, but not limited to, any records of proceedings or reports of the Board pursuant to section 4 and the contents or description of any notice issued pursuant to section 5 and the content or description of any reports or proceedings in connection with such notice) may not serve as a legal basis for or be used as the basis of expert testimony or be used as evidence in connection with any claim for compensation, loss, or damage brought under State or Federal law, other than a claim brought pursuant to section 5(g) or 10 (b), (c), or (d) of this Act.

(2) CONSTRUCTION RULE.—

(A) Nothing in this Act shall preclude the admission into evidence of—

(i) the results of any medical evaluation or monitoring:

(ii) any medical and other scientific studies and reports concerning the incidence of disease associated with exposure to occupational health hazards; or

(iii) any data related to exposure to occupational health hazards for individual employees, in connection with any claim for compensation, loss, or damage brought under State or Federal law. Notification pursuant to this Act shall not be relevant on determining whether such a claim is timely under any applicable statute of limitations.

(B) An employer (including its employees and agents) carrying out its responsibilities under section 6 or 9 of this Act, and acting in essential compliance with the applicable section, shall not be liable, in connection with the execution of those responsibilities, for special, general, or punitive damages under Federal or State law, including, but not limited to, claims based on intentional injury, aggravated or enhanced injury, or failure to warn.

(c) MENTAL DISTRESS.—No person may bring any tort or workers' compensation claim based on emotional harm, fear of disease or stress based directly or indirectly on any report, finding, notice, medical evaluation, or monitoring decision or any act or omission required by this Act. This prohibition applies whether the party bringing the claim has been directly subject to the report, finding, notice, or medical evaluation or is a party learning about such report, finding, notice, medical evaluation, or monitoring decision that affected another person.

Mr. QUAYLE. Mr. President, it is my understanding that the distinguished majority leader is interested in bringing up S. 79, the "High Risk Occupational Disease Notification and Prevention Act." When this bill was reported out of the Senate Labor and Human Resources Committee, I filed dissenting views to the committee report outlining those modifications to the bill that I believe are necessary to ensure a responsible risk notification policy.

Today, I am submitting a series of amendments that would address a number of the problems I noted in my dissenting views. I will be publishing additional amendments to further resolve some of the very significant substantive and technical difficulties in the committee reported version of the bill.

NOTICES OF HEARING

COMMITTEE ON ENERGY AND NATURAL RESOURCES

Mr. BUMPERS. Mr. President, I would like to announce for the public that the hearing on S. 1544, the Na-

tional Trails System Improvement Act which was scheduled before the Subcommittee on Public Lands, National Parks and Forests on November 17, 1987, has been postponed. When the hearing has been rescheduled, the date will be announced in the CONGRESSIONAL RECORD.

SUBCOMMITTEE ON RURAL ECONOMY AND FAMILY FARMING

Mr. BUMPERS. Mr. President, I would like to announce that the Senate Small Business Committee's Subcommittee on Rural Economy and Family Farming will hold a hearing on Tuesday, November 17, 1987, on the impact of land diversion programs on agricultural support industries. The hearing will be held in room 428A of the Russell Senate Office Building and will commence at 9:30 a.m. For futher information, please call Chuck Culver of the committee staff at 224-3188 or Tamara McCann of Senator BAUCUS' office at 224-2651.

SELECT COMMITTEE ON INDIAN AFFAIRS

Mr. INOUYE. Mr. President, I would like to announce that the Select Committee on Indian Affairs will be holding the following:

On Thursday, November 12, 1987, beginning at 10 a.m. in Senate Russell 485, a hearing on S. 1039, a bill to review and determine the impact of Indian tribal taxation on Indian reservations and residents;

On Thursday, November 12, 1987, beginning at 1 p.m. in Senate Russell 301, a hearing on S. 1722 and S. 1723, bills to establish a National American Indian Museum;

On Monday, November 18, 1987, beginning at 2 p.m. in Senate Russell 301, a hearing on S. 1722 and S. 1723, bills to establish a National American Indian Museum; and

On Thursday, November 19, 1987, beginning at 2 p.m. in Senate Russell 485, an oversight hearing on Federal agency actions related to the implementation of the Department of the Interior's Garrison Unit Joint Tribal Advisory Committee Final Report recommendations and draft legislation to implement report recommendations.

Those wishing additional information should contact the committee at 224-2251.

AUTHORITY FOR COMMITTEES TO MEET

COMMITTEE ON FOREIGN RELATIONS

Mr. BYRD. Mr. President, I ask unanimous consent that the Committee on Foreign Relations jointly with the Committee on Labor and Human Resources be authorized to meet during the session of the Senate on Tuesday, November 10, 1987, to hold a hearing on the institute of peace.

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

SELECT COMMITTEE ON INDIAN AFFAIRS

Mr. BYRD. Mr. President, I ask unanimous consent that the Select Committee on Indian Affairs, be authorized to meet during the session of the Senate on Tuesday, November 10, 1987, to hold an oversight hearing on the Implementation of the Indian Child Welfare Act, and to be continued.

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

COMMITTEE ON ENERGY AND NATURAL RESOURCES

Mr. BYRD. Mr. President, I ask unanimous consent that the Committee on Energy and Natural Resources be authorized to meet during the session of the Senate on Tuesday, November 10, 1987, to continuation of oversight hearings to receive testimony concerning the greenhouse effect and global climate change.

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

SELECT COMMITTEE ON INTELLIGENCE

Mr. BYRD. Mr. President, I ask unanimous consent that the Select Committee on Intelligence be authorized to meet during the session of the Senate on Tuesday, November 10, 1987, to hold a meeting on intelligence matters.

The PRESIDING OFFICER. Without objection, it is so ordered. 19-060, Folios: 28/W4,28/W5,28/W6,28/W7S, File No. A10NO6.267

SUBCOMMITTEE ON PATENTS, TRADEMARKS, AND COPYRIGHTS

Mr. BYRD. Mr. President, I ask unanimous consent that the Subcommittee on Patents, Trademarks, and Copyrights of the Committee on the Judiciary be authorized to meet during the session of the Senate on November 10, 1987, to consider S. 698, source licensing.

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

COMMITTEE ON THE JUDICIARY

Mr. BYRD. Mr. President, I ask unanimous consent that the Committee on the Judiciary be authorized to hold a hearing during the session of the Senate on November 10, 1987, on Racketeering Influence and Corruption Organization Act.

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

SUBCOMMITTE ON AGRICULTURAL PRODUCTION AND STABILIZATION OF PRICES

Mr. BYRD. Mr. President, I ask unanimous consent that the Subcommittee on Agricultural Production and Stabilization of Prices of the Committee on Agriculture, Nutrition, and Forestry be authorized to meet during the session of the Senate on Tuesday, November 10, 1987, to hold a joint hearing with the House Subcommittee on Wheat, Soybeans, and Feed Grains on the impact of Federal inspection service protein measurement on wheat prices.

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

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

Mr. BYRD. Mr. President, I ask unanimous consent that the full Committee on Environment and Public Works be authorized to meet during the session of the Senate on Tuesday, November 10, beginning to mark up and report S. 675, amending the Endangered Species Act; S. 1788, TBT legislation; S. 1389, S. 1143, S. 1193, various wildlife bills; committee working paper to reduce plastic pollution; Soil Conservation Service project resolutions; and other pending business.

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

ADDITIONAL STATEMENTS

A COLUMN ON THE NEED TO REDUCE STRATOSPHERIC OZONE DEPLETION

● Mr. WIRTH. Mr. President, I would like to share with my colleagues a column written by a fellow Coloradan, Walter Orr Roberts.

Mr. Roberts is a distinguished professor at the University of Colorado and president emeritus of the University Corporation for Atmospheric Research. During his career, Mr. Roberts has worked hard with other scientists to address environmental issues facing our Nation and the world—including the problems of stratospheric ozone depletion and global warming.

I believe this column is an incisive commentary on the agreement recently signed by the United States, 23 other nations and the European Economic Community in Montreal. This agreement promises to significantly reduce the production and use of ozone-depleting chlorofluorocarbons. As I have stated, this agreement represents a positive first step in the effort to address the problem of ozone depletion, and we can be proud of the United States' strong leadership in developing this accord.

Mr. President, I ask that the text of Mr. Roberts' column be inserted in the RECORD:

[From the Boulder (Co) Daily Camera, Oct. 22, 1987]

COUNTRIES TAKE STEPS TO PROTECT OZONE LAYER

(By Walter Orr Roberts)

It took 10 years of concerted international effort by the United Nations Environment Programme to define the "ozone problem" in a way that could lead to political action. After a further year of detailed negotiation, UNEP achieved the endorsement, a few weeks ago, of a plan to protect the high-altitude ozone layer from further erosion by fluorine-based gases manufactured for human usage.

The culprit gases in ozone destruction are called "CFCs" (chlorofluorocarbons), many

of which go by the trade name of "Freon." These gases are widely and effectively used in refrigerators, air conditioners, plastic foam making, and other industrial uses.

In much of the world, but not in the United States where they have already been discontinued. CFCs are used in spray cans as a propellant for hair preparations, paints, insecticides, etc. Cans of Freon for recharging automobile air conditioners can be purchased in auto stores everywhere, and ultimately most of this leaks out to the atmosphere.

The damage to the ozone layer is done when the CFCs diffuse up into the stratosphere where they react chemically with sunlight to produce chlorine, which destroys ozone. The chemistry of these reactions is an intricate maze, and there are still some big uncertainties.

Our own NCAR laboratories, and many other research centers, are doing intensive experiments and theoretical work to discover the probable pathways to the stratospheric ozone damage. About 20 years ago I wrote a scientific article saying that the CFCs were harmless to the atmosphere. How rapidly new knowledge has shown my error!

Stratospheric ozone, strongest at 12 to 15 miles above our heads, is a shield that protects us from the sun's ultraviolet radiation. The hazards from its reduction include increased skin cancers, suppression of the human immune system, and damage to vegetation in crops, forests and ornamental plants. Dangers also include additional climate warming and increased air pollution. It is difficult to measure the hazards precisely, but estimates suggest that for each 1 percent drop in the ozone shield, there is a 2 percent worldwide increase in skin cancer.

Representatives of 23 governments met in Montreal in mid-September and agreed on a treaty that calls for a 50 percent reduction of the use of CFCs by 1999. The treaty takes effect in January 1989, if adopted by 11 or more nations that represent a minimum of 67 percent of world production. By 1990 the signators must freeze CFC production and use near their 1986 level. This is in marked contrast to much higher present usage plans.

UNEP is the international agency responsible for the agreement. It, in turn, came about as the result of the famous United Nations Conference on Problems of the Human Environment held in Stockholm over a decade ago. The late environmentalists Rene Dubos and Barbara Ward the prime movers. Maurice Strong, now a Colorado resident, was chairman and a great intellectual leader in the Stockholm Conference, and later became first director-general of UNEP. He remains highly influential in world environmental matters.

Through a conference held by the Aspen Institute, I had the reward of working with all three of these leaders in the planning for UNEP and in focusing attention on the greenhouse warming and destruction of the ozone layer.

CFCs are believed to be the cause of the much-publicized "ozone hole" in Antarctica, which forms in the southern hemisphere winter when the sun does not shine on the upper air.

In recent weeks scientists, many of whom were from NOAA and NCAR laboratories in Boulder, have verified that a 50 percent loss of ozone has now resulted, compared with values in 1960. Ozone losses show up prominently in Antarctica because the winter wind patterns there do not promote mixing of air into the polar night from regions where new ozone can be formed by sunlight.

Thus, this location is especially sensitive to ozone destruction by CFCs. What happens in this region may be, in coming years, the best natural indicator of whether the treaty is working.

Our country produces 30 percent of the world's CFC supply, and the business of manufacture, sale and use of these products in this country amounts to $28 billion per year. Fortunately there are substitutes for CFCs. DuPont, the largest maker of CFCs under its "Freon" trade name, believes it can produce safe and effective substitutes within five to 10 years.

McDonald's has already announced that it will use foam food containers made without use of CFCs. American industry has taken a lead in promoting a transition of safer gases. The rest of the world, I hope, will also move rapidly and firmly in the same direction.

The ozone treaty, if ratified and put into effect, will be a truly major landmark in international cooperation to protect "spaceship Earth," the sole habitat of all known life of the universe.●

ACCURACY OF MEDICAL LABORATORY TEST RESULTS

● Mr. COHEN. Mr. President, millions of Americans routinely undergo laboratory tests to determine the source of their medical symptoms or to provide early detection of cancer or other life-threatening diseases. Most health care patients never doubt the accuracy of their lab test results and may believe that such tests are infallible. Yet, a faulty test result can mean weeks of unnecessary treatment, and the costs and anxiety of that treatment, or, even worse, can mean that an illness goes undetected for too long, or even until the death of the patient.

For the past few months, the Subcommittee on Oversight of Government Management of the Governmental Affairs Committee has been investigating the current state of clinical laboratory testing in the United States. The subcommittee's examination has been prompted by an increasing number of concerns raised that inaccurate or unreliable testing has become a serious health hazard, despite the fact that the Congress addressed this issue 20 years ago by passing the Clinical Laboratories Improvement Act of 1967. Tremendous changes have occurred in the past 20 years, however, in the number and types of tests that are conducted, as well as in the way we pay for them.

Serious charges have been raised by experts, as well as in the press and by patients who have themselves been harmed by faulty tests, about the procedures that are followed in clinical laboratories. Many question whether the Federal or State governments should do more to oversee and inspect the quality of lab testing and the performance of clinical laboratories in such areas as proficiency testing, personnel guidelines, quality control procedures, and performance measurements. And, as mandatory drug abuse and AIDS testing become more prevalent, the accuracy of these procedures take on even more far-reaching implications for our society. The subcommittee plans to hold comprehensive oversight hearings on this important issue early in the next session of this Congress.

At this time, I wish to bring to the attention of my colleagues a series of articles on the issue of faulty laboratory testing which has appeared in the Wall Street Journal over the past few months. The stories in these articles, as well as those which have come to my attention during the subcommittee's investigation, are poignant and personal ones, and demonstrate that faulty laboratory tests is truly a life-or-death issue that deserves much closer scrutiny by the Congress.

I ask that a series of articles by Walt Bogdanich of the Wall Street Journal appear in the RECORD.

The articles follow:

[From the Wall Street Journal, Nov. 2, 1987]

THE PAP TEST MISSES MUCH CERVICAL CANCER THROUGH LABS' ERRORS

(By Walt Bogdanich)

The Pap smear. Over the past three decades, it has sharply reduced deaths from cervical cancer. Women and physicians trust it, so much so that the Pap smear has become one of the most common laboratory tests in America.

It is also one of the most inaccurate. No one knows how many women die because a lab botches the analysis or a doctor takes an inadequate specimen. The test, as it is being done today, fails to detect roughly one in every four cases of cancer or precursor cell abnormalities.

Linda MacNeil was one victim. A Florida store manager, Mrs. MacNeil suspected cervical cancer after experiencing bleeding, but a Pap-test report reassured her. Four months later, another test found cancer, Mrs. MacNeil died at age 36.

Cindy Gray's Pap smear wasn't analyzed in a laboratory at all but in the home of a lab employee, in violation of a federal regulation. There was no supervision and no pathologist to consult. Although the test reported no malignancy, the North Carolina mother of three was found soon after to have cervical cancer. She died at 34.

Barbara Arbuckle, of Seattle, was luckier: She is still alive. The 25-year-old woman received negative Pap-test reports, from two different labs, in the months before finding out she had invasive cervical cancer.

INCENTIVES TO HURRY

To find out why the Pap test falls so short of its promise, this newspaper visited labs, inspected records and interviewed doctors, lab workers and government officials. What emerges is a picture of a Pap-screening industry kept afloat by overworked, undersupervised, poorly paid technicians. It is an industry that often ignores what few laws exist to protect women from slipshod testing.

Across the nation, high-volume, cut-rate laboratories, sometimes called Pap factories or Pap mills, allow technicians to analyze up to four times as many specimens per year as

medical experts recommend for accuracy. Many of them pay screeners on a piecework basis that encourages them to rush the analysis.

Some technicians work two or more jobs, earning as little as 45 cents to do the key analysis on a test that may cost the patient $35. In some cases, they say they are penalized if they resist the pressure to screen more slides in a day.

WORK AT HOME

"I think women would be horrified to learn what's happening out there," says Dwight Golann, former chief of consumer protection for the Massachusetts attorney general's office.

Women and their doctors might be surprised to learn that labs often let employees take slides home to screen. "That borders on fraud," says Myron R. Melamed, a physician at Memorial Sloan-Kettering Cancer Center in New York.

Pap mills prosper by underbidding competing labs, charging as little as $1.50 per test. They are sought out by some gynecologists, who profit by marking up lab fees on patient bills.

COST PRESSURE

But their bargain rates also appeal to budget-conscious administrators of group health plans and government-funded clinics. Thus, at a time when pressures are great to restrain medical expenses, problems with Pap-testing accuracy exemplify the possible trade-off in quality of care.

The consequences of faulty testing pose disturbing questions for the medical establishment. An estimated 60,000 women this year are expected to develop cancer of the cervix. If caught early, the disease is nearly always curable. Yet it kills about 7,000 American women a year.

"It is time for the medical community to acknowledge the failures of cervical cancer screening in the U.S.," says Robert Hasselbrack, a pathologist who runs a clinical laboratory in Seattle. Another physician, San Francisco pathologist Eileen King, complains: "Women have been told for many years that a Pap smear will tell them when they have cancer and when they don't. That is a big falsity."

Heightening the urgency is the fact that some doctors now believe cervical cancer develops faster than previously believed. Also, they see it turning up in more young women.

Citing an "alarming number" of cervical-cancer cases in women with recent negative Pap smears, the American College of Obstetricians and Gynecologists has criticized the American Cancer Society for advising women that they need a Pap test only every three years after two consecutive negative annual tests.

"Nothing merits total faith, but nobody can doubt its [the Pap test's] value," says Robert Hutter, a physician who is a past president of the society. Still, the society is considering recommending that women take the test more frequently.

Leading cancer specialists say about half the Pap-test failures result because physicians take inadequate cell samples. But efforts to better educate doctors in taking specimens have been "spectacularly unsuccessful," says the obstetrician and gynecologist association.

Labs could help by rejecting inadequate slides sent to them. But "even good labs" are reluctant to do so, for fear of losing business, says Dr. S.B. Gusberg, another past president of the American Cancer Society.

WALLPAPER CHALLENGE

The Pap test is named for George Papanicolaou, who developed it in the 1920s. To prepare a specimen for the test, a doctor smears cells from the female genital tract onto a glass slide, in some cases two slides. Most aren't analyzed by a doctor but by a cytotechnologist, who ordinarily is a college graduate with a year of special training. Unlike some kinds of medical tests, Pap smears aren't checked by chemical or mechanical means but depend on human visual examination of the specimen.

A slide may contain hundreds of individual cells, each of which should be studied under a microscope. It is tedious work and, if done properly, time-consuming. Louise Newton, an Albany, N.Y., "cytotech," likens the job to examining wall after wall of flowered wallpaper.

"Imagine trying to look at every flower and see how buggy you get," she says. "Tired eyes make mistakes."

Accordingly, the American Society of Cytology recommends that no full-time cytotech examine slides from more than 12,000 patients a year. A 1980 conference of cancer specialists convened by the National Cancer Institute also supported this limit. But it is flagrantly ignored.

WORKLOAD CONTROVERSY

An analysis by this newspaper of government data found that more than half of the Pap smears sent to New York state regulated labs are screened in places where technicians exceed the recommended workload. Kyto Diagnostics Inc. of New City, N.Y., a large private lab run by a prominent cytopathologist, Ralph Richart, reported average workloads of 35,000 cases per screener last year—nearly three times what the cytology society thinks is safe. Most of his screeners aren't even full-timers.

Dr. Richart and other critics of workload limits say some cytotechs can accurately screen more than others. They argue that those who make excessive errors will be caught if a lab randomly rescreens at least 10% of negative slides.

Other medical experts disagree. Because only a small percentage of slides are likely to be positive, they say, and because everyone makes some errors, finding a problem employee might take years using a random 10% rescreen. "It's a seriously flawed, quality-control technique," concludes Robert R. Richert, vice chairman of lab accreditation for the College of American Pathologists.

Even as Pap-smear volume is rising, the number of qualified screeners is shrinking. Fewer people are choosing the field, and many are leaving it for better pay. Nearly half the schools that train cytotechs have closed in recent years; hospitals no longer find them economic to run.

"It is approaching a crisis," says San Francisco's Dr. King, who is studying the problem on behalf of California pathologists. Nearly 50% of advertised positions for cytotechs in California remain unfilled, she has found. Paul Krieger, director of anatomic pathology for MetPath Inc., a laboratory unit of Corning Glass Works, says that if the American Cancer Society decides to recommend more frequent Pap testing, "I don't know how we or anyone else is going to handle it."

To cope with the labor squeeze and to lower their costs, labs are turning increasingly to piecework, promising cytotechs that the more slides they screen, the more they will earn. Nowhere else in laboratory medicine is this method of payment so prevalent. "It's very bad practice. It makes quality control difficult," says Dr. Melamed of Sloan-Kettering.

Some big commercial labs pay almost exclusively by piecework, avoiding many employee costs. Even labs with salaried cytotechs, such as MetPath, usually let them do extras on a piecework basis.

Karen Sanford, a cytotech in Stockton, Calif., left a high-pressure piecework lab in the Los Angeles area after learning from a patient's doctor that she had failed to catch some abnormalities. "It really freaks you out," she says. "What do you say? It happened to me twice. That's when I decided to get out of there."

Not everyone is so conscientious. A particularly dangerous, yet very common, practice among cytotechs is to piggyback Pap-smear screening jobs, doing the maximum allowed at one lab, then meeting another lab's quota later in the day.

MIDNIGHT OIL

"Over 50% of the people I know have two jobs. Some have three or four," says Jason Betterton, a cytotech in Sylmar, Calif. Ms. Sanford tells of a technician who screens at three labs, working from 1 a.m. until late the next afternoon.

Labs frequently let workers leave for the day as soon as they reach their quotas—another incentive to screen slides as rapidly as possible. Lon Barr, a cytotech in Poway, Calif., says that when he joined a San Diego pap lab he was "astonished" to see workers screen 100 slides in 3½ hours, then leave. "It was inconceivable that someone could screen that fast," he says.

Dr. Hasselbrack, the Seattle lab owner, says that in Pap mills, screeners lose sight of the fact that "you are looking at somebody's life, and if you make a mistake, it may be all over."

Piecework pay scales also encourage overwork. At 50 cents a slide, one who stuck to the cytology society's workload limit would earn only $6,000 a year.

LITTLE REGULATION.

Only one state, California, even attempts to prevent workload abuses. Its law states that "no cytotechnologist shall be required to examine more than 75 one-slide gynecologic cases, or 50 two-slide gynecologic cases per day."

But labs often violate or skirt this law. Start with the biggest Pap lab in the country, Cancer Screening Services, of North Hollywood. Almost a million Pap cases were processed last year by this unit of American Cytogenetics Inc. (which a West Coast business magazine in 1985 dubbed California's hottest stock).

Cancer Screening's full-time employees are required to do 100 slides a day, says Shahla B. Sadeghi, medical director. It has mostly one-slide cases. Reminded of the state's legal limit, Dr. Sadeghi says: "It's not really a law—they just suggest it. . . . They know it's not possible." She adds, "Every year we have passed the [state] inspection."

At Central Diagnostic Laboratory in Tarzana, Calif., says former employee Betty Jo Thompson, "there was no such thing as you couldn't do your 100 cases." Moreover, screeners were expected to do extras at $1 a slide, she says. California law lets workers analyze an unlimited number of Pap smears a day if they "volunteer," but Mrs. Thompson says that when she resisted doing extras, the lab cut her salary.

Cyrus Milani, a Central Diagnostic medical director, says workers are sometimes required to do 100 cases daily. He declines to be interviewed further, except to state that

the lab does quality work. Another company official denies that the lab violates any laws.

