

In short, by making it clear the Comprehensive Test Ban Treaty is incompatible with U.S. national security requirements and bad for arms control, Richard Lugar has delivered the kiss-of-death to the CTBT. Without his support, it is inconceivable that a two-thirds majority could be found in the Senate to permit ratification of this accord.

The question that occurs now is: Since the CTBT is so fatally flawed and so injurious, will the Senate's Republican majority agree to let it continue to bind the United States for the foreseeable future? That would be the practical effect of exercising the option a number of GOP senators (including, it must be noted, Mr. Lugar) hope President Clinton will allow them to exercise—unscheduling the vote this week and deferring further Senate action on the Comprehensive Test Ban until after the 2000 elections, at the earliest.

Under international law, that would mean only one thing: Until such time as our government makes it clear the CTBT will not be ratified, the United States will be obligated to take no action that would defeat the "object and purpose" of the CTBT. This would mean not only no resumption of testing. Under the Clinton administration, there will certainly be no preparations to conduct explosive tests either—or even actions to stop the steady, lethal erosion of the nation's technical and human capabilities needed to do so.

If national security considerations alone were not sufficiently compelling to prompt the Senate leadership to stay the course and defeat the treaty, the conduct of the president and his surrogates should be sufficient inducement. After all, administration spokesmen are using every available platform to denounce Republicans for playing "political" games with this treaty. (Never mind that the president and every one of his allies on CTBT in the Senate had a chance to reject the time-agreement that scheduled the vote. As long as they thought their side would prevail, the 14 hours of debate were considered to be sufficient; only when more accurate, and ominous, tallies were taken did the proponents begin to whine there was too little time for hearings and floor deliberation.)

Moreover, in refusing to date to commit not to push for a vote in an even more politically charged environment next year, the CTBT's champions are behaving in a manner that can only encourage GOP speculation that the president and his partisans have every intention of using whatever deferral they are granted to campaign against the Republican majority—with the hope not only of changing minds, but changing senators and even control of the Senate in the upcoming election.

With Dick Lugar arguing that the zero-yield, permanent Comprehensive Test Ban Treaty must be defeated, Senate Republicans can safely do what is right without fear of serious domestic political repercussions. And, while there will be much bellyaching around the world if the CTBT is rejected by the U.S. Senate, the real, lasting impact will not be to precipitate nuclear proliferation; it is happening now and will intensify no matter what happens on this treaty. Neither will it be to inflict mortal harm or "embarrassment" on the presidency. No one could do more to demean that office than the incumbent.

Rather, the most important—and altogether desirable—effect will be to re-establish the U.S. Senate as the Framers of the Constitution intended it to be: a co-equal with the president in the making of international treaties; a quality-control agent pursuant to the sacred principles of checks-and-balances on executive authority, one that if exercised stands to strengthen the le-

verage of U.S. diplomats in the future and assure that the arms control and other treaties they negotiate more closely conform to American security interests. Mr. Lugar put it very well in his formidable press release of last Thursday:

"While affirming our desire for international peace and stability, the U.S. Senate is charged with the constitutional responsibility of making hard judgments about the likely outcomes of treaties. This requires that we examine the treaties in close detail and calculate the consequences of ratification for the present and the future. Viewed in this context, I cannot support the [CTBT's] ratification."

The PRESIDING OFFICER. The Senator from New Hampshire is recognized.

PRIVILEGE OF THE FLOOR

Mr. SMITH of New Hampshire. Madam President, I ask unanimous consent that Cline Crosier on my staff be granted the privilege of the floor for the remainder of the debate on this issue.

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

Mr. SMITH of New Hampshire. Madam President, it was interesting to hear my colleague from Delaware. He is correct. I remember those signs, "One hydrogen bomb could ruin your day." I think the reason we are here today is a second hydrogen bomb that ruined their day. I think we need to make sure they understand we have the capability to respond in kind with weapons that will work. I think that is really the subject of the debate.

It takes a very confident person to criticize Edward Teller a little bit.

Mr. BIDEN. Madam President, if the Senator will yield, not on his scientific assessments, on his political judgment.

Mr. SMITH of New Hampshire. Right.

The Senator from Delaware also said that if you can't verify the reliability or certify the reliability, you can always get out of the treaty. That is true. But my concern is, will it be too late to catch up at that point? How much time will have elapsed?

I wonder sometimes how the results of the cold war might have come out had we yielded to all of the arms control pressures and adopted every arms control agreement exactly as it was pushed upon us, not only in the Senate but also in the House over the years. I look at arms control agreements in the 1960s and 1970s and 1980s. In spite of the fact we had a full-scale Soviet expansion throughout the world and full-scale nuclear buildup and absolutely no verification for the most part and cheating year after year, time after time we still pushed hard for these arms control agreements.

Mr. BIDEN. Will the Senator yield for 30 seconds for me to respond? We did pass the ABM Treaty, SALT I treaty, the START I treaty, the INF Treaty, the CFE Treaty, and we did it during the cold war.

Mr. SMITH of New Hampshire. And the Soviets violated every one of them.

Mr. BIDEN. They seem to work.

Mr. SMITH of New Hampshire. They work if you want to accept the fact

that they violated it. We got lucky. That is the bottom line. As to the violations that President Reagan said trust but verify, in this particular case, I am not prepared to trust the North Koreans or the Libyans or the Iranians or the Iraqis or the Red Chinese, No. 1; and, No. 2, we cannot verify anything they are doing. That has been testified to over and over and over again.

I rise in very strong opposition to this Comprehensive Test Ban Treaty and, in doing so, know full well that we have one of the greatest communicators and spinners in American history in the White House. The idea will be that this will become a political debate in that how could anyone not be in favor of or how could anybody be opposed to a comprehensive test ban where we would ban the testing of nuclear weapons. That is the way it will be spun.

The answer is very simple. Because if you can't verify what the other side is doing, then you are at a disadvantage because we have the superiority of the arsenal. So if we don't verify that they are not testing, and we don't keep our stockpile up to speed because of that, and we don't know it is reliable and they do, then we are gradually losing that advantage. That is the issue.

In spite of all the spin we will hear over the next day or two after this treaty is voted on, that is the crux of the issue. Let us separate the spin. Let us take the politics out of this. Let us take the spin out of it and go right to the heart of it. We can't verify what they do, and if our stockpile is not reliable because we don't test, they gain on us.

The other point is, some of these nations, such as North Korea, might decide to test it on us and think nothing of it. Does anybody feel confident that the Iranians or the Iraqis would feel they had to test a nuclear weapon before they tried it on us? I don't feel that confident. I certainly don't think many in America do either. This treaty is wrong for our nuclear weapons program. It is wrong for America. It is wrong for the international community. It cannot be verified. It does not help us in maintaining our own stockpile.

