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Senate

(Legislative day of Monday, July 10, 1995)

The Senate met at 9 a.m., on the expiration of the recess, and was called to order by the President pro tempore [Mr. THURMOND].

PRAYER

The Chaplain, Dr. Lloyd John Ogilve, offered the following prayer:

Let us pray:

Almighty God, Holy Father, You created us for Yourself and our hearts are restless until they rest in You. We confess our ambivalence. We want You to be Lord of our lives and yet, sometimes, we are filled with reservations. We need Your love, and yet fear the implications of loving others as You love us. We want Your direction in our lives, but are troubled about losing our own control. We pray for America to be a great nation under Your sovereign reign, but there are times when we are reluctant to ask You to begin a vital spiritual awakening in our own hearts.

But Lord, we are willing to be made willing. Help us to see what our lives could be if we loved You with all our hearts, and if our self-erected obstacles to trusting You completely were removed and You had Your way with us.

And so, today we open our minds to think inspired by the wisdom of Your spirit; we commit our wills to seek the guidance of Your spirit; and we face the challenges of this day with the power of Your spirit. In Your holy name. Amen.

RESERVATION OF LEADER TIME

THE PRESIDENT pro tempore. Under the previous order, the leadership time is reserved.

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 1996

The PRESIDENT pro tempore. Under the previous order, the Senate will now proceed to the consideration of S. 1026, the Department of Defense bill, which the clerk will report.

The assistant legislative clerk read as follows:

A bill (S. 1026) to authorize appropriations for fiscal year 1996 for military activities of the Department of Defense, for military construction, and for defense activities of the Department of Energy, to prescribe personnel strengths for such fiscal year for the Armed Forces, and for other purposes.

The Senate resumed consideration of the bill.

The PRESIDING OFFICER (Mr. THOMAS). Under the previous order, the Senator from South Carolina [Mr. THURMOND] is recognized.

Mr. THURMOND. Mr. President, we are ready to proceed now on this bill, and I believe the distinguished Senator from Nebraska desires at this time to take up the amendment.

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

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

AMENDMENT NO. 2111

(Purpose: To propose a substitute to title XXXI)

Mr. THURMOND. Mr. President, I send to the desk the Thurmond-Domenici amendment and ask it be reported immediately.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from South Carolina [Mr. THURMOND], for himself, Mr. DOMENICI, Mr. LOTT, Mrs. HUTCHISON, Mr. BOND, Mr. THOMPSON, Mr. FRIST, and Mr. BINGAMAN, proposes an amendment numbered 2111.

Mr. THURMOND. Mr. President, I ask unanimous consent that further reading of the amendment be dispensed with.

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

The amendment is as follows:

(The text of the amendment is printed in today's RECORD under ''Amendments Submitted.'')

Mr. EXON. I thank my friend and colleague, the distinguished chairman of the Armed Services Committee.

AMENDMENT NO. 2112 TO AMENDMENT NO. 2111

(Purpose: To strike section 3135 of S. 1026 authorizing a program for hydronuclear experiments)

Mr. EXON. As per our previous agreement, I send an amendment in the second degree to the desk at this time and ask that it be read in its entirety, and I also ask that the cosponsors of the amendment be identified as part of the reading.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from Nebraska [Mr. EXON], for himself, Mr. HATFIELD, Mr. DASCHLE, Mr. LEVIN, Mr. BINGAMAN, Mr. GLENN, Mr. HARKIN, Mr. SIMON, Mr. KERREY, Mr. KENNEDY, Mr. WELLSTONE, and Mr. BUMPERS, proposes an amendment numbered 2112 to amendment No. 2111.

On page 33 of the underlying amendment, strike out section 3135, lines 11 through 19.

The PRESIDING OFFICER. Under the previous order, the Senator from South Carolina will have 70 minutes under control in this debate and the Senator from Nebraska will have 90 minutes. The Senator may proceed.

Mr. DOMENICI. Will the Senator yield?

Mr. EXON. I am happy to yield to the Senator.

Mr. DOMENICI. Mr. President, pursuant to the unanimous-consent request, I thought we said we could speak about the bill first, and then it would go to Senator EXON for the debate.

Did I misunderstand? If I misunderstood, it is all right.

The PRESIDING OFFICER. Under the order, immediately after the reading of the amendment, the Senator from Nebraska was to be recognized to offer a second-degree amendment to the Thurmond amendment; there would be 70 minutes debate under the control of the Senator from South Carolina and 90 minutes under the control of the Senator from Nebraska.

Mr. DOMENICI. I did not need the time. Just so I know when we would be speaking.

Mr. BINGAMAN. Mr. President, it is my understanding, and I ask the Senator from Nebraska and the Senator from South Carolina if they agree with this, that during this period that has just been identified, we would be able to speak on the underlying amendment or on the Exon amendment or on both, and the statement I intend to give would be a statement on both, starting, of course, with a description of the Thurmond amendment and my reason for sponsoring it, and also discussing my reason for supporting the amendment of the Senator from Nebraska.

The PRESIDING OFFICER. The Senator from Nebraska.

Mr. EXON. Mr. President, if I might respond and clear up any misunderstanding, the time agreement that was entered into and was specifically agreed to last night was 90 minutes under the control of the Senator from Nebraska, and 70 minutes under the control of the Senator from South Carolina. That time agreement is for debate on both the amendment offered by the Senator from South Carolina and the second degree, and the time can be allotted. Any Senator can debate either the underlying amendment or the amendment in the second degree.

The PRESIDING OFFICER. The Senator from Nevada.

Mr. REID. Mr. President, if I may ask the Senator from Nebraska, it is my understanding, though, it would be used off of either the time—let me state this. I worked, the Senator from Nebraska knows, on the time agreement. The 70 minutes was to be used in opposition to the amendment of the Senator from Nebraska. We have arranged time to speak against the amendment of the Senator, and that was certainly my understanding.

Mr. EXON. The time to speak against the second-degree amendment would be under the control of the Senator from South Carolina.

Mr. REID. That is right. While the Senator is debating, I will talk to the chairman of the committee.

The PRESIDING OFFICER. The Senator from Nebraska.

Mr. EXON. Mr. President, I am certainly pleased to join my good friend from Oregon, Senator HATFIELD, and others, including the distinguished junior Senator from the State of New Mexico, and many other cosponsors, to correct one of the most objectionable provisions in the defense authorization bill that is now before the Senate. The Exon-Hatfield, et al., amendment is a very simple and a very straightforward one. It would delete—eliminate—section 3135 of the bill in its entirety, and remove the $50 million authorization for hydronuclear testing. Our amendment makes no adjustment to the funding for either the stockpiled storage program or the overall energy department budget. Our amendment is funding neutral. It simply removes the authorization in the bill for the use of $50 million to resume nuclear weapons testing.

With that brief opening statement—and I will be expanding on this further—I now yield 10 minutes to my colleague, the junior Senator from New Mexico.

The PRESIDING OFFICER. The Senator from New Mexico.

Mr. BINGAMAN. If I may ask the Senator from Nebraska, I hoped to have about 15 minutes before the end of the debate. May I take all that time at this point?

Mr. EXON. Yes, I will yield 15 minutes.

Mr. THURMOND. I thought I had to make my opening statement.

Mr. EXON. If the Senator from South Carolina wishes to make an opening statement preceding the 15-minute remarks by the Senator from New Mexico, I am certain that will be agreeable.

The PRESIDING OFFICER. The Senator from South Carolina.

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

The proposed amendment is the result of the diligent efforts of interested parties that have endeavored to resolve concerns raised by the original provisions of title XXXI. I would like to thank the distinguished Senator PETE DOMENICI of New Mexico, Chairman of the Subcommittee on Energy and Water Development. Without the efforts of Senator DOMENICI and his staff the agreement underlying this amendment could not have been reached. It has been a privilege to work with him and his staff, I say to Senator DOMENICI.

I would also like to thank the other Senators that have cosponsored this amendment, and contributed to the substance of the amendment. I want to specifically recognize the superb efforts of Senator LOTT, the Chairman of the Strategic Forces subcommittee in arriving at this agreement. Finally, I wish to thank Senator KEMPTHORNE whose excellent work raised key issues in hearings on the Department of Energy.

Through this amendment we have achieved what we and our cosponsors believe is a prudent balance between the need to focus the Department of Energy on the near-term manufacturing capabilities required for the nuclear weapons stockpile and the need to invest in long-term science-based stockpile stewardship. With this compromise we also restore the necessary resources to meet the Department of Energy's request for nonproliferation, verification, and arms control research and development.

This bill sends the message that the Senate will support the necessary investment in this crucial element of strategic nuclear deterrence. Working together, we will continue to do what is necessary to maintain the safety and reliability of the nuclear stockpile. Maintaining the Nation's smaller nuclear stockpile in a safe and reliable condition to meet the requirements of the Department of Defense is the first priority mission of the national security programs of the Department of Energy. The Department of Energy and the administration must not lose sight of this fact as they work to fund a variety of other important programs, such as the Environmental Restoration and Waste Management Program, which this amendment also supports.

I yield the floor.

Mr. DOMENICI. Will Senator THURMOND yield me 5 minutes to speak on the amendment?

Mr. THURMOND. Mr. President, I yield the able Senator from New Mexico 5 minutes.

Mr. DOMENICI. I thank the Senator.

Mr. President, first, let me thank Senator THURMOND for the kind remarks. Obviously, for those who know of my interest in the defense laboratories that are operated by the Department of Energy, in particular the three major nuclear deterrent laboratories of Los Alamos, Sandia-Albuquerque, and Lawrence Livermore, this is a very good amendment from the standpoint of recognizing their capability and their prowess in terms of maintaining the nuclear deterrent in a safe and reliable fashion.

We are engaged, now, in a great transition between where we were going and what we were defending against, in terms of the development of nuclear weapons. Essentially, this bill says let us go a little bit slow before we jump to conclusions as to how we are going to replace and replenish the nuclear stockpile over time. Because, it says, we are moving now in the direction of a stewardship program that is built around the nuclear laboratories and in conjunction with the complex that does much of the fabricating and manufacturing. But it says we are not going to move rapidly into a ''let us build up and let us make sure we have all the manufacturing capabilities,'' but, rather, let us rely upon the institutions within the Defense Department and the DOE to tell us precisely how we ought to handle the stockpile we are going to have to maintain.

I am very pleased that we struck a good balance here in that the Department of Energy and the Department of Defense wanted us to move toward a science-based stewardship program built around the three national laboratories, and we are in the process of developing that.

While we are doing that, we do not want to let the other complexes that

were part of keeping us strong—we do not want to have them disappear. So there is money in here to keep them going, have them in a good state of repair, and make necessary investments.

In the meantime, the institutions within the DOD and Department of Energy will be advising the Congress on precisely how we ought to, over a long period of time, maintain the requisite number of nuclear warheads and weapons.

We do not have that kind of recommendation yet, and the bill, if not amended, would have drawn some conclusions in that regard that the Senator from New Mexico thought were premature. So that is why this amendment was offered. That is why we all worked very hard to put it together.

It clearly says the powerful laboratories, including three or four that are helping with it, including the one in the State of Idaho, Argonne, and others—that all of these are part of maintaining our nuclear stockpile in one way or another and are also part of making sure we do the cleanup work and we maintain the capability for storage of the fuel that we need that is coming out of the defense side.

So, Mr. President, this amendment increases the stockpile stewardship by $239 million. It maintains the nuclear posture review as the means of determining the size of the United States nuclear weapons stockpile. It lifts the prohibition on lab-directed research and development, and allows the Secretary to choose between a reactor and accelerator to produce tritium but it locates that in South Carolina, and provides additional stockpile management funding to upgrade the DOE production complex to meet manufacturing requirements.

So I believe when you look at that it is a rather comprehensive amendment, and it is a substitute for a very major part of the bill.

I want to thank Senators on our side who worked together, and it was my privilege—not being on the committee—to work with them in putting this amendment into the form that I believe the Senate ought to adopt without a dissenting vote.

I want to acknowledge Senator BINGAMAN's actions with reference to this. Obviously in the committee he expressed some doubts about this. He will express those himself today. And clearly working together with Democrats and Republicans, and Senators like Senator BINGAMAN and Senator NUNN, and others, I think this amendment is going to come out to be a very forward step in maintaining our nuclear weapon deterrent and maintaining the stockpile in an appropriate manner for the next 20, 30 or even 40 years. I thank Senator THURMOND for yielding.

I yield the floor.

Mr. EXON. Mr. President, I certainly want to associate myself with the remarks previously made in this regard by the Senator from South Carolina and the Senator from New Mexico with regard to the measure before us, the underlying amendment that was offered the first thing this morning by the chairman of the Armed Services Committee.

I wholeheartedly support this amendment that was worked out after a lot of hard work and a lot of thought. I think it is a very, very sound amendment. It has the wholehearted support of this Senator.

It is a good time though for me to emphasize—with all the work that has been done by all of the parties that have been partially named thus far this morning that I support—that I think the amendment now before us, the underlying amendment introduced by the Senator from South Carolina, is a great improvement over what came out of the committee, and I believe it is nearly unanimously supported. I thank all of those who played a key role in working this out.

It is a good time for me to emphasize though that the second-degree Exon amendment goes after one part of this bill which I will be talking about in greater detail as will many others Senators. That is the part of the bill which allows hydronuclear testing which we think is an important step in the wrong direction, and, if the Exon second-degree amendment is approved today, I think there will be unanimous support for the bill as introduced by the Senator from South Carolina—if the Exon-Hatfield, et al., amendment is accepted.

With that statement, I reserve the remainder of my time.

I yield 15 minutes—with my thanks for all the work he has done on this in company with Senator DOMENICI and others—to the Senator from New Mexico.

The PRESIDING OFFICER. The Senator from New Mexico.

Mr. BINGAMAN. Mr. President, I appreciate the statement by the Senator from Nebraska, and also the statement by my colleague from New Mexico.

Mr. President, I rise as a cosponsor of the Thurmond amendment and of the Exon second-degree amendment to it. I would first like to explain to my colleagues why the Thurmond amendment is an enormous improvement over the DOE provisions currently in the bill. There are three exceptions and they are being dealt with in the second-degree amendments being proposed by Senators EXON, REID, and MCCAIN. I will support all of those amendments as well.

When we debated this bill in committee, I raised numerous objections to the DOE provisions. I expressed the view that these provisions took a series of extreme positions for which there was no support in the hearing record of the committee. My objections were summarized in the dissenting views I filed in the committee's report. I am pleased to report to my colleagues that the Thurmond substitute amendment has now corrected most of the numerous problems I identified and several that were subsequently identified by the executive branch.

Let me highlight the most significant changes:

I had criticized the tritium production and plutonium disposition provisions because they would have prejudged ongoing programmatic environmental impact statements by favoring a multipurpose reactor approach—the least likely approach to come out of these studies. The Thurmond amendment is now neutral on the technical choice. It appropriately funds work on tritium targets, work that DOE under Secretary Curtis told us in the Strategic Forces Subcommittee hearing on May 16 would be required under all options.

Unfortunately, while backing off from making a technical choice on tritium production, the Thurmond amendment now contains a provision mandating that any new tritium production facility be sited at Savannah River. It is that provision which Senator REID is seeking to strike because it obviously disadvantages the Nevada test site in the ongoing environmental impact statement process.

The tritium language also makes $10 million available to a university consortium for plutonium research. Senator MCCAIN will seek to ensure that any money spent for university research in this area is competitively awarded. This is a long-standing policy of the Armed Services Committee at least since Senator TOWER was chairman.

The second area that was problematic in the original bill was a series of provisions—sections 3134, 3163, and 3166—and a $344 million funding add-on aimed at sizing a nuclear weapons manufacturing complex at cold war levels when far more cost-effective alternatives are being developed in the stockpile stewardship and management programmatic environmental impact statement process. Those provisions are entirely reworked in the Thurmond amendment and the funding for stockpile management has been reduced $215 million. There is now no mandate to rebuild production capacity to cold war levels. What is left in the bill is consistent with the ongoing programmatic environmental impact statement process on stockpile stewardship and management.