At Yosemite Pathology in Modesto, "100 slides is what we consider the minimum," says spokesman Robert Colletti. He doesn't feel he is violating the law because "everybody interprets it differently."

FEW PROFICIENCY TESTS

Stephanie Harner, past president of the California Association of Cytotechnologists, says she has complained repeatedly to state health officials about pressures on cytotechs to exceed quotas, but "got mostly a non-response." Kenneth Kizer, director of California's health department, denies that his office has received complaints from cytotechs. He promises to investigate.

The federal government doesn't care about workload or piecework issues. It does prohibit labs under its jurisdiction from letting "kitchen cytologists" analyze Pap tests at home, but many do so anyhow. At the home, pathologists aren't available for consultation and no one checks how carefully slides are examined. "Cytology is done in so many nooks and crannies—places we don't even know of," says Susan Yokota, a cytotech.

Cancer Screening Service, for example, is federally certified as an interstate lab, yet it concedes that workers in the past took slides home. The company says that happened only a few times and is no longer permitted. A Tulsa, Okla., laboratory permitted home screening of smears from government-financed clinics until a Journal reporter began inquiring about the practice.

The only equipment needed for Pap screening is a microscope. But as one lab worker points out, "It's not something to do after a day's work in between washing dishes, with kids screaming for attention."

Patients believe the government is watching over Pap testing, says Lawrence Bergner, a physician at the National Cancer Institute, "but it ain't so." The government sets some standards for interstate and Medicare-certified labs, but the Pap test is the only common lab procedure for which federally licensed labs needn't undergo periodic proficiency tests.

As for the states, only one, New York, requires screeners to pass such tests.

Doctors seeking quality work often turn to professional groups that evaluate and accredit labs. However, the largest group overseeing commercial labs, the College of American Pathologists, doesn't set any overall workload limit. The American Society of Cytology, which does, has certified only about 40 of the more than 1,000 labs analyzing Pap smears nationwide. Many of the largest labs have never sought accreditation.

With weak laws and scant professional oversight, there is little to protect women from the kinds of misfortunes suffered by Mrs. MacNeil, Mrs. Gray and Ms. Arbuckle. In all three instances, their Pap slides were misread, according to testimony in lawsuits filed in their state courts. Ms. Arbuckle's suit is pending; survivors of the other two women received large monetary settlements.

ELUSIVE SLIDES

It often is impossible, however, to determine what went wrong—whether the specimen was misread by the lab or whether, perhaps, it was poorly taken by the doctor. Pap slides are often kept only as long as the law requires. In states without laboratory laws—which is nearly half of them—a lab needn't keep slides at all unless it operates in interstate commerce or is Medicare-certified. In that case, it must keep them two years.

Patricia Ashton, a cytotech and consultant to a major national laboratory, says that her lab's lawyers instruct workers to "get rid of slides as soon as possible" to limit liability. "I don't think its medically ethical," she says.

Even if a suspect slide exists, retrieving it can be a problem. A now-defunct Boston laboratory called Elm Medical Lab, after having failed to detect a woman's cervical cancer, covered up the error by substituting a negative Pap slide for a positive one in her file, according to evidence presented by the Massachusetts attorney general in a state court. A jury last year found the lab had violated state consumer-protection laws; the case is on appeal.

Mr. Golann, who handled the State's case, also presented evidence that slides were improperly prepared at the lab; that one screener spent just seconds on each specimen; that slides were examined at home; and that the lab had failed to find the abnormal cells on 10 of the first 12 positive slides checked by investigators in a rescreening.

The dimensions of some abuses have been stunning. A Mansfield, Ohio, lab in the late 1970s was discovered to have sent out nearly 6,000 erroneous Pap-test reports. A worldwide alert located many, but not all, of the women affected. And this past September, health authorities in Britain issued an international alert for 911 women who had Pap smears misdiagnosed by a leading pathologist there.

PLANNED PARENTHOOD

Bad lab work is currently a paramount concern for Planned Parenthood Federation of America, which last year took 1.4 million Pap smears through affiliated offices and clinics. Early this year, Planned Parenthood warned affiliates of "a rapid rise in the number and cost of claims" due to laboratory errors, specifically Pap smears.

A few years ago, it tried to catch a lab it suspected of misreading Pap slides. Twice it sent the lab, which it won't name, slides from women known to have cervical cancer or its precursors, and twice the lab failed to report abnormalities. When Planned Parenthood tried to retrieve the specimens, one set was said to be lost and the other came back smashed. It was as if "they beat them up with a hammer," recalls Louise Tyrer, a physician who is vice president for medical affairs.

With complaints about lab work pouring in, Planned Parenthood has begun trying to identify problem Pap labs. One lab that has come to its attention is International Cancer Screening Laboratories in San Antonio, Texas. Among the largest in the nation, ICSL processes about a half-million slides annually from 49 states. In 1985, it was banned from operating in New York after failing the state's proficiency test in cancer screening.

ICSL, operating out of a modern building on the outskirts of San Antonio, employs 42 screeners full or part time. It pays the part-timers 50 cents a slide and gives salaried employees 45 cents for each slide they screen after meeting the daily quota.

BIG PRODUCER

One screener is recorded as having analyzed 4,710 slides in June. That is a rate more than four times what the American Society of Cytology considers the maximum safe workload. Even if he worked all 30 days in June, the screener would have to have done 157 slides a day.

At such rates, "I wouldn't expect a cytotech to screen effectively or reliably," says George H. Anderson, a physician at the Cancer Control Agency of Vancouver, British Columbia, which has a highly regarded Pap screening program. Says Dr. Hutter of the American Cancer Society: "If such things are happening, then I would say that's terrible."

ICSL's president, Robert Boughton Jr., says that his lab's work "is the best humanly possible," and that he spends more money than other labs do on quality control. He also says the especially prolific screener's error rate is well within acceptable ranges.

But in a business where one mistake can have tragic consequences, the technician, who declined to be interviewed, last year made at least 93 errors—41 of them "major," lab records show. And those are just the ones uncovered in a routine rescreening of 18% to 20% of his negative slides. No one knows his actual error total.

Mr. Boughton attacks workload limits as the creation of physicians who "sit up in their ivory tower with a bottle of wine" and issue pronouncements. Lending authority to his attacks on workload limits is a Ph.D. degree he says he earned in biology from the University of Mexico in Monterrey "in 1981 or 1982." He is identified in state and federal regulatory records as having a doctorate.

The University of Mexico, however, doesn't have a branch in Monterrey. And no record of Mr. Boughton's Ph.D. could be found at two other universities in that city. Mr. Boughton declines to provide a copy of the diploma, saying, "I am telling you that I have it, and that is all I have to say."

Present and past screeners, who ask not to be identified, say that despite ICSL's huge volume, its medical director works only part time. They also say that 10% or more of the slides sent to the lab are broken in transit. "You could easily miss an abnormality on the broken spot," says one ICSL cytotechnician.

Mr. Boughton says the breakage rate is "5% to 7% at the most." He says that while his medical director holds another job with a state mental hospital, she puts in nearly full-time hours at ICSL. He also makes no secret of the fact that he continues to operate in New York state, even though it banned his lab in 1985 after it failed the cancer-screening proficiency test. "Who's going to stop me?" he asks.

A spokesman for the state, Mary Anne Gardineer, says, "If we can verify that [ICSL] is accepting samples from New York state, we will stop them."

Amid growing criticism of laboratory work, the American Society for Cytotechnologists is pressing for tough government workload limits—even though they would reduce many screeners' pay. "Just as the public needs protection from fatigued truck drivers," the society says, "it needs protection against life-threatening mistakes in the laboratory by overburdened personnel."

Meanwhile, the society has begun a campaign to urge women to ask their doctors where their Pap smears are analyzed. At the very least, women should be told that their Pap test may fail to detect abnormalities, many health experts say. This way, women may be less likely to skip their next gynecologic exam.

FAILURE RATE

The American College of Obstetricians and Gynecologists, citing studies of hundreds of women, puts the Pap test's "false-

negative" rate—the failure to reveal or report abnormalities—at 20% to 40%.

The Pap test's reliability compares unfavorably with that of other lab tests. Drug tests, for example, have been criticized as being inaccurate. But labs measured in a nationwide proficiency test last year had a much lower false-negative rate of about 5%. Even under the best of circumstances, says Dr. Anderson of Vancouver, a Pap test will have a false-negative rate of at least 10%.

To bring error rates down, San Francisco's Dr. King argues for better pay and working conditions for cytotechs. "The field has become unattractive to intelligent, dedicated people of the kind we have always had," she says.

Above all, people in the field don't want Pap testing to remain laboratory medicine's errant stepchild. They prefer to think of it as a test so important that a commemorative stamp was issued in its name in 1978. At the White House ceremony marking the event, Postmaster General William Bolger said of Dr. Papanicolaou: "He wanted to eradicate those awful words so many doctors have quietly voiced: 'If only we had known sooner.'"

Mrs. Gray, the North Carolina woman who got a negative Pap-test report before finding she had cervical cancer, felt the tragic sting of that lament. After the cancer had spread through her body, she underwent several operations, chemotherapy and radiation. As part of a lawsuit, Mrs. Gray gave a videotaped deposition from her sickbed, describing in detail the agony of her struggle for life. The deposition ended with her vow: "I made some plans to beat this thing."

Two months later, Cindy Gray died.

WOMEN MAY WANT TO ASK WHO'LL SCREEN A PAP TEST

Women concerned about Pap-test accuracy might consider asking their doctors questions such as these:

What is the name of the lab, and is it accredited by a professional group? (Accreditation offers no guarantee, but at least it means someone is looking over the lab's shoulder.)

What are workload levels at the lab? Are screeners salaried or paid on a piecework basis?

Can I get a copy of the lab report? (Don't assume that if you don't hear from the doctor the test must have been negative. There are such things as mixups, oversights and lost reports.)

Is the lab nearby? (If a doctor sends the specimen to a lab far away, he should have a good reason.)

[From the Wall Street Journal, Nov. 2, 1987]

IN OKLAHOMA, A DIFFERENT LAB TO SCREEN PAP TESTS MEANS VERY DIFFERENT RESULTS

(By Walt Bogdanich)

OKLAHOMA CITY, Okla.—Legislators can attest that women in this state take cancer screening seriously. When lawmakers in the late 1970s voted not to finance a free Pap smear program, women protested at the state capital with such vigor that the legislators backpedaled.

The women's victory, it turns out, may have been hollow. Intent on reducing the program's cost, the state health department in mid-1986 stopped sending Pap smears to be analyzed by its longtime contractor and began awarding one-year contracts to the lowest bidder.

Now, Adeline Yerkes, a state health official, says it is possible that hundreds of Oklahoma women are walking around with undiagnosed precancerous conditions because of misreported Pap-test results. The low-bid lab reported far fewer "abnormals" than did its predecessor, Oklahoma Teaching Hosptials.

For years, "abnormals" consistently came in at 7% to 9% of the total Pap smears analyzed each year, including a 9% rate in the year ended in June 1986. In the following 12 months, the new contractor, Northwest Laboratories Inc. in Oklahoma City, reported only about 3.5% abnormal, says Mrs. Yerkes, the head of the state program.

The figures suggest that Oklahoma officials "have something to worry about," says Lawrence Bergner, a physician at the National Cancer Institute. "They should really examine it."

But whether the results are misdiagnoses or statistical glitches won't be known for some time, if ever. Four months after the contract ended, the state still hadn't rescreened any significant number of slides to determine their accuracy. Mrs. Yerkes says it can afford to rescreen only 250 of the nearly 100,000 Pap smears. And it is still searching for someone to rescreen just these 250.

She hasn't alerted women to the possible misdiagnoses. Any missed abnormalities, she explains, will be caught when the women show up for their next exam. Mrs. Yerkes says there is no need for panic, because cervical cancer develops slowly.

The state concedes, however, that women may move and be unreachable, or may neglect their next appointment. In addition, there is evidence that cervical cancer in some women develops much faster than previously believed.

"I think it's disgusting," says Dana Dye, who teaches cytotechnology—the screening of cell specimens—at the University of Oklahoma Health Sciences Center. "If she has any doubt, she should let somebody go over those slides."

Northwest Laboratories, which declined to be interviewed, won the contract for the 12 months in question with a bid of $1.50 a slide. The bid from Oklahoma Teaching Hospitals, the old contractor, was more than twice that.

But the state didn't follow up on who actually did the screening. Northwest, it turns out, was so understaffed that it farmed out some of the work. It loaded hundreds of Pap-smear slides into a car and drove them to a cut-rate laboratory in Texas.

Mrs. Yerkes says Northwest's staffing problems became apparent early in the contract, with some screeners carrying excessive workloads. That was soon corrected, she says. But the contract lab was late delivering results, and seemed to have high screener turnover. "The quality of the reading wasn't up to our standards," she says.

The state has contracted with a different lab for 12 months that began July 1 and has written staffing safeguards into the contract, Mrs. Yerkes says. But when a reporter examined the contract on the file in the state capital, the safeguards weren't there. "I don't know what happened," Mrs. Yerkes says.

She says she inspected the lab that holds the new contract, Jerry L. Puls M.D. Inc. in Tulsa. "I know they have an adequate staff," she says. "All Paps are being screened in Tulsa in his own lab."

However, this newspaper learned that many slides the state sent to the new contractor weren't being screened in a laboratory at all but rather were taken home by unsupervised technicians, in violation of federal regulations for Medicare-certified labs. Dr. Puls was told of the discovery and now says he has stopped the practice.

Jack Painter, the manager of the anatomic pathology laboratory at Oklahoma Teaching Hospitals, says that previous screening programs cut the number of deaths from cervical cancer and that now he fears death rates may go back up, But, says Betty McClellan, a pathologist in his laboratory: "Unfortunately, I think it will take years before the mistakes, if any, become apparent."

[From the Wall Street Journal]

MEDICAL LABS, TRUSTED AS LARGELY ERROR-FREE, ARE FAR FROM INFALLIBLE

(By Walt Bogdanich)

It was 4:30 a.m. when cancer finally choked the last breath of life from Janice Johnson. She was 34 and a mother of two, and she died never knowing why her disease had been so unforgiving. An autopsy report called her abrupt decline "quite unusual."

Late, an important clue would be discovered: A hospital laboratory in Arlington, Va., had erroneously reported two successive Pap tests as noncancerous. Undetected, the cancer spread rapidly through Mrs. Johnson's body.

"The lab was never shut down or criticized," fumes Daniel Schultz, a Johnson-family lawyer who in 1984 settled a wrongful-death claim against the hospital and several doctors for $600,000. He asks: "how many other Janice Johnsons are there?"

No one knows. For in many states, including Virginia, the clinical laboratories that test body fluids and tissues aren't licensed—and thus enjoy a freedom from regulatory scrutiny not accorded even to hairdressers. Some 20 years after Congress declared war on incompetent clinical labs, many researchers say that inaccurate and unreliable testing remains a serious health hazard, as well as a waste of millions of dollars.

HARD DATA

In recent years, dazzling advances in computerized diagnostic testing have lent a comforting air of precision to the healing arts. Whether concerned about blood cholesterol, cancer, genetic flaws or diabetes, Americans spend an estimated $20 billion a year on clinical laboratory tests, often receiving impressively detailed printouts on the state of their health.

For the most part, such testing is a great boon to diagnosis and treatment. But along the way, patients have come to regard lab work as infallible—a dangerous assumption, critics say. "Every lab is producing some errors," warns Paul Fischer, an Augusta, Ga., physician and authority in the field. "Human error is inherent in this process. . . . I don't think the public realizes that."

The problem affects not only fringe laboratories in inner cities but also prestigious hospitals, publicly traded laboratory companies and labs in doctors offices, according to an analysis of thousands of pages of government reports. Court records and previously unreleased test data. The recent surge of testing in doctors offices is particularly troubling critics say, because these small facilities are often entirely free of regulatory oversight.

FALSE STARTS

While sloppy to work isn't as obviously dangerous as incompetent surgery—errors

are often caught by a patient's physician—it can do great harm. An Ohio baby developed mental retardation after a lab failed to detect a genetic condition that required a special diet. An Arizona man died after a biopsy slide of his malignant thyroid tumor was misread by two different labs. A California couple's marriage broke up after one spouse was mistakenly diagnosed as having syphilis.

Nor is health the only issue: A urinalysis that falsely tags someone as a drug abuser can sabotage the person's career.

Studies repeatedly have turned up substantial rates of laboratory error, as well as overworked or ill-trained technicians. But abuses are hard to prove, and accountability is scant. By the time an illness has progressed far enough to suggest earlier test error, the slide or specimen often has been discarded.

LITTLE REGULATION

Government hasn't come to grips with the problem. Regulation is so weak and uneven that labs barred from one state can simply do business in another. In some cases, a federal agency has no choice but to reimburse certain labs for tests that it has found them incompetent to perform.

Concern over such problems prompted Congress to pass the Clinical Laboratories Improvement Act in 1967. Although the law covers only a fraction of the nation's labs—those conducting interstate business, legislators hoped it would be a model for state regulation.

However, only about half of the states have enacted laboratory regulation, and most of it is feeble. In 1979 the Senate Labor and Human Resources Committee concluded that the public "cannot have confidence in clinical laboratory testing, despite its critical relationship to good health."

Faulty tests can occur for many reasons: A machine loses its calibration: testing chemicals lose potency or get used improperly: human specimens are inadvertently switched. Even if a test is performed properly. It may be misinterpreted.

Over the years, the medical profession has developed standards to minimize such mishaps. Conscientious laboratories test chemicals and machine calibrations daily. They frequently test "master" specimens of known value to detect any glitches in equipment or procedures. But without oversight, adherence to these standards is left to the whim of the individual lab.

If, for example, Mrs. Johnson's Pap smears had been analyzed at a hospital in New York, where government standards are among the toughest, they would have been screened by workers who had faced proficiency tests and had to have 10% of their work checked by supervisors.

Such safeguards didn't exist at Northern Virginia Doctors Hospital, whose lab supervisor conceded, in a deposition filed in Virginia state court, that Mrs. Johnson's two Pap tests were reported incorrectly one year apart by the same lab worker. The supervisor also said quality-control reviews weren't routine. The hospital declines to comment on Mrs. Johnson's death or her family's suit.

Some researchers worry that Pap-test "sweat shops" impair accuracy by overworking technicians. "I can't deny they are out there," says Thomas Bonfiglio, the president of the American Society of Cytology. "I think you'd have to be crazy not to be concerned."

The society recommends that, in the case of Pap tests, a full-time screener review no more than 10,000 to 12,000 slides a year. But about one-third of labs responding to a survey some years ago exceeded that workload, and records show that screeners at a lab just outside New York City currently have workloads three times greater. The Johnson family lawyer asserted that the worker who called Mrs. Johnson's Pap tests benign had an excessive workload.

Technicians must scan dozens of cells on each slide for abnormalities. "It's a very meticulous job," Dr. Bonfiglio says. "The error rate goes up as people get fatigued."

SINK TESTING

Boston researchers studied 10 women with cervical cancer who had had negative Pap tests in the preceding two years. A reexamination of their slides found that five had been misinterpreted and two slides were too poorly done to read: only three were clearly negative. Researchers at Harvard Medical School and the Boston Hospital for Women did the study.

An even worse situation occurred in the late 1970s at a lab that had won a contract to screen Pap smears for the Air Force. An Air Force pathologist charged that screeners at the lab, Automated Medical Services of Ohio Inc., were overworked. When government doctors reexamined slides it had processed, they found 5,949 "discrepancies" or "mistakes," says Patti Turner, a spokeswoman for the Air Force surgeon general. A search for women who had gotten false reports found most of them, though not all. The lab has closed, and its former officials couldn't be reached for comment.

Now and then labs have even reported on specimens without checking them at all "sink testing," it is called. A Hempstead, N.Y., lab is alleged to have reported phony results for more than a year on blood tests for rheumatism, tuberculosis and various chronic infections. In September a state grand jury indicted the company. Reiss Health Laboratories Inc., on fraud-related charges. The lab, which has pleaded innocent, declines to comment.

Fraud, however, is much less pervasive than error. Nearly one in six labs tested recently by the Centers for Disease Control didn't properly identity several common strains of bacteria. One in seven failed to identify various fungal growths properly. "So many things can go wrong, even in the best labs," says Josephine Bartola, the director of Pennsylvania's laboratory improvement division.

DOCTOR'S-OFFICE LABS

Nearly half of outpatient lab tests now are done in physicians' offices, because of cheaper test equipment and changes in hospital economics. There are estimated to be between 40,000 and 100,000 such small labs, compared with 13,000 hospital and independent labs. The trend alarms many experts, because only 13 states even attempt to regulate labs in doctors' offices.

As a result, in all but a handful of states, their personnel needn't meet any training standards. Dr. Fischer, the authority on office laboratories, says that in as many as two-thirds of small doctor's-office labs, work is done by employees lacking formal lab training, including medical secretaries and receptionists.

When Idaho officials tested unregulated doctor's-office labs in the 1970s, fully half of them submitted erroneous or unacceptable results on a simple pregnancy test. "You'd get the same results throwing a coin in the air," Dr. Fischer remarks. (Their performances improved after they were instructed in the need for quality control and proficiency testing.)

Physicians with labs in their offices generally contend the new equipment is accurate and makes for faster diagnosis and better treatment. But David Yates, a pathologist in the Nashville, Tenn., area, says that "doctors don't realize how difficult it is to consistently generate accurate test data. People think it's a computerized situation where you always get a 100% accurate result; that's simply not true."

TWO STUDIES

Michael Kenney, a health-policy analyst, studied California clinical labs for the CDC in 1985 and found "a systematic pattern" of poorer accuracy by unregulated labs than by government-regulated ones. Another study, by Robert Grayson in 1984, reached a similar conclusion.

Even where office labs are regulated, the monitoring is usually superficial. California requires doctor's-office labs to submit proficiency-test scores—but doesn't review them. "We aren't advertising that," confides Ronald Harkey, of the state lab division. He says his office lacks the computers needed for the task.

Pennsylvania, which does review proficiency tests, recently found that nearly half of the doctors sampled had erred in analyzing a test for bacteria. The state has some of the nation's toughest rules for doctor's office labs, but its officials say they have never disciplined a doctor for faulty testing.

Ms. Bartola, the director of the state's laboratory improvement division, says her office will order a lab to stop offering a procedure if it fails four consecutive proficiency tests. She says this has never occurred, so no stop orders have ever been issued. However, state records show multiple instances of doctor's office labs failing four or more straight tests. For example, the lab of a doctor in Johnstown, Pa., Dinesh Mathur, failed 24 of 40 individual proficiency tests in 1984–85, including six in a row for blood glucose, yet the state didn't restrict his testing.

Asked about these records, Ms. Bartola says some failures may have escaped her attention because of a staff shortage. Besides, she adds, "We don't police them; we work with them until they come up to snuff." Ms. Bartola also says that many doctor's office labs aren't licensed, as required by state law, and that she hasn't the staff to do much about it.

Dr. Mathur, who recently did pass a glucose proficiency test, says that his is a small lab doing few tests and that the state has never told him to stop. He also says he uses the best available equipment.

NEW YORK'S PROGRAM

The federal government is even more lenient. To get Medicare reimbursements, commercial or hospital labs must submit to proficiency testing and inspections. Not so doctors, if they confine their testing to their own patients.

New York state, employing about 170 medical doctors and Ph.D.s, runs probably the nation's most stringent program of laboratory proficiency testing. Yet it doesn't oversee those in doctors' offices.

As for the labs New York does oversee—independent ones and those in hospitals—when the state last February tested their ability to measure 18 parts of a standard blood-chemistry analysis, 11% of the results were either unacceptable or only marginally acceptable.

New York has issued more than 150 orders since July 1984 barring labs from testing in

areas where they have failed to show proficiency. Many prominent labs, some with international reputations, have felt its regulatory sting, including the cytogenetics laboratory at Thomas Jefferson University Hospital in Philadelphia. That major referral center twice failed to pass New York's cytogenetics proficiency test in 1985, commiting "major errors," according to Ann Willey, a scientist who heads New York's Laboratory of Human Genetics. Although barred from testing New York residents, it can continue to process specimens from other states.