Time after time the past several weeks, I have heard members of the administration try to spin this issue and claim that every President since Eisenhower has sought a comprehensive test ban. Basically, that is an attempt to hide the truth, to fool the American people into thinking this treaty would have had unanimous support from all of those Presidents. It wouldn't have had the unanimous support of those Presidents. To make those of us who oppose this treaty look as if we are standing out on the fringes is simply wrong. Yet that is the way it is reported. That is the way it is written. That is the way it will be spun tonight, tomorrow, and the next day by members of the administration as they

move out on to the talk shows—at taxpayers' expense, I might add—and criticize those of us in the Senate who in good conscience vote against this treaty.

What they haven't told the American people about these Presidents is that not one single President—not Eisenhower, not Kennedy, Johnson, Nixon, Carter, no one, not Reagan—no one until Bill Clinton ever proposed a test ban of zero yield and unlimited duration—zero yield, unlimited duration.

In the past few days, the spin machines have been working overtime telling the American people this issue is far too critical to national security for the Senate to make such a rash decision on its ratification. The administration now wants to pull the treaty, saying we haven't had enough time to study it. For up until a week or two ago, they were pushing us for a vote on it.

My colleague from Delaware mentioned the coup in Pakistan, did that bother me. No, frankly. I don't think it has a heck of a lot to do with this decision. I don't like to see coups anywhere. They contribute to the instability in the world. But it has nothing to do, in my view, with the issue before us.

I would like to remind my colleagues, this treaty was signed by President Bill Clinton in 1996 and transmitted to the Senate in 1997. Over 2 years, we have had this treaty before us. One of the problems I have in the Senate is that it doesn't matter how much time you spend on something or how long something is before this body; the only time we try to get really involved in it is when we are about to vote on something. Then those who haven't done their homework want to come out here and say we need more time.

We have had plenty of time. I have had 5 years of hearings on this issue. I chaired them myself and have listened to people testify for the past 5 years on this issue. I remind my colleagues, just a few months ago the minority threatened to hold up every single piece of legislation that came to the Senate floor until we agreed to have a vote on the test ban treaty. Now they are criticizing us because we are having one. It was President Clinton and the minority who demanded the treaty be brought before the Senate; it was President Clinton and the minority who urged consideration; and it was President Clinton and the minority who scolded the majority for failing to act on this issue. That was 2, 3 weeks ago.

So when things go sour on the President, he has a unique way—and a very good way, frankly—of twisting things around to his benefit. We found that out here on the floor in a very important impeachment vote a few months ago. The President has been demanding a vote on this treaty for 2 years. Now he has it. But now it is our fault because he is not going to get the vote he wants. The President said in remarks

on the 50th anniversary of the Chairmen of the Joint Chiefs of Staff, in August, 1999—not too many months ago—"I ask the Senate to vote for ratification as soon as possible." That was 2 months ago. He asked the Senate, "to give its advice and consent to the Comprehensive Test Ban Treaty this year."

The problem with the President is, he wants us to give consent, but he doesn't like our advice. That is the problem. The Constitution requires both advice and consent. This President needs to learn that the Senate is here to advise, and if you want the consent, then you need to advise and discuss. That is part of the process. It is part of the process in treaties, and it is part of the process in judicial nominations, and it is part of the process in other appointments in his administration. After 7 years, almost, he still hasn't learned that.

In his State of the Union, in 1998, President Clinton said, "Approve the Comprehensive Test Ban Treaty this year." That was last year. The Vice President, Mr. GORE, said, "The U.S. Congress should act now to ratify the Comprehensive Test Ban Treaty." That now was July 23, 1998.

Now, because the votes are going against him, he is now saying we need more time, don't vote now. It is just spin at its best, and he is good at it; there is no question about it. That was pure partisan politics because when the majority leader finally consented and offered to bring the treaty to the floor, it was objected to. Let's remind the American people of that. You can bet the President is not going to remind them of that. This treaty was objected to when the majority leader asked to bring it to the floor. Then he offered a second time to bring the treaty to the floor and this body agreed by unanimous consent to a debate and a vote.

Let me say again: Unanimously, we agreed to a debate and a vote.

The minority party had ample opportunity at that time to object on the grounds that we haven't had enough time to study the treaty. Why didn't they say so then? Because the answer is, that is not the issue. We have had plenty of time to study the treaty. "We haven't had enough time to have hearings," they said. The minority leader objected. Once the President sensed he was going to lose the vote, the spin machine began and he tried to figure out a way not to vote on what the President urged us so desperately to schedule in the first place—to avoid the vote he asked us to have.

I agreed with the President then that this treaty deserved consideration by the Senate. I wish we had more chance to advise, but he didn't choose that. So he asked for our consent. As it turns out, we are not going to give it to him. That is our constitutional right. It should not be spun and changed. It should be truthfully debated. We are all accountable. Some have said they don't want to vote on this treaty. I am not one of those people. We are here to

be held accountable; we are here to vote. That is why we are here. If we disagree, we can vote against it. If we agree, we can vote for it.

My objection to this treaty is not based on partisan politics; it is based on careful, thoughtful study of the treaty and its implications both here in the United States and around the world. I believe the world will be more unstable—contrary to the feelings of my colleague from Delaware—not a more stable place, and America's nuclear deterrent capability will become more unreliable than at any time in the history of America if this treaty were to be ratified.

There are three points that would support that argument:

One, the Comprehensive Test Ban Treaty is not verifiable.

Two, the Comprehensive Test Ban Treaty will not stop proliferation.

Three—and perhaps most important—the Comprehensive Test Ban Treaty puts our nuclear arsenal at risk.

My job as chairman of the Strategic Subcommittee is to oversee that arsenal. I have been out to the labs, and I have had 5 or 6 years of hearings on these issues. Others will discuss the first two points in more depth than I will, and some have already. Let me focus on the third concern, which is that the Comprehensive Test Ban Treaty is not verifiable.

Last week, we saw reports in the media that the CIA admitted they were unable to verify key tests that may even be taking place today. We can't base our national security on an ability—which arguably may not exist—to detect an adversary's covert activity, and that the Comprehensive Test Ban Treaty will not stop proliferation. We already have a treaty in place to do that, the Non-Proliferation Treaty. This treaty has been violated repeatedly, over and over, year after year, by rogue nations that don't respect international law.

Do you think, with this kind of treaty, that every nation is going to have this great respect for international law and they are going to allow us total access to their country to verify this? When are we ever going to learn? Some have mentioned how futile the treaty would be in asking rogue nations not to test the same nuclear weapons they promised not to develop in the first place under the Non-Proliferation Treaty. And it is false hope that our adversaries will abide by international law if we just promise to do this treaty.

As I mentioned, the safety and reliability of the nuclear arsenal is my most serious concern. Rather than relying solely on the good intentions of other countries—and they may be good or they may not be—or on our ability to detect violations by other countries, my concern is ensuring that we remain capable of providing the safeguard and nuclear deterrent that won the cold war. That is what won the cold war—

the fact that other nations knew what would happen. They knew what would happen if they messed with us; we had the arsenal.