The third problem in the original bill had to do with laboratory management and funding. Senator DOMENICI referred to this. The original bill contained a provision, section 3139, barring the laboratories from using defense program funds for laboratory-directed basic research, the lifeblood of the laboratories, and for science education. The bill also cut requested funding for dual-use technology partnerships with industry by $249 million. The Thurmond amendment deletes the prohibition on use of defense funds for lab-directed basic research and science education, restores $239 million for the stockpile stewardship technology partnership

and education programs and includes a provision that all of these programs must support national security requirements.

The fourth problem in the original bill involved a severe cut in requested funding for nonproliferation and arms control verification program—a total of $78 million. This would have very seriously damaged the national laboratories' programs in critical areas and slowed the effort to bring Russian nuclear weapons facilities under better security and safeguards. The Thurmond amendment restores all of that funding.

The fifth problem in the original bill involved provisions, sections 3137 and 3138, which would have put the Department of Energy's defense facilities outside the purview of the National Environmental Policy Act and raised a constitutional separation of powers issue according to the Secretary of Energy, who opposed them. The Thurmond amendment deletes those provisions.

Finally, the original bill included a provision, section 3167, that, according to the statement of administration policy on this bill, would have prohibited international inspections of DOE facilities under the terms of the treaty between the United States and the International Atomic Energy Agency. The Thurmond amendment deletes this provision, which I know Senator PELL was very concerned about.

This rewrite of the DOE provisions marks a significant improvement in this bill as a whole. It brings this bill into alignment with the energy and water appropriations bill passed on Tuesday evening and with the administration's request with only modest changes. I commend my senior colleagues from New Mexico, Senator DOMENICI, for his central role in helping to bring about this result. He did yeoman work on convincing the members of the Armed Services Committee on his side to accept these changes. I also commend him for producing in his role as chairman of the subcommittee the excellent defense section of the energy and water appropriations bill passed on Tuesday.

Mr. President, there are still, however three problems with the Thurmond amendment. I have already mentioned the Reid and McCain amendments. Let me now turn to the amendment being offered by Senator EXON.

Senator EXON is seeking to strike a provision in the Thurmond amendment, which was also in the underlying bill. The provision sets aside $50 million to prepare for hydronuclear testing. The administration did not request funds to carry out hydronuclear tests in fiscal year 1996. These are tests with a low yield, usually measured in pounds of TNT, which provide information about the ignition of the primary of a nuclear weapon. These are expensive tests to conduct, approximately the same as for a nuclear weapons test—on the order of $10 to $20 million per test.

The administration's policy in the ongoing Comprehensive Test Ban negotiations is to limit such tests to a yield of four pounds of TNT. The administration is not opposed in principle to such testing, but the technical experts have not found tests which are worth doing. A 1994 summer study by a JASON task force, chaired by Sid Drell of Stanford University, has recommended against hydronuclear testing. The JASON's are a group of the Nation's foremost scientists who under the aegis of the Mitre Corp. advise DOD and DOE on technical matters. They wrote:

> The very limited added value of hydronuclear tests that provide for a brief glimpse into the very early stages of critically have to be weighed against costs, and against the impact of continuing an underground testing program at the Nevada Test Site on U.S. nonproliferation goals. On balance we oppose hydronuclear testing.

Mr. President, this is frankly a highly complex matter. The bottom line for me is that the nuclear weapon stewards in the Department are not crying out for hydronuclear tests within their limited budgets. The best minds in the scientific community on balance do not support them. If a specific problem arises that would require a hydronuclear test to resolve, I believe that the administration would request the funds and the test would be conducted within the 4 pound limit the President has set. But the bill before us and the Thurmond amendment insist on spending $50 million to prepare for hydronuclear tests with no specific purpose in mind.

I attended the May 16 Strategic Forces Subcommittee hearings on the weapons program and I can recall no witness from the laboratories or DOE or the Pentagon demanding such test preparations.

Mr. President, we can not afford to spend money unwisely when we are fighting to bring our deficit under control. I urge my colleagues to support Senator EXON's amendment.

To summarize, Mr. President, I am cosponsoring the Thurmond amendment because it is an enormous improvement in six different areas over the existing bill language. I also support all three efforts to further improve the language in the Thurmond amendment.

Mr. DOMENICI. Will the Senator yield?

Mr. BINGAMAN. Yes, I am glad to yield to my colleague from New Mexico.

Mr. DOMENICI. Mr. President, I just wanted to correct one item the Senator would not have known about because it was changed last night. Senator MCCAIN's request for competitiveness with reference to that $10 million university project, is in the amendment as offered.

I am not speaking for Senator MCCAIN, but I am not sure there will be an amendment on that effort because he already prevailed and it is in the amendment that was sent to the desk.

Mr. BINGAMAN. Mr. President, I appreciate that updated information. I think that is one additional improvement in the Thurmond amendment and I, as I say, commend my colleague and others who have worked hard to put this amendment together. I hope we can pass it with an overwhelming vote.

Mr. President, I yield the floor.

The PRESIDING OFFICER. Who yields time?

Mr. HATFIELD addressed the Chair.

The PRESIDING OFFICER. The Senator from Oregon.

Mr. HATFIELD. Mr. President, I would like to speak on the Exon amendment, the Exon-Hatfield amendment, and I yield myself 10 minutes.

Mr. EXON. I yield 10 minutes or whatever time he needs to the Senator from Oregon.

Mr. HATFIELD. I thank the Senator.

The PRESIDING OFFICER. The Senator from Oregon.

Mr. HATFIELD. I wonder if the Senator from Nevada will yield for a question.

Mr. REID. I will be happy to, as long as it is on Senator EXON's time.

Mr. HATFIELD. I would like to ask if this would be a convenient time for me to speak.

Mr. REID. Very convenient.

Mr. HATFIELD. I am trying to get ahead of the game at 10 o'clock.

Mr. REID. I know the Senator has a full committee markup.

Mr. HATFIELD. I thank the Senator and I thank Senator EXON.

Mr. President, it is a pleasure to join with Senator EXON this morning. The Senator from Nebraska is perhaps one of the Senate's most knowledgeable persons on the issues involving the nuclear weapons stockpile. He has certainly demonstrated leadership in protecting the integrity of the stockpile, as well as the efforts to end nuclear proliferation. So I do not believe this is an either/or situation. I think it is a very wise approach that the Senator from Nebraska has created for us to consider.

I think every Senator should be aware that the bill as reported by the Armed Services Committee contains an extremely provocative, unnecessary, and expensive provision which would allow for the preparation of hydronuclear experiments which would yield expulsions up to 20 tons.

Mr. President, we got out of that nuclear explosive testing business 3 years ago by the actions of this body. Three years ago, the Congress adopted a moratorium on underground nuclear testing, and this moratorium was put in place as an acknowledgment after hundreds—hundreds—of underground tests of our nuclear stockpile. It was in our national interest not to test.

The Armed Services Committee in its report justifies this provision and the authorization for $50 million to prepare for these tests with a statement that it is concerned about the readiness of the Nevada test site. This is the wrong reason to test. In fact, this is not a reason

at all. It is no reason. I will be interested to learn the source of concerns about the test site's readiness capabilities—who dreamed this up, and why the preparation for a hydronuclear test is the preferred option for maintaining that readiness. I think we deserve to have that kind of information and the source of it.

As most Senators know, the Exon-Hatfield-Mitchell law, which initiated our testing moratorium 3 years ago, acknowledged the possibility that a resumption of testing could be necessary to ensure the safety and reliability of the stockpile. Following an initial 9-month moratorium on testing, the Exon-Hatfield-Mitchell law allows for a 3-year program of limited testing and no more than five tests per year. So there is a flexibility factor already in the law. To date, the President of the United States has not certified that any weapon in the arsenal has a safety or reliability problem that would require explosive testing.

So certainly the President, who has a role to play in this, and especially through the Department of Defense, has no request for this. This is pure and simple a resurrection of the cold war mentality that has dominated this Congress for too long, especially under the military industrial complex that exists all over this country that former President Eisenhower warned this country against.

Yet the Armed Services Committee is recommending that the full Senate approve $50 million to prepare for the commencement of a series of tests at the Nevada test site. Why? There is no justification for these funds. There is no request for these funds—not from the Department of Defense, not from the President of the United States, not from the National Security Council, not from any body of authority that represents the major responsibility for protecting this country.

The provision included in the bill must be removed. It is dangerous and provocative and threatens the goal clearly stated by a Congress when it adopted the Exon-Hatfield-Mitchell law. That goal is the successful negotiation of a comprehensive test ban treaty.

Let me say that again. The goal is a comprehensive test ban treaty, not the renewal of testing to challenge the rest of the nations of the world.

Mr. President, current CTB negotiations led by the United States contain a discussion about thermal nuclear tests, but the official position of the United States is that the comprehensive test ban should prohibit all nuclear tests exceeding 4 pounds. Four pounds, Mr. President, not 40,000 pounds as the Armed Services Committee is proposing.

I believe that the provision in this bill and its accompanying report are fatally flawed. Let me read to my colleagues a passage from page 367 of the Armed Services report:

The Committee recognizes that the administration is currently negotiating a Comprehensive Test Ban Treaty in an effort to preclude or make more difficult the spread of nuclear weapons. However, the committee notes that sub-kiloton hydronuclear experiments are not particularly suitable for bomb development or giving foreign military planners confidence in a nuclear weapons design.

I am stunned by this passage. It is factually incorrect. Independent nuclear weapons experts have made it clear that hydronuclear tests are useful to proliferant states attempting to develop nuclear weapons capabilities. That is the very reason the United States comprehensive test ban negotiation position bars such tests over a few pounds of yield. This bill ignores these facts and argues that the United States should prepare for tests anyway.

It is clear to me and should be to all of my colleagues that the provision included in the bill is at the very best a very unfortunate mistake. The President has not requested these tests. The independent group of nuclear weapons experts known as the JASON group concurs that testing because no safety or reliability problem exists.

If this mistake is left unrepaired, it will result in grave consequences. American public opinion is solidly behind the effort to achieve a comprehensive test ban treaty and expect our leadership in the negotiations. If this bill is adopted with the current provision intact, we will irreparably harm our ability to negotiate a comprehensive test ban. I fully expect the American public and people around the world to react with the same astonishment and anger that it vented when France announced its decision to resume testing.

The Exon-Hatfield proposed amendment must be adopted if we are to avoid a return to the Dark Ages of a nuclear arms race. Three years ago we were able to end the cycle of vague justifications for underground nuclear testing and replace them with concrete requirements which must be met before testing resumes. The provision included in this bill breaks current law and will likely lead to irreparable harm to the comprehensive test ban negotiations.

Mr. President, as the chairman of the Senate Appropriations Committee, I would make one final note. The Senate has already completed action on the energy and water appropriations bill, which contains funding for weapons activities. That bill does not include funds for hydronuclear testing. Voting for this amendment would be consistent—that is, voting for our proposed amendment, Senator EXON's and mine—with current law as well as appropriations for the coming fiscal year. And I can assure the Armed Services Committee I will do all within my power as the chairman of the Appropriations Committee to block any funding for this kind of foolishness if it should prevail in this final bill.

Now, Mr. President, I would add one final note. For the last few days I have been asked to interview on my experience in Hiroshima a month after the bomb had been dropped, following World War II. It has only been the last few years that I would even like to talk about that kind of experience. But how—how absolutely immoral, how insensitive to begin to act for this kind of provision on the 50th anniversary of that horrible devastation that was wreaked upon Hiroshima and the people of Japan. What a monster we let loose in that situation.

It saved my life. I can attest to that because we were stationed for the invasion of Japan at the time. And having been in that occupation of September 2, 1945, and seen the following MacArthur order to put a white sheet before each of the gun emplacements at the very area we were to invade it was like sailing through inland seas of checkerboards. It would have been a murderous crossfire upon which probably who knows, a million people would have lost their lives. But nevertheless—nevertheless—not trying to judge in hindsight the wisdom of that bomb, the fact is, how insensitive on the 50th anniversary of that bomb to propose something of returning to the Dark Age mentality of testing again for increasing the capacity to kill and to destroy life as this would lead us to.

I yield the floor.

Mr. EXON addressed the Chair.

The PRESIDING OFFICER. The Senator from Nebraska.

Mr. EXON. I yield myself such time as I may need from our allotted time.

I just want to compliment my very dear friend and colleague from Oregon for the excellent remarks that he has just made. It puts in perspective so dramatically and so honestly and in such a straightforward manner the heart and soul of the Exon-Hatfield amendment, which is to follow on the Exon-Hatfield amendment of 3 years ago that we were joined in by the then-majority leader, George Mitchell. I think maybe we were somewhat surprised when we won that vote. But I think it was a giant leap forward in facing up to the realities of the situation that confront us.

So I thank my friend and colleague, a man of great wisdom and experience, for outlining in a very articulate fashion his views as to why the Exon-Hatfield amendment should be adopted, and also backing that up with his vast experience. When he was talking about those dark days of World War II when important decisions were being made, I was at Clark Field in the Philippines, which had just been taken during that particular period of time. And I know also—not to the extent that I believe my friend from Oregon did—but we knew full well what was being planned. We knew the sacrifices that were going to have to be made. And when the Senator from Oregon said his life was probably saved by that action, I think that is very much on point.

Having said that, I would like to come to the defense for a moment of former Senator Harry Truman, then President Harry Truman, who had the

courage to make that devastating decision that I believe very likely left its mark on the great President Harry Truman.

I am convinced he did the right thing, but it was a horrible thing. The Senator from Oregon has brought that very dramatically to the attention of the Senate.

Therefore, while I have been known as a hawk, and continue to be a hawk, I happen to feel that humanity has to recognize that if we keep maintaining as a major part of our national security the threat of another Hiroshima, then we are in dire circumstances, as far as humanity is concerned.

I ask my friend, though, about one part of his remarks, if I understood them correctly—I suspect there was somewhat an unintended understatement, if I heard my friend correctly—I believe he said that if the Exon-Hatfield amendment is not adopted, it will irreparably harm the chances for a nuclear test ban treaty. I believe those were the well-chosen words the Senator from Oregon used.

I happen to think that is a very minimal statement. I simply say if the Exon-Hatfield amendment does not prevail, it will not harm our effort for a comprehensive test ban treaty, it will destroy it.

I wonder if the Senator from Oregon feels that I am justified in making that statement a little more stronger than he did in his well-chosen remarks?

Mr. HATFIELD. I would not want to debate that issue with the Senator, because I know that he made that with care, understanding, with great feeling. I do feel, based upon the kind of outpouring of criticism that was leveled by all parts of the world against France for its announced intention to resume testing, that it would be escalated by about a hundredfold against the United States because of our superb leadership role we play in making those policies that affect the whole world, far more than France. But nevertheless, even with France, it is a setback. I think it would be even a greater setback and perhaps lead to total impossibility of success if you resume testing.

(Mr. SHELBY assumed the chair.)

Mr. EXON. I could not agree more and thank my friend for his remarks.

Mr. President, the Exon-Hatfield amendment then, if I can repeat that again, is a very simple and straightforward one. It will delete section 3135 of the bill in its entirety and remove the $50 million authorization for hydronuclear testing that the Senator from Oregon has addressed in a very eloquent fashion.

Our amendment makes no adjustment to the funding for either the stockpile stewardship program or the overall Energy Department budget. Our amendment is funding neutral. It simply removes the authorization in the bill to use $50 million to resume nuclear weapons testing, and the reasons for removing that and not doing it have been adequately addressed already by my colleague from Oregon and the junior Senator from New Mexico.

Three years ago, as was alluded to by Senator HATFIELD, a strong bipartisan coalition in both Houses of Congress twice approved a plan to phase out nuclear weapons testing and give the moribund comprehensive test ban negotiations a shot in the arm. Successful negotiation of a global comprehensive test ban treaty would significantly advance the cause of nuclear weapons proliferation by denying those nations tempted to develop nuclear capability the means to prove out their weapons. Getting that done, in the view of this Senator, is absolutely essential.