Laird Jackson, the director of Thomas Jefferson's lab, says New York's proficiency tests were flawed. Besides, he adds, cytogenetics testing is subjective, akin to "judging ice skaters." Dr. Jackson says his lab has passed a proficiency test conducted by a major testing service outside New York.

A COMMERCIAL LAB

Another lab that has sometimes failed New York tests is the nation's largest publicly traded company exclusively engaged in testing human specimens. International Clinical Laboratories Inc. The Nashville-based company's clients include 40 hospitals with 8,700 beds. In a recent two-year period, ICL's major referral lab failed New York state's proficiency tests for toxicology, which detects drugs subject to abuse, and mycology, which identifies molds sometimes associated with severe infections. Paul Ottaviano, an executive of ICL, says it passed proficiency tests administered by others, as well as government inspections, and has since passed New York's tests.

What are the consequences of laboratory error for patients? A cytogenetics test (for genetic abnormalities) may lead a woman to terminate a pregnancy. "If that diagnosis was wrong, it's a wrongful death," Ms. Willey asserts.

Laboratory mistakes needn't be unusual to be devastating. Caroline Keklak, of Columbus, Ohio, says she suffered through two unnecessary operations because she was erroneously reported to be pregnant. According to a suit she filed in Ohio state court, the following occurred: Ohio State University Hospitals in Columbus admitted Mrs. Keklak with abdominal pain in January 1985 and a blood test determined that she was pregnant. When an ultrasound exam detected a pelvic mass, doctors, thinking she had a tubal pregnancy, performed emergency abdominal surgery. But instead of an embryo surgeons found a cyst, and they removed her right ovary.

Mrs. Keklak's suit says that as a result of the surgery, she later developed an abscess on a Fallopian tube and required a second operation to remove it. Except for the erroneous pregnancy test, the suit asserts, the cyst would have been treated with medicine and "no surgery would never have been performed."

The suit attributes the faulty pregnancy test to a mix-up of specimens. A spokesman for the hospital declines to comment.

MEDICARE LOOPHOLE

The federal government tries to reduce errors by inspecting labs. But it is hampered by a surreal tangle of contradictory regulations.

Sharon Harris, of the federal Health Care Financing Administration (HCFA), says that if "people's lives are in danger," her agency can revoke a lab's Medicare certification. But the effect is merely to halt reimbursements for tests on Medicare patients; the lab can continue testing other patients.

St. Clair Medical Laboratory in Belleville, Ill, for instance, remains open seven months after federal regulators called it a health hazard and revoked its Medicare certification. (An attorney for the lab says it has never been a health hazard and notes that it has remained licensed by the state.)

Another inconsistency: In 1984, after St. Ansgar Hospital Laboratory in Moorhead, Minn., failed proficiency tests, the HCFA barred it from doing a kidney-function test on specimens sent across state lines. Ms. Harris says such a stop-test order indicates patient safety is at stake. But because failing to demonstrate competence on a single procedure isn't deemed serious enough under Medicare rules to warrant regulatory action, the HCFA can't stop St. Ansgar from performing that test on Medicare patients, nor can it stop reimbursing for the test.

St. Ansgar says the lab has passed Minnesota proficiency tests. It won't comment specifically on the federal agency's action.

Since January 1985, the HCFA has issued more than 90 orders prohibiting labs from doing certain tests on interstate specimens, according to records obtained under the federal Freedom of Information Act. Most of these labs participate in the Medicare programs, so many of them continue to get federal reimbursement for the prohibited tests.

"It does seem very inconsistent," says the federal agency's Ms. Harris. "I'll admit it's a problem."

TRADE GROUPS

The government has also drawn fire for ceding regulatory oversight to private medical groups that, critics say, are lax in policing laboratories. For example, it essentially exempts from Medicare regulation labs in more than 5,000 hospitals accredited by the Joint Commission on Accreditation of Hospitals, a trade group. California's chief of laboratory field services, Roderick Hamblin, says the commission "doesn't always adequately identify deficiencies in performance or . . . get them corrected." A Joint Commission official calls that notion "ridiculous."

Many states accept Joint Commission inspections in lieu of their own, but not New York. When a commission team inspected the Moses Ludington Hospital in Ticonderoga, N.Y., on Aug. 30, 1985, it reported nine laboratory deficiencies; New York state inspectors who checked the lab a few months later found 38. The Joint Commission won't comment on the case but says different inspections may emphasize different aspects of labs. Margaret Warden, the hospital's administrator, says hers is a small rural facility that is "doing the very best we can."

Under current rules, if the Joint Commission wants to decertify a lab, it must revoke the accreditation of the entire hospital. The commission hasn't revoked any accreditation soley because of lab performance in recent years. "We . . . don't see ourselves at all in a policeman's role," says Jack Coale, a Joint Commission spokesman.

This view is shared by the College of American Pathologists, which runs its own accreditation and proficiency test program for labs. It has revoked the accreditation of just one of 3,800 labs since January 1985. "The whole basis of our program is education and laboratory improvement," says John Duckworth, a doctor who heads its accreditation commission. "Ours is not a regulatory program."

Since Congress passed its laboratory legislation 20 years ago, it has tried five times to strengthen the law. Each effort, opposed by organized medicine, failed. The HCFA would like to see states take a bigger role, but organized medicine makes its presence felt in state capitols, too. Its influence, along with the issue of costs (New York spends $2.2 million a year to oversee labs) has helped keep state laws limp.

OFFICE MACHINES

Many doctors argue that technological advances make regulation less important. They note, for example, that new glucose-monitoring machines are so simple to operate that diabetics use them at home.

But the machines don't inspire universal confidence. In the past two years, the Food and Drug Administration has received about 1,200 reports of problems associated with glucose monitors. In one such report, a hospital complained that its machine wasn't working right; when the manufacturer checked, it found employees had apparently been using the device even though it was broken, dirty and held together with a rubber band. In dozens of other cases, technicians were found to be using the machines improperly. An FDA task force is investigating.

Growing evidence of testing abuses, along with fear of malpractice litigation, has begun to stir concern in some quarters of the medical establishment. Since late 1985, the Journal of the American Medical Association has been running a series of articles on office testing. Physicians, the authors have written, "are unfamiliar with . . . the subtleties of testing, the idiosyncratic personalities of 'foolproof' electronic equipment, or even the basic concepts of quality control."

Observes Walter Johnson, the director of the cytogenetics lab at Case Western Reserve University in Cleveland: "Most of us would prefer that regulation be on a voluntary basis. But frankly, voluntary systems don't work worth a damn in the long run."●

NATIONAL WOMEN VETERANS RECOGNITION WEEK, 1987

● Mr. CRANSTON. Mr. President, as chairman of the Committee on Veterans' Affairs, I would like to draw my colleagues attention to the fact that Sunday, November 8, was the beginning of "National Women Veterans Recognition Week."

As the Senate author of the legislation establishing this commemorative week, Senate Joint Resolution 171, which was signed by the President last Friday, I am proud that this is the fourth year in which we are honoring the women veterans of this country in this manner. Because of the success of activities carried out in the past 3 years to recognize women veterans, I believe the designation of such a week again this year is important to continue this momentum.

Mr. President, I note with pleasure the strides made during the past few years on behalf of women veterans. A number of concerns have been raised by different studies—a 1982 General Accounting Office report, a 1984 Veterans' Administration report, and a "Survey of Female Veterans," published in August 1985 by Louis Harris & Associates—regarding women veterans. The VA Advisory Committee on Women Veterans has also raised several concerns regarding women veterans.

In its initial report, issued in July 1984, the advisory committee made the following points:

Two fundamental problems cut across the issues discussed by the Committee. First: Many women veterans are not aware of their entitlement to the benefits administered by the VA and other women who may be aware of their entitlements are reluctant to initiate claims for their benefits. Second: VA information materials, brochures, and outreach programs designed to inform veterans of their rights and benefits have been aimed at a male constituency. In part, this is merely a reflection of a traditional societal mindset that a veteran is, almost by definition, male.

More recently, in its July 1986 report, the advisory committee lists as its top priorities increasing understanding of, and addressing, concerns such as the special needs of aging women veterans, the gender-specific health conditions of women veterans, the employment needs and problems of women upon separation from the armed services, the notification of provision of benefits to WAAC's and WASP's, and the development and distribution of material to inform women veterans more adequately of the wide range of VA benefits and services for which they are eligible.

Mr. President, I am pleased to note that the Veterans' Administration has worked and is continuing to work in conjunction with the VA Advisory Committee on Women Veterans to resolve these problems. One constructive step the VA took was the establishment of a women veteran coordinator position in each VA medical center in order to make VA health-care facilities more accessible and sensitive to the needs of women veterans. At its semiannual meeting last month, the advisory committee noted other VA accomplishments in improving the care provided to female veterans. Among those improvements are steps to ensure women more privacy during examinations and hospital canteens stocking cosmetics, practical pajamas for women, and other such products.

Mr. President, the advisory committee also noted that the VA has taken another important step to improve the quality and accessibility of VA health-care for women veterans in response to legislation I authored in 1983 in section 302 of Public Law 98-160. In compliance with this provision requiring the VA "to provide appropriate care, in the timely fashion, for any gender-specific disability * * * of a woman veteran eligible for care * * *," the VA in 1986 established a policy requiring that ambulatory care for gender-related conditions be available to women veterans on a par with the care male veterans receive for their gender-related ailments, and requiring that complete physical examinations for women include gynecological examinations.

The VA is also examining another health issue of special concern to women Vietnam veterans. The Consolidated Omnibus Reconciliation Act of 1985—Public Law 99-272—included a provision based on legislation I authored in the Senate requiring the VA to conduct a female Vietnam veterans health experience study. It will focus on potential long-term adverse health effects resulting from service in Vietnam, where servicemembers may have been exposed to a variety of health hazards, including agent orange and other phenoxy herbicides. The Office of Technology Assessment reviewed the protocol for this study in September and raised several serious concerns. The health study contractors are now revising the protocol in light of OTA's recommendations. A due date for the study has not been established.

Mr. President, with regret I note that the Fine Arts Commission rejected the Vietnam Women's Memorial Project's [VWMP] effort to place a statue of a servicewoman near the Vietnam Veterans Memorial. As a member of the VWMP Congressional Advisory Council, I have been honored to be a part of this national effort to express our continuing commitment as a nation to all of those who served in Vietnam, both men and women, and am disappointed that the Fine Arts Commission failed to acknowledge the merits of this project. The contributions and sacrifices of women veterans who served in the Vietnam conflict deserve greater public recognition and appreciation. I believe that the VWMP proposal to erect a permanent memorial to these women at the Vietnam Veterans Memorial site would be a most fitting addition to the existing memorial and would appropriately acknowledge the important contributions these women have made to our national security.

Mr. President, I plan to continue my work on behalf of this worthwhile project in pursuit of the VWMP's goal of erecting a statue of a servicewoman at the Vietnam Veterans Memorial.

Mr. President, although much has been accomplished in the past several years, women veterans are still less than half as likely to use major veteran's benefits such as VA health care and home loan guaranties than are their male counterparts. Much has yet to be done to recognize fully the rich contributions of women in our Armed Forces and to address the unique problems and concerns of women veterans. Our designation of a National Women Veterans Recognition Week in 1987 is one way for us to signify our continued support for the women of this country who have made such a great contribution to our national security.●

HERBERT HOOVER, ATHLETIC INNOVATOR

● Mr. HATFIELD. Mr. President, this country has been blessed with a large number of athletes who entered the political arena after their playing days were over. Two of our last three Presidents played college football; Senator BRADLEY was a star basketball player, Congressman JACK KEMP had an outstanding career in the American Football League and several other current and former athletes say they are considering a career in politics. The road from athlete to politician is indeed a well-worn path.

My remarks today, Mr. President, bring to the Senate's attention the accomplishments of an extraordinary politician who also was an athletic innovator. This particular man served our Nation with distinction over four decades. He was known as an outstanding administrator who served the Nation in the wake of two world wars and during an economic collapse. Unfortunately, historians initially did not treat him kindly, and it has been only recently that more responsible writers have come to judge him in a favorable manner. I am, of course, speaking of President Herbert Hoover.

One of the last places one would expect to find an article about President Hoover is in a sports magazine. And yet, the latest edition of Sports Illustrated carries a story about a game President Hoover as instrumental in inventing—Hoover Rules Medicine Ball. As the article points out, it takes great strength and stamina to play this forgotten game, and the physical rewards are endless. I must agree with the author that had Mr. Hoover's administration been more popular, perhaps the game itself might have endured. If revisionist historians can resurrect the image of President Hoover as a man of action in a time when the nation faced its greatest economic crisis, maybe sports revisionists can rediscover a forgotten, yet invigorating game.

Mr. President, I ask that the article, "Rediscovering the Joys of (oof!) Medicine Ball," be printed in the RECORD.

The article follows:

REDISCOVERING THE JOYS OF (OOF!) MEDICINE BALL

(By John Garrity)

Talk about a power serve. Steve Hinman aced me with a heave that cleared the net by at least 15 feet, causing me to lose the ball for a moment in the ceiling lights, and it crashed at my feet like a sack of concrete mix. The floor shivered. I thought, "The only way to practice for this guy is to have someone drop watermelons to me from a freeway overpass."

A minute later, at deuce, a strong volley by Hinman caught one of my teammates off-balance and sent him reeling off the court. But it was quickly back to deuce when a topspin return, aimed right at me,

hit the net and threatened to snap off the aluminum standards at the floor.

Joe Hovorka grinned. "You know something? I think we've rediscovered a great game."

For the record, the first semisanctioned Hoover Rules medicine ball match since the Depression was played at The Athletic Club of Overland Park (Kans.) on the morning of May 12, 1987. Hinman, the club's director, captained a three-man house team. I, by virtue of having what may be the only copy of the game's rules outside the Herbert Hoover Presidential Library-Museum in West Branch, Iowa, led the challengers.

The Rosetta stone of medicine ball (or "mediball," as we call it) is a 56-year-old magazine article entitled The President Watches His Waistline, by one Will Irwin, who is identified as a "celebrated author and intimate friend of President Hoover," In his article, Irwin succinctly states the rules for mediball. The game is played on a court 66'×30' and scored exactly like lawn tennis, with these exceptions: 1) There are no rackets; 2) A six- or eight-pound medicine ball replaces the tennis ball; 3) The game is played over an eight-foot volleyball net; 4) The ball must be caught on the fly and instantly thrown back over the net.

"Nets, outs and muffs count points for the other side; clean placements for your own side," Irwin wrote. "A ball returned from within your own service line must be returned beyond your opponent's service line [much more about this humdinger later]. As played on the White House grounds, it is always 'doubles' or 'triples'—never a 'singles' game."

Irwin's account also includes this "word of caution": "The men who play medicine ball at the White House are all vigorous and sound. . . . This is no game for middle-aged men with organic flaws. . . ."

It took but a few warm-up tosses with our eight-pound ball to prove the veracity of that statement. "Holy mackerel, those guys must have been *animals*!" said Hovorka, straining to reach the opposite service line with a two-handed chest shot. Because he was one of three players on the court who could benchpress more than 300 pounds, those of us with gray hair and incipient "organic flaws"; began to wonder if the game was even playable. Fortunately, Hovorka discovered that the ball could be launched 40 or so feet with a two-handed hammer-throw-spin technique, and we all adopted that shot as the equivalent of the forehand drive.

As we began to play, it soon became obvious that medicine ball is not so much about throwing as it is about catching. Hand catches were difficult on all but the softest tosses. We had to develop ways to break the momentum of the ball, either by catching it sideways and using the arms to give with the leathery weight or by moving square up to the ball's flight path and boxing it against the body with the arms.

"It's strength and quickness and concentration," says Larry Schwartz, the club's athletic director. "You concentrate so hard on simply catching the ball you can't think about where you want to throw it."

With Hovorka serving, my team won the first game; but in the second game Hinman's side also held service as Steve Brownback and Joe Gorenc, a former wide receiver in college, made impressive baseline catches. Muscles began to protest when the third game locked at deuce, but Schwartz held service of us, recklessly hitting the floor twice to make saves.

At this point—gasping, and clinging to a one-game lead—I asked whether either the players or the equipment were up to an hour-long battle without benefit of Parris Island training. It was agreed that the match should be a best-of-five-games affair—giving us the edge.

But it was Hinman's turn, and he immediately made a place for himself in modern chronicles of medicine ball by introducing the two-handed underhand serve, the previously mentioned bomb that damn near checkered the varnish on the floor when it thudded onto the hardwood. It was the only service ace of the game, but it was enough to demoralize our side. The score was soon knotted at two games apiece.

The final and deciding game came down to this: *My* serve.

Never was there a physique less suited for mediball: 6'6", 200 pounds, a cattail leaning in the wind. "Get it high," Hovorka pleaded. "We can take 'em," Schwartz cried, clapping his hands.

I took my stance behind the service line, gripped the ball tightly, bent my knees for a Hinman serve (See? Already he had revolutionized the game!) and with a manly grunt launched the ball high over the net. . . .

But I'm getting ahead of myself. What, you may reasonably ask if you're not of a certain age, is a medicine ball?

Good question. Turn-of-the-century physicians prescribed exercise with a weighted leather ball as "good medicine" for patients lacking strength and stamina—"vigor," as it was called in those days.

The medicine ball was actually patented in the 1890s. According to Dr. Donald A. Chu, professor of biomechanics and sports medicine at Cal State-Hayward, the ball was a favorite with women in the first decades of this century. "Eventually," Chu says, "they discovered it was a lot more fun to play basketball and volleyball than to gently toss around a medicine ball, and it was retired to the back of the equipment room."

The ball's flirtation with glamour and power came with Hoover's election in 1928, when he was 54. A committed outdoorsman and fisherman in his years as a mining engineer, Hoover had puffed up to 200 pounds, a victim of Washington dinner parties. His personal physician, Navy Commander Joel T. Boone, invented the new game to reduce the presidential girth, and four days after the inauguration the Medicine Ball Cabinet was born.

For the next four years, the rich and powerful—cabinet members, U.S. Supreme Court justices, friends and aides—showed up at the White House in old clothes and sweaters to play medi-ball with the President, who was said to have a forehand drive powerful enough to bowl opponents over. The games began at seven o'clock each morning, Sundays excepted, and continued without a break until a factory whistle down by the Potomac signaled the end of play at 7:30. "By this time," says Irwin's article, "the players are usually in a reeking perspiration." You bet.

Hoover's recollection, in his Memoirs, differs only slightly from Irwin's. Where Irwin reports a six-pound ball, Hoover remembers it as weighing eight. Irwin places the net at 8 feet, Hoover at 10. But both accounts credit the game with keeping the presidential bulk under 185 pounds, and being fun at the same time. "It required less skill than tennis, was faster and more vigorous, and therefore gave more exercise in a short time," Hoover wrote.

Had the Hoover presidency been more popular, medicine ball might not have been consigned to history's ash heap. Alas, the game did not survive the Great Depression, and the medicine ball resumed its role as a seldom-used sports bystander. Even through the '70s and '80s, with running, aerobics and weight-resistance training all having their moments in the limelight, the medicine ball sat mildewing in YMCA gymnasiums throughout the nation.

Nevertheless, Everlast Sporting Goods continues to manufacture medicine balls at its Bronx, N.Y., factory. They are still made in the classic manner, by hand-stitching a leather cover around a sandbag core and a wrapping of cotton batting. Medicine balls come in five weights, the four-to-five-pound ball being the lightest, the 14-15 pounder the heaviest. Our "eight-pounder" actually weighs nine pounds. "It's not an exact science," concedes an Everlast spokesman. Most balls are slightly out of round and will flatten further on impact, giving an eccentric wobble to throws.

Everlast manufactures about 5,000 balls a year, which sell for $30 to $60. That leads to the question: Who buys them? "The primary users today are boxing-oriented gymnasiums," says John Toms, Everlast's vice-president of sales, "places like Joe Frazier's Gym in Philadelphia and Gleason's Gym in New York. Some boxers even buy their own personal medicine balls." If he had to single out one figure as the medicine-ball guru, Toms would choose Frazier. "He does a routine with a 15-pound ball that is really something to see."

Catching that routine requires a visit to Frazier's Gym, a windowless warehouse in the shadow of a freeway overpass. There the former world heavyweight champion preaches the gospel of the medicine ball to anyone who cares to listen. "I'm 43 now, and I still weigh only 236 [seven pounds more than when he last fought, in 1981]," Smokin' Joe says. "I owe that to the medicine ball."

Frazier has two medicine balls, actually—a 15-pounder and a special-order, two-foot-diameter leather boulder that weighs 25 pounds. The balls are used in lifting and stretching exercises, two-man sit-up-and-catch routines and the classic drill in which a trainer repeatedly drops the ball several inches onto a boxer's tensed abdominal muscles.

But that's just a warmup. Frazier most enjoys a game of point-blank catch with the 25-pounder, in which each player takes the full impact of the ball in the midsection, allowing it to drop before catching it with the hands. Twenty or 25 such blows to the solar plexus develops more than strength, Frazier says. "It keeps me alert."

The medicine balls at Frazier's Gym reek of sweat and leather, but there is a new generation of weighted balls that smell of high-tech chemicals and come in designer colors. Of course, along with the new look comes a new name: plyoballs, from plyometric, having to do with the rapid stretching and contracting of muscles to develop power. Uniform in density and perfectly round, these balls have a pliable polyurethane skin that is easy to grip.

Triangle Health and Fitness Systems of Morrisville, N.C., calls its updated medicine balls Bodyballs and recently introduced three-and four-pounders in red and blue, respectively. Another company, Athletic Training Consultants of Bowie, Md., offers Versaballs in 2-, 4-, 6-, 9-, 12- and 15-pound weights. "The idea behind the Versaball is

that it can be used as a regular medicine ball, but it can also be used for upper-body plyometric exercises," says University of Maryland strength and conditioning coach Frank Costello, a partner in the Versaball division.

Costello, the 1966 NCAA high jump champion (and more recently a member of the U.S. Olympic Developmental Committee, which holds clinics for potential Olympians and analyzes their performances), says he learned the value of medicine-ball training 20 years ago in international competition. "The Eastern Europeans were big on medicine balls, but in this country people just thought of them as something boxers bounced off each other's stomachs."

That perception may be changing. The Washington Capitals hockey team has started training with Versaballs, and Costello expects other professional and college teams to follow. "You're going to see a big upswing in medicine balls," he says. "They're an important part of an athlete's training."

The humble medicine ball may even come to be perceived as—gasp!—sexy. *Shape* magazine recently put curvy television actress Connie Sellecca on its cover, cradling a Bodyball against an admirably slim thigh.

My first serve of the deciding game was in the air, but I won't bore you with a shot-by-shot recounting of the epic denouement of the resurrection of mediball. Actually, I don't remember much of the final game, except that I scored a crucial point by nimbly avoiding contact with a heavy shot that was out by inches. Which, I must add, should not be mistaken for ducking.

My side won.

More to the point, Hoover Rules mediball was judged a success. "I tell you," said Hinman, "you wouldn't even *have* a waistline if you played this every day." "It's neat," echoed Schwartz. "A bit of Americana rediscovered." The Athletic Club of Overland Park plans to add medicine ball to its regular activities schedule.

But Will Irwin's note of caution will be observed. Beginners must start out with the six-pound medicine ball or a four-pound plyoball. The game will go faster, with less risk of injury. Heed the words of the game's inventor, Commander Boone: "Exhilaration, not depression, should follow. Otherwise, it's dangerous."●

OUR LONG-TERM STRUCTURAL PROBLEMS

● Mr. BINGAMAN. Mr. President, over the past few weeks, our attention has been focused on America's short-term economic problems. Since the stock market crash of "Black Monday," the eyes of both Wall Street and Main Street have been on the budget negotiations here in Washington. While these negotiations are extremely important, and I hope will be successfully concluded in the near future, they should not divert our attention from this Nation's long-range economic problems. Reducing the budget deficit will calm the jittery stock market. But it will not, by itself, correct the underlying structural problems of our economy. It will not cause our trade deficit to go away, nor will it make our huge foreign debt magically disappear.