The linchpin of this treaty, as I see it, is whether or not you believe the United States can maintain a safe, credible, and reliable nuclear arsenal, given a zero-yield ban in perpetuity. The Stockpile Stewardship Program is really at the heart of this matter. If you think that we can have a reliable nuclear arsenal, with a zero-yield ban, in perpetuity, you should be for this treaty. Even the Secretary of Defense, William Cohen, has illustrated this point. This was 2 days ago. I want this to be listened to carefully. During testimony before the Armed Services Committee.

Senator SNOWE. Would you support ratification of this treaty without the Stockpile Stewardship Program?

Secretary COHEN. No.

Senator SNOWE. No? So then, obviously, you are placing a great deal of confidence in this program.

Secretary COHEN. I oppose a unilateral moratorium, without some method of testing for the safety and security and reliability of our nuclear force. The question right now is, does the Stockpile Stewardship Program give us that assurance? If there is doubt about it, then, obviously, you would say we cannot rely upon it and we should go back to testing.

Let me repeat that last line:

If there is doubt about it, then, obviously, you would say we cannot rely upon it and we should go back to testing.

Well, that is a critical point. Which of us would knowingly ratify a treaty that was advertised to put the safety, reliability, and credibility of the United States nuclear deterrent stockpile at risk and place the lives of the American people at risk? None of us would do that. Certainly not us, not the Secretary, not anybody. But that is the linchpin. If you believe in the Stockpile Stewardship Program, a series of computer simulations and laser experiments—that is what the program is, that we don't need to test, and that we do these computer tests and laser experiments—if you think that can sufficiently guarantee the safety and reliability of our nuclear weapons program, without testing of any kind forever—forever—then you should vote for the treaty because that is what this is about. As the Senator from Delaware said, you can get out of the treaty, but if you don't like what is going on, then it is too late.

If, however, you do not believe that the Stockpile Stewardship Program can sufficiently guarantee the safety and reliability of our nuclear weapons programs, then you should vote against the treaty.

Well—as Chairman of the Strategic Forces Subcommittee, I have oversight of all three of the Nation's nuclear laboratories—Los Alamos, Lawrence Livermore, and Sandia. I have been to the labs, I have seen the computer simulations, I have talked with the physicists and programmers. Just last Feb-

ruary Senator LANDRIEU and I traveled to Lawrence Livermore Lab for a field hearing and a very productive set of tours and briefings.

Based on my experience—based on what I've seen, I don't have the confidence that the Stockpile Stewardship Program can sufficiently guarantee the safety and reliability of our nuclear weapons arsenal—forever—without any testing of any kind.

But don't just take my word for it—after all I'm not a physicist—I'm not a nuclear lab director. To settle the question about whether this Stockpile Stewardship Program can guarantee the safety and reliability of our nuclear weapons, we must turn to those lab directors, the men directly responsible for administering, executing, and overseeing the Stockpile Program.

Those three gentlemen testified before the Armed Services Committee just last week, and I think it is absolutely critical to share that testimony with my colleagues as we debate this treaty.

Dr. John Browne, Director of Los Alamos National Laboratory, had this to say about the condition and reliability of the Stockpile Stewardship Program:

Maintaining the safety and reliability of our nuclear weapons without nuclear testing is an unprecedented technical challenge.

The Stockpile Stewardship Program is working successfully toward this goal, but it is a work in progress.

There are simply too many processes as a nuclear explosion involving too much physics detail to perform a complete calculation. At present, with the most powerful supercomputers on Earth, we know that we are not doing calculations with sufficient accuracy and with sufficient detail to provide maximum confidence in the stockpile.

We know that we do not adequately understand instabilities that occur during the implosion process and we are concerned about the aging of high explosives and plutonium that could necessitate remanufacture of the stockpile.

We do not know the details of how this complex, artificially produced metal (plutonium) ages, including whether pits fail gradually, giving us time to replace them with newly manufactured ones, or whether they fail catastrophically in a short time interval that would render many of our weapons unreliable at once.

It is important to note that even with a complete set of tools we will not be able to confirm all aspects of weapons safety and performance. Nuclear explosions produce pressures and temperatures that cannot be duplicated in any current or anticipated laboratory facility. Some processes simply cannot be experimentally studied on a small scale because they depend on the specific configuration of material at the time of the explosion.

On the basis of our experience in the last 4 years, we continue to be optimistic that we can maintain our nuclear weapons without testing. However, we have identified many issues that increase risk and lower our level of confidence.

Dr. Bruce Tarter, Director of Lawrence Livermore National Laboratory testified:

We have not been able to meet the deadlines of the program as we thought we could.

It (the stockpile stewardship program) hasn't been perfect—the challenge lies in the longer term.

The stockpile stewardship program is an excellent bet—but it's not a sure thing.

Dr. Paul Robinson, director of Los Alamos National Laboratory, which is responsible for the engineering of more than 90 percent of the component parts of all U.S. nuclear warheads, provided an even more ominous testimony.

There is no question from a technical point of view, actual testing of designs to confirm their performance is the desired regimen for any high-technology device.

For a device as highly consequential as a nuclear weapon, testing of the complete system both when it is first developed and periodically throughout its lifetime to ensure that aging effects do not invalidate its performance, is also the preferred methodology.

I could not offer a proof, nor can anyone, that such an alternative means of certifying the adequacy of the U.S. stockpile will be successful. I believe them as I do now that it may be possible to develop the stockpile stewardship approach as a substitute for nuclear testing for keeping previously tested nuclear weapon designs safe and reliable. However, this undertaking is an enormous challenge which no one should underestimate, and will carry a higher level of risk than at any time in the past.

The difficulty we face is that we cannot today guarantee that stockpile stewardship will be ultimately successful; nor can we guarantee that it will be possible to prove that it is successful.

Confidence in the reliability and safety of the U.S. nuclear weapons stockpile will eventually decline without nuclear testing.

The stockpile stewardship program—though essential for continual certification of the stockpile—does not provide a guarantee of perpetual certifiability.

I have always said actual testing is preferred method—to do otherwise is acceptable risk.

I cannot ensure the program will mature in time to ensure safety and reliability of our nuclear weapons stockpile in the future.

I have always felt if you are betting your country—you better be conservative.

I find this testimony absolutely chilling. I am not willing to "Bet my country" on the stockpile stewardship program. America's lab directors who are directly responsible for the execution of the stockpile stewardship program testified before Congress that this program cannot guarantee the future security or stability of our nuclear weapons. I am not willing to accept any risk. I will not risk the lies of the American people on a program who's director—empowered by the President with the responsibility for running that program—are so very uncertain about its reliability.

On the basis of the expert testimony of these three lab Directors alone, if any Senators had any doubt about how they would vote on this treaty—it should now be gone!

And I cannot for the life of me understand why the President would ask the Senate to ratify a treaty that lives or dies based on the stockpile stewardship program—a program that our lab Directors are telling us they cannot guarantee!

If we ratify this treaty, there is a very high probability we will have to start looking for a way out of it within 10–15 years—maybe even sooner. I don't

understand entering into a treaty you know full well you may have to pull out of almost as soon as it goes into effect.