The Senator from Oregon, Mr. President, raised some rather interesting questions in his riveting remarks to the Senate this morning. He said, why is this included in the defense authorization bill? It was not requested by the administration. How did it creep back in? I suggest the answer to the question is that, despite all of our efforts to the contrary, there are people embedded in the Pentagon today that want to resume nuclear testing on a full-scale basis. This is a step in that direction, a very important and a very ill-timed one, in the opinion of this Senator.

Those people deep inside the Pentagon, and associated with it, have tried to influence the President of the United States to lift his objections, which he has stated over and over and over again to not begin nuclear testing by the United States of America, who is far ahead of any real, imagined or invented future enemies that might be a nuclear threat. If we begin testing today, it will be viewed by the rest of the world as they are currently reviewing and showing their distress of the French and their distress of the Chinese for the testing in this area that they are about as of now.

We must not join. The attack that will be launched against China and France and the United States of America, the leader in this field, is a terrible step in the wrong direction.

Mr. President, I feel so strongly about this issue. I talked a great deal yesterday, along with others, about the ballistic missile defense system. And on a close vote, the Senate validated the actions of our Armed Services Committee in that regard. I think that was a terrible mistake, but it has been done. But if we do not adopt the Exon-Hatfield amendment and go ahead with this program that is an open invitation, much more than a camel's nose under the tent, to start the nuclear race all over again, we will have essentially no one but ourselves to blame.

A comprehensive test ban would also freeze in place the inherent advantage of the United States, as it has at the present time, because we possess the most tested and proven nuclear stockpile ever. After 1,148 nuclear weapons tests over 50 years, the United States possesses the safest and most reliable nuclear weapons in the world. No one can argue with that.

The resulting law that we talked about earlier, called the Hatfield-Exon-Mitchell law, enacted an initial 9 months testing moratorium period, followed by 3 years of limited weapons testing, if necessary. And the Senator from Oregon referenced that in his remarks this morning.

During this 3-year period, no more than 5 safety and reliability tests could be conducted each year, for a total of 15 tests. Approval for the tests are to be sought from Congress through an annual testing report outlining the justification for such testing.

To date, no authority to conduct any weapons tests have been sought by the administration, and along with Russia, which, of course, are watching us in this area, we have not tested. Now comes France, and we all observe as to what they have done recently with regard to tests.

Likewise, I will mention once again the concern I have with the Chinese action. But during the time following enactment of the Hatfield-Exon-Mitchell law, those nations, led by the United States, have been working hard to reach agreement in Geneva on a comprehensive test ban treaty.

If we want to flush that down the drain, then defeat the Exon-Hatfield, et al., amendment.

I must confess, Mr. President, that I have had some rather angry words with certain administration officials on this particular matter. While the President has been steadfast, there are some close to him who are wishy-washy on this issue. I hope the President will listen to those of us who have done a great deal of study and have a great deal of concern about this. And I think the President will, notwithstanding the fact that some of those closest to him are wishy-washy on the issue, and I have told that to them to their face.

After 2 years of negotiations, we are hopeful that we are entering maybe some kind of an end-game with regard to a comprehensive test ban treaty. The nuclear and nonnuclear nations of the world are on track to reach an agreement, possibly, by 1996—a goal expressly endorsed by not only the United States, but China, Russia, and France. No one should ignore the fact that the permanent extension of the nuclear nonproliferation treaty was obtained this spring with the assurance provided by the nuclear powers that a comprehensive test ban treaty would soon follow. The world is in agreement: It is time to close the nuclear Pandora's box, and a comprehensive test ban treaty is a significant step toward that end. Let us not kill the possibility.

I recount the history of this issue so as to provide a context for better understanding the real reason why the Armed Services Committee provided $50 million for hydronuclear testing. Let no Senator misunderstand the true

intent behind this provision of the bill. Its purpose is to bust out of the nuclear testing moratorium we have been observing for the past 3 years as a result of the Hatfield-Exon-Mitchell bill that has been referenced on several occasions this morning. It wants the United States to renege on our commitment made during the NPT conference. It hopes to scuttle the comprehensive test ban treaty negotiations now underway.

The cumulative effect of these consequences will be to undermine our efforts to halt the spread of nuclear weapons around the world. As a result, our national security will be weakened, not enhanced, by the resumption of nuclear weapons testing and a new nuclear race will be in full swing. Our standing as a world leader will be irreparably harmed on the issue of nonproliferation. For proof of these things to come, simply look at the world condemnation over the recent French decision to resume testing. The world is astonished, but the French, in their way, go ahead as they always do. Let us not follow their course.

Some may ask, what is a hydronuclear test exactly? The simple definition is that it is a very low yield detonation—usually measured at a few pounds of explosive yield—to assess primary performance and safety of warheads. While a high-explosive explosion generates sufficient energy to melt the core of the weapon, the nuclear energy release is insufficient to cause the bomb to reach full criticality and with the possibility that it would explode with full power. It is true that the U.S. negotiation position in Geneva would allow for such experiments not to exceed 4 pounds of yield under a comprehensive test ban treaty. However, a treaty agreement has not been reached, and it is the present administration policy not to conduct such tests outside the treaty. I hope the President and the administration maintain that position.

Moreover, the authorization bill seems to use the term ''hydronuclear experiments'' rather loosely. As section 3165 of the bill notes, the tests to be performed may be measured not in terms of pounds of TNT yield, but rather in tons. That was stated in somewhat different form by the Senator from Oregon in his remarks to the Senate this morning. The type of nuclear tests the committee majority has in mind are not—I emphasize ''not,'' Mr. President—traditional hydronuclear tests. They are looking at detonation with yields up to 40,000 pounds— that is a whole lot more than 4 pounds—or 20 tons of explosive power.

The $50 million authorization provided in the bill for these nuclear weapons tests is a particularly mischievous add-on to the President's budget request. The mandate is in violation of existing law, which states that all proposed nuclear tests be included in the annual administration report on our Nation's nuclear weapons stockpile and the need, if any, to conduct tests. Specifically, the bill violates the provision of the Hatfield-Exon-Mitchell law that states, ''Only the numbers and types of tests specified in the report * * * may be tested.''

In short, the bill totally negates the process already in existence for proposing and approving, with congressional concurrence, new nuclear weapons tests.

More central to the point is whether these new tests are really needed. No safety or reliability problem is known to exist with any of our Nation's nuclear weapons to justify a resumption of weapons testing. On this most important point, there is no disagreement. Administration officials, from the laboratories to the Secretaries of Defense and Energy, all the way up to the President, are unanimous in this opinion. Even the JASON group—also referenced by the Senator from Oregon in his remarks this morning—an assembly of outside nuclear weapons experts, concurs with the finding that no safety or reliability problem exists, and that the restart of nuclear testing is not necessary.

Mr. President, there is no explanation in the committee bill as to which warheads are to be tested, or which weapons, why they are to be tested—though, in a very vague fashion, almost a carte blanche authority—and they do not even say how many tests are allowed. There is no limit.

Absent a known safety or reliability problem, the primary purpose for the resumption of testing is unknown. If it is to maintain worker expertise at the Nevada test site, it should be made clear that the committee has received no testimony to suggest that the testing expertise is eroding, or if it was, the proposed authorization to use $50 million to resume testing would stem this.

There is not any question but that this Senator has stood at the forefront—because we live in an uncertain world, and we have no way of knowing what the next move in the world, especially in nuclear testing is going to be—I have been at the forefront in maintaining a facility, with the people at the Nevada test site to be there, to do the testing, if an emergency arises.

I suggest that the true reason for the committee action is the basic belief that the United States should test for the sake of testing. It is a good thing to do, some seem to feel, even if it means undermining our Nation's efforts to close Pandora's box and halt the spread of nuclear weapons around the globe.

American leadership in the world community is strongest when we lead by example. We should continue to do that—lead by example. There is never more the case than in the area of nuclear weapons testing. We must continue to lead, and we must be responsible.

Contrary to the committee direction, there is no reason, Mr. President, to restart nuclear weapons testing. American public opinion has been solid against such a proposition for quite some time. Our country is poised to join the world community in taking a historic step toward limiting the number of nuclear states in the future.

Seriously endangering these efforts, as the committee testing provision would do, we will be working against the very national security interests that we profess to support in other areas of the bill, such as ballistic missile defense funding and, of course, the Nunn-Lugar program.

Mr. President, I urge my colleagues to support the Exon-Hatfield, et al., amendment and turn back this misguided attempt to fire up the cold war rhetoric of the past.

After 1,100 nuclear detonations, our stockpile is safe. It is reliable. It is time to concern ourselves with whether other nations are going to start and deploy their own nuclear arsenals.

The resumption of U.S. nuclear weapons testing will doom—will doom—the comprehensive test ban negotiations, and in the process, give the green light to the world leaders, hoping to find superpower status in the form of even a nuclear bomb or two.

Our amendment is a choice between priorities. A vote for the Exon-Hatfield, et al., amendment is a vote against the spread of nuclear weapons. A vote against our amendment is a vote for more testing and an abdication of responsible U.S. leadership.

We would be no different from the French, in their decision to test—an object of worldwide ridicule and derision.

Mr. President, I urge my colleagues to carefully think and then cast their vote, which I think and hope will be overwhelming, for the cause of halting the spread of nuclear weapons, and support the Exon-Hatfield, et al., amendment.

Mr. President, I reserve the balance of my time.

The PRESIDING OFFICER. The Senator from Nebraska has 31 minutes remaining, and the Senator from South Carolina has 61 minutes remaining.

Mr. THURMOND. Mr. President, I yield 20 minutes to the Senator from Nevada.

Mr. REID. Mr. President, I extend my appreciation to the chairman of the committee, the manager of this bill, and extend my congratulations to him, also, for the amendment that he has offered.

This amendment removes the triple play reactor for tritium production, appropriately shifts more funds to stockpile stewardship, restores stewardship funding for industrial partnerships that are critical to the new technology development for stockpile stewardship, and restores verification funding critical to fighting nuclear proliferation

I am also very pleased to see that the amendment endorses test readiness and hydronuclear tests.

There is only one problem I have with the amendment, and under the

unanimous-consent request I will offer an amendment at a subsequent time about that.

Mr. President, I say to my colleagues in the Senate that I have the deepest respect for the senior Senator from Nebraska and the senior Senator from Oregon. I say to my friend from Nebraska that he could not be more wrong. He keeps talking about nuclear testing. This has nothing to do with nuclear testing. That is the whole point of the experiments we are talking about. They are not nuclear tests.

Mr. President, there has been reference by the Senator from Nebraska and the Senator from Oregon about the JASON report. We will talk about the JASON report.

In July of this year, July 25, a couple of weeks ago, the new JASON report, the one that we should be talking about, says:

Underground testing of nuclear weapons at any yield level below that required to initiate boosting is of limited value to the United States. However, experiments involving high explosive and fissionable materials that do not reach criticality are useful in our understanding of the behavior of weapon materials under relevant physical conditions. They should be included among treaty consistent activities . . .

The report cited by the Senator from Oregon and the Senator from New Mexico—they should have read the more recent version, because it supports what the Senator from South Carolina is doing with this amendment.

With all due respect, they should not be throwing around the JASON report, because quoting from the JASON report arrives at the opposite conclusion.

Now, we will also talk about this as it relates to Nevada. Mr. President, this is not some kind of a pork issue for Nevada. The bill provides funds for a program of hydronuclear experiments at the nuclear weapons design laboratories at the Nevada test site.

I assure Members that it was written to assure that the majority of funds would go to the weapons laboratories which are not in Nevada. They are in New Mexico and one in California. The funds will go to the labs, regardless of how the vote on this amendment turns out.

Very little, if any, of the funds will go to the Nevada test site. My concern is not dollars to Nevada, but, rather, making it clear that these experiments are important and should be allowed to commence.

I also caution the stewardship supporters that support the Exon amendment could be interpreted as a prohibition of experiments the labs are currently contemplating at the labs and at the test site. I think people should be very careful about the intent of this amendment, and what the final result would be if the amendment is adopted.

There is no accepted definition of hydronuclear experiments. Mischief can and will be done if this amendment is passed. If the amendment is defeated, the decision on hydronuclear experiments will revert to the President, where it belongs.

I am forever amazed, Mr. President, that we are elected to the legislative branch of Government. But it seems we have 535 Secretaries of State. We have people who seem to think that they know better than the executive branch.

The Exon amendment is to limit stewardship, it is to limit readiness, and, of course, hydronuclear experiments. For 3 years we have let our nuclear weapons competence deteriorate. It is now time to end that deterioration. Not to return to the cold war—no one wants to do that—but to maintain and protect our nuclear deterrence and our nuclear expertise.

The Senator who offered the amendment has stated on a number of occasions that there have been a lot of tests conducted. Sure there have been a lot of tests conducted. Carl Lewis has been running and broad jumping and doing all the other things he does for 12 or 15 years. If he stops, he loses that touch. You must continue to work on something you are good at—recognizing that we led the world in safety and reliability of nuclear weapons. Of course we did. Why? Because we continually worked at it and we should not just give up on that.

Stockpile stewardship is critical to maintaining a safe, secure, reliable nuclear stockpile. Stockpile stewardship is also underfunded, but that is not the debate here today. As long as we own nuclear weapons—there is no doubt we will own them for the foreseeable future—we have an obligation to ourselves and to the world to keep them safe, secure and reliable.

My friend who has offered this amendment has attempted to make this a nuclear testing issue. The problem in the world today is not because of nuclear testing. We are not going to do nuclear testing. Even if this amendment is defeated, we are not going to do nuclear testing. The problem in the world today is nuclear weapons, and these experiments will do nothing to harm the negotiations that are taking place for the comprehensive test ban, which I support. I repeat, as long as we own nuclear weapons—and there is no doubt we will own them for the foreseeable future—we have an obligation to ourselves and the rest of the world to keep them safe.

The Senator from Oregon stated we have had hundreds of tests. Of course we have had hundreds of tests. But those tests, the majority of them, were for new weapons development. You cannot have this huge nuclear arsenal we are going to have for the foreseeable future and just let it sit. So long as we choose to own nuclear weapons, without the benefit of full-scale nuclear testing—and we are not talking about doing full-scale nuclear testing—we must support a fully funded stockpile stewardship program. This bill recognizes we must support the ability to resume testing, which is referred to as ''readiness.''

I appreciate the complimentary statement of the author of this amendment regarding readiness. But, until we have proven that the alternative, the stockpile stewardship and management program, will work, we must retain the ability to test in an emergency.

Furthermore, this bill, the underlying bill, recognizes that readiness can only be achieved cost effectively as a byproduct of ongoing experimental programs. The experimental program at the test site has been put on hold for a long time. We have acknowledged that. There was a legitimate break in the test and experimental program, as the laboratories reassessed what needed to be done. I have heard the senior Senator from New Mexico talk for hours about the ability of the labs to do what is important, scientifically, for this country. I accept that and I agree with that. We have had these labs, the best in the world, the best the world has ever known—we have had these labs reassess what needs to be done in a world without nuclear testing. Because, no matter what the Senator from Oregon says, no matter what the Senator from Nebraska says, we are not talking about nuclear testing. Our laboratories have said: We have reassessed this in light of the fact we do not believe there is going to be further nuclear testing. They say to give us confidence in our nuclear weapons, a transition must be made.

That is what we are talking about and that is why I support the amendment offered by the Senator from South Carolina.

There was some added delay that came in deference to politics —not good science; politics—to the extension of the Nuclear Nonproliferation Treaty. That treaty has been extended. I supported that. We are now engaged in comprehensive test ban negotiations, but the experiments the labs have proposed for 1996, and the President would approve, are clearly well within the scope of any potential comprehensive test ban. They are also well outside the scope of the Hatfield-Exon-Mitchell testing limitation.

If there is any problem in the bill because of report language or some vague, abstract thought process that people may have, I have acknowledged to the Senator from Nebraska we will put specific language—I should say more specific language—in the bill saying the tests are limited to no more than 4 pounds. I made that offer. But people do not want to accept that. They want to fight on nuclear testing, and there is no nuclear testing. We cannot fight about something that does not exist.

I repeat, we will offer to say there can be no experiment—not a test—no experiment over 4 pounds; not tons, not kilotons, not megatons—4 pounds. How big is 4 pounds?