In a recent article in the New York Times, economist Charles McMillion points out the problem of relying on quick fixes. While the title "Not Higher Taxes, Faster Growth" is misleading, his analysis is right on target. The long-range solution to our debt and deficit problem is improved economic competitiveness. Reducing the budget deficit is important, but correcting the structural factors which gave rise to our problems is more important. I urge my colleagues not to be diverted from this task.

I ask that this article be printed in the RECORD.

The article follows:

[From The New York Times, Nov. 1, 1987]

NOT HIGHER TAXES, FASTER GROWTH

(By Charles W. McMillion)

The stock market collapse has awakened the nation and the world from a long dream of economic unreality. We have now been challenged more forcefully and more visibly than at any time since the Sputnik era of a generation ago.

Unfortunately, many still cling to the security blanket of quick fixes. Only the strategies have changed in the now largely misdirected battles to reduce the budget and trade deficits. Long declining economic growth and living standards are at the heart of the current crisis. Neither of these is likely to benefit—indeed, both could well suffer—if taxes are significantly raised, Government spending indiscriminately slashed or the dollar further enfeebled on foreign markets.

Our economic growth averaged 4 percent a year during the 1950's and 1960's, before slowing to less than 3 percent in the 1970's. So far, in the 1980's, real annual growth has slowed to barely 2 percent. Had growth remained at 4 percent during the 1970's and 1980's, we would not have a Federal budget deficit, but a substantial surplus.

We are now in our 59th consecutive month of slow economic growth. During this period our national economy and Federal budget deficit have each grown by about $1.2 trillion. Arguably, our nation has borrowed its entire economic growth over the past five years.

Although reducing the budget deficit by raising taxes or cutting spending or both may send some positive signal to investors, it is likely to send negative signals and create recessionary fears among consumers as we approach the Christmas buying season.

We have had slow economic growth because the economy has changed. Competition for markets, jobs and tax revenues is no longer local, or even national. Today competition is global, and we are losing out.

By increasing debt we have been creating jobs, but not middle-class jobs. Real wages are now below 1963 levels, and 80 percent of the jobs created in the 1980's are in retail sales and miscellaneous services where average wages, adjusted for inflation, are below the national average wage for 1949.

The only way Americans could sustain their standard of living in the 1970's was to have at least two income earners in the household. In the 1970's wives went to work—whether they wanted to or not. While in the 1980's, living standards have been supported by accumulating debt.

The trade deficit and a weakening dollar are only the most obvious indicators of our economic decline. The 1986 trade deficit of $160 billion was larger than the G.N.P. of 170 of the 179 countries with which we trade. To pay for all these foreign goods, our foreign borrowing now exceeds $150 billion a year—more than Brazil or Mexico have accumulated over their entire histories.

With this massive borrowing, we are now consuming far more than we are producing. At some point, just to service this enormous debt, the United States will have to competitively produce—and sell in tough global markets—far more than we now consume. This will require a wrenching change in world patterns of consumption and production. To do this, we must competitively produce $200 billion a year more, or we will be forced to consume $200 billion a year less in foreign produced goods.

Changing the exchange rate is an obvious "quick fix" for our trade imbalance. Certainly at some lower exchange rate the trade accounts could be balanced. But we should remember the lessons of the weak dollar in the late 1970's. At that time inflation soared to double digits, wages suffered their steepest decline since the Great Depression and other nations' per capita income surpassed our own. At the time, this seemed an extraordinary price to pay for a positive trade balance.

At current exchange rates, Japan now has the highest per capita income in the world, surpassing second place West Germany and a full 12 percent ahead of ours. This is extraordinary considering that in 1972, we earned twice what the average Japanese did.

The sad truth is that there are no easy answers, in Washington or elsewhere, to the profound dilemmas developed in the generation since the Sputnik challenge.

President Reagan, and the President who will succeed him, simply must acknowledge the pervasiveness of this crisis and provide coherent, forceful leadership. We have the resources and the mobilization capabilities to productively work our way out of this dilemma. It will involve major changes in all areas of our society. Old antagonisms between labor and management, public and private sectors, must be put aside in recognition of our interests.

The nation's attention must be turned to education and training, capital formation, development of commercial technologies and to opening and developing foreign markets for our goods. American firms and workers must make dramatically better products, emphasizing innovation, quality and productivity. The Government must be made capable of becoming a productive partner.

Everyone would like quick and dramatic action in the face of our current crisis. We must not now however compound the costs of our past budget and trade inaction by significantly raising taxes or slashing spending as we face a possible recession.●

CHUCK COLSON AND THE STATE

● Mr. HATFIELD. Mr. President, my friend Chuck Colson recently wrote a column in Christianity Today magazine which provides a good bit of guidance to those of us charged with the responsibility of drafting our Nation's laws.

Very often efforts to uphold the first amendment's provisions regarding the separation of church and State

produce results openly hostile to religion. But even more dangerous is the trend to construe the first amendment to demand that the laws passed by the Nation's legislatures cannot reflect the personal judgments of the elected representatives that might somehow be guided by religious conviction and conscience. So it is considered constitutional, for example, to legislate against murder provided that the value motivating this law is a generalized sense of the value of human life and not the biblical prescription against murder that stems from the sacredness of life and society. The fact is that the values of America emanate largely from a Judeo-Christian ethic that has been forged over thousands of years, and that each law enacted necessarily reflects a value judgment. As Chuck Colson points out, attempts to somehow sanitize the legislative process from such moral influence are sometimes ludicrous and at all times shortsighted. One does not advocate repeal of the first amendment when he or she casts a vote that reflects, in Chuck Colson's words, "religiously motivated political activism." To believe that elected officials must disavow religious influence when exercising judgment is to misunderstand the Constitution and to mandate for many of us a misrepresentation of the constituencies responsible for our election. I ask that Mr. Colson's editorial be printed in the RECORD, and encourage all of my colleagues to read it carefully.

The editorial follows:

SPYING ON HENRY HYDE AT MASS

(By Charles Colson)

Religion, a friend of mine joked, is being treated today the same way homosexuality once was: As long as it is practiced only among consenting adults behind closed doors, it is tolerated.

I thought of this irreverent quip while watching NBC's news coverage of the Supreme Court decision striking down Louisiana's "creation science" law. The counsel who represented Louisiana argued that the legislature was merely seeking to assure equal discussion of equally valid theories regarding the origins of man; academic freedom demanded no less. Anchor Tom Brokaw appeared frustrated. Finally he growled, "But weren't many sponsors of this bill *religious* people—doing this for *religious* reasons?"

For Brokaw, apparently a person with religious motivations has no business injecting those into public debate; it seems religious convictions might contaminate public policy.

This shocking attitude is held not just by the American Civil Liberties Union and People for the American Way, but by a lot of otherwise sensible people who have been conditioned into believing that public debate should be free of any religious influence.

The U.S. Supreme Court has encouraged this mindset. In 1971's *Lemon* v. *Curtzman*, the Court applied a threefold test of constitutionality: first, a law's primary effect must neither advance nor inhibit religion; second, it must not result in excessive entanglement of government with religion. Fair enough so far. But the third tenet holds that a law must be adopted with a "secular intent"—and that is where difficulties arise.

It was on this third point, in fact, that the Louisiana law was struck down. The law's drafters expressly stated a secular purpose—balanced academic teaching—but that expressed purpose was held by the Court to be a "sham." Justice Brennan argued bluntly in a majority decision that the sponsor's motivation was religious—hence the law itself was unconstitutional.

My concern here is not to argue the merits of the Louisiana law. It may not have been wisely drafted or advanced true academic freedom. But the grounds on which it was struck down establishes a chilling precedent. If the effect of the Court's decision is to hold that any motivation for passing a law—be it conservatism, liberalism, Marxism, or whatever—is valid *except* religion, then we will have perverted religious freedom into a monstrous form of religious repression.

Congressman Henry Hyde offers a firsthand account of what it means to run afoul of this bigotry. In 1976 Congress passed the Hyde Amendment, which barred federal funding of abortion in the Medicaid program. Planned Parenthood, the ACLU, and other groups challenged the amendment's constitutionality, claiming it imposed "a peculiarly religious view of when a human life begins." To prove their theory, the plaintiffs' lawyers asked to review Hyde's mail for expressions of religious sentiment—such as the suspicious use of "God bless you" at the end of a letter. Their private investigator followed Hyde to a mass for the unborn, covertly making notes as the congressman read Scripture, took Communion, and prayed.

The plaintiffs testified that these observations evidenced a simmering religious conspiracy, claiming that Hyde, a devout Catholic, could not separate his religion from his politics and that the Hyde Amendment was thus unconstitutional.

Planned Parenthood and the ACLU ultimately lost their case. But Hyde later wrote, "Some powerful members of the cultural elites in our country . . . go to Gestapo lengths to inhibit [religious] expression."

The authors of a New York law outlawing the use of children in pornography certainly went to lengths to avoid a legal battle like Hyde's or Louisiana's. In its preamble, the statute specifically states that the law is *not* based on any moral or religious considerations. Only by making such a specific disclaimer did the bill's drafters believe they could avoid a court challenge.

That this bias against religious motivations exists is disturbing enough. But do we really understand where this growing intolerance can lead us—what kind of society we would have if the public square were sanitized of religious values?

The abolition campaign, the reform of inhumane prison and working conditions, child labor laws, education reform, and the civil rights movement: all these sprang from religiously informed motives. What would the history of social justice be like without the likes of William Wilberforce, John Wesley, Lord Shaftesbury, William Jennings Bryan, Martin Luther King? Such leaders were from both the political Left and Right, theological liberals and conservatives alike.

Even such a generally irreligious observer as John Dewey once commented, "The church-going classes, those who have come under the influence of . . . Christianity . . . form the backbone of philanthropic and social interests, of social reform through political action, of pacifism, or popular education. They embody and express the spirit of kindly good will towards [those] in economic disadvantage."

Religiously motivated political activism brings a transcendent moral perspective to the turmoil of contemporary political affairs. While the separation of the institutions of church and state is a vital constitutional safeguard, no one ever intended the religious and political realms to be separated. To do so is to sterilize our body politic and leave it morally impoverished.

For me, Tom Brokaw's question was hauntingly reminiscent of the celebrated remark of Lord Melbourne in Parliament 200 years ago. Rising in indignation to oppose the abolition campaign led by an outspoken Christian, William Wilberforce, Melbourne thundered, "Things have come to a pretty pass when religion is allowed to invade public life." Had Melbourne prevailed and Wilberforce been disqualified because he spoke his Christian conscience, the abominable slave trade might not have ended.

Two centuries ago the answer to Melbourne's challenge was yes: in the name of humanity and justice, religion must invade public life. The answer to Tom Brokaw's question today should be no less. ●

SALUTING BILL DAVIDSON

● Mr. LEVIN. Mr. President, tonight, in Southfield, MI, congregation Shaarey Zedek is paying tribute to a very special man. William Davidson will receive Israel's Peace Medal at a dinner to benefit State of Israel bonds.

Let me read from the invitation to this event:

It is singularly fitting that, on the eve of the 40th anniversary of the remarkable nation, the Detroit Jewish Community and Congregation Shaarey Zedek salute a remarkable man.

Bill Davidson is dedicated and determined. He has served as president of his beloved Congregation Shaarey Zedek. His deep commitment to Jewish education can be seen in his building of the wing at the Hillel Day School of Metropolitan Detroit.

He has remembered his own alma mater by establishing a visiting professorship in business administration at the University of Michigan. And he has endowed a chair in industrial and managerial engineering at the Technion-Israel Institute of Technology.

He has a profound interest in the quality of life of his community and has participated with great generosity in philanthropic efforts to satisfy education, social, and cultural needs both in this country and abroad.

As involved as Bill is in the business world and community life, he still finds time to avidly follow the Detroit Pistons, of which he is a principal owner. Not surprisingly, Bill is more than just a fan. He has a terrific relationship with the players and truly loves the game. Bill had special rea-

sons to be proud of the Pistons this past year when they went all the way to the semifinals in the NBA and took the powerful Boston Celtics to a hard-fought seven game series.

Let me conclude with another quotation from the invitation to tonight's dinner:

It is with justifiable pride that Congregation Shaarey Zedel pays tribute to a vigorous international industrialist who is also a distinguished leader in congregational and communal life.

As we congratulate a good friend and great community leader, Bill Davidson, we also want to commend his congregation and community for recognizing his many contributions. Tonight will be an evening of celebration.●

TURKEY

● Mr. LUGAR. Mr. President, today I would like to insert into the RECORD an article by James A. Phillips of the Heritage Foundation entitled "Turkey: An Increasingly Key Strategic Asset for the U.S." I believe it addresses several key issues in our relations with Turkey. Turkey is a key NATO ally that is strategically located at the nexus of our NATO, southwest Asia, and Middle East policies. Our continued and steady support for Turkey in upcoming years will help them to maintain their position as a strong force for stability in the region.

The article follows:

TURKEY: AN INCREASINGLY KEY STRATEGIC ASSET FOR THE U.S.

(By James A. Phillips)

INTRODUCTION

At a time when war and chaos in the Persian Gulf remind policymakers how difficult it is to deal with Middle Eastern states, Turkey remains a rock of stability and reliability in the eastern Mediterranean. Yet the U.S. Congress is contemplating actions that will strain relations with this key ally. Not only is Congress imprudently considering a reduction in the Administration's request for $785 million in military aid to Turkey, but it is considering attaching onerous conditions to that aid.

Turkey is of great importance to the United States for geostrategic, political, and economic reasons. In strategic terms, Turkey poses a formidable barrier to Soviet expansion in the eastern Mediterranean and Middle Eastern regions. Its pivotal location and large army make it the eastern linchpin of the North Atlantic Treaty Organization's (NATO) security perimeter. The Iranian revolution and Soviet invasion of Afghanistan emphasizes its importance in Persian Gulf contingencies. The Greek government's threats to terminate U.S. base rights in Greece enhance Turkey's importance in NATO's eastern Mediterranean defense plans.

Muslim Bridge. In political terms, Turkey's position as NATO's only Muslim member makes it a bridge between the Western and Muslim worlds and enables it to play a stabilizing role in the volatile Middle East. Turkey's commitment to secularism, instituted in 1923 by the far-seeing founder of modern Turkey, Kemal Ataturk, makes it an ideological adversary to the Islamic fundamentalist groups, which threaten the stability of much of the Middle East. Aside from Israel, Turkey is the only Middle Eastern state with a longstanding commitment to parliamentary democracy.

Turkey thus offers the Third World a model for secularism and democracy. It also is a proved model for economic development. Turkish Prime Minister Turgut Ozal has ignited an impressive economic boom by instituting free market economic reforms. The Wall Street Journal praises him as "the developing world's closest approximation to Ronald Reagan.

The U.S. clearly has strong reasons to maintain the closest possible working relationship with Turkey. Yet cracks are appearing in the Turkish-American relationship. In early May Turkish President Kenan Evren canceled a scheduled visit to the U.S. to signal growing Turkish doubt about American sincerity and reliability because of anti-Turkish actions taken by the U.S. Congress. Despite Turkey's crucial contributions to the Western alliance, Congress has reduced the Reagan Administration's aid request for Turkey each year since 1981. Congress attaches counterproductive conditions on that aid and arbitrarily links Greek aid levels to Turkish aid levels in an inflexible 7 to 10 ratio.

Because of these congressional actions, Turks increasingly believe that they are taken for granted by Washington; they are particularly galled when they contrast their stalwart security cooperation with the U.S. with the shrill anti-American harangues of Greece's socialist Prime Minister, Andreas Papandreou.

To restore the health of Turkish-American relations and enhance American interests, the U.S. should:

(1) Give Turkey $785 million in military aid, which the Administration requested, to modernize the Turkish armed forces and enable Turkey to meet its NATO defense responsibilities.

(2) Set aid levels to Turkey according to its contributions to Western security against Soviet threats.

(3) Refuse to make U.S. aid to Turkey dependent on Turkish behavior in such regional issues as the Cyprus dispute.

(4) Press U.S. allies to increase economic aid for Turkey and to facilitate Turkish entry into the European Economic Community.

(5) Encourage rapproachement between Greece and Turkey through a high-level dialogue and such confidence-building measures as a nonaggression pact.

TURKEY'S STRATEGIC IMPORTANCE

Turkey anchors NATO's eastern flank, guards one-third of NATO's 3,600-mile front with the Warsaw Pact and is the only NATO member sharing an extensive border with the Soviet Union. Turkey controls the Bosporus and the Dardanelles, the key straits that constrain Soviet naval access to the Mediterranean Sea. In the event of conflict, Turkey is to close the straits to the 69-ship Soviet Black Sea fleet, nearly one-third of Soviet major surface warships. By doing so, Turkey would prevent Moscow from surging against NATO's soft underbelly in the Mediterranean and from cutting sea lines of communication to Greece, Turkey, Israel, Egypt, and the Persian Gulf. Turkey's 654,000-man armed forces are the second largest in NATO, only after the 2,143,000-man U.S. armed forces, and larger than France's 557,000 and West Germany's 485,000. The tough disciplined Turkish forces would tie down 20 to 30 Soviet divisions in the event of war, some of which otherwise could be deployed on NATO's central front.

The long border with the Soviets

Turkey has long experience in dealing with Russia, having confronted Russia in thirteen wars over the last four centuries. Faced with post-World War II Soviet demands for bases on the straits and territorial concessions, Turkey turned to the U.S. for support. Under the 1947 Truman Doctrine, Turkey along with Greece became a successful test case for the strategy of containing an expansionist Soviet Union through U.S. economic aid, military assistance, and diplomatic support. Turkey fought alongside the U.S. in the Korean War, joined NATO in 1952, and later became a member of the pro-Western Baghdad Pact and its successor, the Central Treaty Organization (CENTO). Greek-Turkish disagreements over Cyprus have been the main irritant in U.S.-Turkish relations.[1] The importance of maintaining close strategic ties was underscored by the 1979 Soviet invasion of Afghanistan, which dramatically demonstrated Moscow's expansionist designs for pushing closer to the Persian Gulf.[2]

Hard Intelligence. The U.S. today enjoys access to six major and 21 smaller facilities in Turkey that are dedicated to NATO military and intelligence functions. The air base at Incirlik in southern Turkey offers a staging area for U.S. fighter bombers; facilities at Sinop on the Black Sea and Diyarbakir in eastern Turkey provide intelligence on Soviet military activities; Belbasi near Ankara contains a seismic station for monitoring Soviet nuclear tests; Pirinclik is the site of radar warning and space monitoring stations; and storage facilities at Yumurtalik and Iskenderun house fuel and military supplies. These facilities provide 25 percent of NATO'S hard intelligence on Soviet strategic nuclear activities, weapons development, military readiness, and force movements.[3] U.S. Air Force units from as far away as Spain and Great Britain use Turkish bombing ranges on training missions.

As important as Turkish defense installations have been to the U.S., they are likely to become even more important in the future. Greece's Papandreou repeatedly has threatened to dismantle U.S. bases in Greece when the current agreement governing their operation expires in December 1988. Turkey is the logical choice to help fill the gap that could be left by the loss of the four major and several minor U.S. installations in Greece.

Turkish role in Persian Gulf

The 1980 Defense and Economic Cooperation Agreement (DECA) between the U.S. and Turkey limits American use of Turkish facilities to NATO defense purposes. This condition was imposed by Turkey to avoid being drawn into regional conflict without

[1] After Greek-Turkish tensions flared on Cyprus in 1964, President Lyndon Johnson sent a letter to Ankara hinting that NATO would not back Turkey if a Turkish intervention precipitated a Soviet reaction. Following the 1974 Turkish military intervention in Cyprus, the U.S. Congress imposed an arms embargo on Turkey that was not lifted until 1978.

[2] See: James A. Phillips, "A Mounting Soviet Threat to the Northern Tier," Heritage Foundation Backgrounder No. 274, July 1, 1983.

[3] Bruce Kuniholm, "Turkey in the World," in George Harris, ed., The Middle East in Turkish-American Relations (Washington, D.C.: The Heritage Foundation, 1985), p. 9.

NATO backing. Yet Turkey still could play a role in deterring a Soviet move to the Persian Gulf. In 1982 the United States began to modernize ten Turkish air bases, several of them in eastern Turkey, on the flank of possible Soviet invasion routes through Iran. These air bases could enable U.S. warplanes to interdict the supply lines and slow the momentum of a Soviet invasion force attacking Iran.

Turkey is reluctant to become involved in Middle Eastern conflicts because of a desire to avoid stirring up memories of Ottoman imperialism. It seeks to preserve its neutrality in the Iran-Iraq war to preclude Iraqi or Iranian support of Kurdish terrorists inside Turkey. Turkey also enjoys lucrative trade with both belligerents in the Gulf war. Although the Turks permit U.S. intelligence-gathering activities related to Persian Gulf events, they have refrained from committing themselves in advance to granting U.S. access to their bases in the event of a Persian Gulf flareup. Turkish involvement in Perisan Gulf affairs is unlikely unless Soviet forces are involved and Turkish efforts are subsumed under a NATO umbrella. Nevertheless, no Soviet military planner can afford to ignore Turkey when contemplating aggression in the Gulf.

ISSUES IN U.S.-TURKISH RELATIONS

Turkey's defense needs

In addition to the Soviet Union, Turkey is surrounded by some of the world's most ruthless regimes: the pro-Soviet states of Bulgaria, Syria, and Iraq as well as revolutionary Iran. Greece, Turkey's only western neighbor is led by the volatile Papandreou regime, which persistently conjures up a Turkish bogeyman to distract its increasingly disenchanted citizens from the economic havoc wrought by its myopic socialist policies. Since Turkey cannot count on being reinforced rapidly by its NATO allies in the event of Soviet attack, it must maintain a large military establishment. Ankara devotes 4.5 percent of Turkey's Gross National Product (GNP) to national defense, one of the highest commitments in NATO. Yet Turkey's economic base is not broad enough to finance the acquisition of enough modern defense systems to enable Turkey to fulfill its NATO responsibilities.

Turkey's obsolescent tanks, aircraft, and ships are often far older than the crews that man them. In fact, Turkish military equipment has been described as a "museum of World War II." The Turks have initiated an extensive program to upgrade their aging M-48 tanks, and they hope to replace Korean War vintage warplanes with F-16 fighter-bombers produced under a coproduction agreement with the U.S.

In 1983 the Pentagon estimated that bringing Turkish forces up to minimum NATO standards would cost $18 billion over thirteen years.[4] Although the 1980 DECA did not establish an explicit quantitative link between U.S. aid and access to Turkish bases, Washington pledged its "best efforts" to underwrite Turkey's NATO defense commitments. Ankara estimated that this would require in excess of $1 billion in American aid each year. But Congress has pared back the Administration's aid request each year. Although Turkey is the third largest recipient of U.S. aid in recent years after Israel and Egypt, American military aid has fallen from a peak of $718 million in Fiscal Year 1984 to $615 million in FY 1986 and $490 million in FY 1987.

Lobbying Congress. When the 1980 DECA expired in December 1985, the Turks sought to extract firmer U.S. aid level guarantees. After more than a year of hard bargaining, the Turks last March accepted letters between Secretary of State George Shultz and Foreign Minister Vahit Haldfogu that contained the unusual clause that the Reagan Administration would lobby Congress with "vigor and determination" to help Turkey meet its NATO responsibilities.

To their credit, the Turks did not threaten to terminate American access to their bases, as has Greece's Papandreou. The Ozal government subsequently was criticized by its political opposition for agreeing to renew the DECA without binding U.S. commitments. Although Ankara signed the new agreement in March 1987, Prime Minister Ozal announced in April that it would not be ratified by the Turkish Parliament because the U.S. Congress slashed the Administration's requested aid package by 36 percent from $913 million to $569 million. President Evren's subsequent cancellation of his planned U.S. visit further underscored growing Turkish exasperation with its American ally.