Now, supporters of the treaty will point out that if in fact the lab Directors, and the Secretary of Energy all agree in 10 years that the stockpile stewardship isn't working, the President, in consultation with Congress, can just pull us out of the treaty.

Well, treaties tend to take on a life of their own, and I do not believe it would be that easy. Just look at the ABM Treaty of 1972. Our co-signer, the U.S.S.R. doesn't even exist anymore, and although there is overwhelming agreement between the defense and intelligence communities, and the American public, that our national interests are at stake, the President still opposes pulling out of the ABM Treaty!

The Nuclear Test Ban Treaty of 1963 and the Nuclear Nonproliferation Treaty of 1968 are two more examples. These treaties have both been violated. But have we pulled out of either one despite the legal right to do so—absolutely not!

My friends and colleagues, it makes no sense to ratify a treaty that our own nuclear experts tell us we may have to negotiate a way out of within a decade.

This treaty is dangerous and ill-advised. It places our nuclear stockpile, and hence our nuclear deterrent capability, at considerable risk. This treaty is bad for America, and it is bad for the international community, and I will vote against it.

That is if I'm given the opportunity to vote against it. While Senate Democrats and the White House are back pedaling furiously, some in the Senate are anxious to rescue them from their miscalculation and deliver them from a major legislative defeat. It might be tempting to view this as a "win-win" situation for those who oppose the treaty. The reasoning goes like this: If we effectively kill this flawed treaty without a vote, we will have forced the White House to back down, and have won without letting the White House accuse us of killing the treaty. This is superficially appealing. But it is a strategy for, at best, a half-victory, and at worst, a partial defeat.

Postponing a vote on the CTBT will allow the White House to claim victory in saving the treaty, and will allow the White House to continue to spin the American people by blaming opponents for not ratifying the treaty. There is no conservative victory in that.

Every single Senator knows today how he or she will vote on this treaty. More debate and more hearings won't change that. It's time to put partisan politics aside and stand firm on our beliefs. The die is cast, and Republicans and Democrats alike have staked out their positions. It's time for Senators to stand by those positions and vote their conscience. Mr. President, I oppose postponing the vote on this treaty, and I urge my colleagues to do the same.

Mr. President, I yield the floor.

Mr. HELMS. I feel obliged to observe that the United States has already flirted with an end to nuclear testing—from 1958 to 1961. It bears remembering that the nuclear moratorium ultimately was judged to constitute an unacceptable risk to the nation's security, and was terminated after just three years. On the day that President Kennedy ended the ban—March 2, 1962—he addressed the American people and said:

We know enough about broken negotiations, secret preparations, and the advantages gained from a long test series never to offer again an uninspected moratorium. Some urge us to try it again, keeping our preparations to test in a constant state of readiness. But in actual practice, particularly in a society of free choice, we cannot keep top flight scientists concentrating on the preparation of an experiment which may or may not take place on an uncertain date in the future. Nor can large technical laboratories be kept fully alert on a standby basis waiting for some other nation to break an agreement. This is not merely difficult or inconvenient—we have explored this alternative thoroughly and found it impossible of execution.

This statement is very interesting. It makes clear that the fundamental problems posed by a test ban remain unchanged over the past 27 years. The United States certainly faces a Russian Federation that is engaging in "secret preparations" and likely is engaging in clandestine nuclear tests relating to the development of brand-new, low-yield nuclear weapons. The United States, on the other hand, cannot engage in such nuclear modernization while adhering to the CTBT.

Likewise, the Senate is faced with the same verification problem that it encountered in 1962. As both of President Clinton's former intelligence chiefs have warned, low-yield testing is undetectable by seismic sensors. Nor does the United States have any reasonable chance of mobilizing the ludicrously high number of votes needed under the treaty to conduct an on-site inspection. In other words, the treaty is unverifiable and there is no chance that cheaters will ever be caught.

This is not my opinion. This is a reality, given that 30 of 51 countries on the treaty's governing board must approve any on-site inspection. Even the President's own senior arms controller—John Holum—complained in 1996 that "treaty does not contain . . . our position that on-site inspections should proceed automatically unless two-thirds of the Executive Council vote 'no.'" Instead of an automatic green light for inspections, the U.S. got exactly the opposite of what it requested.

But most importantly, in 1962 President Kennedy correctly noted that the inability to test has a pernicious and corrosive effect—not just upon the weapons themselves (which cannot be fully remanufactured under such circumstances)—but upon the nation's nuclear infrastructure. Our confidence in the nuclear stockpile is eroding even as

we speak. Again, this is not my opinion. It is a fact which has been made over and over again by the nation's senior weapons experts.

In 1995, the laboratory directors compiled the following two charts which depict two simple facts: (1) that even with a successful science-based program, confidence will not be as high as it could be with nuclear testing; and (2) even if the stockpile stewardship program is completely successful by 2010, the United States will not be able to design new weapons, and will not be able to make certain types of nuclear safety assessments and stockpile replacements.

Senators will notice that, on both charts, there is mention of "HN" (e.g. hydronuclear) and 500 ton tests. The laboratory directors, in a joint statement to the administration in 1995, said: "A strong Stockpile Stewardship and Management Program is necessary to underwrite confidence. A program of 500-ton experiments would significantly reduce the technical risks."

This judgment has not changed over the past several years. Both weapons laboratory directors stated in 1997 that nuclear testing would give the United States greater confidence in the stockpile.

So as I listen to these claims that the United States is "out of the testing business," I make two basic observations. First, we are only out of the testing business because President Clinton has taken us out. There is no legal barrier today to conducting stockpile experiments. The reason is purely political. Indeed, the White House is using circular logic. The United States is not testing because the White House supports the test ban treaty; but the White House is claiming that because we are not testing, we should support the treaty.

Second, I remind all that the United States thought it was out of the testing business in 1958, only to discover how badly we had miscalculated. President Kennedy not only ended the 3-year moratorium, but embarked upon the most aggressive test series in the history of the weapons program. If Senators use history as their guide, they will realize that the CTBT is a serious threat to the national security of the United States.

Mr. McCAIN. Mr. President, I rise today to express my very grave concerns over the path down which we are heading. The United States Senate is on the verge of voting down a treaty the intent of which is consistent with U.S. national security objectives, but the letter and timing of which are fraught with serious implications for our security over the next decade.

Mr. President, I will vote against ratifying the Comprehensive Test Ban Treaty. This is not a vote I take lightly. I am not ideologically opposed to arms control, having voted to ratify the START Treaty and the Chemical Weapons Convention. But, my concerns about the flaws in this Treaty's drafting and in the administration's plan for

maintaining the viability of the stockpile leave me no other choice.

On October 5, Henry Kissinger, John Deutch and Brent Scowcroft wrote to the majority and minority leaders stating their serious concerns with the Senate's voting on the treaty so far in advance of our being able to implement its provisions and relying solely on the Stockpile Stewardship Program. They noted that ". . . few, if any, of the benefits envisaged by the treaty's advocates could be realized by Senate ratification now. At the same time, there could be real costs and risks to a broad range of national security interests—including our nonproliferation objectives—if [the] Senate acts prematurely." These are sage words that should not be taken lightly by either party in the debate on ratification.