My dad was a miner. I used to go down, as a boy, with him in the mines. He would drill the holes and he would load the holes, tamp that powder in—sticks of dynamite. He would put in 4

pounds, and 4 pounds is not very much, Mr. President. We acknowledge that. We agree to that. Because that is what the amendment of the Senator from South Carolina talks about, is those experiments of 4 pounds or less.

But no one has agreed to accept that. Why? Because they want to debate here on nuclear testing. This is not what the debate is about. This is not nuclear testing.

So, I urge my colleagues to vote against this Exon amendment. What does this amendment mean for U.S. policy? The United States is trying to negotiate a comprehensive test ban by the end of this year. Our goal is to end nuclear testing. Our goal is also to preserve the right to do treaty-compliant experiments, and that is what we are talking about here today. Hydronuclear experiments would be included in this.

We passed a resolution earlier this session of Congress to continue to hold firm in seeking these goals. I supported that. That was the right way to go. Recently, 24 Senators wrote the President to request that he not change his strategy. That strategy includes the experiments we are talking about in this amendment—not big tests; but experiments of less than 4 pounds. Are we now telling the President to change his strategy, to no longer seek to assure the right to do these important experiments? I hope the answer is no, and that the record will show that the answer is no, because otherwise this amendment is much more dangerous than it appears on the surface.

What is a hydronuclear experiment?

Could I ask the Chair how much time of the 20 minutes does the Senator from Nevada have left?

The PRESIDING OFFICER. The Senator from Nevada currently has approximately 8 minutes remaining.

Mr. REID. What is a hydronuclear experiment? I am quoting:

> Nuclear materials, either plutonium or uranium are configured with high explosives in a geometry very similar to a nuclear explosion. The amount of material and/or the geometry are chosen so that no—

I underline or underscore ''no.''

> nuclear chain reaction will occur when the explosion is detonated. Nuclear reactions occur and radiation is emitted in tiny quantities. By historic convention, in the United States the yield of an experiment is less than 4 pounds of TNT equivalent.

This is a millionth of a kiloton. This is 4 pounds.

The vast majority of informed experts that have studied the issue of the safety and reliability of nuclear weapons, including the JASON group—including the JASON group—who have studied the issue of the safety and reliability of nuclear weapons, recognize the importance of doing the experiments we are talking about today.

The only substantial debate is over the value or the size or the yield of these various experiments. That debate is going on in the Government now. But remember, we have agreed to clearly indicate, in this amendment, that it would be no more than 4 pounds.

So that is what the bill seeks to support. That is why we need hydronuclear experiments. And that is why we should support this bill and defeat the Exon amendment.

This is not, I repeat, a fight over nuclear testing. We should not let this become a fight over nuclear testing. Nothing in this bill will lead us to break any treaty, to break any existing law, or to end our testing moratorium.

To compare 4-pound experiments to what the French or Chinese are doing is stretching one's imagination beyond my ability to comprehend. The French are setting off kilotons in the middle of the ocean. In the Chinese deserts, they are setting off kilotons, thousands of tons of TNT.

So to try to compare that to these tiny little experiments in which you could carry the dynamite around in your pockets, 4 pounds, is absolutely absurd.

We know that the President will only approve treaty compliance experiments. We know the President's position on a comprehensive test ban. He has made it very clear. This bill will not change the President's position on that. The issue is whether you can conduct these experiments. The only experiments being proposed by the labs or the Department of Energy are treaty compliance, and well within the scope of any plausible test ban treaty.

The experimental preparations called for in this bill are long overdue. We are talking about experimental preparations that will be done in laboratories.

Senator EXON and others are concerned about this bill leading to an undermining of U.S. efforts to conclude a comprehensive test ban. There is no basis for that concern. First of all, the President must approve all nuclear tests or hydronuclear experiments. And we all know that he will not approve any experiment that is not consistent with our negotiating position.

Second, the hydronuclear experiments that would be considered by the nuclear weapons laboratories and the Department of Energy will not have yield that would be considered a nuclear tests under U.S. law or under international conventions. What this bill will do is get our Nation moving on fully developing our stockpile stewardship program.

Is there anything wrong with wanting to make sure that these weapons that we have are safe and reliable? No one is talking about building new weapons or new weapons systems. Should we not have a stockpile, no matter how large or how small, that is safe and reliable? I hope the answer cries out as yes.

An essential element of a program like this is a program of experiments that uses both nuclear materials and high explosives, a program of hydrodynamic experiments and hydronuclear experiments. This bill says that we have delayed these experiments long enough, and it is time to move with an experimental program and do it soon.

This program is critical to stockpile stewardship. This program is critical to readiness. And let me add that readiness to testing is critical until we have fully established that we can maintain the safety and reliability of our nuclear stockpile without nuclear testing. This is not an attempt to start testing. This is an attempt to find an alternative to testing and at the same time preserve our capability to resume testing if our national security demands it.

We must be concerned about the dangers of an accidental explosion. We must be concerned that we have a safe and reliable stockpile.

I again refer to the professional group that was talked about by the Senator from Nebraska and the Senator from Oregon, giving great credence to the JASON report. I again read from their own sources. Their own sources say, however, that experiments involving high explosives and fissionable material that do not reach criticality are useful in improving our understanding of the behavior of weapons materials under relevant physical conditions. They should be included among the treaty's consistent activities.

I suggest that if you are going to use something as a source, you should use the latest source. And the latest source is July 25, 1995, where the JASON group supports what the committee has agreed to in this bill. Based upon the JASON report of good common sense, logic, and the safety and reliability of our weapons, this amendment should be defeated.

Mr. EXON. Mr. President, I was hoping we could move back and forth on time. There are 31 minutes left on our side.

I would like to have a better balance on time. But if there is no speaker ready to go over here, I yield 20 minutes to the Senator from Ohio.

The PRESIDING OFFICER. The Senator from Ohio.

Mr. GLENN. I thank my friend from Nebraska.

Mr. President, this discussion is taking place on the anniversary of the end of World War II and the use of atomic weapons, as we all are aware from the news reports of the last few days. It was the first time we really had weapons of mass destruction used like this, and we saw what nuclear weapons could do. My view in that area, as an aside, is that we really saved lives, both Japanese and American, by what happened out there. But out of World War II we came into the cold war, where bomb and missile development became very major programs and became survival for this country.

At the same time, though, that we were proceeding along those lines, we kept our concerns about the spread of nuclear weapons and nuclear material, and hoped all along that someday we

could get control of our nuclear stockpiles as well as those of our major adversary for all of those years, the Soviet Union. Then, in the meantime, we hoped that others could be persuaded not to go the nuclear route. We had hopes that someday we might get control of some of these matters. Until that day, we wanted to prevent the spread of nuclear weapons. We did not want to see nuclear information, nuclear weapons, be spread to smaller and smaller nations where maybe their use would be common in border wars and things that the rest of the world would not deem that important. And we would see new levels of terror around the world that would make Hiroshima and Nagasaki look like tiny firecrackers compared to the potential of what might happen.

So what did we do? Well, in the hope that we might be able to make some advances in this area, we formed the Nonproliferation Treaty, and we have just gone through the 25th anniversary. The purpose of NPT was to tell nations foursquare with the nuclear weapons route, if you will, that we will cooperate with you on peaceful uses of nuclear material for medicines or whatever purposes. Meanwhile, we will try to get control of this nuclear stockpile on both sides, Soviet and American, try to get it under control.

We passed legislation here in 1978 just a couple of years or 3 years after I came into the Senate called the Nuclear Nonproliferation Act. The Pressler amendment came much later. Other laws have been put on the books through the years, all with the objective of keeping control of nuclear weapons around the world.

We finally at last, in our day and time, are seeing a reduction in these stockpiles of weapons. We still hope that we can get to a comprehensive test ban sometime, one that is verifiable and justifies the faith that these other nations have placed in the United States. So here we are, in 1995, having really moved down the road a long, long way. We have made a lot of progress.

So, Mr. President, I rise to speak as a cosponsor of the amendment offered by my colleague from Nebraska, Mr. EXON, to strike what I view as an ill-advised provision in the bill pertaining to low-yield testing of nuclear weapons.

On May 12, 178 parties to the Nuclear Nonproliferation Treaty agreed to make that treaty permanent. That was a big fight. They agreed to make that treaty permanent, not a 5-year review as we have been going through, but to make it permanent. And America's success in achieving this outcome was substantially encouraged by promises made by the nuclear weapons states to conclude, to do everything we could to conclude a comprehensive nuclear test ban treaty by 1996.

Shortly after the celebration died down, after that NPT extension, China set off a nuclear device, and said more would follow. France then declared it, too, would fire off a few before halting next year. China continues to support the right to conduct so-called PNE's, peaceful nuclear explosions. These steps by China and France do not help at all to advance the cause of nuclear nonproliferation of either variety—horizontal nonproliferation which seeks to prevent the geographical spread of the bomb in more countries, or vertical proliferation which seeks to prevent the increased growth and sophistication of weapons already in the stockpiles of the nuclear weapons states.

Yet, instead of expressing its opposition to the actions of France and China and proceeding along the lines that we have developed through all of these years, the hoped-for area where we really could get nuclear stockpiles under control, the Armed Services Committee voted on June 29 to require the President to make ''preparations to commence low-yield hydronuclear experiments,'' a policy that would substitute low-test for no test.

It was stated here that these have nothing to do with nuclear explosions, but they do. The title of them is hydronuclear—small amounts, very small amounts, but they are nuclear experiments. They are low-test nuclear experiments. That is the definition of them. That is the reason they are called hydronuclear experiments.

These experiments are basically an attempt to say that we will look at the hydro characteristics of a low-yield explosion— in other words, the wave patterns, the way the motion occurs internally, combine that with computer techniques that can tell us something about safety. That is true. But it could also be used by a nation that could develop sophisticated computer techniques to give them a lot of clues how to go ahead and do their own weapons development.

So the question comes down to, do we want a comprehensive test ban or does this undermine a comprehensive test ban?

In the dreams of its supporters, this action could well pave the way for nuclear test explosions with yields ranging from 4 pounds to several hundred tons of TNT equivalent—even within something called a Comprehensive Test Ban Treaty. And recall, 100 tons is 200,000 pounds equivalent of TNT—100 tons, 200,000 pounds of TNT.

By comparison, the blasts at Oklahoma City and the World Trade Center were equivalent to the explosive yield of between 1,000 and 2,000 pounds of TNT. The FBI has not released its official estimate figure yet, but it is in the ballpark because on August 3, 1995, the Bureau of Alcohol, Tobacco and Firearms informed my staff that their own explosives experts estimate the yield of the Oklahoma City bomb at about 2,100 pounds of TNT equivalent.

More explosive than these detonations, however, will be the punch that will come from angry members of the global nonproliferation regime if the United States and the other nuclear weapons States start to play games over their commitment not to engage in any further nuclear tests, which was a key item during deliberations over whether we were going to extend the NPT. Many of these countries have already sent a blizzard of demarches, aide-memoirs, nonpapers, and other such diplomatic missives to remind the United States and the other nuclear weapons States about that basic arms control and nonproliferation goal, perhaps best summarized in the preamble of the NPT itself of seeking to achieve the discontinuance of all test explosives of nuclear weapons for all time.

Any resumption by the United States of such tests, or even active preparations to resume such testing, would jeopardize this hard-won consensus on the permanent extension of the NPT.

Essentially, if we heed the nuclear testing policy dictated in this bill, we will only invite the following type of collective declaration by the nonnuclear weapons States: Halt all testing or we leave the treaty. I think some nations might well do that. If we are having trouble today affording a limited missile defense and curbing the proliferation of nuclear weapons within the NPT and ABM Treaties, just imagine how worse these conditions would be if these treaties collapsed. I do not think we can afford to take such a risk.

The testing policy dictated in this bill is all the more mystifying given that even veteran bomb designers do not believe that low-yield nuclear test explosions are vital to ensure either the safety or reliability of our nuclear stockpile.

Former Livermore Director Herbert York does not believe such tests are necessary. We have conflicting testimony here about the JASONs. And the JASONs, I might add, are an advisory group to the Department of Defense. They are academics and defense experts, think-tank experts. They are one of the most top-level scientific groups that advises the Department of Defense, so their expertise in this area is without question.

Now, the JASONs in the past have said they see some advantages to this type of testing but the disadvantages far outweigh the advantages in the dangers to nonproliferation, to the NPT, and so on—outweigh this—and that has been their view in the past. Another view was expressed on the floor this morning. We are asking for some clarification of that. And I hope we can get that before our debate here is concluded this morning.

In November 1994, just last fall, the JASONs specifically cited the effect of renewed underground nuclear testing upon U.S. nonproliferation goals as grounds for their conclusion that they oppose it. After considering NPT and considering the advantages, and some of which there were, they say, ''On balance, we oppose hydronuclear testing.''

That was last November. Even our nuclear weapon labs have come around

to the view that such testing is not necessary to maintain the nuclear arsenal.

Dr. Frank Von Hippel, until recently the Assistant Director for National Security in the White House Office of Science and Technology Policy, goes so far as to say that a resumption of nuclear testing—and this would be just low-level nuclear testing, hydronuclear testing

> . . . would be seen as a fraud by virtually all of the 170 nonnuclear states that agreed this spring to an indefinite extension of the Nonproliferation Treaty after receiving a commitment that a Comprehensive Test Ban Treaty would be signed next year . . . Based on U.S. experience, the objective value of ''reliability'' tests is negligible in comparison with the costs of reneging on the deal with the nonweapons States, which promises that we will all work together against the spread and to reduce the numbers of these terrible devices.

That was published in the Los Angeles Times on July 26 of this year.

We have all sorts of definitions of ''comprehensive,'' I guess. I think comprehensive is pretty clear myself, but comprehensive to me means these lower-level tests also. So we need obviously a bit more predictability when we attempt to forge a national policy or craft a permanent international treaty. But we cannot go on unilaterally contriving new definitions of our international treaty commitments, a lesson that unfortunately has yet to be learned by supporters of provisions in the current bill addressing the ABM Treaty.

Mr. President, a basic nuclear fission explosion is caused when a chemical explosion forces a sudden release of energy from the nucleus of atoms, typically plutonium or highly enriched uranium. In testing a nuclear explosive device, there is no nuclear explosion if the total energy released from a detonation is equal to the yield from the detonation of just the chemical explosives in that test device. If, however, you get some energy release greater than the energy that is released from the chemical explosive, then you have a nuclear explosion. A device that produces such explosions is what we call a nuclear explosive device.

Under current nuclear proliferation sanctions legislation, our country imposes tough sanctions if nuclear nonweapons states detonate a device that produces a nuclear yield of only 1 pound, 1 pound of TNT equivalent.

The source for that is section 834 of the Nuclear Proliferation Prevention Act of 1994, Public Law 103–236. This was a standard used by the United States during a nuclear test moratorium between 1958 and 1961. It was used at that time to define what was called a hydronuclear experiment.

Section 3135 of the current bill makes available $50 million for, ''Preparation for the commencement of a program of hydronuclear experiments.'' Later on, in section 3165 of the bill, the bill makes it clear that this bill intends to include detonations with nuclear yields on the order of 20 tons of TNT to fall within the category of ''hydronuclear tests''—that is in the bill—although the series of tests during the old moratorium had nuclear yield of far less than a pound of TNT.

The bill is therefore not only an extreme diversion from historic U.S. practice but in establishing a 4-pound testing level, it adopts a standard that is four times higher than the standard we now apply to other countries in implementing our nuclear proliferation laws. I think it opens up a Pandora's box for arms control professionals and intelligence professionals who are responsible for verifying compliance with a comprehensive test ban. Verifying such a ban is difficult enough, but I think it is far easier to verify that there have been no nuclear explosions whatsoever, than it is to determine whether a given nuclear explosion at an unknown location had a yield of 1, 3, 4, 5 pounds, or whatever.

Moreover, our current 1-pound definition for sanctions, which is still the law, has nothing to do with restraints on nuclear testing. As I clearly stated on the floor in my remarks a couple years ago, on May 27, 1993, this definition:

> . . . is not intended to foreclose any other definition that may be adopted in the course of the negotiation of any future international agreement limiting the testing of nuclear explosive devices, including a Comprehensive Test Ban Treaty.