The Cyprus dispute

Ankara justifiable bridles at some of the congressional strings attached to U.S. aid, particularly the linkage to progress in resolving the long-running Cyprus issue. The 1974 Turkish intervention on behalf of Turkish Cypriots prompted the U.S. to impose an arms embargo on Turkey from 1975 to 1978. The result: the Turks hardened their position. It also weakened NATO defenses and harmed U.S. interests by depriving the U.S. during that period of access to Turkish intelligence-gathering installations. The deterioration of Turkish-American relations also led the Turks to seek improved relations with Moscow. One result was Turkey's acceptance of a broad interpretation of the 1936 Montreux convention, which governs usage of the Bosporus and Dardanelles. This new interpretation permitted the Soviet aircraft carrier *Kiev* to transit the straits in July 1976 under the pretense that it was an "anti-submarine cruiser."

Although the U.S. arms embargo was lifted in 1978 when it became clear that it did not produce the intended results, it has left scars in the Turkish-American relationship. Yet Congress continues to link aid to Turkey to Cyprus negotiations in a manner that the Turks find biased toward Greece. This April, for example, the Senate Foreign Relations Committee passed a resolution to prohibit the use of U.S. provided weapons by Turkish forces on Cyprus and called for a reduction in numbers of the roughly 20,000 Turkish troops stationed on that island.

The 7 to 10 aid ratio

Another case of congressional micro-management that impairs American interests is the 7 to 10 aid ratio that Congress has been using as a rule of thumb in setting Greek and Turkish aid levels. For every ten dollars that Turkey receives, Greece receives seven dollars. This arbitrary ratio, never agreed to by the U.S. executive branch, supposedly maintains the regional "balance" of power between Greece and Turkey, although the nature of this "balance" has never been made explicit. Turkey's population is five time larger than Greece's and its armed forces are three times larger. Turkey requires far more military aid than does Greece because, with its long common border, it faces a much more direct Soviet threat.

Doling out security assistance according to criteria set by the "Greek lobby" in the U.S. skews the distribution of scarce funds and weakens Western defenses. In practice, the ratio does not help Greece, and it hurts Turkey. While Greece amassed up to $1 billion in unspent U.S. military credits at one point,[5] Turkey has been forced to delay the long-overdue modernization of its armed forces. The inflexible application of the ratio reduced U.S. influence with both aid recipients and allows Greece's Papandreou to continue to thumb his nose at Washington because he can count on Greek aid automatically being set at 70 percent of Turkey's aid. The *de facto* 7 to 10 aid ratio, moreover, contradicts official U.S. policy by implicitly endorsing Greek claims that Turkey, not the Soviet Union, is the chief threat to Greek security.

Turkish-Greek Relations

The Greeks once were a Christian minority group living with the Turkish-ruled Ottoman Empire. Since regaining independence in 1832 with British, French, and Russian support, the Greeks zealously have guarded their sovereign rights against a return of Turkish domination. Greece historically has sought foreign help to offset its neighbor's greater size. In 1921, Greece took advantage of Ottoman weakness to invade Anatolia in an unsuccessful attempt to incorporate Greeks on the eastern coast of the Aegean Sea into an expanded Greece.

As with other international conflicts involving claims of rival nations to disputed territories, the Aegean conflict has created extreme bitterness and distrust on both sides. After World War II, Soviet meddling in the Greek civil war and territorial demands on Turkey gave both a common enemy and earned both a common friend in the U.S. In recent years, however, the declining perceptions of the Soviet threat, rising tensions over Cyprus, and disputes about sovereignty over Aegean air space, coastal waters, and the seabed have plagued Turkish-Greek relations.

Greece claims sovereignty of the waters within six nautical miles of the coasts of its Aegean islands but reserves the right to extend its claim to twelve miles. Turkey considers such an extension a belligerent act because it would close most of the Aegean to the Turkish Navy. Turkey would like to settle the issue in bilateral negotiations, but Greece has rejected such an approach, preferring to bring the dispute before the International Court of Justice at The Hague. The World Court, however, has become a highly politicized tribunal, which probably would not give Turkey a fair hearing.

Refusing to Talk. The possible existence of offshore oil deposits has raised the stakes and suspicions of both sides. This March, a naval confrontation over oil exploration in disputed waters narrowly was averted. A similar dispute in 1976 led the two states to agree to avoid provocative acts and negotiate a solution. These talks, along with other bilateral contacts, were broken off by Papandreou when he took office in 1981. As a result, minor Turkish-Greek issues have become politicized to such an extent that they become contentious tests of national

[4] Burce Kuniholm, "Turkey and NATO: Past Present and Future," *Orbis*, Summer 1983, p. 441.

[5] *The Wall Street Journal*, September 10, 1986.

wills that all too easily escalate into saber-rattling crises.

Although Turkey's pragmatic Ozal seeks to open a dialogue and has offered to meet Papandreou "anytime, anwhere," the Greek leader has ruled out such a dialogue as long as Turkish troops remain on Cyprus. This puts the cart before the horse. No progress can be expected on the Cyprus issue without a broad willingness to compromise on both sides. By refusing to talk or listen to his Turkish counterpart, Papandreou perpetuates distrust and diplomatic paralysis. This may benefit him politically by allowing him to pose as the uncomprising defender of Greek sovereignty, but it increases the risks of blow-up in the Aegean that could harm Greek, Turkish, American, and NATO interests.

TURKEY'S EXPERIMENT WITH FREE ENTERPRISE

Prime Minister Ozal, trained as an engineer in the U.S., is dedicated to free market economic reforms. He has been praised by Ronald Reagan as "a real Reaganite in economic terms" because of his determined efforts to prod Turkey toward free enterprise. Since 1980, Ozal has rationalized the price system by abolishing subsidies and lifting price controls, overhauled the tax system, and slashed income taxes by 20 percent for most workers. He has opened up the economy by liberalizing currency exchange rules and expanding access by Turks to foreign imports, credit, and investment. By encouraging Turkish industry to shift toward exports rather than import substitution. Ozal hopes to harness fully Turkey's comparative advantages, especially its large, skilled workforce and its geographic proximity to both Europe and the Middle East.

Under Ozal's stewardship, first as head of the State Planning Organization and since 1983 as Prime Minister, Turkey has made dramatic economic gains. Today it boasts the strongest growth rate of any of the twenty-four countries that belong to the Organization for Economic Cooperation and Development—7.9 percent real growth in Gross National Product in 1986. Inflation plummeted from over 100 percent in 1980 to 26 percent in 1987. Exports surged from $2.9 billion in 1980 to $7.5 billion in 1986, and foreign investment increased fivefold in the same period.

Despite Ozal's success in stimulating economic growth, his centrist Motherland Party is losing ground politically because of its austerity program and a persistent unemployment rate of 20 percent. Moreover, Ozal's efforts to protect Turkey's credit rating by assiduously meeting its foreign debt commitments ($4 billion in principal and interest was paid on Turkey's $25 billion foreign debt in 1986) have left him open to opposition charges that he serves Turkey's foreign creditors better than his own people.

Private Sector Enthusiasm. To reduce the budget deficit, Ankara is moving slowly to privatize some of the State Economic Enterprises that collectively account for approximately 40 percent of Turkey's industrial production. Privatizing such state enterprises as mining, textiles, cement, and aviation are under consideration. Sales of shares in the toll revenues of a bridge across the Bosporus already have provided money for a second bridge. Encouraged by interest rates that exceed the rate of inflation, the continued political stability, the private sector now may have the enthusiam and financial strength to support the rapid growth of privatization.

The chief Turkish-American bilateral economic issue concerns Turkish textiles. Textile exports are the centerpiece of Ozal's export-oriented economic strategy, making up the single largest source of Turkey's export earnings. Turkish textile exports in the U.S. rose to about $140 million in 1986, up from roughly $80 million in 1985. But the growth rate of Turkish textile imports to the U.S. is inhibited by import barriers. The Turks complain that, as a late entrant to the Multifiber Arrangement that sets quotas for U.S. textile imports, they lose out to such Far Eastern textile producers as South Korea, the Republic of China and Taiwan, and Hong Kong. U.S. officials urge that granting Turkey a larger textile quota would prevent the U.S. from fulfilling its commitments to other textile exporters. This is a lame answer. The U.S. is now in a position to reduce significantly its barriers to textile imports.[6]

TURKEY'S DOMESTIC POLITICAL REFORMS

In addition to rationalizing its economy, Turkey is reforming its political system. The army, which mounted a bloodless 1980 coup to avert impending civil war, returned power to civilians just three years later and held elections. Although military rule sparked harsh Western criticism, the army garnered little Western praise for restoring democracy and preserving Ataturk's secular reforms against growing (but still marginal) Muslim fundamentalist extremism. The participation of twelve political parties in Turkey's September 1986 by-elections and the referendum last month that lifted a ban on several politicians attest to the steady evolution of Turkey's "guided democracy" into a thriving, stable democratic system.

Turkey also has been making strides in correcting the human rights abuses that accompanied the crackdown on warring leftist and rightist terrorists in 1980. It has established a commission to investigate Turkish prison conditions and permitted Council of Europe officials to visit prisons. The U.S. State Department's most recent Human Rights report for Turkey concluded that: "In general, the positive trend in the observance of human rights continued in 1986. The Government made considerable progress in reducing human rights abuses, although significant shortcomings are still evident."

Perhaps the most emotional issue in Turkish-American relations is the thorny question of past Turkish treatment of its Armenian minority. Each year a measure is introduced in Congress to designate a day of remembrance in the official U.S. calendar for hundreds of thousands of Armenians who perished in the final tumultuous years of the Ottoman Empire. Although the resolution has never been passed by both Houses, the Turks see it as providing a fig leaf of respectability to Armenian terrorists who have waged a war of terrorism against Turkey since the mid-1970s. Over fifty Turkish citizens, most of them diplomats, have been murdered, including four in the U.S.[7] Seared by a terrorist bloodbath that claimed an average of 25 lives a day in 1980, the Turks have taken a hard line against terrorism of any stripe. The Turkish public interprets support in the U.S. for the Armenian resolution to be support for anti-Turkish terrorism, an equation that could harm bilateral relations if the resolution were passed.

POLICY RECOMMENDATIONS

Turkey is a steadfast ally and should not be taken for granted. The Ozal government's strong commitment to NATO, modernization, free enterprise, and free trade make it one of the most pro-American Turkish governments ever to hold power. Ozal's opposition derides him as "Amerikanci" and criticizes him for not securing firmer U.S. aid commitments in the DECA signed earlier this year. Washington should help Ozal demonstrate the benefits of a close U.S. connection. It should avoid giving Ozal's critics on the left and the right issues that can be used to discredit him and the rising generation of U.S.-educated technocrats.

Long-term U.S. goals should be to facilitate Turkey's transition to a stable democracy, to a free market economy, and to full integration into Western Europe's economy as well as its defense alliance. To accomplish these goals:

(1) Washington must meet its DECA obligations to help modernize Turkey's armed forces and enable the Turks to fulfill their NATO responsibilities. The U.S. is committed to make its best efforts to help Turkey upgrade its military strength. The Administration's request for $785 million in military aid for Turkey is an absolutely necessary investment in Western security. Congress undermines NATO security to the extent that it arbitrarily cuts this aid. Military aid to Turkey is one of the most cost-effective means of deterring Soviet aggression in the eastern Mediterranean as well as southwest Asia. While it costs the U.S. $60,000 to outfit and station one American soldier in Turkey, the cost for one Turkish soldier is roughly $9,000.[8]

(2) Congress should stop linking Turkish aid levels to diplomatic progress on the Cyprus question. Cyprus is a complex problem that cannot be resolved by solutions imposed by outside powers.[9] Only direct talks between Greece and Turkey will lay the groundwork for a settlement. If the U.S. pressures Turkey to make concessions, the Greeks may lose incentives to make reciprocal concessions and be tempted to negotiate with Washington rather than Ankara. Moreover, the U.S. arms embargo proved to be a blunt instrument that hardened Turkey's position instead of encouraging compromise.

Washington should offer its good offices to explore possible solutions but should not cajole either side into a settlement that could later unravel, leaving the U.S. as a scapegoat. Nor should Washington recognize the Turkish Republic of Northern Cyprus established in 1983 or any other unilateral approaches.

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[6] See Edward Hudgins, "Robust U.S. Textile Industry Needs No More Protection," Heritage Foundation *Backgrounder Update* No. 54, September 29, 1987, and Katsuro Sakoh and Edward Hudgins, "The Multifiber Arrangement: U.S. Gains From Relaxing Its Restrictions," Heritage Foundation *Backgrounder Update* No. 13, June 6, 1986.

[7] The Armenian Secret Army For the Liberation of Armenia (ASALA) which is responsible for many of these outrages is supported by the Soviet Union, Syria, and Palestinian terrorist groups. For an excellent analysis of the Armenian terrorism see: Michael Gunter, Pursuing the Just Cause of Their People: A Study of Contemporary Armenian Terrorism (New York: Greenwood Press, 1986).

[8] Testimony of Ambassador Parker Hart, cited in Bruce Kuniholm, "Rhetoric and Reality in the Aegean: U.S. Policy Options Toward Greece and Turkey," SAIS Review, Winter/Spring 1986, p. 153.

[9] For an excellent analysis of U.S. policy toward Greece, Turkey, and Cyprus see: Paul Henze, "Out of Kilter: Greeks, Turks and U.S. Policy," The National Interest, Summer 1987.

(3) The arbitary 7 to 10 Greece: Turkey aid ratio should be scapped. Scarce funds for security assistance should be disbursed to maximize Western defenses against Soviet threats, not to offset the real or imagined threats posed by one NATO member against another. If Greek Prime Minister Papandreou genuinely believes that Turkey is more of a threat to Greece than is the Soviet Union, then he should withdraw from NATO. Since he does not, it is clear that the real enemy of Greece is the Soviet Union. An inflexible U.S. formula for doling out aid undermines the rationality of NATO defense planning, constrains the President's ability to conduct foreign policy, and limits U.S. influence in both capitals.

(4) The Reagan Administration should invoke the 1986 amendment to the Defense authorization act that allows the Administration to transfer surplus military equipment to Turkey, Greece, and Portugal. Secretary of Defense Caspar Weinberger has given the Turks a list of surplus equipment including 40 Phantom F-4 fighter-bombers, that they may be eligible to receive. The Administration should use such surplus equipment transfers as much as possible to help offset expected congressional cuts in military aid. Increased contributions from U.S. military construction, the NATO Infrastructure program, and the Defense Industrial Cooperation program also can help to make up the difference.

(5) Washington should press its allies to increase foreign aid to Turkey and to consider favorably Turkey's application for full membership in the European Economic Community. Japan, which claims to be looking for ways to strengthen the Western alliance on which it depends, should be encouraged to buttress Turkey with economic aid.

(6) The U.S. should open its markets to Turkish textile exports as much as possible under the Multifiber Arrangement. Better yet, the Multifiber Arrangement should be phased out to liberalize the textile trade and reduce clothing and other fabric prices for U.S. consumers.

(7) The U.S. should encourage Ankara to open the Ottoman archives to allow a full, open review of the Turks' treatment of Armenians. While the Armenians unquestionably suffered grievous wrongs, there is no incontrovertible proof of a systematic genocide campaign by the Turks against them. Moreover, the acts in question were committed by the defunct Ottoman government, not the Turkish Republic. A full-scale investigation of the matter, using the old Ottoman archives, could clear up the issue. Congressional resolutions on the Ottoman Armenians would only reopen old wounds and disrupt Turkish-American relations without resolving anything.

(8) Washington should encourage a rapprochement between Greece and Turkey by offering itself as a conduit for private communication, by calling on both sides to tone down their rhetoric, by exploring the possibilities of a mutual nonaggression pact and other confidence-building measures. A dialogue between Athens and Ankara must be established before any progress can be made on sovereignty disputes in the Aegean. Such disputes are essentially a matter of national pride. They will not be resolved until there is a political will on both sides to accept compromise.

CONCLUSION

The U.S. cannot afford to take Turkey for granted. Turkey anchors NATO defenses in the eastern Mediterranean and contributes to the deterrence of Soviet expansion toward the Persian Gulf. Turkish facilities provide 25 percent of NATO's hard intelligence on Soviet military activities.

Turkey also is important as a stabilizing force in the Middle East and as a bridge between the Moslem world and the West. Its secular system provides a workable alternative to the rising tide of Moslem fundamentalism that plagues the Middle East. Moreover, Prime Minister Ozal's free market economic reforms provide a valuable model for economic development for scores of other countries.

The U.S. must live up to its commitment to make its best possible effort to help Turkey fulfill its NATO obligations. By trimming the Administration's aid proposals for Turkey and attaching counterproductive aid conditions, the U.S. Congress undermines Western security and strains bilateral relations with a valuable ally.

Given the steady drift of Papandreou's Greece away from the Western alliance, the U.S. must strengthen its ties to Turkey, not weaken them. For if Prime Minister Papandreou chooses to oust U.S. bases from Greece, Turkey is the obvious candidate to provide substitute facilities.●

UNITED STATES-SOVIET ECONOMIC RELATIONS

● Mr. MOYNIHAN. Mr. President, I ask that the following article by Mr. Donald Blinken of Warburg, Pincus & Co., and which appeared in the Minneapolis Star Tribune on October 21 of this year be inserted in the CONGRESSIONAL RECORD.

The article follows:

A CHANCE TO IMPROVE ECONOMIC RELATIONS WITH THE SOVIETS

(By John P. Hardt and Donald M. Blinken)

The upcoming Reagan-Gorbachev summit may offer an important opportunity not only to reduce the arms competition with the Soviet Union but also to put U.S.-Soviet economic relations on a sounder basis.

The key to such a development is a general improvement of the political environment. Were we to enter into a period of substantial, predictable improvement in all areas of our relations—arms control, regional issues, human rights—then economic interdependence could follow.

A bipartisan task force of prominent Americans, sponsored by the Institute for East-West Security Studies, sees a prospect of significant change and diversity in the Soviet "new thinking" that provides the West with important challenges and unusual opportunities. This prospect includes joint ventures, scientific and technological exchanges, and greater integration of the Soviet Union in the international economic community. Without careful consideration and preparation, however, these opportunities for mutual benefit may not provide an economic payoff and may, in fact, erode our security.

We should assume that Mikhail Gorbachev is serious about making his economy efficient, modern and competitive. But to do this without accepting the managerial methods and technological development of the economically advanced countries is the hard way for Gorbachev to go. His domestic-reform proposals, if implemented, could fundamentally change the way the Soviet system works. But without openings to Western methods, time may run out on him. Gorbachev's reform strategy, and the Soviet Union generally, need critically important inputs:

Joint ventures that bring Western management and technology to key economic sectors linking science and applied technology.

Modernization of manufacturing output so that the quality of goods approaches the world market level; the test would be Soviet ability to sell autos, machinery and other manufactured goods to world markets.

Government agreements for exchange of scientific and technological information vital to modernization.

Participation in the international financial community, important both for allowing broader economic interchanges and for the prestige associated with being a participant on the global economic scene.

There may be commercial advantages if joint ventures provide substantial returns on investments made in alternative markets. We should not assume, however, that such agreements will come easily. The degree of control over production, quality and information that the Soviets would be required to turn over to Western businessmen in joint ventures would be unprecedented. The new Soviet joint-venture law is vague on these points and imposes restrictions on Western equity holding and profit repatriation.

Moreover, these benefits would have to offset the risks of providing technology and market access to Soviet enterprises for the sale of manufactured goods in the West. Increasing exports to the West is a primary Soviet objective in Western joint ventures since, as long as they continue to rely principally on energy sales at current OPEC oil process for foreign exchange, their supply of hard currency will remain tight.

The Soviets would also benefit from the opportunity to join and participate in the global economic institutions. With appropriate conditions, these benefits could be mutual. Provision of accurate and adequate economic data by the Soviet Union and a credible prospect of movement toward currency convertibility might be the minimum conditions. Beyond these reforms, the assurance of a constructive Soviet role in facilitating growth and stability in the world economy would also be vital to the interests of the current members of institutions like the World Bank.

We need to review our own and our allies' interests and proceed to develop a realistic strategy for testing and possibly joining the Soviet Union in shared relationships. For as promising as prospects of expanding markets, higher returns on investments and increased job creation may be, we must first review realistically the necessary preconditions.

A more predictable contractual environment that our present laws and practices permit is an important precondition for successful U.S.-Soviet joint ventures. Stable and focused export controls and embargo-proof contracts are essential for sound long-term agreements in production of manufactured goods. Without such stability the Soviets will prefer to look at European and Japanese allies as trading partners. The approval of exchange of scientific and technological information would also be beneficial.

An effective Western control policy must be both multilateral and narrowly targeted as indicated both by the recent study of the National Academy of Sciencies and the Reagan administration's policy on competitiveness. Efforts to curb nonstrategic technology transfer could alienate our allies,

whose cooperation is required for a workable controlled system. In particular we need:

Sharply focused export controls honored by all Western industrial countries and related to specific weapons-system enhancement.

Within this agreed, protocol, increased discipline, intelligence exchanges and indigenous penalty procedures, to assure that incidents such as the Toshiba-Kongsberg sale of propellor-machinery equipment do not erode our defenses.

Other aspects of normalized commercial relations such as import and credit restrictions would also need to meet the test of security.

Most important, Gorbachev's economic reforms are ultimately a domestic issue in the Soviet Union. Where economic interdependence can serve the interests of the West, we should proceed.

Some success in his efforts to modernize and raise efficiency in the short run may assure Gorbachev's tenure in office. Failure may mean that the Soviet Union enters the next century as a relatively backward, but increasingly truculent, second-class economic power. That would not be in the best interest of the West.●

FORMAL NOTIFICATION

PROPOSED ARMS SALE

● Mr. PELL. Mr. President, section 36(b)(1) of the Arms Export Control Act requires that Congress receive formal notification of proposed arms sales under the act in excess of $50 million, or, in the case of major defense equipment as defined in the act, those in excess of $14 million. Upon receipt of such notification, the Congress has 30 calendar days during which the sale may be reviewed. The provision stipulates that, in the Senate, the notification of proposed sales shall be sent to the chairman of the Foreign Relations Committee.

In keeping with my intention to see that such information is available to the full Senate, I ask to have printed in the RECORD the notification I have received.

The notification follows:

DEFENSE SECURITY ASSISTANCE AGENCY,
Washington, DC., November 4, 1987.

In reply refer to: I-15619/87ct.

Hon. CLAIBORNE PELL,
Chairman, Committee on Foreign Relations, Washington, DC.

DEAR MR. CHAIRMAN: Pursuant to the reporting requirements of section 36(b)(1) of the Arms Export Control Act, we are forwarding herewith Transmittal No. 88-04, concerning the Department of the Army's proposed Letter(s) of Offer to Austria for defense articles and services estimated to cost $18 million. Shortly after this letter is delivered to your office, we plan to notify the news media.

Sincerely,

GLENN A. RUDD,
Acting Director.

[Transmittal No. 88-04]

NOTICE OF PROPOSED ISSUANCE OF LETTER OF OFFER PURSUANT TO SECTION 36(b)(1) OF THE ARMS EXPORT CONTROL ACT

(i) Prospective Purchaser: Austria
(ii) Total Estimated Value:

	Millions
Major defense equipment [1]	$17
Other	1
Total	18

[1] As defined in section 47(6) of the Arms Export Control Act.

(iii) Description of Articles or Services Offered: Eighteen M109 155mm self-propelled howitzers with machine guns, tool and shop sets, small arms, support equipment, spare parts and a quality assurance team.

(iv) Military department: Army (UXG).

(v) Sales Commission, Fee, etc., Paid, Offered, or Agreed to be paid: None.

(vi) Sensitivity of Technology Contained in the Defense Articles or Defense Services Proposed to be Sold: None.

(vii) Section 28 report: Included in report for quarter ending 30 Jun 87.

(viii) Date Report Delivered to Congress: November 4, 1987

POLICY JUSTIFICATION

AUSTRIA—M109 155MM SELF-PROPELLED HOWITZERS

The Government of Austria has requested the purchase of 18 M109 155mm self-propelled howitzers with machine guns, tool and shop sets, small arms, support equipment, spare parts and a quality assurance team. The estimated cost is $18 million.