In the post-cold-war era, a strong consensus exists that proliferation of weapons of mass destruction is our single greatest national security concern. Unfortunately, a ban on nuclear testing, especially when verification issues are so poorly addressed, as in this treaty, will not prevent other countries from developing nuclear weapons. A number of countries have made major strides in developing nuclear weapons without testing. South Africa and Pakistan both built nuclear stockpiles without testing; North Korea may very well have one or two crude nuclear weapons sufficient for its purposes; and Iraq was perilously close to becoming a nuclear state at the time it invaded Kuwait. Iran has an active nuclear weapons program, and Brazil and Argentina were far along in their programs before they agreed to terminate them. Testing is not necessary to have very good confidence that a first generation nuclear weapon will work, as the detonation over Hiroshima, utilizing a design that had never been tested, demonstrated more than half-a-century ago.

Whenever an arms control agreement is debated, the issue of verification rightly assumes center stage. That is entirely appropriate, as the old adage that arms control works best when it is needed least continues to hold true. That the leaders of Great Britain, France, and Germany support ratification is less important than what is going on inside the heads of the leaders of Russia, China, India, Pakistan, Iraq, Iran, and North Korea. We don't need arms control agreements with our friends; we pursue arms control as a way of minimizing the threat from those countries that may not have our national interests at heart. Some of the countries with active nuclear weapons programs clearly fall into that category. On that count, the Comprehensive Test Ban Treaty falls dangerously short.

In order to fully comprehend the complexity of the verification issue, it is important to understand the distinction between monitoring and verifying. Monitoring is a technical issue. It is the use of a variety of means of gather

information—in other words, detecting that an event took place. Verification, however, is a political process.

Even if we assume that compliance with the treaty can be monitored—and I believe very strongly, based in part on the CIA's recent assessment, that that is not the case—we are left with the age-old question posed most succinctly some 40 years ago by Fred Ikle: After Detection—What? What are we to make of a verification regime that is far from prepared to handle the challenges it will confront. For example, we are potentially years from an agreement among signatories on what technologies will be employed for monitoring purposes. More importantly, the treaty requires 30 disparate countries to agree to a challenge on-site inspection when 19 allies couldn't agree on how to conduct air strikes against Yugoslavia?

Furthermore, we are being asked to accept arguments on verification by an administration that swept under the rug one of the most egregious cases of proliferation this decade, the November 1992 Chinese transfer of M-11 missiles to Pakistan, and that continues to cling tenaciously to the ABM Treaty despite the scale of global change that has occurred over the last 10 years.

In determining whether to support this treaty at this time, it is essential that we examine the continued importance of nuclear weapons to our national security. Last week's testimony by our nuclear weapons lab directors that the Stockpile Stewardship Program will not be a reliable alternative to nuclear testing for five to 10 years is a clear and unequivocal statement that ratification of this treaty is dangerously premature. General John Vessey noted in his letter to the chairman of the Armed Services Committee that the unique role of the United States in ensuring the ultimate security of our friends and allies, obviating their requirement for nuclear forces in the process, remains dependent upon our maintenance of a modern, safe and reliable nuclear deterrent. As General Vessey pointed out, "the general knowledge that the United States would do whatever was necessary to maintain that condition certainly reduced the proliferation of nuclear weapons during the period and added immeasurably to the security cooperation with our friends and allies." This sentiment was also expressed by former Secretaries of Defense Schlesinger, Cheney, Carlucci, Weinberger, Rumsfeld, and Laird, when they emphasized the importance of the U.S. nuclear umbrella and its deterrent value relative not just to nuclear threats, but to chemical and biological ones as well.

The immensely important role that a viable nuclear deterrent continues to play in U.S. national security strategy requires the United States to be able to take measures relative to our nuclear stockpile that are currently precluded by the Test Ban Treaty. Our stockpile is older today than at any previous

time and has far fewer types of warheads—a decrease from 30 to nine—than it did 15 years ago. A fault in one will require removing all of that category from the stockpile. The military typically grounds or removes from service all of a specific weapons system or other equipment when a serious problem is detected. Should they act differently with nuclear warheads? Obviously not.

Finally, this treaty will actually prevent us from making our nuclear weapons safer. Without testing, we will not be able to make essential safety improvements to our aging stockpile—a stockpile that has already gone seven years without being properly and thoroughly tested.

I hope the time does arrive when a comprehensive ban on nuclear testing will be consistent with our national security requirements. We are simply not yet there. I will consider supporting a treaty when alternative means of ensuring safety and reliability are proven, and when a credible verification regime is proposed. Until then, the risks inherent in the administration's program preclude my adopting a more favorable stance.

These are the reasons that I must vote against ratification of the Comprehensive Test Ban Treaty at this time. The viability of our nuclear deterrent is too central to our national security to rush approval of a treaty that cannot be verified and that will facilitate the decline of that deterrent. Preferably, this vote would be delayed until a more appropriate time, but, barring that, I cannot support ratification right now.

The operative phrase, though, is "right now." The concept of a global ban on testing has considerable merit. Defeating the treaty would not only imperil our prospects of attaining that objective at some future point, it would in all likelihood send a green light to precisely those nations we least want to see test that it is now okay to do so. Such a development, I think we can all agree, is manifestly not in our national interest.

In articulating his reasons for continuing to conduct nuclear tests, then-President Kennedy stated that, "If our weapons are to be more secure, more flexible in their use and more selective in their impact—if we are to be alert to new breakthroughs, to experiment with new designs—if we are to maintain our scientific momentum and leadership—then our weapons progress must not be limited to theory or to the confines of laboratories and caves." This is not an obsolete sentiment. It rings as true today as when President Kennedy uttered those words 37 years ago.

I thank the Chair.

Mr. HATCH. Mr. President, today the Senate debates an arms control treaty of idealistic intent, vague applicability, and undetermined effects. Given today's state of scientific, geopolitical and military affairs, I must vote against the resolution of ratification of

the Comprehensive Test Ban Treaty, a treaty that will lower confidence in our strategic deterrent while creating an international regime that does not guarantee an increase in this country's security.

On balance—and these matters are often concluded on balance, as rarely are we faced with clear-cut options—it is my reasoned conclusion that the CTBT does not advance the security of this nation.

Some people think that, by passing the CTBT, we will be preventing the horrors of nuclear war in the future. There is great emotional content to this argument.

But in deliberations about a matter so grave, I had to apply a rational, logical analysis to the affairs of nations as I see them. And, on reflecting on half a century of the nuclear era, I can only conclude that it is the nuclear strategic deterrent of this country that is the single most important factor in explaining why this country has not been challenged in a major military confrontation on our territory. We emerged victorious from the cold war without ever engaging in a global "hot" war.