I would today go further and say, no test ban treaty that deserves the word ''comprehensive'' in its title can allow nuclear explosions of any size, period. That is what comprehensive means, no nuclear explosions.

Explosive tests at even 1 pound and below can give a proliferant country some potential benefits, no doubt about that, especially in the areas of weapons safety, though there is no indication that any proliferant country has chosen that route to acquire the bomb. When you go to 4 pounds, then 40 pounds, then 400 pounds, and beyond, then you obviously run into more and more proliferation risks. We drew the line at 1 pound for sanctions purposes many years ago, not to legitimize tests below that level but simply to guarantee that no proliferant country could escape from the force of U.S. sanctions by undertaking exactly the type of so-called hydronuclear experiments described in the current bill.

In short, America should not be encouraging the world community to engage in low-yield nuclear testing. A comprehensive test ban must eliminate all nuclear explosions. As I said on this floor last March 16, it is essential that we proceed with several measures to strengthen controls against the global spread of nuclear weapons, including:

> Negotiation at the earliest possible date of a verifiable—underline verifiable—permanent comprehensive ban on the testing of nuclear explosive devices, with emphasis on those words ''verifiable,'' ''permanent,'' ''comprehensive'' and ''ban.''

Mr. President, we in the past have seen Taiwan have a program for nuclear weapons. We were able to bring them around to turn that program off. South Korea had a similar program at one time. We turned that off. Iran is in the process, we believe, now of heading for nuclear weapons. We are trying to turn that off. Pakistan has already gone that route against our very serious objections. India went that route in 1974.

Are we now to come into this debate today and say that we are going to perform little bitty nuclear explosions, but you people cannot do the same things? It just does not make sense if what we are trying to go to is a comprehensive test ban.

The debate today is ironic given that we just do not need to perform hydronuclear experiments to maintain the reliability of our nuclear arsenal. In fact, our Government is now investing billions in special facilities that will enable our country to ensure the safety and reliability of the stockpile without nuclear explosive testing. And that includes hydronuclear testing. This is what is known as to the stockpile stewardship program.

Are there advantages to hydronuclear testing? Of course there are. I agree with that. But the dangers to the NPT and the worldwide spread of nuclear weapons as other countries see us testing and decide to do the same thing is far greater. The danger is far greater than any advantage we get out of the hydronuclear test.

If the hundreds upon hundreds of nuclear tests that we have undertaken over the last half century have still not given us a reliable arsenal, then this dubious record surely offers sufficient cause for us to question whether testing is truly as efficient a method for establishing a method of safety and liability as its proponents claim it is. The truth is, of course, that we already have a safe and reliable arsenal. And a good way to keep it that way without testing is to leave the designs alone.

Supporters of the nuclear testing section of the bill appear to want it both ways, twice. They want both to resume nuclear testing and fund big-ticket nonnuclear test facilities. They also want both to expand current nuclear and missile defense capabilities and to propagate the view that our potential adversaries will do nothing in response that will adversely affect our national security. I am opposed to such reasoning, and I am sure I am not alone in challenging these totally incompatible goals.

I applaud the leadership of my friend from Nebraska. Over the years he has fought for restraints on nuclear testing. I am proud to be included as a cosponsor of his amendment today. I hope our colleagues have been following the debate here on the floor today. And I hope we have an overwhelming vote in support of the Senator from Nebraska.

I reserve the remainder of my time.

The PRESIDING OFFICER. Who yields time?

Mr. THURMOND addressed the Chair.

The PRESIDING OFFICER. The Senator from South Carolina.

Mr. THURMOND. I yield 10 minutes to the able Senator from Arizona.

Mr. KYL. I thank the chairman for yielding me the time.

Mr. President, I rise in very strong opposition to the Exon amendment and in support of the committee's position.

Let us begin with a redefinition here of what we are talking about. What is a hydronuclear test? All that the committee has done is to provide $50 million to enable us to have the capability to conduct such tests, should the administration decide to go forward with that decision.

A hydronuclear experiment is one in which the conventional high explosive yield is greater than the nuclear yield.

So we are, by definition, talking about something that does not have a high nuclear yield. As a matter of fact, the kind of tests that have been contemplated in the past are tests with approximately 4 pounds—4 pounds—of material, between 1 and 4 pounds. All these experiments provide is an experimental calculation of the safety of the stockpile. That is what we are talking about here.

Now, what about the CTB, the comprehensive test ban? Would conducting such tests run afoul of the test ban? Well, we can quote no better authority than one of our colleagues here in the U.S. Senate who was here during the debate on the Hatfield amendment. And I refer to the Senator from Massachusetts, Senator KENNEDY, who suggested that such low-yield tests would be perfectly acceptable within the Comprehensive Test Ban Treaty. On September 18, 1992, Senator KENNEDY said:

> The first of these concerns—accidental detonation—can be resolved with safety tests with an explosive power equivalent to a few pounds or less of TNT. Such test need not be limited under a comprehensive test ban.

That is on page S13965 of the CONGRESSIONAL RECORD.

Now, the reason, of course, why, such tests should be allowed under the CTB is because they are not verifiable. As the Senator from Ohio pointed out, the CTB only works at levels where you can verify that the nations that are adhering to the treaty are, in fact, adhering to the treaty. These low yields are not verifiable. They are so small you cannot detect them. That is why they could not be included under a CTB. That is why this has nothing to do with the CTB. So let us get that off the table right now.

The next point is: Why test? Lawrence Livermore Laboratory estimates that:

> One-third of all of the weapon designs placed in the U.S. stockpile between 1958 and 1987 required and received post-deployment nuclear tests to resolve problems.

In other words, after we had put the warheads on top of the missiles, or put them in the bombs in the planes, one-third of all of those weapons required and received postdeployment tests to resolve problems that they had developed.

''In three-quarters of these cases the problems were identified as a result of nuclear testing.'' In each case the weapon was thought to be reliable and adequately tested when it entered the stockpile.

In other words, Mr. President, we test in order to find out whether they are still going to work, whether they will be reliable, and whether they will remain safe. These are the most complex weapons in our entire inventory, and yet they receive the least testing once they have been deployed. We shoot the guns. We fly the airplanes. We sail the ships. This is called readiness.

But some of our friends on the other side do not want to know whether the most complex weapons in our inventory are reliable, whether they will work, and whether they are safe. And how can they possibly constitute an effective deterrent if those against whom they might be used understand that they have not been tested maybe for 30 years? We are talking about weapons, warheads that will be in our inventory for 30 years or more, never having been tested. Lawrence Livermore notes that in three-fourths of the cases where testing was done, problems were identified as a result of that testing.

These weapons were thought to be reliable. Let me be very specific.

Of the 16 Lawrence Livermore developed warhead designs that entered the stockpile between 1958 and 1987, several were found to have problems. For six of these, the WXX, the W84, the W79, the W68, the W47, and the W45, the resolution of these problems involved nuclear tests.

Further, of the 25 Los Alamos weapon designs that were deployed between 1958 and 1987, one-third have required postdeployment nuclear testing. That is what we are talking about here.

Let us go to the element of safety, because, obviously, we want our weapons to be safe, and technology has improved, has enhanced our capability of making these weapons safe.

The 1990 Drell panel, which was constituted to consider this issue, concluded that ''there is still room for substantive improvement in nuclear weapons safety.''

One manner to improve the safety of the warheads is to replace warheads—the ones that have high explosives—to ones with insensitive high explosives, the so-called IHE. High explosives can be detonated in abnormal thermal pressure or shock environments.

That can be a danger in a crash situation or a fire situation.

As the Drell panel noted, ''In certain violent accidents, such as airplane fires or crashes, HE has a high probability of detonating, in contrast to IHE.'' The Drell panel concluded that:

> . . . replacing warheads with HE with new systems with IHE is a very effective way—perhaps the most important step—for improving safety of the weapons stockpile from scattering plutonium.

IHE was first introduced in 1979 in the stockpile. As of early 1990, only 25 percent of the stockpile was equipped with IHE. Incorporating IHE in the stockpile could require design changes and, thus, the requirement to retest the weapon to ensure its ability to accomplish its military requirement.

So, Mr. President, both for reliability reasons and for safety reasons, some limited testing is necessary.

There has been a lot of quotation here of the so-called—I should not say ''so-called''—of the experts on the subject, because experts will differ in their opinions and the JASONs are all experts and so are the directors of the laboratories.

I quoted the statistics from the Lawrence Livermore Laboratory and the Los Alamos Laboratory. One of my colleagues said the lab directors are against this. The lab directors are for it. Ask Sig Hecker, who is the director today of the Los Alamos Laboratory. Some of the quotations were for previous directors. This is the current director of Los Alamos, and he says we ought to have testing.

You can find whatever you want to in the JASON report, but what my colleague from Nevada is quoting from is the most recent report. It is the draft July 1995 report. That is the most recent report.

Of course, they point out the fact that there are some advantages and some disadvantages, but one of their conclusions is that experiments involving—actually let me read the first sentence, because it will support the position of the Senator from Nebraska. I do not want to quote selectively, I am going to quote the whole thing:

> Underground testing of nuclear weapons at any yield level below that required to initiate boosting is of limited value to the United States.

They are talking about these very low yield kind of tests.

But they go on:

> However, experiments involving high explosives and fissionable material that do not reach critical—

The ones we are talking about—

> are useful in improving our understanding of the behavior of weapons materials under relevant physical conditions. They should be included among treaty consistent activities.

That is the most recent JASON report. Obviously, they discussed all of the pros and cons, and there are pros and cons of this kind of testing.

Let me just conclude with two points, Mr. President. The Senator from Nebraska, in his opening remarks, talked about the wishy-washy advisers of the President. I think who he had in mind—he can correct me if I am wrong—is the Secretary of Defense William Perry, perhaps among others. If the Senator would like to correct me right now.

Mr. EXON. The Senator is wrong, but he has a right to be wrong.

Mr. KYL. Will the Senator tell me who he meant when he referred to the wishy-washy advisers to the President?

Mr. EXON. There are a whole group of wishy-washy advisers to the President. I talked about people inside the Pentagon. The Secretary of Defense supports my position. I hope you are not saying the Secretary of Defense supports your——

Mr. KYL. Yes, I am going to say that.

Mr. EXON. You are wrong. You have a right to be wrong.

Mr. KYL. Because the Secretary of Defense and the Defense Department in May of this year had suggested to the administration the desirability of these kinds of tests. When the issue went to the National Security Council and the highest counsels, including the President, the Defense Department recommendations were shelved, they were overruled.

As a result, we are not going to go forward with these tests, although the most recent Defense Department document in July of this year, which I can quote to you, does refer to the continuing open issue as to whether we should go forward.

But in any event, I find it interesting that this is the same Secretary of Defense who was so relied upon yesterday in the debate on missile defense and find it ironic that some people on the floor were suggesting that the reason we did not need missile defenses is because we could rely upon our triad, our nuclear triad. You cannot have it both ways. If you are not going to test reliability and safety of the triad, then you should be supporting missile defense. If you are not going to support missile defense, then you ought to be supporting the effectiveness of our nuclear triad.

Mr. President, I want to conclude at this point. The whole phrase, the whole concept of stockpile stewardship implies a responsibility. That is what stewardship means. And these are the most complex weapons in our inventory. As I said, we test guns and planes and ships regularly. It is called readiness. I cannot believe that we are arguing here about a 1-to-4 pound test that does not reach criticality, where, by definition, the conventional yield is greater than the nuclear yield, and it seems to me, therefore——

The PRESIDING OFFICER (Mr. INHOFE). The Senator's time has expired.

Mr. KYL. The Senate ought to support the committee position and reject the position of the Senator from Nebraska.

Mr. THURMOND. I yield 3 more minutes to the able Senator.

Mr. KYL. I thank the chairman for yielding. I will take 30 seconds of that time.

Let me say this. We all wish the nuclear genie had not been let out of the bottle, but it was. I noted with interest, Senator HATFIELD, Senator EXON, and others commented about their experience in World War II and glad that President Truman made the decision he did, which probably brought that horrible war to a conclusion much faster than it would have been, and thank God the weapon he chose to use worked.

All we are saying is, in the future, 30 years from now we better know that the weapons we rely on in our stockpile will work. To do that, we need to be prepared to conduct the very limited tests, and that is going to require the limited money included in the bill for this purpose. That is why we need to reject the Exon amendment.

The PRESIDING OFFICER. Who yields time? The Senator from South Carolina.

Mr. THURMOND. I yield 12 minutes to the able Senator from Nevada.

The PRESIDING OFFICER. The Senator from Nevada is recognized.

Mr. BRYAN. I thank the Chair, and I thank the distinguished chairman of the Senate Armed Services Committee.

Mr. President, I rise in strong opposition to the amendment offered by my good friend, the senior Senator from Nebraska. During the course of the debate this morning, references have been made to the 50th anniversary of the end of World War II and the use of nuclear weapons at Hiroshima and later Nagasaki. Let me say, I think those references have absolutely nothing to do with what we are talking about today.

We are not debating whether we should resume underground testing, as it has been historically known at the Nevada test site. That is not the issue before us today. We are not debating about the prospect of developing new nuclear weapons. The issue, I think, that was framed so artfully by the distinguished junior Senator from Arizona, the question today is the safety and reliability of the nuclear arsenal.

No scenario that I am familiar with contemplates a future in terms of our armed service deterrent that does not include our nuclear arsenal. So safety and reliability is essential and critical.

As a member of the Armed Services Committee, I have joined my colleagues on a number of occasions questioning the Department of Energy and the Department of Defense officials regarding our plans to maintain the safety and reliability of our nuclear weapons stockpile in the absence of nuclear testing.

In hearing after hearing, the answer came back that we simply do not know. Mr. President, no one in this body can state with categorical certainty that our nuclear weapons arsenal has suddenly become safe and reliable for the foreseeable future, and that there is no need to continue to ascertain the safety and reliability of that nuclear stockpile.

Nuclear weapons, by their very nature, are extraordinarily complex systems. We simply do not understand the effects of aging on many components that make up each nuclear device. Those who designed the nuclear weapons planned for our enduring stockpile did not contemplate the maintenance of these systems past their designed life. Our national labs, which are ultimately responsible for certifying the safety and effectiveness of our nuclear weapons systems, have initiated a science-based stockpile stewardship program, which aims to give us the information we need to know about the nuclear stockpile without nuclear testing.

Many of my colleagues are familiar with these new strategies, including the National Ignition Facility, the ATLAS, the DAHRT, and many others. Once these facilities are up and running, the labs anticipate the ability to obtain much of the data previously gathered through nuclear testing without performing nuclear tests. But science-based stockpile stewardship has never been considered as a complete substitute for all types of nuclear tests or experiments for a number of reasons.

Even when the science-based stockpile stewardship program is fully implemented, there will still be gaps in the type of knowledge our labs need to gather. It is a common misperception that the new simulator technology, anticipated to become available soon, will, in effect, simply simulate nuclear tests and allow us to gather all of the same data that a nuclear test may provide. Mr. President, nothing could be further from the truth. Each of the components of the science-based stockpile management program will provide some of the data, which are issues of concern, such as certifying the safety and effectiveness of our weapons system. None will provide all the data, and even the combination of all of the new technologies currently being considered will not eliminate the need for certain types of actual testing with nuclear materials.

Given the high level of uncertainty that remains regarding science-based stockpile stewardship, the Senate Armed Services Committee has taken a very reasonable and responsible approach in the legislation currently before the Senate. The committee directs preparations to conduct nuclear testing should this type of testing become necessary. The bill does not direct hydronuclear testing, and hydronuclear tests would still have to be approved by the President of the United States under current law.

It is, in my judgment, reckless for our Nation to hold thousands of the most powerful and dangerous weapons known to mankind and not have the knowledge or understanding of how to maintain them.