This sale will contribute to the foreign policy and national security of the United States by helping to improve the security of a friendly country which has been and continues to be an important force for economic progress in Europe.

The Government of Austria needs these howitzers to improve the range and mobility of its artillery and to augment its defensive firepower. Austria will have no difficulty absorbing these howitzers into its armed forces because it already has similar weapons in its inventory.

The sale of this equipment and support will not affect the basic military balance in the region.

The prime contractor will be Bowen McLaughlin York of York, Pennsylvania.

Implementation of this sale will require assignment to Austria of two additional U.S. Government personnel and three contractor representatives for three weeks.

There will be no adverse impact on U.S. defense readiness as a result of this sale.●

INFORMED CONSENT

● Mr. HUMPHREY. Mr. President, today I begin a new series of letters received in my office in support of informed consent. Already, this body has heard testimonies from women in every State who have suffered traumatic effects from abortion—effects they were never warned might occur. Sadly, the number of such cases continues to rise due to the fact that abortion clinics are not required to fully inform patients about the risks, effects, and alternatives to abortion. It is an injustice that should not be allowed to continue.

Mr. President, my informed consent legislation, S. 272 and S. 273, would go a long way toward ending this injustice toward women by requiring medical personnel to provide all the appropriate information. I urge my colleagues to support the bills.

I also ask that two letters from women in Alabama be entered into the RECORD. Both letters clearly demonstrate the need for informed consent.

The letters follow:

DEAR SENATOR HUMPHREY: My husband left me when I got pregnant. I had been on a mild tranquilizer before conceiving and my doctor convinced me that the baby would be born with severe birth defects. At this point, I was so confused that I couldn't think clearly so I went along with everyone else's advice. They were just as misinformed as I was and they thought they were doing what was best for me at the time. I fully expected the clinic to tell me a little about what was happening during and after the abortion. All they did was take my $225.00, give me 5mg. valium and asked me please not to cry and appear so upset. I could not help it, I didn't want to be there. I have wished so many times I could have left there with my precious baby.

The part I've relived the most was the actual abortion procedure. I remember going into a room, laying on a table, and looking around. The "doctor" came in and said "I'll begin now." He turned on the machine and began suctioning. The pain was awful. It felt like my stomach was being drawn through a very strong vacuum. I remember looking in a jar or bottle of some sort and it whirled around and it was full of blood and pieces of white tissue. After they were through, I began to cramp very badly. My emotions went haywire.

After the abortion, I grew more and more depressed and two weeks later, I couldn't take it anymore and tried to commit suicide by cutting my wrists. I was rushed to the hospital and they explained I had suffered a nervous breakdown of unknown origin. In the back of my mind I knew why, but to talk about it hurt too much. I was sent to Searcy, our state mental institution—I was kept locked in a ward for 5 weeks. By the time I got out I had built such a wall around myself that no one would hurt me again and I wouldn't have to think about the abortion. The female problems continued. Pelvic infections, low grade fever, continuous bleeding, they never ended. At this time I began to have nightmares, I'd wake up in a cold sweat because I'd hear my baby crying for me but I couldn't find him, or I'd hear that suction machine over and over again. I also began to engage in casual sex with multiple partners, some I didn't even know.

David, my present husband and I had just begun dating, and after a couple of months I was pregnant. David was very upset and blamed me for getting pregnant because he thought I was on the pill. Dave said he was not ready to begin a family and he would pay for an abortion. All I kept thinking was I barely made it through the last abortion I can't go through that again. "I won't have any more children if I have it done again, I told them. "Oh, sure you will," they told me." I knew better.

My second abortion was performed on July 23, 1977 at the same clinic where my first abortion was performed just nine months before. This time the pain was worse because the doctor said I had a cyst

the size of a grapefruit on my ovary and a yeast infection. He said it would be better if we waited, but since I was from out of town we would go ahead.

I had to go into the hospital 4 days after my 2nd abortion for acute Pelvic Inflammatory Disease (P.I.D.), a painful infection in my fallopian tubes. One tube and ovary, about to rupture, had to be removed. In February, 1978, at 19 years of age, my doctor performed a complete hysterectomy, taking all reproductive organs. Because I was put into instant "post-menopause" I was prescribed injectable hormones that I must stay on for the 30 some years to come until my normal "change of life".

The psychological problems were numerous. David and I couldn't even talk about the abortion without physically abusing each other. We then adopted a daughter and I was so proud of her. I loved this child with every ounce of my being, but she was a constant reminder of the two precious babies that would be playing with her but were not. I hated myself for what I had allowed to happen. I became anorexic, slowly starving myself to death.

My health had steadily gotten worse. My weight continued to drop from a once 160 lbs. to 90 then 85 and I was successfully starving myself to death. I was going to avenge my kids with my death. Then the pain would be gone and the price would be paid. Then they took my daughter away from me and said I couldn't have her back until I was well enough. I withdrew into my home. I barricaded myself in with my husband and daughter gone. If someone came around I got a loaded gun and held it on them. I couldn't take anymore! My whole being was threatened.

My feelings were awakened through an organization who's counselors listened to women like me and did not judge. They simply cared and loved unconditionally. I've found healing in Christ Jesus. I asked for His forgiveness and He freely gave it to me, all I had to do was reach out and take it.

I feel these tragedies in my life can be used to help someone else because I understand the depth of the pain and grief that goes with losing a child through abortion. My purpose now is to see that other women have a chance to know that someone cares and is willing to love them through this healing process.

JANET WILLIS, *Alabama.*

DEAR SENATOR HUMPHREY, Abortion, that is a very haunting word for me. October, that is a very painful month for me. Yes, October 30, 1981 I had an abortion. The day before Halloween, I was 16 years old and very scared. My boyfriend left me to face it all alone. And I mean all alone. I couldn't tell my mother, I had just lost my father in death the June before. The only person that knew was my stepsister. She took me to Mobile, AL on that awful day. I went in and paid that lady $280.00 to take the life of my first child. I wonder was that baby a boy or girl. She didn't tell me much, just that it wouldn't hurt, that it was totally painless. But boy she was wrong! They took me to the back to run several tests (told me it was to check for venereal diseases). They gave me 2 pills to take and I had to wait 30 minutes. Then it was my turn. That table was so cold. That doctor's eyes were so cold. I begged him to be easy with me but he was so rough and hateful. All he wanted was my baby. That machine, I'll never forget that awful machine, the noise it made still makes me shiver. The pain I felt—all I could do was ask myself why? Why had I let them take my baby.

Well, they put me on pills and said come back in 2 weeks. I never went back. I went home and 2 days later took a bottle of 50 Tylenol. All that did was make me sick. All this happened nearly 6 years ago. Momma still doesn't know it. But I can't forget it. I've learned to cope with it but the pain will never leave me. It interfered with my first marriage a lot. It's very painful at times for me to have sex. Was the abortion the cause of it? I have no idea. I have a beautiful 2 year old baby now. She's the most precious thing in my life. I had a fear for a long time that because of that abortion I would never have a baby. But I prayed for a long time for my little girl and I finally got her. My life is finally falling into place and I'm so happy. I just had to get this off my mind. I had no one else to tell and since you don't know me, I thought I could tell you.

Abortion is one thing I would never recommend to anyone. Especially a 16 year old girl. It really messes up your life. I have just gotten the Lord into my life and He is really helping me. I have met a wonderful person and I'm really happy for the first time in my life.

ANONYMOUS●

"JUSTICE FOR ALL" DAY—NOVEMBER 17, 1987

● Mr. METZENBAUM. Mr. President, one of our Nation's founding principles is "justice for all." On November 17, 1987, in every part of the Nation, more than 50 national organizations and hundreds of local groups will reaffirm that principle.

The Justice for All Day is sponsored by a coalition of organizations, including leaders of various religious faiths, the business community and labor.

The objective of this day is to provide opportunities for forums, hearings, teach-ins, town meetings, and discussions about the facts and issues, the myths and realities of poverty. The hope is to raise the consciousness of the American people to the plight of the poor.

Currently, 32 million of our citizens live in poverty; two-thirds of them are working poor—the fastest growing group of poor. One of every five children under age 5 is poor. Poverty afflicts two-parent as well as single-parent families of every race and ethnic background. It exists in rural and urban communities, in every part of our Nation. It afflicts farmers, women and children, veterans, the old and the disabled, the employed as well as the unemployed.

My State of Ohio is participating actively in this day of justice for all. To raise awareness of poverty, major events are scheduled, including forums, speakers, hearings, teach-ins and numerous other community events at universities, religious centers, community centers, women's shelters.

As the day of our national thanksgiving draws near, I commend the organizations and individuals participating in Justice for All Day. Senator KENNEDY and I sponsored a resolution for that purpose, which was passed by the Senate. I urge all Americans to recognize November 17 as a day of awareness, a day to reflect on the realities of poverty, the successes, and the continuing struggle to find solutions. It is a day to demonstrate the generosity of the American heart.●

THE NAMING OF O'DEAN P. JUDD AS CHIEF SCIENTIST FOR THE STRATEGIC DEFENSE INITIATIVE ORGANIZATION

● Mr. DOMENICI. Mr. President, I wish to congratulate Dr. O'Dean P. Judd on being named chief scientist for the Strategic Defense Initiative Organization [SDIO]. Dr. Judd will serve as the primary science adviser to the Director of SDIO, Lt. Gen. James Abrahamson.

I take special pride in recognizing this appointment since Dr. Judd is a resident of New Mexico. During the last 15 years, Dr. Judd has worked at Los Alamos National Laboratories as a technical manager and scientific researcher in the areas of laser fusion, laser-induced chemistry and isotope separation, and in the development of high-power gas lasers.

Since 1981, Dr. Judd has been Los Alamos' chief scientist for defense and research applications. During this time he was also involved in many government committees related to strategic defense and as a technical adviser to SDIO. He has also served as an adjunct professor of physics at the University of New Mexico. Dr. Judd holds several patents on lasers and has published extensively in many scientific and defense-related areas of research and development. He is a senior member of the Institute of Electronic and Electrical Engineers, and a member of the American Physical Society and the American Association for the Advancement of Science.

Dr. Judd's experience and expertise make him uniquely qualified for such an important position within SDIO. He has doctoral and master's degrees in physics from UCLA. His primary responsibilities at Los Alamos included technical evaluation of progress involving high-power lasers, particle beams, kinetic-energy projectiles, and nuclear-directed energy. It is precisely these technologies on which our country may someday rely for its defense against nuclear weapons.

Los Alamos has been at the forefront of SDI research and development, particularly in the areas of neutral particle beams and free electron lasers. Dr. Judd has been one of the pioneers in the development of these promising technologies. He is a fine addition to General Abrahamson's

staff—one who will help ensure the success of the SDI Program.●

FRAUD OF THE DAY—PART 13

● Mr. HEINZ. Mr. President, today I am not going to address a specific fraud as I have been doing in the past, but instead I am going to discuss fraud in an entire industry: textiles and apparel. I do this, I hasten to add, not because I have run out of material—there is plenty left—but because the fraud problem in this sector is so pervasive and so serious.

This is an industry which has been sorely tested over the past few years. Unemployment is up; sales are down; imports are increasing; and the general outlook for the industry is definitely not good. Add to that the general depression in the industry over the large amount of customs fraud which involves textiles and apparel, and you have a very serious problem indeed.

In 1986, Customs Service agents seized 510 shipments worth $28.5 million. In 1987, both the number and worth of the seizures increased significantly. Agents seized 1784 shipments worth $113 million. Some of this increase is attributable to a new Customs Service policy of using portable scales to weigh textile and apparel imports on the pier. The majority of shipments seized had papers which underdeclared the weight of the shipments, a tactic which permits importers to evade quota limits based on weight equivalents.

Agents also made many seizures of textiles manufactured in the People's Republic of China. These textiles were imported using fraudulent visas which allowed shipments to this country far in excess of the amounts permitted by quota. The other scam which resulted in significant seizures involved the violation of trademark and copyright laws.

Much of the increase in seizures can be attributed to increased diligence on the part of the Customs Service, in part enhanced by the increased use of more sophisticated equipment such as portable scales. Yet it is also clear that the dramatic increase in seizures was not solely a result of increased enforcement efforts. Some of it occurred simply because of an increase in the overall incidence of customs fraud.

As customs fraud grows in seriousness and magnitude, we need to develop more creative means of tackling it. One such solution is a private right of action in customs fraud cases as provided in the amendment adopted by the Senate last July 15.

When considering such a proposal, Senators need to keep in mind that this is fundamentally not a trade policy issue but rather an integrity and credibility issue. Attacking customs fraud does not mean passing more laws to restrict imports. It does not mean "tilting" the playing field to help American parties win unfair trade practice cases. It does not mean limiting the President's discretion to resolve trade policy disputes bilaterally.

What it does mean, very simply, is providing additional tools to combat violations of existing law. It is not a matter of protectionism or of trade policy. It is a matter of combating criminal activity. People who commit customs fraud are breaking our law. Period. And in doing so, they are injuring innocent domestic parties. Anything we can do to increase the risks and costs of engaging in such criminal activity and make the apprehension and subsequent prosecution of such people more likely is not only desirable but imperative.

Mr. President, earlier in this series I discussed customs fraud in the photo album manufacturing industry. Recently, I received a letter from a domestic producer of albums strongly supportive of my amendment. The principle argument of the letter centered on the strong deterrent value a private right of action would have against customs fraud. The latter also stresses the fact that such an amendment would help the chances of successful prosecution in such cases. This letter clearly shows the need for the Senate amendment. Mr. President, I ask that this letter be printed in the RECORD.

SPM MANUFACTURING CORP.,
September 18, 1987.

DEAR SENATOR: I am writing to express strong support for Senator Heinz's amendment providing for a private right of action in the United States Court of International Trade for those who have been victimized by customs fraud. This amendment and all other provisions which seek to deter unfair trade practices are vital and must be passed.

My family-owned company manufactures photo albums. Since 1984, we and the other firms in our small industry have been targeted by photo album companies in Korea. These Asian companies have been engaged in massive circumvention of an antidumping order since December 1985, when the Commerce Department imposed an antidumping duty of 64.8 percent on photo albums and photo album pages imported from Korea.

This circumvention is clearly demonstrated by the incredible shift in exports from Korea to nontraditional export markets.

A comparison of photo album exports from Korea in the ten months before and after the Commerce Department's final antidumping determination reveals a 121,065 percent increase in exports to Singapore and a 904 percent increase in exports to Hong Kong.

The ultimate destination of the photo albums exported from Korea is confirmed when one examines surging U.S. imports from these same countries. Imports from Taiwan, Singapore and Hong Kong in the first five months of 1986 following the antidumping order against Korea experienced increases of 1,300, 860, and 95 percent respectively, over the same five months period in 1985. This overall trend has continued, and the number of Asian countries being used as circumvention routes has increased.

In fact, in a Letter to the Editor (attached) published in the International Herald Tribune on September 4, 1987, Ambassador Koh from Singapore admits that about $1 million of South Korean photo albums were transshipped through Singapore in 1986, and an unspecified additional quantity of albums with Korean filler pages were also shipped to the United States marked with Singapore as the country of origin during that same war. Statistics demonstrate that Ambassador Koh may not yet have the full facts.

A recent article in the Korean Herald reported an increase of 60 percent in photo album exports in the first five months of 1987, in the face of the imposition of a dumping duty by the U.S., by far the largest photo album market in the world.

The domestic photo album industry has been working with the Customs Department since early 1986 in an effort to stem the massive circumvention of the antidumping order. But the methods which Customs must use make this a cumbersome and ineffective means of battling such pervasive fraud. So far the illegal flood continues, unabated.

Everyone is aware of the alleged scarcity of resources available to combat commercial fraud. But an increase in available funds and manpower alone is not an adequate solution to the widespread customs fraud United States industries are facing.

The Customs Department must gather evidence for each case against each importer individually. When several companies are engaged in fraud, and when the fraudulent goods are being transshipped through numerous countries and imported through many different ports, this is a very time consuming and exceedingly difficult process. The procedure for gathering evidence is complicated by the extremely limited jurisdiction the United States Customs Department has in foreign countries. There is no way to require foreign companies to permit our agents in their facilities, nor to open their records and premises to the type of scrutiny which is necessary to detect fraud. A United States customs agent must rely on either his ability to bluff or the willingness of the company being investigated to cooperate. The latter seems most unlikely in situations where the companies are most guilty. Further, there is no provision permitting the drawing of negative inferences in legal proceedings when a foreign company refuses to cooperate.

Meanwhile, dumping continues. Circumvention continues. Domestic sales slump. Jobs are lost.

A private right of action will permit the company harmed by fraud to take action to receive compensation for business lost to fraudulently imported merchandise.

The Heinz amendment would add a badly needed weapon to the very limited arsenal available to the hundreds of domestic industries which are suffering severely because criminal competitors engage in undetected and/or undeterred customs fraud. Only when foreign companies and domestic importers believe that they are truly at risk when they engage in fraud will there be any hope of bringing this problem under control.

We need this weapon. It is not the solution, but it is a significant aid. If you have any questions about this need, or about the problem of pervasive illegal circumvention, or the need for any and all other provisions

of the trade bill which combat unfair trade, please ask your staff to contact me.

Sincerely,

FRANCES SHAINE,
Chairman.●

BUDGET BLAME RESTS WITH CONGRESS

● Mr. GARN. Mr. President, as my colleagues know, I've been involved with the Senate Banking Committee for the entire 13 years I've been in the Senate, serving as chairman for 6 years. I've had the opportunity to spend considerable time dealing with the financial markets. We have a responsibility in the committee to oversee the proper operation of the security industry, as well as savings and loans, banks, credit unions, et cetera. I've also had the opportunity over these years to be exposed to some of the world's greatest economists, testifying before the Senate Banking Committee, on the state of the economy. The one characteristic that has been consistent about all of them is how wrong they have been. It's funny to watch them come before the committee in January or February of each year, make their economic projections for the following calendar year, and then come back the next year and explain why they were wrong when they gave their projections in the previous year.

Obviously, we've had great turmoil in the stock market in the last couple of weeks. A 508 drop in 1 day is certainly not only dramatic, but very drastic. It's easy for one to want to start trying to analyze why this occurred. I believe the first and most obvious reason is that the market was overvalued. There is no doubt that when one considers the market has gone from a Dow of 1,000 to over 2,700 in such a relatively short period of time, and that earnings ratios are at historic high, that the market was overvalued. This still doesn't explain why it came back down so dramatically in 1 day.

There are people who are saying that it was obviously the domestic deficit. Well, that explanation is somewhat misguided because if the market drop was only a result of the domestic deficit, then the result doesn't reflect the recent drop in the deficit, as bad as it still is, but which is now better than it has been. The deficit came down quite sharply last year as a result of Gramm-Rudman-Hollings, and I expect it will come down automatically whether or not a compromise of $23 billion is achieved between the administration and the Congress. Imposing automatic sequesters may not be the nicest way to do it, but the fact remains that the deficit will come down by that amount.

One can say, "Well, it's the trade deficit." This also doesn't make complete sense since the trade deficit, as bad as it is, has softened a little over the last 2 or 3 months. One can say, "Well it's the value of the dollar." This response is also not entirely true since the dollar has been fluctuating between $1.43 and $1.44 per yen. I was in Japan in April when it got down to $1.38. And only recently it dipped to around $1.33.

What this scenario portrays is that one can start looking at all the individual pieces, and conclude that it doesn't make any sense for any one item to cause the problem. And that is right. But what we have to do, in my opinion, is look at all of these issues together. One will see a trade deficit that has been running at $15 billion a month and a national debt that, while it has improved slightly over the last year, continues to be in excess of $2 trillion.

Since the budget deficit is now receiving considerable discussion in Congress, in the media, and in our home States, I want to restate my previous words before this body to put this issue in perspective for my colleagues. When I was first elected to the Senate 13 years ago, Gerald Ford was President. I can remember sitting on the floor of the House when he gave his State of the Union Message and then receiving his budget recommendations in which he requested $295 billion. Congress passed a budget of $318 billion. Isn't it amazing that today we are pleased to say that we have reduced the deficit down to $170 or $175 billion, and 13 years ago, we were running the whole Government for $300 billion?

Twenty-five years ago, when John Kennedy was President, he was the first President to preside over spending $100 billion in 1 year. Think of it. It took 174 years for this country to spend $100 billion in 1 year, 9 years for the second $100 billion, and 4 years for the third $100 billion. And then I consider that in my Senate career, I have been here to see 300, 400, 500, 600, 700, 800, 900 and $1 trillion spent in 1 year, and all this is just slightly over two terms in the Senate. It is simply mind-boggling.

And then consider revenues. I disagree with those, based on this history I just related, who say the problem or reason that we're in this situation is because we don't tax the American people enough; it's revenues that is the problem. I recently submitted an article from the latest issue of Readers' Digest into the RECORD which documents that over the last 40 years of tax increases, for every dollar of new taxes Congress has taken from the American people, it has spent $1.47. And in 1982, I was so concerned about the deficit at that time that I voted for TEFRA, the Tax Equity and Fiscal Responsibility Act of 1982. I voted for the tax bill of 1982 because I was promised that for every dollar of tax increase, there would be a dollar of expenditure reduction, and this plan would reduce the deficit by $196 billion over 3 years. So we in Congress increased taxes in 1982, and for every dollar that we taxed our constituents, we spent $1.06. These examples should hopefully unravel the glue that holds the revenue argument together, since all the rhetoric being stated on Capitol Hill and from the news media is that the only solution to the deficit is a tax increase.

And this solution is being proclaimed from all corners. Recently, I was home in Utah and good, conservative businessmen came up to me and said, "Jake, I don't like a tax increase, but we've got to have one. That's the only solution to the problem." Boy, the psychology that is rampant in this country, particularly since the stock market drop on October 19, that a tax increase is the solution to the problem.

Mr. President, I just get so terribly frustrated on this issue. I'm glad I don't have hair because I'd be pulling it out if I did. The lack of revenue is not the problem—it is too much spending. It shouldn't matter whether one is a Democrat or Republican or liberal or conservative; the issue is clear. Maybe we need to get some old-fashioned accountants up here, with their green eyeshades and black armbands, to strip away all the rhetoric on this matter and just look at the facts as the budget progresses. If we did that, my colleagues could come to only one conclusion—that we simply have been totally and completely fiscally irresponsible on the spending side. This is the nature of the budget problem, because we are still being taxed at historically high rates in this country.

And yet Congress wants to find some scapegoat. They want to blame the Fed, saying that it is obviously the M's—how or what the M1 or M2 money supplies are this weekend.

And of course, we blame Ronald Reagan. We say it is his fault. Well, everyone is entitled to their own opinions, but they are not entitled to their own facts. And the fact of the matter is that no President of the United States has ever spent a dime not appropriated by Congress. A President can recommend a budget, he can yell, scream, plead, shout, veto, but ultimately, he does not spend any money not appropriated by Congress. Not George Washington, not Abraham Lincoln, not Harry Truman, and not Ronald Reagan. It is rather immaterial what a President sends up in a budget because if Congress doesn't like it, we have the constitutional power to change it. Every single dime of the $2 trillion deficit and above has been appropriated by the Congress of the United States—no one else, not the Su-

preme Court, not a President, not Paul Volcker—Congress.

All Members of Congress are proclaiming themselves as fiscal conservatives now, particularly within the last week and a half, although many don't vote as such. It is ironic that in the middle of this entire problem and the current economic summit to decide a compromise and the mix of spending cuts and also tax increases, the Senate has been debating the issue of catastrophic health insurance. It doesn't make any sense to me that in the middle of this budet crisis—and despite how great the need for some form of catastrophic health insurance—we are talking about creating a huge, new, bottomless pit, entitlement program. If anyone thinks this limited measure now before the Senate is the end of catastrophic health insurance, then they believe in the tooth fairy. This program will simply start out rather modestly, and 5 or 10 years from now, when somebody looks back and asks, "What happened to catastrophic health insurance?", no one will recognize that modest program. I challenge my colleagues to show me a program whose original estimates when we started the program in Congress have any comparison to their ultimate cost.