Despite the security we have bought with our nuclear deterrent, the world we live in today is more dangerous than the cold war era. Today, we are faced with the emergence of new international threats. These include rogue states, such as Iraq, Sudan, and North Korea; independent, substate international terrorists, such as Osama bin Laden; and international criminal organizations that may facilitate funds and, perhaps, nuclear materials to flow between these actors. Some of these actors, of course, can and have developed the "poor man's" nukes, as they are called: biological and chemical weapons.

It is to the credit of the serious proponents of this treaty that they have not argued that this treaty can effectively prevent these new actors on the global scene from developing primitive nuclear weapons—which can be built without tests. The CTBT does not prevent them from stealing or buying tactical nuclear weapons that slip unsecured out of Russian arsenals. The CTBT cannot prevent or even detect low-yield testing by rogue states which have a record of acting like treaties aren't worth the paper they're written on. These are the threats we face today.

In this new threat environment, the proponents of this treaty suggest that we abandon testing to determine the reliability of our weapons, to increase their safety, and to modernize our arsenal.

Yet we have recent historical evidence that our nuclear deterrent is a key factor in dealing with at least some of these actors. Recall that, in the gulf war, Saddam Hussein did not use his chemical and biological weapons against the international coalition. This was not because Saddam Hussein

was respecting international norms. It was solely because he knew the United States had a credible nuclear deterrent that we reserved the right to use.

Proponents of the Comprehensive Test Ban Treaty argue that scientific tests at the sub-critical level can replace testing as the methodology to ensure the reliability and safety of our nuclear arsenal, which, we all know, has not been tested since 1992. The question of reliability of our deterrent is absolutely essential to this nation's security. And yet the proponents of our science-based alternative program to testing—known as the Stockpile Stewardship Program—all acknowledge that this critical replacement to testing is not in place today and will not be fully developed until sometime in the next decade.

Even if the Stockpile Stewardship Program is fully operational in 2005, as the most optimistic representations suggest, that will be more than 10 years since we have had our last tests. After a decade of no testing, the confidence in our weapons will have declined. Throughout this period, we will be relying on a scientific regime whose evolution and effectiveness we can only hope for.

This is the concern of numerous national security experts, and their conclusions were not supportive of the CTBT. Addressing this central issue, six former Secretaries of defense (Schlesinger, Cheney, Carlucci, Weinberger, Rumsfeld, Laird) said:

The Stockpile Stewardship Program, which will not be mature for at least 10 years, will improve our scientific understanding of nuclear weapons and would likely mitigate the decline in our confidence in the safety and reliability of our arsenal. We will never know whether we should trust the Stockpile Stewardship if we cannot conduct tests to calibrate the unproven new techniques.

Former Secretary of State Henry Kissinger, former National Security Advisor Brent Scowcroft, and former Director of Central Intelligence John Deutch said recently:

But the fact is that the scientific case simply has not been made that, over the long term, the United States can ensure the nuclear stockpile without nuclear testing . . . The Stockpile Stewardship Program is not sufficiently mature to evaluate the extent to which it can be a suitable alternative to testing.

I hasten to point out that the experts who have spoken against the CTBT have served in Republican and Democratic Administrations. Secretary Kissinger served in the Nixon administration, for example, which negotiated the Threshold Test Ban Treaty banning tests above 150 kilotons. This treaty was ratified during the Bush Administration. John Deutch, as we all know, was head of the CIA in the present Administration.

I support the Stockpile Stewardship Program, and will continue to support it. There may be a day when my colleagues and I can be convinced that science-based technology can ensure

the reliability and safety of our arsenal to a level that matches what we learn through testing. That would be a time to responsibly consider a Comprehensive Test Ban. And that time is not now.

This central point on the reliability of our nuclear deterrent has not escaped the public's view of the current debate. Utahns have approached me on both sides of the argument.

Yes, we have seen numerous polls that suggest that the public supports the Comprehensive Test Ban Treaty. When people are asked, "do you support a global ban on nuclear testing?" majorities respond affirmatively. However, when people are asked, as some more specific polls have done, "Do you believe our nuclear arsenal has kept this country free from attack?" the majority always answers overwhelmingly affirmatively. When asked whether we need to continue to rely on a nuclear deterrent, the answer is always overwhelmingly affirmative, as it is when the public is asked whether we need to maintain reliability in our nuclear deterrent. Once again, I find the public more sophisticated than they are often given credit for.

When I speak with people about the limits of monitoring this global ban, and the numerous methods and technologies available to parties that wish to evade detection, confidence in the CTBT falls even lower. The fact is—and, once again, the proponents of the treaty concede this—that a zero-yield test ban treaty is unverifiable.

Small but militarily significant tests—that is, 500-ton tests, significant to the development and improvement of nuclear weapons—will not always be detectable. Higher yield tests—such as 5 kilotons—can be disguised by the techniques known as "decoupling," where detonations are set in larger, either natural or specially constructed, subterranean settings.

Today we are uncertain about a series of suspicious events that have occurred recently in Russia, a country that has not signed the CTBT. Some Russian officials have suggested that they would interpret the CTBT to allow for certain levels of nuclear tests, a view inimical to the Clinton administration's proponents of the CTBT. These are troubling questions, Mr. President, which should cast great doubt on the hopes of the proponents of the CTBT.

But the proponents say, under a CTBT regime we could demand an on-site inspection. But the on-site inspection regime is, by the terms of the treaty, weak. It is a "red-light" system, which means that members of the Executive Council of the Conference of States Parties must vote to get affirmative permission to inspect—and the vote will require a super-majority of 30 of 51 members of the Council for permission to conduct an inspection. The terms of the treaty allow for numerous obstructions by a member subject to inspection. Some of these codified instructions appear to have come out of

Saddam Hussein's play book for defeating UNSCOM.

Some have suggested that Senate rejection of this treaty, which seems likely, will undermine this country's global leadership. It is said that, if we fail to ratify, critical states will not ratify the treaty. This assertion strikes me as highly suppositious.

Since the end of World War II, there are very few instances of the United States using its nuclear threat explicitly. Besides the Soviet Union, locked in a bipolar global competition with us until its collapse in 1991, other nations' decision to develop nuclear programs were based, not on following "U.S. leadership," but on their perception of regional balances of power, or on their desire to establish global status with a strategic weapon. Their decisions to cease testing will be similarly based.

The CTBT, it is argued, will prevent China from further modernizing its nuclear forces. It would be more accurate, in my opinion, to state that the treaty, if it works as its proponents wish, may constrain China from testing the designs for nuclear warheads it has gained through espionage. The debate over future military developments always hinges on the distinction between intentions and capabilities. China's current nuclear capabilities are modest, although it has a handful of warheads and the means to deliver them to the North American continent.

But I have to ask: Are the analysts in the Clinton administration confident that China's intentions are consistent with a view embodied in the CTBT that would lock China into substantive nuclear inferiority to the United States?

Is that what their espionage was about? Or their veiled threats—such as the famous "walk-in" in 1995, when a PRC agent showed us their new-found capabilities? And how about the PRC's explicit threat to rain missiles on Los Angeles? That was a reflection on intentions.