Another concern regarding this amendment is its affect on the Nevada test site and the unique capabilities this complex brings to the U.S. national security effort. The DOE stated its intention to allow the readiness of the Nevada test site to slip from 6 months up to 3 years. The Nevada testing facility is a unique resource, and

the Nation's investment in it must be protected. Personnel at the Nevada test site are a small community of highly specialized workers with expertise found nowhere else in the world. This capability is irreplaceable and must not be risked. The combination of an aging stockpile and the decaying nuclear weapons expertise at the Nevada test site and at the labs pose a direct threat to the safety and reliability of our stockpile.

It is important to note that hydronuclear testing would not lead the United States on a path to violate the Comprehensive Test Ban Treaty, as has been suggested by some of our colleagues.

While negotiation positions are generally regarded as classified, it has been reported in the media that the United States favors a limit under the CTB of hydronuclear tests with less than 4 pounds of nuclear yield. Other nations apparently want a much higher yield.

It has been reported in the press that Great Britain wants up to 100 pounds, Russia wants tests up to 10 tons, and France wants tests allowed up to 100 to 200 tons.

At this point, there is simply no way to predict how the final CTB may be negotiated. Even with the hydronuclear testing program, the United States can remain in full compliance with all current international agreements and the likely future provisions of any CTB.

In fact, the Armed Services Committee report language specifies ''treaty complaint'' hydronuclear tests.

We must remember that even if START II is ratified, the United States will continue to maintain a stockpile of thousands of nuclear weapons.

The reliability of these weapons forms the basis of their existence as a strategic deterrence. As our stockpile of nuclear weapons is reduced, the reliability of each nuclear weapon becomes even more critical to an effective deterrence.

It is possible that only through hydronuclear testing at the Nevada test site can we have adequate assurance that our nuclear weapons will function as expected if a time should ever be needed to use them in a crisis.

Almost one-half of the nuclear weapons systems developed since 1970 have needed nuclear testing to correct or evaluate defects. Clearly, this amendment could seriously hamper our confidence in our nuclear weapons stockpile.

Mr. President, I am afraid this amendment may, in some part, be motivated by a misunderstanding of what the committee hoped to accomplish by adding funding to the stockpile stewardship account for hydronuclear testing.

While the terminology may be confusing, the committee does not envision a resumption of the type of nuclear tests that we have become familiar with over the years. These are not full-scale tests of nuclear weapons, nor are they intended to test for new weapon designs.

Very small hydronuclear tests may, for example, test whether dropping a weapon would result in a nuclear detonation—a test that, I suggest, should hardly raise nonproliferation concerns.

Such tests are not designed to improve our ability to use nuclear weapons against any future enemy. They are designed to protect those in the Armed Forces or the general public who may be put at risk by an unsafe or deteriorated weapon.

Other experiments, slightly larger, but still nowhere near the level of a full-scale test, and still completely consistent with our treaty obligations, could test the so-called ''boost'' provided by the tritium components of a weapon.

Some have argued that such tests are largely irrelevant; the claim is made that it makes little difference if the yield of the nuclear weapon deteriorates only slightly over the period of time. The answer to that, Mr. President, is that we simply have no assurance, however, that an old weapon will experience only a slight reduction in yield.

While everyone hopes and assumes that we will never use a nuclear weapon again, it is simply unconscionable not to provide our military planners the confidence they need in the anticipated yields of our nuclear weapon systems.

Again, I urge my colleagues to vote against the amendment offered by the senior Senator from Nebraska.

I yield the floor and the remainder of my time to the able chairman of the Senate Armed Services Committee.

The PRESIDING OFFICER. Who yields time?

Mr. THURMOND. I yield Senator KEMPTHORNE 10 minutes.

Mr. KEMPTHORNE. Mr. President, I thank the chairman of the Armed Services Committee. With regard to this debate, there is a reality, and the reality is that we have a nuclear arsenal. It exists. Now, perhaps through START Treaties we are going to see a reduction of the nuclear warheads. I think we all want to see that continue. But the reality is, we have a nuclear arsenal. And the reality is, Mr. President, it is the oldest stockpile in our history. Yet, we want to make sure that we maintain the safety and the reliability of that stockpile.

Talk about scenarios of disaster, what happens if you have an unreliable situation occur with a nuclear stockpile? Right now, we have a high level of confidence. As we continue each year, the confidence level goes down.

It is analogous to having an automobile that is working well today; does that mean we should then shut down all garages and diagnostic centers? No, because the automobile is a machine, and it will need to have monitoring and repair, just as this machine that we have of the nuclear arsenal will need.

These hydronuclear tests with a yield of about 4 pounds—and I agree with the Senator from Nevada, I support, if there is need for clarification, that it is not more than 4 pounds— these 4-pound tests should more accurately be called experiments. These are safety experiments. These experiments give detailed data about how a weapon is aging. This data is then used to draw decisions about the safety and reliability of the weapon.

These experiments are compatible with the ongoing negotiations for a comprehensive test ban. Indeed, during a recent discussion with the DOD Under Secretary Curtis, he pointed out that hydronuclear experiments will be compatible with a comprehensive test ban.

Moreover, during the previous moratorium, an underground test from 1958 to 1961, the United States conducted hydronuclear tests at the Los Alamos National Laboratory. In testimony this year, Dick Reis, the Department of Energy official in charge of defense programs, acknowledged that there is no guarantee that the proposed Science-Based Stockpile Stewardship Program will work.

What does that mean—the Science-Based Stockpile Stewardship Program? This is a program that has to come up with computer modeling, physics machines, to understand the aging of weapons. It will take about 10 years to put this science-based stockpile reliability program in place. And then perhaps another 10 years to determine its accuracy. Ten years before we will have it in place, and another 10 years to determine its accuracy. That is a total of 20 years, Mr. President.

The design life of our nuclear stockpile is 20 years, roughly. Unfortunately, that clock is not just starting.

As I said, we have the oldest stockpile in our history. So in 4 years, 5 years, when we hit the year 2000, many of the elements to that arsenal will have reached their design life capacity.

That does not mean they will no longer be of value to us, but again the confidence level goes down.

Dick Reis informed the Armed Services Committee on May 16, ''The history of the stockpile has shown that the continuous surveillance, repair and replacement of components and subsystems is commonplace.''

We are spending billions of dollars on Trident submarines, on D–5 missiles, upgrades to the Minuteman missile, but without a safe and reliable nuclear stockpile, all of this investment could be for naught.

The bill now on the floor authorizes almost $200 million to maintain the Nevada test site in a state of readiness. The current administration policy says we must be able to conduct an underground test at the test site within 3 years of a decision to test. The investment to maintain the test site requested by the President allows us to leverage that investment and conduct these experiments at minimum cost.

On May 16, the Director of the Los Alamos Laboratory, Dr. Hecker, testified before the Armed Services Committee. As part of his written testimony, Dr. Hecker provided the committee with a document entitled ''Nuclear Weapons Stewardship: Los Alamos National Laboratory.''

Page 18 of this document states:

Hydronuclear experiments include some fissile material but no nuclear explosion. Only small amounts of energy are released. They are used to assess primary performance and safety. These experiments are important for two reasons: They can be used, (1) to directly address the nuclear detonation safety of the stockpile weapon; and, (2) to provide important benchmark performance measures. Our plan is to gather baseline, hydrodynamic and hydronuclear data on all stockpiled weapons systems.

In other words, hydronuclear tests are an important component of the new Science-Based Stockpile Stewardship Program.

Mr. President, will we continue to oppose hydronuclear experiments after a comprehensive test ban treaty is signed? In other words, are we going to exclude these experiments from all future stockpile stewardship activities?

I do not believe that is the position of the Clinton administration. I do not believe it is the position of the Armed Services Committee. Given the uncertainties in the Science-Based Stockpile Stewardship Program and the time lag before this program provides meaningful data, the Armed Services Committee took what it believes to be the prudent step of providing funds to prepare for hydronuclear experiments that are compatible with the comprehensive test ban treaty, to stem the inevitable decline in the confidence of our nuclear stockpile.

There has been a great deal of reference as to what is the amount that we are going to be testing—400 pounds, 4,000 pounds, 40,000 pounds. Again, it is 4 pounds. I will reference in the bill itself, page 383, section 3165, Report on Hydronuclear Testing:

The committee directs that the Secretary of Energy is to move forward with the ''preparation of a comprehensive report'' by the directors of the two nuclear weapons design laboratories on the relative costs and benefits of alternative limits on the permitted levels of hydronuclear testing to include 4 pounds, 400 pounds, 4,000 pounds, 40,000 pounds of yield.

But it is a report. It is a report on the cost and benefit analysis.

Then it goes on to say:

The committee requests the preparation of a single report with additional and/or dissenting views by each director as they deem appropriate. The report should be delivered to the congressional defense committees, the Secretaries of Defense and Energy and the Commander in Chief of the U.S. Strategic Command for their comments.

That is what is in here. Again, Mr. President, in summary, we have nuclear stockpile. It is the oldest in our history. We better ensure the safety and the stability of that stockpile. The way they are proposing they will do that is to now come up with a computer model program that is 10 years away from now.

We are simply saying that one component that will help us is the hydronuclear experiments of not more than 4 pounds. If that is not a very realistic and responsible approach, I do not know what is.

I yield the balance of my time back to the chairman of the Armed Services Committee.

Mr. THURMOND. I yield 7 minutes to the able Senator from Texas.

Mrs. HUTCHISON. Thank you, Mr. President. I thank the Senator from South Carolina.

Mr. President, I rise to speak about the importance of maintaining a safe and reliable U.S. nuclear deterrent, and in opposition to the amendment offered by my friend, the senior Senator from Nebraska.

Mr. President, the issue is not testing of new weapons. It is assuring a credible U.S. nuclear deterrent. If the United States is to maintain a nuclear weapons capability, we must be able to assure the safety and reliability of our existing stockpile.

Unless we have the capability to continue experiments and testing, we cannot ensure either. We must continue to make needed investments in nuclear weapons stockpile maintenance.

Nothing in the bill that is pending before us will violate any treaty or obligation, nor will it violate self-imposed moratorium on nuclear testing. Hydronuclear testing will not violate any existing U.S. treaty commitments, nor would it violate the Comprehensive Nuclear Test Ban Treaty that we are trying to negotiate. But such testing does provides the essential margin of safety we need—short of the resumption of full-scale nuclear testing. I would add that the President has reserved the right to resume testing, if deemed to be vital to our national security interests and maintenance of our nuclear deterrent.

The amendment that has been proposed will nullify our ability to assure to stockpile safety and reliability. We will not get to the goal of a comprehensive nuclear test ban treaty if we unilaterally preclude ourselves from conducting essential stockpile maintenance and relaiblity activities, including hydronuclear testing.

One critical component of U.S. nuclear stockpile management is the Pantex Nuclear Weapons Plant, a Department of Energy [DOE] facility located in Amarillo, TX. The Pantex plant, along with Savannah River, Y–12 and the Kansas City plant, is one of the few remaining production sites with existing infrastructure and capabilities that, if upgraded in place, can cost-effectively and meet the needs of nuclear weapons stockpile management and missile material disposition requirements identified in the Defense Department's Nuclear Posture Review.

However, Mr. President, I remain very concerned that the Department of Energy's published 5-year budget plan calls for cuts in weapons activities of up to 40 percent in fiscal year 1997 and beyond. The DOE portion of the Defense authorization bill should be used for its intended purpose—to meet the nuclear deterrent capability our national security needs require.

Our nuclear weapons complex is undergoing a crucial reconfiguration. I am concerned that decisions could be made which would both compromise the integrity of our nuclear deterrent and needlessly waste billions of dollars of taxpayer money. The current and future existence and full utilization of our production sites, working with the national labs, is critical to maintaining an effective and efficient nuclear deterrent.

Pantex, as the sole site in the United States for assembly, disassembly, and maintenance of nuclear warheads, as well as the primary site for interim storage of plutonium components removed from these weapons, is key to a cost-effective, competent nuclear deterrent in a scaled-back complex. Some proposals in DOE would suggest that Pantex and the other production sites be phased out, with the Nevada test site becoming the sole production site for the complex.

This course, however, would not only deprive our country of the ability to remanufacture and deal with significant weapons production if the need ever arose, but would also result in the needless recreation of a multibillion-dollar infrastructure at Nevada which already exists at the existing production sites. By retaining and upgrading Pantex as the primary stockpile stewardship and management facility, we would also realize other cost savings, in the form of avoided transport cost and duplicative environmental, security, and safety expenditures.

We must ensure an orderly and safe transition to civilian stewardship of nuclear materials decommissioned from military use. I believe that one of the most critical national security issues facing our country today is the safe, environmentally sound, and secure storage and disposition of these materials. An example of this transition would be purification and fabrication of weapons components. Such capacity could complement a reactor for the dedicated source of tritium production, by fabricating mixed oxide fuel from plutonium components for disposition in such a reactor.

One key element to implementation of this transition for the entire complex is the National Resource Center for Plutonium, which is operated by a consortium of Texas universities. The center was funded at $9 million in fiscal year 1995, and the administration and the House-passed version of the Defense authorization bill recommended authority for $10 million in fiscal year 1996, with recommendations for continuing support in fiscal year 1997. This center enjoys a symbiotic relationship with the national labs, in its work with

fissile material disposition supplements.

I would like to personally thank Chairman THURMOND and Senators LOTT and KEMPTHORNE for the outstanding work done by the Senate Armed Services Committee in bringing needed attention to nuclear stockpile management and the maintenance of our nuclear deterrent capabilities, which addresses, head-on, the concerns raised in the Defense Department's Nuclear Posture Review.

Mr. President, the position outlined in the Senate Armed Services Committee Defense authorization bill provides the Department of Energy with clear guidance to maintain and enhance our nuclear deterrent capabilities. At the same time, the bill provides direction to DOE to make the necessary decisions to clean up nuclear waste sites; to address the issue of plutonium and highly enriched uranium disposition; to consider new reactor options for disposition of fissile materials and the disposition of fissile materials—plutonium—through fabrication of mox fuel and the burning up of mox fuel in a reactor; and finally to make a rational choice, in the very near term, for a dedicated source of tritium production.

Mr. President, nuclear weapons stockpile management is a critical element in putting us on the right course to meet our critical national security requirements and this legislation sets us on the right course and gives needed direction and support to the Department of Energy. I am proud to be part of and supportive of the efforts of the Senate Armed Services Committee to address in a meaningful and realistic manner our Nation's critical national security and defense needs.

I yield the floor.

The PRESIDING OFFICER. The Senator from Nebraska.

Mr. EXON. Mr. President, I will yield myself 3 minutes.

First, I would like to introduce letters from the Secretary of Defense and the Secretary of Energy, since their names have been mentioned, in full support of the Hatfield-Exon amendment.

I would simply also advise the Senate that, following the references made by some Senators with regard to the new JASON report, the Secretary of Energy initiated a call to me. She was very upset about the slant that was being placed on this. She has furnished me a full copy of the JASON report of August 3. I submit that at this time to be made part of the RECORD.

I ask unanimous consent the letters and the report be printed in the RECORD.

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

THE SECRETARY OF DEFENSE,
Washington, DC, July 31, 1995.

Hon. JAMES EXON,
U.S. Senate,
Washington, DC.

DEAR SENATOR EXON: Thank you for sending me a copy of your June 20 letter to President Clinton providing your views on the nuclear testing moratorium and the Comprehensive Test Ban (CTB) Treaty. I want to assure you that U.S. policy on the nuclear testing moratorium has not changed, and there are no plans to change it. Based on the assumption that a treaty will be signed before September 30, 1996, and subject to the same understandings that govern our current moratorium, the President extended the moratorium until the CTB enters into force. As you may know, the President has stated that he considers the maintenance of a safe and reliable nuclear stockpile to be a supreme national interest of the United States. We are currently reviewing how best to ensure that this mandate can be carried out, both now and in the future. Your letter provides an important perspective for our deliberations.

Sincerely,

WILLIAM J. PERRY.

THE SECRETARY OF ENERGY,
Washington, DC, August 3, 1995.

Hon. JAMES EXON,
Ranking Minority Member, Subcommittee on Strategic Forces, Committee on Armed Services, U.S. Senate, Washington, DC.