Mr. President, I don't care what kind of compromise the budget negotiators develop; I don't believe it is going to attack the basic fundamental problem of a Congress that has been out of control for several decades, and continues to fund more and more additional programs over which we have no control. As I have indicated on this floor before, and to ensure that my colleagues are aware of this information, I repeat the fact that less than one-third, or about 30 percent, of the Federal budget is subject to the appropriations process. This means about 70 percent of the budget, in round numbers, consists of entitlement programs. They are funded year after year in ever increasing amounts without any constraints or limitations on their funds.

I want to give a specific example. I served for 6 years as chairman of the HUD-Independent Agencies Appropriations Subcommittee, and I am now the ranking Republican on the subcommittee. This subcommittee appropriates funding for housing and HUD, and such independent agencies as EPA, the Veterans' Administration, NASA, the National Science Foundation, and several others. The subcommittee's budget totals $60 billion, just in this one little subcommittee. As my colleagues know, the budget committee establishes the framework and provides a subcommittee with a 302(b) allocation, which doesn't designate we spend each dollar within that particular subcommittee, but states the total funding level, such as $59.2 billion, that we are allowed to appropriate. How we or any subcommittee does this as appropriations is our business.

In my subcommittee, over 60 percent of that $59 or $60 billion is entitlements programs, and we can't touch them. When you make a cut and have to cut x number of dollars, it comes out of the 30 or 40 percent. So where does it come from? It comes out of NASA, it comes out of the National Science Foundation, it comes out of housing, it comes out of EPA, it comes out of Superfund, but the entitlements programs just roll on, getting their ever-increasing amounts due to indexation and depending on the number of people who are eligible to apply. They are untouchable. Congress doesn't have the courage to touch entitlements.

It seems to me that when we are dealing with a crisis, a budget crisis like we are, that everything should be on the table—every part of the Federal budget, whether it is on-budget or off-budget items. The financial markets are smart enough to know that the deficit is much larger than it appears for many reasons. My colleagues may not be aware that the Federal Reserve System produces a profit in excess of $15 billion a year, which is over and above their operating expenses. Why is that? It is because this money isn't taxpayers' money, but money paid by member banks and institutions for the service that are rendered by the Fed. These banks totally operate on their own and produce that much money for the Treasury. Social Security has its own trust fund, which isn't direct tax dollars. The airport development fund consists of money that is collected on every airline ticket for the improvement of airports. But do we spend it on the improvement of airports and updating the Federal Aviation Administration system? No, because if we did, that trust fund would make the deficit look bigger.

We're playing games in Congress with on-budget and off-budget items, and I would suggest that nothing should be out of consideration for budget cuts, including Social Security, including veterans' pensions, Federal Civil Service and military retirements, and other entitlement programs. I have no trouble making this suggestion because I have been advocating it for years. This doesn't mean I support making cuts in Social Security. I'm just saying that we can't solve this budget problem in excess of $2 trillion, which we are adding to at the rate of a couple of hundred billion dollars a year, unless we are willing to look at the entire Federal budget, on- and off-budget, and make some tough decisions. We can't do it with one-third of the on-budget items and let the other trust funds roll on.

Again, I'm not advocating a cut in Social Security, but 3 years ago if the House had followed the Senate's lead, this crisis would not have been nearly as severe. I'm referring to the Senate vote of 49 to 49, with the Vice President breaking the tie, that would have imposed a freeze across-the-board in the 1986 budget resolution. We voted at that time to freeze military expenditures for 1 year; we voted to freeze Social Security, and veterans' pensions, and Federal Civil Service and military pensions, and all the other programs for 1 year. This type of plan involves an enormous amount of money if it is successful. We were not talking about cutting anyone in 1985. Certainly we were not talking about cutting Social Security. The Senate simply asked everybody to stand still for a year and go without an increase. Amazing. We wouldn't even need to cut any program if we just say, "Would everybody stand still for 12 months and get along with what you had the year before?" But we're not willing to do that, and if this past week is any indication, it appears those from the House and the Senate now meeting meet with the Presidential staff, lack the coverage to deal with the entitlements programs. I'm convinced the economic summit will only be making some additional cuts in the 30 percent, which has, in many cases, already been cut too much, and talking about tax increases, since we're going to exclude 70 percent of the budget from even being considered for any changes whatsoever.

If I sound angry, I am. Congress is not being honest with the American people. We are playing games with the American people. We are buying votes with the taxpayers' dollars, and we don't even have the courage to talk about 70 percent of the Federal budget. So what do we do? We pass Gramm-Rudman-Hollings. This legislation is a monument to our institutional irresponsibility. It's very existence simply means that we haven't got the courage to deal with what we are elected to do. We don't even pass separate appropriations bills anymore. Last year the budget process broke down so badly that we passed one giant continuing resolution, with all 13 appropriations bills molded into one large bill, for the entire year. A continuing resolution is suppose to be used when Congress reaches the end of a fiscal year and hasn't been able to agree on all the budget appropriations bills. A one-liner that says, "We continue appropriations for this department of the Federal Government for 5 days at last year's levels." I don't think taxpayers can imagine electing A Congress—535 people—for the sole purpose of running the Government, which use to finish the fiscal year by June 30 but nowadays has not been able to and therefore has extended the fiscal year to October 1? That is not a

solution to the problem; it's a poor excuse. Instead of working harder earlier in the year, we now have 3 months longer each year in which to not do our work.

And so here we are on the 10th of November, still operating on a continuing resolution, with a national crisis of a trade deficit and a stock market that doesn't know where it's going. It's the 10th of November and we still haven't approved a single appropriations bill for 1988. We're having these crisis talks to come up with a bipartisan solution which probably will not include 70 percent of the budget. Yes, I am angry. I am sick of it. I have had a belly full of elected, public officials who have a greater desire to get themselves reelected than to cast some votes that might solve the crisis. It makes no sense to me at all; it didn't 3 or 4 years ago, and it makes even less sense now.

I'm encouraging my constituents not to believe any politician. It is unfortunate we have reached this point but they shouldn't believe what we are saying to them. Instead, it's time they carefully examine our voting records, both Senators and Congressmen, before the 1988 election, and see if we are voting the way we talk. I do that at home. I have no problem going home to my constituents in Utah and saying, "Check up on my voting record. It will match what I say." Unfortunately, there are too many of us who don't do this.

I think all Americans should determine which of their representatives are cosponsors of a balanced budget amendment. Again, another gimmick around here. It is easy to say that we are for a balanced budgt amendment, and then vote for every appropriations bill that comes along. Supporting a balanced budget amendment does not count; it counts how we vote on the actual spending measures that appropriate dollars for the running of this Government. One appropriations bill that is really interesting to me and the biggest, most wasteful bills we consider, in my opinion, is the legislative appropriations bill. Maybe we should again call up our accountants who could calculate for us the growth of senatorial and congressional staff over the years—the cost of running your Congress. It is startling. If one were to go back 10 years and look at the difference between today and 10 years ago, I'm sure it would amaze all of us. And then we have the audacity to say that we are for a balanced budget amendment, but we won't even discipline ourselves on the running of Congress. Forget the programs that have political impact at home that make constituents feel good. The legislative appropriations bill doesn't do that. It doesn't provide health care for anyone. It doesn't provide pensions. It doesn't do anything for the general public of this country. There is a large number who are cosponsors of a balanced budget amendment who won't vote for a 2-percent across-the-board cut in the legislative appropriations bill. Our constituents should check up on us and take some time to examine our records. They should ask us to supply them with our voting record on money bills, and see if it matches our rhetoric. If it doesn't, they should get someone else to represent them. They should elect someone who will vote in Washington the way they talk when they are in the home State.

The reason I get so worked up about this issue and the economic summit that is playing with only 30 percent and not the entire Federal budget, is because I've got seven children and four grandchildren as of October 15, and I am getting to an age where what happens in this country is not going to have a major affect on my life one way or another. But I really wonder what Congress is going to do for my little kids, my 5-year-old daughter and these little grandchildren. I wonder what kind of things we are planning today that will affect the kind of budget deficit existing in years 2010, 2015, when my children will be at the marrying age. That is very disturbing—very, very disturbing to me, especially considering when I came here 12 years ago, we had a budget totaling $300 billion. If anybody had told me at that time that I would be in the Senate long enough to see a $2.4 trillion deficit and interest on the national debt in excess of $140 billion per year, which was half of what we were running the entire country when I was first elected, I would not have believed it.

Getting back to my opening statement, individually each of these things are not the cause of the economic problems in this country. But collectively, they are, and the only body that can do something about it is the Congress of the United States. No matter how much we want to blame someone else, we cannot. I remind my colleagues of the fact that only Congress can appropriate money; only Congress has the ability to fund programs. The President does not, the Chairman of the Fed does not, and I think it is time Congress started being responsible.

If I could have one constitutional amendment that I think would do more good than any other single thing, one that could happen with the snap of my fingers, it would be an amendment limiting a President to one 6-year term, Senators to two 6-year terms and Congressman to three 4-year terms. Maybe if we didn't have the incentive to be here for 35, 40, or 50 years because we believe we are so valuable to our constituents, then we might start seeing some courage and some statesmanship around here. I don't think the Founding Fathers ever intended that we have a professional legislative body that stays in session from January until December, year after year after year, and which even in a full year cannot finish its work by the end of the fiscal year. This doesn't occur once in a while, but occurs year after year after year.

It serves no useful purpose to blame Republicans or Democrats for our situation. Oh, we could play that game. I could give a partisan speech about how much more responsible Republicans are, backed by the voting records to prove it. But who really cares at this point? The country has a very serious problem, and I would suggest Congress ought to start being Americans first, rather than Republicans or Democrats, and start showing a little political courage to make some tough decisions rather than always trying to cast them on the basis of how will I look by November 1988.

Mr. President, I appreciate the indulgence of my colleagues while I express these heartfelt concerns about our country and the road it is traveling. This is an important issue, now and for the future. There is no other body in the world who has the responsibility and the opportunity to solve this crisis than the U.S. Congress. I hope we don't stand idly by and allow the economy and the country to falter, all in the name of partisan politics. If we do, then we are not worthy of the sacred responsibility to govern.●

NATIONAL WOMEN VETERANS RECOGNITION WEEK

● Mr. DOMENICI. Mr. President, I rise today to pay tribute to our Nation's women veterans. While we honor all veterans across the country on November 11 in Veterans Day ceremonies, let us also remember the great contributions women have made in our Armed Forces.

Through their sacrifices on behalf of all Americans, women in the Armed Forces have a record of achievement of which they can be justly proud. Their courage, dedication to duty, and unwavering support for our Nation's ideals deserve our sincere gratitude.

Women comprise 1.2 million of our Nation's 28 million veterans. This is a small, but growing, 4.2 percent of our veteran population. While the total veteran population of this country is expected to decline gradually in the years ahead, the number of women veterans will continue to increase because the number of women on active duty in the armed services continues to rise.

The growing number of women veterans is one reason why recognition of women veterans is so important. For this reason, the Veterans' Administration has developed formal plans for the care of women veterans at all VA

medical facilities and expanded outreach efforts to inform eligible women veterans that they are entitled to the same benefits as male veterans.

Recent studies show that women veterans are less than half as likely as their male veteran counterparts to use major VA benefits such as health care and the home loan guarantee program. This is another reason why many Veterans Day activities planned throughout the Nation will include events dedicated to women veterans. Through this dedication, it is hoped that women veterans will not only gain the recognition they deserve, but that women veterans will become increasingly aware of the many benefits available to them.

I wholeheartedly support this week's goal of gaining well-deserved recognition for women veterans' outstanding service to this Nation. And I'd like to add to this goal my hope that word will be spread far and wide that women veterans have the right and privilege of Federal assistance in maintaining their good health, improving their homes, and achieving their life's goal. That is why I am proud to stand before my Senate colleagues now and send a heartfelt "Thank you" to the women veterans of America.●

VETERANS DAY

● Mr. DOMENICI. Mr. President, I rise today with great pride to pay tribute to the nearly 28 million American men and women who are this Nation's veterans. No single group of people is more responsible for securing "the Blessings of Liberty" in the United States.

President Reagan has proclaimed this year's Veterans Day theme as "Veterans, You are America." Given the sacrifices, the hardships, the tireless vigilance, and the untold pain suffered by many of our veterans in the defense of freedom, no theme could be more appropriate. You are America. You have struggled to achieve so much for your country and for the free world, through both World Wars, and the Korean and Vietnam conflicts. Each of these struggles tested the will of our Armed Forces and the very fabric that holds this Nation together.

This year, as it has done for so many years in the past, our Nation will honor the 11th hour of the 11th day of the 11th month with a Presidential wreath laying ceremony at Arlington National Cemetery's Tomb of the Unknown Soldier. This solemn ceremony honors more than the moment of armistice concluding World War I. It acknowledges the thousands of brave soldiers whose identities remain lost.

On this day each year, Federal, State, and local groups join together to commemorate Veterans Day. Veterans organizations, military officials, and communities plan parades, ceremonies, and other observances. We must all take this opportunity to acknowledge the debt of gratitude we owe to this Nation's veterans.

It is with a sense of great pride that I join my Senate colleagues and the people of America in honoring Veterans' Day. My appreciation can best be expressed by reiterating: "Veterans, You are America."●

BENJAMIN CHARNY

● Mr. WILSON. Mr. President, for some time now I have been active in support of the International Cancer Patients Solidarity Committee, a small but brave group of individuals working to free refuseniks with cancer.

Of late, I have been particularly involved in the case of Benjamin Charny, a mathematician who has been denied permission to leave the Soviet Union to seek treatment for his cancer.

Today, the New York Times published a guest editorial from Benjamin Charny. It explains in detail how Mr. Charny's work in mathematics performed over 16 years ago cannot possibly pose any threat to the Soviet Union today. While the Soviets have denied Mr. Charny's visa in order to protect "state security," I can only conclude that there is another reason he is not allowed to leave, and that reason is anti-Semitism. Mr. Charny, like all refusniks, is Jewish.

The denial of basic human rights by the Soviet Government to Soviet Jewry is a matter that must be on the agenda in the December 7 summit. As our distinguished Republican leader, Mr. DOLE, stated on this floor last week, "glasnost is not freedom." Let's do everything we can as individuals and as the people who are supposed to be leading this Nation to see to it that Benjamin Charny is freed.

Mr. President, I ask that Dr. Charny's article from the New York Times be printed in the RECORD.

The article follows:

MUST DEATH BE A SOVIET PASSPORT?

(By Benjamin Charny)

Moscow.—On Sept. 20, Faina Kogan died in Moscow of bone marrow cancer. For many years, she had been refused permission to leave the Soviet Union for the West, where she sought treatment for her illness and reunification with her son.

The reason given by Soviet authorities for the denial concerned the "secret work" her husband, Naum Kogan, had done some 16 years ago. At the time she made her request, her husband's "secret work" was in fact not secret at all. Rather, it became the excuse for keeping a sick woman from receiving medical treatment.

Mrs. Kogan is but one victim of the stamp of false secrecy; she was sacrificed to the state for so-called security interests. Other victims refused on the grounds of state secrecy—refuseniks who have also died in the last year—include Rimma Bravve, Yuri Speizman and Inna Meiman.

For each of these people, years of exhausting struggle to obtain exit visas ended with the granting of permission to leave, but only after it was too late. Each died before having had a chance to receive sufficient care. In each case, "state secrecy" was the reason given by authorities for their refusal.

If the possession of obsolete and arbitrarily classified state secrets remains a legitimate reason for refusing those in need of medical treatment, many other seriously ill refuseniks will share the fates of Mrs. Kogan and the others.

I also have been diagnosed as having cancer. Yet because I am a mathematician and worked on various scientific projects more than 16 years ago, I too have been refused permission to seek medical treatment outside the Soviet Union. Although my theoretical and practical findings were published in unclassified scientific journals, which were translated into English and distributed in the West, I have repeatedly been denied an exit visa. In May 1987, I was officially told that my work during this period is still considered "secret."

As I said, the work was done more than 16 years ago. It is hardly possible to talk seriously about scientific secrecy in any work done so long ago, especially considering the great technological advances made during recent years in the fields of computers and automation.

The only applied problem I worked on between the years 1966 and 1971 was the design of an atmosphere reentry guidance algorithm for a space vehicle returning to Earth from the Moon or another planet. In other words, it concerned the design of software for the on-board computer that controls a vehicle's reentry flight.

This work consisted of two parts, theoretical and practical. The theoretical part, concerning the derivation of mathematical formulas that define the algorithm, has never been secret. Similar formulas were widely published by many authors in the Soviet Union and the United States.

The practical part of my work consisted of adjusting any theoretical algorithm, solving the guidance problem in principle, to specific on-board computers. The capacity of vehicle-borne computers at that time was extremely limited because of computer dimensions and weight requirements.

To "squeeze" a theoretical algorithm in the computer, one had to invent a special mathematical technique, which I did. It was that practical part of my work that was considered secret at that time. Is it possible that this work could still be considered secret today?

Of course not, for the vehicle-borne computer of that period have become hopelessly obsolete. Microprocessors used in today's personal computers are infinitely smaller in dimension and, in every respect—from memory to bit capacity—more powerful. Known theoretical algorithms have since solved the problem in principle by using microprocessors without any tricks.

Utilizing a mathematical technique devised in the 1960's with today's more advanced computational tools is like extracting cubic roots on an abacus instead of doing so by means of a pocket calculator. Thus, the part of my work that was considered secret some 16 years ago has long ago ceased to be secret. That work ceased to be secret the day the first microprocessor appeared.

Seven years ago, authorities acknowledged that much. At that time, they gave my as-

sistant, A. A. Goltsin, permission to leave the Soviet Union. He had carried out computations for me and was educated enough (he was a graduate of Moscow University in mechanics and mathematics) to have understood all the details of my work. It seems obvious, therefore, that the status of all my work ceased to be secret with Mr. Goltsin's departure.

The Soviet visa office has stated that decisions concerning "work secrecy" are made by a chain of authorities from the plant, the ministry and, finally, the visa office. At each link of the chain, a decision is made by people who are not competent to evaluate specialized work—three people openly confessed that much to me.

I. A. Karaculco, deputy chief of the visa office; N. A. Gavrilenco, deputy chief of the General Machinery Building Ministry, and V. I. Lomonosov, deputy director of the Institute of Automation and Instrument Making, all conceded that they are unable to discuss the general tenets of my work from the 1960's. Mr. Lomonosov has refused to draw on competent experts to discuss and re-evaluate the matter of my so-called secret work.

In October, the Forum on Space was hosted in Moscow. The wonderful words "Together to Mars" were the forum's motto. Let it be so, but Soviet officials seem to suggest that we return to Earth quite separately, for they persist in branding my work on vehicle re-entry of some 16 years ago as "secret." My work is no longer secret, and it is obsolete.

Although my life is in danger, I still have hope. I have many hopes. Let us go to Mars together, but let us not go if, in so doing, we trample over the corpses and time-marked lives of the refuseniks, victims of the stamp of false secrecy.●

MEDICARE PRESCRIPTION DRUGS

● Mr. HEINZ. Mr. President, during the debate on October 27 on whether to add an outpatient prescription drug benefit to Medicare, some Members expressed concern regarding a provision in the amendment which permits the HHS Secretary to reduce reimbursement below specified limits for "high volume pharmacies." The language for this provision, which the Senate adopted in an 88 to 9 rollcall vote Tuesday evening, states:

[f]or calendar years after 1990, the Secretary may by regulation reduce either (or both) of the payment limits established [for single or multiple source drugs] dispensed by a high volume pharmacy (as defined by the Secretary) based on differences between high volume pharmacies and other pharmacies with respect to operating costs, quantity discounts, and other economies. The Secretary shall consult with high volume pharmacies, elderly groups, and private insurers in making such adjustments and (notwithstanding any other provision of this title) shall allow not less than 90 days for public comment on proposed regulations.

Mr. President, some of my colleagues are concerned that we may have inadvertently authorized the HHS Secretary to penalize high volume pharmacies—potentially discouraging the most efficient providers of pharmacy services from participating in the Medicare outpatient prescription drug program.

I wish to point out clearly for the record that such was and is not my intent, nor, I am certain, the intent of any of the cosponsors of the Heinz-Mitchell prescription drug amendment. In fact, Mr. President, the purpose of this provision is to encourage beneficiaries to shop at high volume pharmacies, thereby achieving for themselves and the Medicare Program significant savings. I would like to take this opportunity to explain to my colleagues how this provision is meant to work.

Under the legislation adopted earlier this week by the Senate, after meeting a deductible of $600 in 1990, part B enrollees remain responsible for a 20 percent copayment on every prescription. The amount of their copayment depends on the reimbursement to the pharmacy for the drug. For example, if Medicare calculates that $20 is the appropriate reimbursement for a given drug, including an allowance for the pharmacist's services, the beneficiary pays the pharmacist 20 percent of that amount, or $4, and Medicare directly pays the pharmacist the other 80 percent, or $16. The purpose of this copayment is to provide an incentive for beneficiaries to shop carefully for less expensive drugs and pharmacy services.

Mr. President, our intention is to ensure that older Americans—who will soon be insured for the first time by Medicare for a significant portion of their drug costs—will continue to have a financial incentive to shop at the lowest cost pharmacies. If they were to pay the same price for drugs at a high volume pharmacy as they do at their corner drug store, they would have no incentive to shop at high volume pharmacies. Under this provision of the Senate catastrophic health care costs legislation, beneficiaries who shop at these pharmacies will find their copayments are reduced by several percent.

It is not intended that the Secretary be authorized to arbitrarily or prejudicially reduce reimbursement to any level he wishes for those providers he defines as "high volume" pharmacies. In addition to the divestive language and legislative history, the Secretary will have a powerful incentive to be careful and reasonable in establishing the size of any such discounts and the number of pharamacists included in the definition of "high volume" pharmacies. If the Secretary goes too far, the most efficient pharmacies will refuse to participate in Medicare, and any potential savings will be lost.

Mr. President, according to experts in the field of reimbursement for pharmaceuticals, this approach is practical and fair to pharmacists. It is modeled on successful State programs that gradually discount reimbursement rates for incrementally higher volume pharmacies. I believe that Medicare reimbursement to pharmacies will be ample, and will continue to provide an incentive to pharmacists to seek our ways to economize and cut costs, even after Medicare passes on to benficiaries the economies of high volume pharmacies. Medicare reimbursement for single source—brand name—drugs will be the published average wholesale price or AWP A 1984 report by the inspector general of the Department of Health and Human Services indicates that 99.6 percent of pharmacy drug purchases were made at prices averaging 16 percent below the AWP. This report was based on review of economies realized by average pharmacies. High volume pharmacies may be expected to achieve even greater economies due to bulk purchasing. I would hope that the Secretary will be guided by the fact that maximum reimbursement discounts under similar State programs are less than 10 percent.

Mr. President, I hope this will help reassure my colleagues of our intent in crafting this cost-saving measure, and of the safeguards inherent in it. The cost of Medicare's part B Program must be constrained if we are to keep premiums within an affordable range. Encouraging beneficiaries to use high volume pharmacies will help us to meet this goal.●

JESS JOHNSON

● Mr. JOHNSTON. Mr. President, for 20 years I have been pleased to count Jess Johnson, Jr., as a friend. I first knew Jess back in Baton Rouge, when I was in the Louisiana Senate and he was handling government relations, for Shell Oil. He beat me to Washington by 6 months. He and Peg moved here in 1972, and he has managed Shell's Washington office for the last 15 years.

During that time he has served his company admirably, both as manager and Washington Representative, but his real contribution to the Nation's Capitol has been the improvements he has made to our quality of life.

He is, for instance, a notable gourmet. A founding member of the local board of the American Food and Wine Institute, he has been known to share his expertise with his friends. In the winter of 1980, Jess and Peg took my family in after our house was badly damaged in a fire. Normally, the stress of such a traumatic event causes weight loss, but not if you are eating Jess's cooking every night for a week. His Cajun Cuisine added several inches to my waistline.