Those of us who study intentions and capabilities of such a key geopolitical competitor as China know that their capabilities are far inferior to us. But you have to wonder, based on their statements and other actions, whether the Chinese are willing to accept the current strategic balance that would be locked in with the CTBT.

And, does it make sound strategic sense for the defense of our country that the United States, in effect, unilaterally disarms our technological superiority by freezing our ability to modernize and test?

When we freeze our deterrent capability, we are, in effect, abandoning America's technological edge and mortgaging that deteriorating edge on the belief and hope that all of our geopolitical competitors will do the same. This reflects a view of the world that is far more optimistic than I believe is prudent. A substantial dose of skepticism should be required when thinking about the defense of our country.

To address these concerns, the administration has waived "Safeguard

F," which it will attach to the treaty. This addendum states that it is its understanding that if the Secretaries of Defense and Energy inform the President that "a high level of confidence in the safety or reliability of a nuclear weapon type which the two Secretaries consider to be critical to our nuclear deterrent could no longer be certified, the President, in consultation with Congress, would be prepared to withdraw from the CTBT under the standard "supreme national interests" clause in order to conduct whatever testing might be required."

This vaguely worded escape clause is the manifestation of what is known in international law as *rebus sic stantibus*. This famous expression is attributed to Bismarck, who declared: "At the bottom of every treaty is written in invisible ink—*rebus sic stantibus*—until circumstances change." This is a recognition common in international law, and now manifest in black-and-white in "Safeguard F," that agreements hold only as long as the fundamental conditions and expectations that existed at the time of their creation hold.

The fundamental conditions that the CTBT seeks to address are where my fundamental reservations lie. There are too many factors that we cannot control and that will not be restrained by the best intentions of a testing freeze.

The world is changing, and alliances are subtly changing. Geopolitical competitors such as China, Russia, Iran, and North Korea are undergoing radical—radical—social changes that are demonstrably affecting their governments, foreign policies, and militaries. An agreement on a test ban freeze today does not reconcile with these realities.

Even the most stalwart proponents of the treaty can only argue that U.S. ratification of the treaty may influence other states' behaviors. That is a hope, not a certainty. The need for a reliable nuclear deterrent, last tested in 1992, remains a certainty. I firmly believe that the CTBT will not control these external realities. While some countries may see a test ban regime in their interests, others, motivated not by the norms we hope for in the international community, but by the more historic realities of national interest and competition, may not.

The timing is simply wrong to pass this treaty. The science has not been sufficiently reassuring, and global developments have not been encouraging.

I must admit that my ongoing concerns about this administration's understanding of the world do not promote confidence in their support for this treaty. Under this administration, we have seen a precipitous decline in the funding of the military; we have seen an unacceptable resistance to missile defense; we have seen that it was Congress that had to promote sanctions on nuclear and missile proliferation from Russian firms spreading nuclear and missile technology to rogue states. All of this belies confidence.

Combine this with a lack of confidence in the science-based alternative to testing promoted by the administration, which even its supporters recognize is not up to speed, and I must conclude that it is against the U.S. national interest to vote for the CTBT.

This vote is not about the horrors of Hiroshima and Nagasaki. It is about whether the nuclear deterrent that has kept this country secure for half a century and will keep this country secure for the foreseeable future.

Deterrence is not static, it is dynamic. The world is not static, it is unpredictable and dangerous. The CTBT is an attempt to impose a static arms control environment—to freeze our advantage—while gambling that our competitors abide by the same freeze. Today, that is unsound risk.

I will vote to oppose the resolution of ratification of the Comprehensive Test Ban Treaty.

Mr. ASHCROFT. Mr. President, I rise today to speak on the Comprehensive Test Ban Treaty (CTBT). Signed by the President on September 24, 1996, and submitted to the Senate approximately one year later, the CTBT bans all nuclear explosions for an unlimited duration.

Every member of the Senate would like to strengthen the national security of the United States. Every member of the Senate would like to leave this country more safe and secure. There are time-honored principles which undergird genuine security, however. As George Washington stated over two centuries ago, "There is nothing so likely to produce peace as to be well prepared to meet an enemy." Washington believed that if we wanted peace, we must be prepared to defend our country.

The CTBT is not based on the national security principles of Washington or any other President who used strength and preparedness to protect our way of life and advance liberty around the globe. This treaty is based on an illusion of arms control, dependent on the unverifiable good will of signatory nations—some of which are openly hostile to the United States. The CTBT will do nothing to stop determined states from developing nuclear weapons and will degrade the readiness of the U.S. nuclear stockpile. The U.S. nuclear arsenal is still the most powerful deterrent to aggression against the United States, but this treaty would place the reliability of that arsenal in question.

Is such a step worth the risk? What does the CTBT give us in return? Is the treaty really the powerful weapon in the war against proliferation that the Administration claims? Several critical deficiencies of the CTBT make this treaty a genuine threat to U.S. national security.

First, the monitoring system of the treaty will not be able to detect many nuclear tests. The International Monitoring System (IMS) of the CTBT is designed to detect nuclear blasts greater

than one kiloton, but tests with a smaller blast yield may be used to validate or advance nuclear weapons designs. Tests larger than one kiloton can be masked through certain testing techniques. By testing underground, for example, the blast yield from a nuclear test can be reduced by a factor of 70. The bottom line is that countries will be able to continue testing under this treaty and not be detected.

The unverifiability of the CTBT was highlighted by the Washington Post on October 3, 1999. In an article entitled "CIA Unable to Precisely Track Testing," Roberto Suro writes that "the Central Intelligence Agency has concluded that it cannot monitor low-level nuclear tests by Russia precisely enough to ensure compliance with the Comprehensive Test Ban Treaty. . ." Twice last month, Russia may have conducted nuclear tests, but the CIA was unable to make a determination, according the Post article.

Senator JOHN WARNER, the distinguished chairman of the Armed Services Committee, is quoted in the Post article concerning a broader pattern of Russian deception with regard to nuclear testing. According to a military assessment mentioned in the Post, Russia has conducted repeated tests over the past 18 months to develop a low-yield nuclear weapon to counter U.S. superiority in precision guided munitions.

Such behavior reinforces the central point that proponents of the CTBT seem to miss in this debate. When nations have to choose between the communal bliss of international disarmament or pursuing their national interest, they follow their national interest. Countries such as Russia have the best of both worlds with an unverifiable treaty like the CTBT: Russia can continue to test without being caught and the U.S. nuclear arsenal cannot be maintained or modernized and eventually deteriorates over time.

A second critical problem with the CTBT is that countries do not have to test to develop nuclear weapons. The case of India and Pakistan provides perhaps the best example that a ban on nuclear testing can be irrelevant. Pakistan developed nuclear explosive devices without any detectable testing, and India advanced its nuclear program without testing for twenty-five years.