DEAR SENATOR EXON: As the Senate considers provisions relating to hydronuclear experiments in S. 1026, the ''National Defense Authorization Act for Fiscal Year 1996,'' as reported by the Senate Armed Services Committee, I wanted to reiterate that the President's Fiscal Year 1996 budget request included no funds to conduct hydronuclear experiments. The Administration stands behind its budget request.

Sincerely,

HAZEL R. O'LEARY.

NUCLEAR TESTING

(Prepared by JASON, the MITRE Corp; Sidney Drell, Chair, John Cornwall, Freeman Dyson, Douglas Eardley, Richard Garwin, David Hammer, John Kammerdiener, Robert LeLevier, Robert Peurifoy, John Richter, Marshall Rosenbluth, Seymour Sack, Jeremiah Sullivan, and Fredrik Zachariason; Aug. 3, 1995)

1 (U) SUMMARY AND CONCLUSIONS

(U) We have examined the experimental and analytic bases for understanding the performance of each of the weapon types that are currently planned to remain in the U.S. enduring nuclear stockpile. We have also examined whether continued underground tests at various nuclear yield thresholds would add significantly to our confidence in this stockpile in the years ahead.

(U) Our starting point for this examination was a detailed review of past experience in developing and testing modern nuclear weapons, their certification and recertification processes, their performance margins,[1] and evidence of aging or other trends over time for each weapon type in the enduring stockpile.

CONCLUSION 1

(U) The United States can, today, have high confidence in the safety, reliability, and performance margins of the nuclear weapons that are designated to remain in the enduring stockpile. This confidence is based on understanding gained from 50 years of experience and analysis of more than 1000 nuclear tests, including the results of approximately 150 nuclear tests of modern weapon types in the past 20 years.

(U) Looking to future prospects of achieving a Comprehensive Test Ban Treaty (CTBT), a stated goal of the United States Government, we have studied a range of activities that could be of importance to extending our present confidence in the stockpile into the future. We include among these activities underground experiments producing sub-kiloton levels of nuclear yield that might be permitted among the treaty-consistent activities under a CTBT.

(U) Three key assumptions underlie our study:

1. (U) The U.S. intends to maintain a credible nuclear deterrent.

2. (U) The U.S. remains committed to the support of world-wide nonproliferation efforts.

3. (U) The U.S. will not encounter new military or political circumstances in the future that cause it to abandon the current policy—first announced by President Bush in 1992—of not developing any new nuclear weapon designs.

CONCLUSION 2:

(U) In order to maintain high confidence in the safety, reliability, and performance of the individual types of weapons in the enduring stockpile for several decades under a CTBT, whether or not sub-kiloton tests are permitted, the United States must provide continuing and steady support for a focused, multifaceted program to increase understanding of the enduring stockpile; to detect, anticipate and evaluate potential aging problems; and to plan for refurbishment and remanufacture, as required. In addition the U.S. must maintain a significant industrial infrastructure in the nuclear program to do the required replenishing, refurbishing, or remanufacturing of age-affected components, and to evaluate the resulting product; for example, the high explosive, the boost gas system, the tritium loading, etc. Important activities in a stockpile stewardship program that will sustain a strong scientific and technical base, including an experienced cadŕe of capable scientists and engineers, are described in the body of this study.

(U) The proposed program will generate a large body of technically valuable new data and challenging opportunities capable of attracting and retaining experienced nuclear weapons scientists and engineers in the program. This is the intent of DOE's currently planned stockpile stewardship program.[2] For the success of this program, the management of the three weapons laboratories (LANL, LLNL, SNL) must motivate, support, and reward effort in an area that has lost some of its glamor and excitement in the absence of new nuclear design and test opportunities.

(U) Nevertheless, over the longer term, we may face concerns about whether accumulated changes in age-affected weapons components, whose replacements might have to be manufactured by changed processes, could lead to inadequate performance margins and reduced confidence in the stockpile.

(U) Enhancements of performance margins will add substantially to long-term stockpile confidence with or without underground tests. To cite one example, we can adjust the boost gas fill or shorten the time interval between fills. (This is discussed more fully in the classified text.)

CONCLUSION 3:

(U) The individual weapon types in the enduring stockpile have a range of performance margins, all of which we judge to be adequate at this time. In each case we have identified opportunities for further enhancing their performance margins by means that are straightforward and can be incorporated with deliberate speed during scheduled maintenance or remanufacturing activities. However greatest care in the form of self-discipline will be required to avoid system modifications, even if aimed at ''improvements'', which may compromise reliability.

[1] Footnotes at end of article.

(U) This brings us to the issue of the usefulness, importance, or necessity of reduced-yield (less than 1 kiloton) underground tests for maintaining confidence in the weapon types in the U.S. stockpile over a long period of time.

(U) For the U.S. stockpile, testing under a 500 ton yield limit would allow studies of boost gas ignition and initial burn, which is a critical step in achieving full primary design yield. The primary argument that we heard in support of the importance of such testing by the U.S. is the following: the evidence in several cases and theoretical analyses indicate that results of a sub-kiloton (~ 500 tons) test of a given primary that achieves boost gas ignition and initial burn can be extrapolated to give some confidence in the yield of an identical primary with full boosting. Therefore, if a modified or remanufactured primary is introduced into the stockpile in the future to correct some aging problem, such tests on the modified system would add to confidence that the performance of the new primary is still adequate.

(U) It follows from this argument that the utility to the U.S. of testing at yields of up to approximately 500 tons depends on such tests being performed on a continuing basis and yielding reproducible results. If they are permitted only for a few years, such tests could add to the theoretical understanding of the boosting process and the reliability of the computer-codes that attempt to describe it, but would not contribute directly to the reliability of the weapon in the enduring stockpile in view of the possible manufacturing changes made at a later date. To gain evidence as to whether long-term changes in age-affected weapons components have any impact on boost-performance the tests would have to be made with the remanufactured weapons themselves.

CONCLUSION 4:

(U) In order to contribute to long term confidence in the U.S. stockpile, testing of nuclear weapons under a 500 ton yield limit would have to be done on a continuing basis, which is tantamount to remaking a CTBT into a threshold test ban treaty. While such ongoing testing can add to long term stockpile confidence, it does not have the same priority as the essential stockpile stewardship program endorsed in Conclusion 2, nor does it merit the same priority as the measures to enhance performance margins in Conclusion 3. In the last analysis the technical contribution of such a testing program must be weighed against its costs and its political impact on the non-proliferation goals of the United States.

CONCLUSION 5:

(U) Underground testing of nuclear weapons at any yield level below that required to initiate boosting is of limited value to the United States. However experiments involving high explosives and fissionable material that do not reach criticality are useful in improving our understanding of the behavior of weapons materials under relevant physical conditions. They should be included among treaty consistent activities that are discussed more fully in the text.

(U) This conclusion is based on the following two observations.

(U) [(a)] So-called hydronuclear tests, defined a limited to a nuclear yield of less than 4 lbs TNT equivalent, can be preformed only after making changes that drastically alter the primary implosion. A persuasive case has not been made for the utility of hydronuclear tests for detecting small changes in the performance margins for current U.S. weapons. At best, such tests could confirm the safety of a device against producing detectable nuclear yield if its high explosive is detonated accidentally at one point. We find that the U.S. arsenal has neither a present nor anticipated need for such re-confirmation. The existing large nuclear test data base can serve to validate two- and three-dimensional computational techniques for evaluating any new one-point safety scenarios, and it should be fully exploited for this purpose.

(U) [(b)] Testing with nominal yields up to a 100-ton limit permits examination of aspects of the pre-boost fission process. However, this is at best a partial and possibly misleading performance indicator.

(U) An agreement to limit testing to very low yields raises the issue of monitoring compliance. We have not made a detailed study of this issue, but not the following: Cooperative, on-site monitoring would be necessary, and relevant measurements, including for example neutron yields, could be made without compromising classified information on bomb designs.

(U) We have reviewed the device problems which occurred in the past and which either relied on, or required, nuclear yield tests to resolve.

CONCLUSION 6:

(U) For the weapon types planned to remain in the enduring stockpile we find that the device problems which occurred in the past, and which either relied on, or required, nuclear yield tests to resolve, were primarily the result of incomplete or inadequate design activities. In part, these were due to the more limited knowledge and computational capabilities of a decade, or more, ago. We are persuaded that those problems have been corrected and that the weapon types in the enduring stockpile are safe and reliable in the context of explicit military requirements.

(U) Should the U.S., in future, encounter problems in an existing stockpile design (which we do not anticipate at present) that are so serious as to lead to unacceptable loss of confidence in the safety, effectiveness, or reliability of a weapons type, it is possible that testing of the primary at full yield, and ignition of the secondary, would be required to certify a specified fix. Useful tests to address such problems generate nuclear yields in excess of approximately 10 kT. DOE's currently planned enhanced surveillance and maintenance program is intended to alert us to any such need that may arise. A ''supreme national interest'' withdrawal clause that is standard in any treaty to which this nation is a signatory would permit the U.S. to respond appropriately should such a need arise.

CONCLUSION 7:

(U) The above findings, as summarized in Conclusions 1 through 6, are consistent with U.S. agreement to enter into a Comprehensive Test Ban Treaty (CTBT) of unending duration, that includes a standard ''supreme national interest'' clause. Recognizing that the challenge of maintaining an effective nuclear stockpile for an indefinite period without benefit of underground tests is an important and also a new one, the U.S. should affirm its readiness to invoke the supreme national interest clause should the need arise as a result of unanticipated technical problems in the enduring stockpile.

FOOTNOTES

[1] Defined as the difference between the minimum expected and the minimum needed yields of the primary.

[2] See the 1994 JASON Report JSR–94–345 on ''Science Based Stockpile Stewardship''.

Mr. EXON. I just want to summarize what the situation is with regard to this report. Senator REID, Senator KYL, and probably others have confused the just-completed JASON report. But they did not reveal the full story. They are simply wrong, and they are comparing oranges with lemons. The entire quotation in the JASON report just put out, on hydronuclear testing, is as follows:

A persuasive case has not been made for the utility of hydronuclear tests for detecting small changes in the performance margin for current U.S. weapons.

So the newest JASON report does not endorse nuclear tests. Also, the particular quotation used by the Senator lacks accuracy. When they quote the JASON report as saying, ''However, experiments involving high explosives and fissionable material that do not reach criticality are useful in improving our understanding of * * * weapons materials,'' the Senator fails to mention the most important point, that the experiments that do not reach criticality are not hydronuclear tests. They are not hydronuclear tests.

I simply point out that the portion of the report that the Senator quotes deals with experiments that are not hydronuclear in any way. Again, the JASON report is very clear. I quote from it.

A persuasive case has not been made for the utility of hydronuclear tests . . .

I hope this begins to set the record straight. I yield 5 minutes to my colleague from Michigan.

The PRESIDING OFFICER. The Senator from Michigan.

Mr. LEVIN. Mr. President, first let me thank the Senator from Nebraska for yielding but also, most important, for the legislative initiatives which he and Senator HATFIELD and others have taken over the years to try to stop the proliferation of nuclear weapons through a comprehensive ban on nuclear testing. And they are related. And that is the whole issue.

We recently were able to obtain the continuation of the Nuclear Nonproliferation Treaty. We fought really hard for that and we got other nations to go along with it. We did so based on our commitment to a comprehensive test ban treaty. We are in no position to tell other nations that they cannot have nuclear weapons, even though we do, if we are going to ignore our commitments to them to obtain a comprehensive test ban—emphasis on the word ''comprehensive''—when that commitment to them and that representation to them was part and parcel of our getting a nonproliferation treaty. That is the issue. It is the proliferation of nuclear weapons.

That is why the statement that was made by the DOD and DOE scientific advisory group—called JASON—relative to hydronuclear tests, is so important. I am going to read that again because this, to me, is really the heart of the issue. We are talking about hydronuclear tests. This is what they said just last November:

The very limited added value of hydronuclear tests have to be weighed against costs and against the impact of continuing an underground testing program at the Nevada test site on U.S. nonproliferation goals.

That is what they say. This is the JASON group which has been referred to so many times this morning. These are the scientists that advise the DOE and DOD, and this is the weighing process, the limited added value, of which there is some. Everyone concedes that tests have value. The question is, Do the benefits outweigh the costs? We have done a lot of that in regulatory reform lately talking about cost-benefit analysis.

So what our DOD and DOE scientists did last November was weigh the benefits, the limited added value of hydronuclear tests against the costs. That is, in their words, the impact of continuing that program, an underground testing program at the Nevada test site on U.S. nonproliferation goals.

What is their conclusion? Now I am quoting JASON:

On balance, we oppose hydronuclear testing.

Why? These are their words:

Since hydronuclear tests would be potentially more valuable to proliferants, it would be in our national interest to forego them.

That, for me, is the bottom line. We have spent a lot of time here trying to figure out how we can defend against nuclear weapons, either in the theater system, short-range missiles delivering them, or in long-range missiles delivering them.

This body I think is darned near unanimous on how we are going to try to defend against theater missiles. We are very much divided as to the best way to defend against the long-range missiles. But proliferation is the greatest threat in the future to this country—proliferation of nuclear weapons.

Our best scientists say hydronuclear tests are potentially more valuable to proliferants—the bad guys—than they are to us and, therefore, it would be in our national interest to forego them.

What the current JASON report says in this is the one that was quoted by our good friend from Nevada. He quoted the section that relates to tests which have no nuclear yield, tests which do not reach criticality. That is not the issue before us. Those are hydrodynamic tests. Those are not hydronuclear tests. Those have zero nuclear yield. There is no criticality. And he read a section of the report that was just released last night which said, ''Experiments involving high explosives and fissionable material that do not reach criticality are useful in improving our understanding in behavior of weapons.''

That is true. But there is no downside on that. That is not a nuclear test. That is not a nuclear experiment. That does not reach criticality. There is no nuclear yield.

The next page of this same most recent report is the one that Senator EXON has just quoted from reasserting the conclusion of the JASON group against hydronuclear testing.

I thank the Chair. I thank my friend from Nebraska.

The PRESIDING OFFICER. Who yields time?

Mr. PELL addressed the Chair.

Mr. EXON. I yield 1 minute to the Senator from Massachusetts, and following that, 1 minute to the Senator from Rhode Island.

The PRESIDING OFFICER. The Senator from Massachusetts.

Mr. KENNEDY. Mr. President, I support the Exon amendment to delete the section on nuclear testing. For the second time in 2 days we are addressing provisions of the committee bill that go against the tide of history, and would send us back to the days of the cold war and the nuclear arms policies of that period.

In April, the United States reached a new milestone with the permanent extension of the Nuclear Non-Proliferation Treaty. This treaty, first signed in 1968, is a solemn agreement by 178 nations to halt the spread of nuclear weapons.

Achieving this goal was not a foregone conclusion when the treaty extension conference commenced. The five nuclear weapons states agreed to work in good faith for a comprehensive test ban in 1996. It was understood by all the nations at the conference that a test ban will be the single most important step we can take to ensure that the non-proliferation treaty will be observed and maintained.

The bill and the Thurmond amendment calling for the administration to prepare for nuclear tests runs directly contrary to the principle we accepted at the non-proliferation conference. Some argue that test in question—called a hydronuclear test—is not a real nuclear test. That is not true in terms of physics, and it is not true in terms of public policy.

In physics, a hydronuclear test is a very low yield explosion, but it is a nuclear explosion nonetheless. Moreover, it is a type of explosion that the United States does not need to maintain the safety and reliability of our nuclear arsenal. This view has been stated and reaffirmed by Energy Secretary Hazel O'Leary, and by many technical experts, including the JASON panel. We can use alternative methods, such as advanced simulations and other nonnuclear technical means, to ensure the safety and reliability of our stockpile.

In terms of public policy, a hydronuclear test is clearly regarded as a nuclear explosion by many of the signatories to the NPT. They have made it clear that they will not accept a Comprehensive Test Ban Treaty that allows for hydronuclear tests.

That is the reality. Some may wish it was otherwise. In the past, I have suggested that such tests, if small enough, might be acceptable under a comprehensive test ban. But clearly other nations disagree, and the goal of a comprehensive test ban is too important to lose.