A good Louisianian, he stays close to his roots. He has been active in the Mardi Gras Krewe of Louisianians since its founding, but his hospitable

instances extend beyond the borders of his native State. For a long time he has been active in the affairs of Meridian House International, a nonprofit educational and cultural institution which provides services to international visitors and resident diplomats. He has served on its board of trustees and as chairman of the 1987 business committee. It is a civic enterprise which utilizes Jess's great talent for warmth and friendship, as well as his capacity for hard work and attention to detail.

Jess is famous for his jokes about Uncle Noon and Aunt Mess, which makes it appropriate to say that today I have some good news and some bad news. The bad news is that on December 1, Jess is retiring as vice president of Shell Oil Co. The good news is that he and Peg will continue to live in Washington for at least part of the year so we will continue to have the very great pleasure of his company.●

CAN SDI BE LEGALLY TESTED AND DEVELOPED?

● Mr. JOHNSTON. The strategic defense initiative [SDI] is clearly a central issue in the upcoming arms reduction talks. The administration is intent on having the option not only to conduct research on SDI, but also to test and develop SDI. However, the ABM Treaty prohibits the testing and development of space-based antimissile weapons systems or components. Or that's what we thought for 13 years after we agreed to the treaty. The administration, though, cites its so-called broad interpretation of the ABM Treaty. That reinterpretation of the treaty permits testing and development of exotic antimissile systems and components, those based on "other physical principles."

There is reason to question whether the administration has in fact thought through their position on SDI and how it relates to the upcoming arms reductions negotiations. I say this because the administration has yet to decide whether the space-based kinetic kill vehicle [SBKKV] can be legally tested or developed even under their own broad interpretation of the ABM Treaty. This is not a minor detail. I emphasize that the SBKKV, also known as the space-based interceptor [SBI], is the only space-based antimissile weapon approved by the Secretary of Defense in his Milestone I decision as a candidate for phase I of SDI's early deployment.

If testing and development of the space-based interceptor is banned even under the administration's interpretation of the treaty, then SDI would have no antimissile weapons to deploy in space in an early deployment. There are only two logical exceptions. The first is if the U.S. renounced the ABM Treaty. The second is, ironically enough, if the Soviets agreed to amend the treaty to loosen its restrictions on SDI to permit testing and development of the space based interceptor.

Frankly, I don't see how the United States can develop a rational negotiating strategy until it decides what the current treaty means and what it implies for SDI. You can't decide what you want at the bargaining table until you see what you've already got.

The issue of whether the space-based interceptor can be legally tested or developed is an important one not only for the upcoming arms negotiations. It is also important for congressional funding decisions on SDI. SDI's estimates that implementing SDI's phase I early deployment would cost $70 to $100 billion or more. Before we move to far down that road it would be nice to know if even the administration agrees that testing and developing the space-based weapons in phase I would be illegal.

I have sent to each of my colleagues a copy of a staff study by Thomas K. Longstreth of the Federation of American Scientists entitled "Space-Based Interceptors for Star Wars: Untestable Under Any Interpretation of the ABM Treaty." Reviewing the history of ABM research, the negotiating record of the ABM Treaty, the ABM Treaty text and protocols, and the subsequent practices of the United States and Soviet Union, Mr. Longstreth concludes that SBI will use technology not based "on other physical principles."

On October 21, I provided the Secretary of Defense and the Secretary of State a copy of the Longstreth report and requested their comments on the report and particularly on its conclusion. I would have expected a detailed rebuttal, if not on the report itself, then on the fundamental conclusion that the space-based interceptor cannot be legally tested or developed. Instead, the State Department said the issue is still being studied and the Defense Department also did not have a ready answer. Although the Department of Defense is still attempting to respond in writing, my staff contacted the Department of Defense and learned that at present they, as does State, have no official position on the issue.

It should be noted that the administration explicitly recognized they had no official position on this issue when they submitted their report to Congress on the ABM Treaty nearly 6 months ago. I would hope that the administration will make some determination on this pivotal issue before the Congress concludes its fiscal year 1988 appropriations process and certainly before the upcoming arms talks.

I ask that the executive summary of the Longstreth report be printed in the RECORD at this point as well as the reply of the State Department dated October 29, 1987.

The document follows:

SPACE-BASED INTERCEPTORS FOR STAR WARS: UNTESTABLE UNDER ANY INTERPRETATION OF THE ABM TREATY

(By Thomas K. Longstreth)

EXECUTIVE SUMMARY

A number of recent reports reviewing the Reagan Administration's "broad" interpretation of the ABM Treaty's limits on the development, testing and deployment of ABM systems based on "other physical principles" (OPP) have concluded that the broad interpretation is fatally flawed as it applies to lasers and other "exotic" or directed energy systems with potential ABM applications assumed at the time of the negotiation of the ABM Treaty to be based on OPP.

However, none of these reports—or the overall debate over the broad interpretation—have focused on the more pertinent issue of whether ABM weapons that use kinetic energy (hit-to-kill weapons) should be considered ABM systems based on OPP. The space-based interceptor (SBI) is one such kinetic kill weapon now being developed within the Star Wars program that is the leading candidate for any near-term, space-based ABM system.

A review of the history of ABM research, the negotiating record of the ABM Treaty, the ABM Treaty text and protocols, and the subsequent practices of the United States and Soviet Union demonstrates that the SBI will use technology not based "on other physical principles." Consequently, the SBI cannot be developed or tested legally in space under either the traditional or broad interpretation of the ABM Treaty.

This report also finds that:

Much of the technology to be utilized by the SBI was well understood in 1972 and pursued vigorously by the Defense Department in multi-billion dollar programs during the 1950s and 1960s. Various efforts within the 1960s' Project DEFENDER—including the BAMBI program which was quite similar to the current SBI—proceeded beyond paper studies, contrary to assertions by senior Reagan Administration defense officials.

In asserting that the Exoatmospheric Reentry vehicle Interception System (ERIS) is based on "traditional" ABM technology, while SBI is a "future" system, the Administration has tried to argue that differences in the two weapons' means of guidance account for this distinction. No such fundamental difference in the technologies of ERIS and SBI exists, nor can any basis for such an assertion be found in the ABM Treaty text or negotiating record.

There is not a single direct reference to kinetic kill weapons like the SBI cited as examples of future ABM systems based on OPP by either Soviet or American negotiators in those parts of the ABM Treaty negotiating record that have been made public.

Under both the broad and traditional interpretations, the SBI is either an ABM interceptor missile subject to the Treaty's limits on "traditional" ABM systems and components contained in Articles II, III, and V, or a non-ABM interceptor missile subject to the limits of Article VI. Either way, any development, testing and deployment of the SBI in other than a fixed, land-based mode are banned.

U.S. DEPARTMENT OF STATE,
Washington, DC, October 29, 1987.
Hon. J. BENNETT JOHNSTON,
U.S. Senate.

DEAR SENATOR JOHNSTON: You requested the views of the Department of State on the staff study written by Thomas K. Longstreth of the Federation of American Scientists, entitled: "Space-Based Interceptors for Star Wars: Untestable Under Any Interpretation of the ABM Treaty."

Appropriate agencies of the Executive Branch are currently assessing the issue of whether the United States would be able to test and develop space-based interceptors under the terms of the Anti-Ballistic Missile Treaty. Independent studies, such as those written by Dr Longstreth, are read with great interest and provide additional thoughts and material for consideration. Thank you for sharing the staff study with us.

With best wishes,
Sincerely,

J. EDWARD FOX,
Assistant Secretary,
Legislative Affairs.●

PASCAL DILDAY

● Mr. WILSON. Mr. President, California has recently lost a dear friend, a man who during his lifetime gave so freely of himself to enrich his San Diego community, and whose countless good works reached beyond city boundaries to be felt throughout the entire State.

Pascal Dilday was a consummate San Diegan, passionate about his community and compassionate when that community called upon him to lend his good name, his leadership, his foresight to so many worthy causes. It is not every man who can generate the admiration, respect, and sheer affection of an entire city, but it was certainly Pascal Dilday who did.

His legacy lies in his positive spirit which enveloped us all * * * and in the breadth of his friendship which he bestowed generously and willingly. Pascal's legacy rests with the University of Southern California and its Trojans, for he was the school's quintessential booster (and its star quarterback in 1932), and with the innovative automobile dealership which enriched San Diego's business sector for so many years.

We will never forget how Pascal loved California and how California loved him in return. I take great pride in honoring his memory in his Chamber of the U.S. Senate on behalf of all Californians.●

ORDER OF BUSINESS

Mr. BYRD. Mr. President, parliamentary inquiry. Have the yeas and nays been ordered on the adoption of the conference report in the Older Americans Act?

The PRESIDING OFFICER (Mr. CONRAD). They have been.

Mr. BYRD. I thank the Chair.

ORDER THAT COMMITTEE BE DISCHARGED FROM CONSIDERATION OF NOMINATION OF JUNE BROWN

Mr. BYRD. Mr. President, as in executive session, I ask unanimous consent that the Committee on Governmental Affairs be discharged from consideration of the nomination of June Brown to be Inspector General of the Department of Defense, the nomination having been unanimously approved by the members of the Committee on Governmental Affairs.

Mr. COCHRAN. Mr. President, there is no objection to the unanimous-consent request on this side of the aisle.

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

THE QUARTER-CENTURY MARK OBSERVED

Mr. BYRD. Mr. President, November 1962 saw the election to the U.S. Senate of Senator EDWARD KENNEDY from Massachusetts. That was 25 years ago this month.

To mark that quarter-century anniversary, last Friday evening, Senator KENNEDY's sons and daughter organized a gala celebration at Boston's Westin Hotel.

According to reports, the evening was a rousing success, with countless of Senator KENNEDY's friends, admirers, and associates in attendance.

I believe that recognizing Senator KENNEDY's 25th anniversary is appropriate here in the Senate, as well. I congratulate Senator KENNEDY on reaching this important milestone in his career, and in our national history. I also commend Senator KENNEDY for the thorough, farsighted, and dedicated fashion in which he is fulfilling his stewardship for the people of Massachusetts, and for the contributions that he has made and continues to make to our work here in the Senate.

Also, I want to commend Senator KENNEDY's daughter Kara, and his two sons Edward, Jr., and Patrick, for the fine efforts that they invested in organizing and managing last Friday evening's activities in Boston. I know that Senator KENNEDY was touched by that demonstration of affection toward him, and proud of the abilities that his children evidenced in bringing off such a big event.

And I know that all of our colleagues join me in congratulating Senator KENNEDY on the occasion of the 25th anniversary of an outstanding Senate career.

MORNING BUSINESS

Mr. BYRD. Mr. President, I ask unanimous consent that there be a period for morning business and that Senators may speak therein.

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

ORDER OF PROCEDURE

Mr. BYRD. Mr. President, does the distinguished Senator from Mississippi have anything he would wish to bring to the attention of the Senate?

Mr. COCHRAN. Mr. President, if the distinguished leader would yield, as Senators know, the Republican leader of the Senate has this year been placing in the RECORD statements that he refers to as "Bicentennial Minutes." I ask unanimous consent, Mr. President, that a copy of the statement of Senator DOLE, entitled "November 10, 1953: See-Saw in Senate Majority," be printed in the RECORD.

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

BICENTENNIAL MINUTE

NOVEMBER 10, 1953: SEE-SAW IN SENATE MAJORITY

● Mr. DOLE. Mr. President, 34 years ago today, on November 10, 1953, Thomas Burke, Democratic mayor of Cleveland, was sworn in as U.S. Senator from Ohio. Since the Senate had adjourned for the year and would not reconvene until the following January, Burke's appointment to the Senate had no immediate effect. But symbolically, it meant that the Senate majority had shifted in mid-Congress from the Republicans to the Democrats.

Ironically, the vacancy that Burke filled had been caused by the death of Senate Republican Majority Leader Robert Taft, Sr. At the time of Taft's death, the Senate was split between 48 Republicans, 47 Democrats, and 1 independent, Wayne Morse. When Ohio's Governor, Frank Lausche, appointed Burke to Taft's unexpired term, he gave the Democrats a 48-to-47 edge. Would this mean that the Senate would be reorganized and committee chairs shifted between parties? No, because Senator Morse announced that he would vote with the Republicans on organizational matters. This would divide the parties evenly, allowing Vice President Richard Nixon to cast the tie-breaking vote.

During the course of the 83d Congress, other deaths caused the majority to shift this way and that, but Republicans retained the majority status, on paper if not in reality. This led to a famous exchange between Republican Leader William Knowland, who complained about the difficulties in being a majority leader without a majority, and Democratic Leader Lyndon Johnson, who observed: "If anyone has more problems than a majority leader with a minority, it is a minority leader with a majority."

As for Senator Burke, in 1954 he was defeated for election to the remaining 2 years of the term by Republican George H. Bender. But in 1956, Senator Bender lost his bid for reelection to a full term to Frank Lausche, the man who, as Governor, had started it all.●

Mr. COCHRAN. We have no further business on this side of the aisle, Mr. President and no requests for statements.

Mr. BYRD. Mr. President, has the order been entered to the effect that at 9:30 a.m. on Thursday next the Senate will proceed to vote by rollcall on the adoption of the conference report on the Older Americans Act?

The PRESIDING OFFICER. The order has been entered.

Mr. BYRD. I thank the Chair.

ORDERS FOR THURSDAY

ORDER FOR ADJOURNMENT UNTIL 9 A.M. ON THURSDAY NEXT

Mr. BYRD. Mr. President, I ask unanimous consent that when the Senate completes its business today it stand in adjournment until the hour of 9 a.m. on Thursday next.

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

MORNING BUSINESS

Mr. BYRD. Mr. President, I ask unanimous consent that on Thursday next, after the two leaders have been recognized under the standing order, there be a period for the transaction of morning business not to extend beyond the hour of 9:30 a.m. and that Senators may speak during that period for morning business for not to exceed 5 minutes each.

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

NO MOTIONS OR RESOLUTIONS OVER UNDER THE RULE TO COME OVER ON THURSDAY NEXT

Mr. BYRD. Mr. President, I ask unanimous consent that no motions or resolutions over under the rule will come over on Thursday next.

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

CALENDAR CALL UNDER RULE VIII WAIVED ON THURSDAY NEXT

Mr. BYRD. Mr. President, I ask unanimous consent that the call of the calendar under rule VIII be waived on Thursday next.

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

PROGRAM

Mr. BYRD. Mr. President, on Thursday next, the Senate will come in at the hour of 9 a.m. After the two leaders have been recognized under the standing order, there will be a period for morning business not to extend beyond the hour of 9:30 a.m., and during that period for morning business, Senators may speak for not to exceed 5 minutes each. At the hour of 9:30 a.m., the Senate will vote by rollcall on the adoption of the conference report on the Older Americans Act. That will be a 30-minute rollcall vote with the call for the regular order to occur at 10 o'clock; in other words, at the expiration of the 30 minutes.

So Senators need not wait for 1 minute thereafter, feeling that the leaders will hold the vote because the 30-minute rollcall vote, every Senator ought to be there. They are receiving adequate notice in advance.

Then, upon the disposition of that conference report, Mr. President, the Senate would proceed to debate the amendments en bloc on nuclear waste. They are the committee amendments en bloc. There will be 2 hours of debate on those amendments en bloc and at 12 noon, a vote will occur. There will be rollcall votes throughout the day on Thursday and I would suggest that Senators be prepared for votes also on Friday.

If the distinguished acting minority leader, Mr. COCHRAN, has anything further to say to the Senate or any further business to transact, I will withhold the motion to adjourn until such time as he has been able to.

Mr. COCHRAN. Mr. President, I thank the majority leader for his gracious yielding. I do wish you a happy Veterans Day. Tomorrow is an important day for all of us as we celebrate that, pay tribute to those who made such great sacrifices to our country and express our appreciation for that. I wish you a good Veterans Day, Mr. Leader.

Mr. BYRD. Mr. President, I thank the distinguished Senator. Tomorrow and this evening are very special events in my own memory. My mother died in the influenza epidemic of 1918, and I am told by my older brother that she died on the night before the armistice was signed. So I have no recollection of her, of course. I was just a little under 1 year old on that date. My birthday was on November 20. So I will soon, the Lord willing, see another birthday.

But Armistice Day, the old Armistice Day, the day of course had an impact on my life. I did not know it then but I have learned it since.

ADJOURNMENT UNTIL 9 A.M., THURSDAY, NOVEMBER 12, 1987

Mr. BYRD. Mr. President, if there be no further business to come before the Senate, I move, in accordance with the order previously entered, that the Senate stand in adjournment until the hour of 9 a.m. on Thursday next.

The motion was agreed to, and at 5:49 p.m., the Senate adjourned until Thursday, November 12, 1987, at 9 a.m.

NOMINATIONS

Executive nominations received by the Secretary of the Senate November 9, 1987, under authority of the order of the Senate of February 3, 1987:

DEPARTMENT OF STATE

HENRY ANATOLE GRUNWALD, OF NEW YORK, TO BE AMBASSADOR EXTRAORDINARY AND PLENIPOTENTIARY OF THE UNITED STATES OF AMERICA TO THE REPUBLIC OF AUSTRIA.

THE JUDICIARY

FRANK ERNEST SCHWELB, OF THE DISTRICT OF COLUMBIA, TO BE AN ASSOCIATE JUDGE OF THE DISTRICT OF COLUMBIA COURT OF APPEALS FOR THE TERM OF 15 YEARS, VICE FRANK Q. NEBEKER, RETIRED.

CHERYL M. LONG, OF THE DISTRICT OF COLUMBIA, TO BE AN ASSOCIATE JUDGE OF THE SUPERIOR COURT OF THE DISTRICT OF COLUMBIA FOR THE TERM OF 15 YEARS, VICE DONALD S. SMITH, RETIRED.

IN THE AIR FORCE

THE FOLLOWING AIR NATIONAL GUARD OF THE U.S. OFFICERS FOR PROMOTION IN THE RESERVE OF THE AIR FORCE UNDER THE PROVISIONS OF SECTIONS 593 AND 8379, TITLE 10 OF THE UNITED STATES CODE. PROMOTIONS MADE UNDER SECTION 8379 AND CONFIRMED BY THE SENATE UNDER SECTION 593 SHALL BEAR AN EFFECTIVE DATE ESTABLISHED IN ACCORDANCE WITH SECTION 8374, TITLE 10 OF THE UNITED STATES CODE. (EFFECTIVE DATES IN PARENTHESES).

LINE OF THE AIR FORCE

To be lieutenant colonel

MAJ. JOHN F. AMMERALL, xxx-xx-xxxx 8/1/87.
MAJ. FRANK G. ANDERSON, xxx-xx-xxxx 8/13/87.
MAJ. BARRY W. BEARD, xxx-xx-xxxx 7/28/87.
MAJ. SUSAN L. BICKELMANN, xxx-xx-xxxx 7/12/87.
MAJ. PETER W. BORGOS, xxx-xx-xxxx 5/30/87.
MAJ. ROBERT J. CLEARY, xxx-xx-xxxx 7/14/87.
MAJ. WILLIAM J. CRUMM II, xxx-xx-xxxx 6/7/87.
MAJ. WILLIAM R. DITTMER, xxx-xx-xxxx 7/1/87.
MAJ. JOHN W. DRONENBURG, xxx-xx-xxxx 5/30/87.
MAJ. ROBERT R. FUS, xxx-xx-xxxx 7/31/87.
MAJ. KENCIL J. HEATON, xxx-xx-xxxx 8/14/87.
MAJ. PALMER O. HOLLIS, xxx-xx-xxxx 8/8/87.
MAJ. DAVID H. HUGHLEY, xxx-xx-xxxx 7/16/87.
MAJ. CHARLES F. JOHNS, xxx-xx-xxxx 7/18/87.
MAJ. ERIC S. KANJA, xxx-xx-xxxx, 7/19/87.
MAJ. DUANE E. KNAPP, xxx-xx-xxxx 7/19/87.
MAJ. ROGER W. LARSEN, xxx-xx-xxxx 7/1/87.
MAJ. THOMAS K. LEEPER, xxx-xx-xxxx, 7/28/87.
MAJ. PHIL P. LEVENTIS, xxx-xx-xxxx 8/8/87.
MAJ. ROBERT M. MARSHALL, 287.–40–6490, 6/27/87.
MAJ. WILLIAM T. MCGLATHERY III, xxx-xx-xxxx 8/1/87.
MAJ. JOHN D. MOORE, xxx-xx-xxxx 8/2/87.
MAJ. RUSSELL K. N. MUN, xxx-xx-xxxx 5/28/87.
MAJ. LOUIS J. NIGRO, xxx-xx-xxxx 8/4/87.
MAJ. WALTER G. POWELL III, xxx-xx-xxxx 8/14/87.
MAJ. WILLIAM R. REILLY, xxx-xx-xxxx 5/11/87.
MAJ. LYNN V. RITCHIE, xxx-xx-xxxx 6/28/87.
MAJ. GEORGE P. SCHULER, xxx-xx-xxxx 2/23/87.
MAJ. CHARLES A. SCRIVNER, JR., xxx-xx-xxxx 7/16/87.
MAJ. JAMES E. SHEPPARD, xxx-xx-xxxx 7/28/87.
MAJ. DOMENIC S. VACCA, xxx-xx-xxxx 7/11/87.

CHAPLAIN CORPS

To be lieutenant colonel

MAJ. RAYMOND R. BROWN, xxx-xx-xxxx 7/26/87.

MEDICAL SERVICE CORPS

To be lieutenant colonel

MAJ. EDWARD H. MEILINGER, xxx-xx-xxxx 6/23/87.

BIOMEDICAL SCIENCE CORPS

To be lieutenant colonel

MAJ. LEROY C. FEUSNER, xxx-xx-xxxx 8/2/87.
MAJ. WILLIAM M. GLASSBRENNER, xxx-xx-xxxx 8/2/87.

MEDICAL CORPS

To be lieutenant colonel

MAJ. ROBERT M. GALLAGHER, xxx-xx-xxxx 7/11/87.
MAJ. PETER K. O. HOCHLA, xxx-xx-... 8/8/87.
MAJ. SIDNEY J. MORGAN JR., xxx-xx-xxxx 7/12/87.
MAJ. WILLIAM H. RICHTER, xxx-xx-xxxx 7/25/87.
MAJ. GILDO S. SORIANO, xxx-xx-xxxx 7/19/87.
MAJ. JOHN H. WARD, xxx-xx-xxxx 7/11/87.

NURSE CORPS

To be lieutenant colonel

MAJ. MARGARET A. HOLMES, xxx-xx-xxxx 5/2/87.

Executive nominations received by the Senate November 10, 1987:

DEPARTMENT OF STATE

RICHARD HUNTINGTON MELTON, OF VIRGINIA, A CAREER MEMBER OF THE SENIOR FOREIGN SERVICE, CLASS OF MINISTER-COUNSELOR, TO BE AMBASSADOR EXTRAORDINARY AND PLENIPOTENTIARY OF THE UNITED STATES OF AMERICA TO THE REPUBLIC OF NICARAGUA.

AFRICAN DEVELOPMENT FOUNDATION

DAVID C. MILLER, JR., OF THE DISTRICT OF COLUMBIA, TO BE A MEMBER OF THE BOARD OF DIRECTORS OF THE AFRICAN DEVELOPMENT FOUNDATION FOR A TERM EXPIRING SEPTEMBER 22, 1993, VICE PATSY BAKER BLACKSHEAR, TERM EXPIRED.

ENVIRONMENTAL PROTECTION AGENCY

LINDA J. FISHER, OF OHIO, TO BE AN ASSISTANT ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY, VICE MILTON RUSSELL, RESIGNED.

FEDERAL COMMUNICATIONS COMMISSION

BRADLEY P. HOLMES, OF NEW YORK, TO BE A MEMBER OF THE FEDERAL COMMUNICATIONS COMMISSION FOR THE TERM EXPIRING JUNE 30, 1990, VICE MARK S. FOWLER, RESIGNED.