The Exon amendment will enable us to take the next important step in the post-cold war era— the achievement of a comprehensive test ban that will serve as the cornerstone in that all important battle to prevent the proliferation of nuclear weapons. I urge the adoption of the amendment.

This is a sound, sensible amendment. I hope that it will be agreed to.

I thank the Chair.

The PRESIDING OFFICER. The Senator from Rhode Island.

Mr. PELL. Mr. President, I support the amendment being offered by the Senator from Nebraska [Mr. EXON], and am pleased to be a cosponsor. This amendment would remove from the Armed Services Committee bill the requirement that $50 million be spent in preparation for hydronuclear testing.

In one respect, I believe the committee bill would set our Nation on an unfortunate course. It in effect would place the United States in a position of moving toward a new nuclear testing program. This would deflect us from the current strong administration effort to achieve a comprehensive test ban and it would send an unmistakable signal to other nations of the world that the United States is not serious and purposeful in its quest of a test ban.

Those who joined with us in the decision this spring to extend the Non-Proliferation Treaty could come to no other conclusion than that the United States had acted in bad faith in order to secure approval of extension of the treaty. This would be an unfortunate effect of any such decision to go forward with a testing program that simply is not needed to safeguard our national security.

Mr. President, I believe that this amendment will leave the way open to the successful completion of test ban negotiations in Geneva. That negotiation is in process now with the goal of achieving a comprehensive test ban next year.

I would hope that such a ban can be in place by October 1, 1996, as envisaged in legislation over the last several years. Until that time, I would hope that the United States would continue to adhere to the present moratorium on nuclear testing. I believe that the President should be commended strongly for his steadfastness in this regard.

Some years ago President John F. Kennedy reached a breakthrough agreement with the Soviet leadership that brought the first agreed limit on nuclear testing. That agreement, the Limited Test Ban Treaty of 1963, forbade nuclear testing in the atmosphere, in outer space, and under water. It allowed testing only underground and required that testing be done in such a way that the world be spared from radioactive poisoning from the debris of nuclear tests.

Moving beyond that Limited Test Ban Treaty has been difficult and tortuous. President Nixon accomplished the Threshold Test Ban Treaty in 1974 and his successor, President Ford, negotiated the Peaceful Nuclear Explosions Treaty. It took more than 10 years to get these treaties ratified and in place.

Currently, the five nuclear powers are following different courses. We and the British, who must use our testing site, are adhering to a moratorium. The Russians are also adhering to a moratorium. The Chinese are following a nuclear testing program in anticipation that a test ban may be achieved. The French have just unleased a political firestorm in the Far East by announcing a series of tests in the South Pacific.

Earlier this year the President of the United States made the very wise decision to abandon U.S. efforts to negotiate a treaty with a provision allowing an easy exit from the treaty at the 10-year mark. This provision could accommodated those who would like a comprehensive test ban to be effective and in force for only 10 years. Nonetheless it worried those nations who fear that the nuclear superpowers do not, in fact, intend to end nuclear testing for all time. The President understood these concerns and decided to negotiate a treaty without an easy exit. As is the case with most treaties, nations will be able to get out of the treaty if they find their supreme national interests are jeopardized.

Unfortunately, there have been protracted discussions on whether to allow exceptions under the treaty and what kind of exceptions they should be. Some of the parties would like to see a reduced threshold for nuclear testing rather than elimination of testing. Some would like to see so-called peaceful nuclear explosions revived. Still others would like to see safety and reliability testing be permitted. In our own country, these discussions have led from the suggestion that detonations with explosive power of several pounds be permitted. This has led still further to advocacy by some in the defense community of flexibility in the treaty that would allow hydronuclear explosions of several tons, or even hundreds of tons of explosive power.

Mr. President, we would delude ourselves if we believe that the nations of the world, having agreed to the permanent extension of the Non-Proliferation Treaty this spring at our behest, would now agree to allow continued nuclear testing under any guise. We are committed to these nations to bring nuclear testing to a halt. We should not be dissuaded from pursuing that course.

The authorization bill as written would require hydronuclear testing and essentially deflect us from our goal of a complete end to nuclear testing. The Exon amendment would get rid of this provision and allow the President to pursue the present course. I hope the Senate would have the wisdom to agree to the amendment.

The PRESIDING OFFICER. The Senator from South Carolina.

Mr. THURMOND. Mr. President, I have 2 minutes left.

The PRESIDING OFFICER. Two minutes, fifty-one seconds.

Mr. THURMOND. Mr. President, I rise to support the prudent and reasonable attempt to plan for the resumption of treaty compliant hydronuclear testing, as contained in the Thurmond-Domenici amendments.

Every weapons system, indeed every machine in our technological society, requires testing. Hydronuclear testing is the only tool left to assess our confidence in the safety and reliability of the shrinking U.S. nuclear stockpile.

DOE testimony to the House states that the potential alternative to testing, science-based stewardship, is not guaranteed to work. If it does work, it will take 15 to 20 years to perfect. Given this risk, it is imprudent to give the sole remaining tool which can perform a reality check on the primary of a nuclear weapon in a dynamic environment.

No other nation should feel threatened that we feel the need to keep our weapons safe and reliable. I urge the defeat of the Exon-Hatfield amendment and demonstrate a strong support for our Nation's nuclear deterrence.

Mr. President, I yield the floor.

Mr. DOLE addressed the Chair.

The PRESIDING OFFICER. The majority leader.

Mr. DOLE. Mr. President, I will use 1 minute out of my leader time.

Mr. President, I ask unanimous consent that following the first of the consecutive votes, there be 4 minutes of debate equally divided between Senator THURMOND and the sponsor of each amendment before each of the remaining votes.

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

UNANIMOUS-CONSENT AGREEMENT

Mr. DOLE. I ask unanimous consent that the following amendments be the only first-degree amendments in order to S. 1206, and that they be limited to relevant second-degree amendments.

I will submit the list, since there are 185 amendments; 105 Democratic amendments and 80 on the Republican side.

This has been approved by both sides. At least it gets us to a limit.

I do not know how we can finish this bill. Senator THURMOND is prepared to stay all night tonight. He has a plane at 5:30 in the morning.

So we can go at least until 5:30.

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

Mr. DOLE. I ask unanimous consent that the list be printed in the RECORD.

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

POSSIBLE AMENDMENTS—MAJORITY

Abraham: Burdensharing, manufacturing technology.

Brown: Fitzsimmons, Pakistan, Pakistan, Pueblo, Pueblo, Taiwan.

Campbell: Fitzsimmons Army Hospital.

Cohen: Information technology relevant.

D'Amato: Land conveyance, transfer of real property, waste water treatments.

Dole: JPATS.

Domenici: Energy, USMER ranchers, DNA microwave, Army ground radar, Army EAC, Flirs for customs, AF laser, spouse abuse.

Faircloth: Subtitle D.

Gramm: Relevant.

Grassley: DOD executive aircraft, reduce funding level, defense modernization account, sale of aircraft.

Helms: Battle of Midway, Fort Bragg, relevant.

Inhofe: PFNA, CATT Program.

Kempthorne: Relevant.

Kyl: Nunn-Lugar funding, Coop threat reduction.

Lott: ABM review sec. 237, relevant, relevant, relevant, hydra 70.

McCain: Land conveyance, Wyoming, Olympics, land conveyance, Montana, BRAC improvement, U.N. peacekeeping.

McCain/Campbell/Brown: _____.

Murkowski: North Korea, military housing.

Nickles-Inhofe: Ft. Sill Milcon.

Pressler: Jr ROTC, Indian reservations, relevant.

Shelby: Battlefield Integration Center, BMD Technology Center, DSETS.

Smith: DAGGR, Brac leases, relevant.

Specter: Bosnia war crimes.

Stevens: Rules for acquisition/subcont, cargo preference.

Thurmond: Air Force Reserve, relevant, awards, report requirements, relevant (personnel), Defense Cooperative relation, relevant, relevant, relevant, relevant, relevant, relevant.

Warner: Relevant fissile materials, relevant, relevant, relevant, relevant.

Warner/Kempthorne: Nuclear spent fuel.

POSSIBLE AMENDMENTS—MINORITY

Akaka: SoS French nuclear test.

Bingaman: Funds ongoing ops., Funds TRP, Pentagon renovation, relevant, relevant, relevant.

Boxer: Military convicts, Land conveyance, Executive compensation, relevant.

Breaux: Cargo preference.

Bradley: Budget cap, F22, Comanche.

Bumpers: Relevant, relevant, relevant, Ft. Chafee.

Byrd: Relevant, relevant, relevant.

Conrad: Relevant.

Daschle: Health care, relevant, relevant.

Dorgan: Land conveyance, relevant.

Exon: Nuclear testing report, Navy nuc. fuel storage, ASAT funding.

Feinstein: Jordan draw down, repeal sec. 382, land conveyance, military const. auth. ext., defense conversion, relevant, base reuse.

Ford: ROTC.

Glenn: Service academy requirements, humanitarian assistance, defense modernization, IRIS, relevant, relevant.

Harkin: Burdensharing, civil air patrol, relevant, relevant, relevant.

Heflin: Start 1, advance technologies, test equipment.

Johnston: Relevant.

Kennedy: Relevant, relevant.

Kohl: Authorization levels, Env. advisory board.

Lautenberg: Relevant, relevant.

Leahy: Land mine moratorium, land mine clearance.

Levin: Relevant, relevant, relevant, relevant, relevant, relevant, relevant.

Mikulski: Relevant, relevant Holskid BRAC Disposal.

Nunn: J ROTC, civil military cooperative, civil military cooperative, civil military cooperative, relevant, relevant, relevant, Missile Defense, relevant, relevant.

Pell: Relevant, relevant.

Pryor: Leasing provision on closed bases, SoS director oper. test. & eval., testing of TMD, report arms export control, relevant, relevant.

Reid: Relevant, relevant.

Robb: Relevant, relevant, pilots rescue radio, reserve authorization, commercial ship research, privatization of military air.

Sarbanes: Anechoic Chamber, Pax River Ready Reserve Fleet.

Simon: IMET provision, peacekeeping funding, contingency force peace operations, land exchange.

Wellstone: Relevant.

ADJOURNMENT OF THE TWO HOUSES

Mr. DOLE. Mr. President, I ask unanimous consent that the Senate proceed to the immediate consideration of House Concurrent Resolution 92 just received from the House. I ask that it be read so that all Members will know what it is.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:.

A concurrent resolution (H. Con. Res. 92) providing for an adjournment of the two Houses.

Resolved by the House of Representatives (the Senate concurring), That when the House adjourns on the legislative day of Friday, August 4, 1995, pursuant to a motion made by the Majority Leader, or his designee, it stand adjourned until noon on Wednesday, September 6, 1995, or until noon on the second day after Members are notified to reassemble pursuant to section 2 of this resolution, whichever occurs first; and that when the Senate recesses or adjourns on any day beginning on Saturday, August 5, 1995, through Saturday, August 19, 1995, pursuant to a motion made by the Majority Leader, or his designee, in accordance with this resolution, it stand recessed or adjourned until noon on Tuesday, September 5, 1995, or until such time on that day as may be specified by the Majority Leader or his designee in the motion to recess or adjourn, or until noon on the second day after Members are notified to reassemble pursuant to section 2 of this concurrent resolution, whichever occurs first.

SEC. 2. The Speaker of the House and the Majority Leader of the Senate, acting jointly after consultation with the Minority Leader of the House and the Minority Leader of the Senate, shall notify the Members of the House and Senate, respectively, to reassemble whenever, in their opinion, the public interest shall warrant it.

The PRESIDING OFFICER. Is there objection to the immediate consideration of the concurrent resolution?

There being no objection, the Senate proceeded to consider the concurrent resolution.

Mr. DOLE. Mr. President, I ask unanimous consent that the concurrent resolution be considered and agreed to, and that the motion to reconsider be laid upon the table.

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

So, the concurrent resolution (H. Con. Res. 92) was agreed to.

Mr. DOLE. I thank my colleague. If that took more than 1 minute, take it out of my leader's time.

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The Senate continued with the consideration of the bill.

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

The PRESIDING OFFICER. Is there a sufficient second?

There appears to be a sufficient second.

The yeas and nays were ordered.

Mr. DOLE. Can we get the yeas and nays on all the amendments?

Mr. EXON. I will be glad to incorporate that. I ask for the yeas and nays on all of the amendments with reference to the matter that we have been debating.

The PRESIDING OFFICER. Is there a sufficient second?

There appears to be a sufficient second.

The yeas and nays were ordered.

Mr. DOLE. So there will be the yeas and nays on four amendments.

Mr. THURMOND. Mr. President, I yield back any time remaining, and I am going to move to table the Exon amendment.

The PRESIDING OFFICER. Is there a sufficient second?

Mr. EXON. I make an inquiry of the Chair. I thought that the yeas and nays on the Exon amendment had been ordered.

Is that not correct?

The PRESIDING OFFICER. That is correct.

Mr. EXON. Then a tabling motion would not be in order at this time, would it?

The PRESIDING OFFICER. The Chair is advised by the Parliamentarian that a tabling motion would be in order.

Is there a sufficient second on the tabling motion?

There appears to be a sufficient second.

The yeas and nays were ordered.

The PRESIDING OFFICER. Under the previous order, the Exon amendment is set aside. The Senator from Nevada [Mr. REID] is recognized to offer an amendment, on which Senator REID will control 40 minutes and Senator THURMOND will control 20 minutes.

The Senator from Nevada.

AMENDMENT NO. 2113 TO AMENDMENT NO. 2111

(Purpose: To strike the provision designating the location of the new tritium production facility of the Department of Energy)

Mr. REID. I send an amendment to the desk.

The PRESIDING OFFICER. The clerk will report.

The assistant legislative clerk read as follows:

The Senator from Nevada [Mr. REID], for himself and Mr. BRYAN, proposes an amendment numbered 2113 to amendment No. 2111:

On page 29 of the amendment, strike lines 18 through 21.

Mr. REID. The record should read as on the amendment that this is offered on behalf of both Senators from Nevada.

Mr. President, I object to the section of this amendment that directs the Department of Energy to site its new tritium production facility at Savannah River.

For Members of the Senate, let me explain briefly what we are talking about. Tritium is an element that is critical to all modern nuclear weapons. However, it is radioactive and decays. Our weapons will cease to work if we do not periodically replace the tritium. We do not now in the United States have the ability, the capability to produce tritium. We must develop a new tritium source.

We are, in this amendment, striking from this Thurmond amendment the specification that this new producer of tritium shall be in Savannah River. This is not an appropriate action and certainly it is not an appropriate issue for legislative action.

Decisions like this belong with the administrative branch of our Government. Decisions like this must be based on a complete analysis of many complex technical and economic decisions. A fair and impartial assessment of alternatives for different techniques and sites is what is called for. To think that we, as a Senate, can step in without hearings, without any procedures at all to indicate what would be the proper site for this production facility would be absolutely wrong.

It is clear the reason that this is in the bill is because of the chairman of the committee being from South Carolina. There is no other reason. The fact is there are a number of sites that the Department of Energy and this administration generally are looking at to determine where would be the best place to put it. One of the sites, of course, is at the Nevada test site.

If there were a vote taken today with the people in the Department of Defense, people in the Department of Energy who are making the decision, Nevada would probably win, but that is not how these decisions are made. It is not by a vote. It is by people who are administrators, who listen to the experts who work under them and for them and with them to determine where would be the best place to site this production facility. It certainly should not be done in a site specific amendment as we are now asked to consider.

Why does South Carolina feel that they must legislate the outcome of this issue? Why should not South Carolina and the Members of this Senate be willing to take their chances that their site is the best site?

The junior Senator from New Mexico earlier today in his remarks on the underlying Thurmond amendment indicated that he would not approve of the site specific section of the bill. He said that he would support the Reid amendment, and I think that is the way it should be.

This is not some small project that you can put any place you want. This is a multibillion-dollar project. This is not a project that costs a few million dollars, a few hundred million dollars. This is a project that costs a few billion, and it is simply wrong to site it as has been done by the committee in this bill. This is a multibillion-dollar