Proliferation in South Asia also lends itself to a broader discussion of this Administration's nonproliferation record. The Administration's rhetoric on the CTBT has been strong in recent weeks, but has the Administration always been as committed to stop proliferation?

The case of Pakistan is particularly illustrative of this Administration's flawed approach to nonproliferation and arms control. In an unusually candid report in 1997, the CIA confirmed China's role as the "principal supplier" of Pakistan's nuclear weapons program. Although the Administration has been careful to use milder language

in subsequent proliferation reports, China is suspected of continuing such assistance. Rather than take consistent steps to punish Chinese proliferation, however, the Administration is pushing a treaty to stop nuclear testing—testing which is not needed for the development of nuclear weapons in the first place.

This Administration would have more credibility in the area of non-proliferation if it had been taking aggressive steps to punish proliferators and defend America's interests over the last seven years. When China transfers complete M-11 missiles to Pakistan, this Administration turns a blind eye. When China is identified by the CIA in 1997 as the ". . . the most significant supplier of WMD-related goods and technology to foreign countries," the Administration rewards China with a nuclear cooperation agreement in 1998.

These severe lapses in U.S. non-proliferation policy cannot be covered over with the parchment of another unverifiable arms control treaty.

A third problem with the CTBT is that it places the reliability of the U.S. nuclear arsenal at risk. While other countries can develop simple nuclear weapons without testing, such tests are critically important for the maintenance and modernization of highly sophisticated U.S. nuclear weapons. In that it forbids testing essential to ensure the readiness of the U.S. stockpile, the CTBT is really a back door to nuclear disarmament. The preamble of the CTBT itself states that the prohibition on nuclear testing is "a meaningful step in the realization of a systematic process to achieve nuclear disarmament. . . ."

Proponents of the CTBT argue that we have the technology and expertise to ensure the readiness of our nuclear arsenal through the Stockpile Stewardship Program. The truth of the matter is that only testing can ensure that our nuclear weapons are being maintained, not computer modeling and careful archiving of past test results. As Dr. Robert Barker, a strategic nuclear weapons designer and principal advisor to the Secretary of Defense on all nuclear weapons matters from 1986-92, stated, ". . . sustained nuclear testing . . . is the only demonstrated way of maintaining a safe and reliable nuclear deterrent."

Dr. James Schlesinger, a former Secretary of the Defense and Energy Departments, is one of the most competent experts to speak on the national security implications of the CTBT and the Stockpile Stewardship Program. His comments on the Stockpile Stewardship Program should be heeded by every Senator. In testimony before Congress, Dr. Schlesinger stated that the erosion of confidence in our nuclear stockpile would be substantial over several decades. Dr. Schlesinger states that "In a decade or so, we will be beyond the expected shelf life of the weapons in our nuclear arsenals, which was expected to be some 20 years."

The real effect of the CTBT, then, is not to stop the spread of nuclear weapons, for less developed countries can develop simple nuclear weapons without testing and countries like Russia and China can test without being detected. The real effect of the CTBT will be to degrade the U.S. nuclear arsenal, dependent on periodic testing to ensure readiness.

Modernization and development of new weapons systems, also dependent on testing, will be precluded. The need to modernize and develop new nuclear weapons should not be discounted. New weapons for new missions, changes in delivery systems and platforms, and improved safety devices all require testing to ensure that design modifications will be effective. In supporting this treaty, the President is saying that regardless of the future threats the United States may face, we will surrender our ability to sustain a potent and effective nuclear deterrent. Mr. President, such shortsighted policies which leave America less secure are completely unacceptable and should be rejected.

It is difficult for me to understand how a President who determines that "the maintenance of a safe and reliable nuclear stockpile to be a supreme national interest of the United States" can support the CTBT, a treaty which could jeopardize the entire nuclear arsenal within years.

Those who favor the CTBT argue that the treaty will create an international norm against the development of nuclear weapons. If the United States will take the lead, advocates for the treaty state, then other countries will see our good intentions and follow our example.

Mr. President, moral suasion carries little weight with countries like North Korea, Iran, and Iraq. Moral suasion means little more to Russia, China, Pakistan, and India. These countries follow their security interests, not the illusory arms control agenda of another international bureaucracy.

It is folly to degrade the U.S. nuclear deterrent through a treaty that has no corollary security benefits. I am not opposed to treaties and norms which seek to reduce the potential for international conflict, but arms control treaties which are not verifiable leave the United States in a more dangerous position. When we can trust but not verify, the better path is not to place ourselves in a position where our trust can be broken, particularly when the security of the American people is at stake.

I thank the Chair for the opportunity to address this important matter and I urge my colleagues to oppose the Comprehensive Test Ban Treaty.

Mr. HELMS. Mr. President, the incredible and contrived rhetoric pouring forth constantly from the White House for the past few weeks has at times bordered on absurd and futile efforts to

sell to the American people the Comprehensive Test Ban Treaty. For example, only this administration could attempt to put a positive spin on a Washington Post article reporting that the CTBT is unverifiable. It didn't work and once again it was demonstrable that you can't make a silk purse out of a sow's ear.

No administration, prior to the present one, has ever tried to argue with a straight face that a zero yield test ban would or could be verifiable. A treaty which purports to ban all nuclear testing is, by definition, unverifiable. In fact, previous administrations admitted that much less ambitious proposals, such as low-yield test ban, were also not verifiable.

This is not a "spin" contest. This is a fact.

There is one hapless fellow, at the other end of Pennsylvania Avenue, who is bound to know this, and he should not be lending his name to such shenanigans.

I am not referring to the President. This is his treaty—the only major arms control agreement negotiated on his watch—and its ratification is entirely about his legacy. No, I am talking about Vice President GORE, who took the correct, flat-out-position—when he was a United States Senator—he was opposed to even a 1-kiloton test ban. According to then Senator GORE, the only type of test ban that was verifiable was, in his estimation, one with no less than a 5-kiloton limit. He was quite clear, Mr. President, in saying that anything less—such as the CTBT treaty now before the Senate—would be unverifiable.

On May 12, 1988, Senator GORE objected to an amendment offered to the 1989 defense bill which called for a test ban treaty and which restricted nuclear tests above 1 kiloton. Then-Senator GORE declared:

Mr. President, I want to express a lingering concern about the threshold contained in the amendment. Without regard to the military usefulness or lack of usefulness of a 1 kiloton versus the 5 kiloton test, purely with regard to verification, I am concerned that a 1 kiloton test really pushes verification to the limit, even with extensive cooperative measures. . . . I express the desire that this threshold be changed from 1 to 5.

In other words, the Vice President knows full well that a 1-kiloton limit—to say nothing of 0-kiloton ban—was unverifiable. In fact, at his insistence, the proposed amendment was modified upwards to allow for all nuclear tests below 5 kilotons.

Why then, is the administration, of which he is now a part, claiming that a zero-yield ban is "effectively verifiable"?

Numerous experts have cautioned the Senate that a "zero-yield" CTBT is fundamentally unverifiable. Other nations will be able to conduct militarily significant nuclear tests well below the detection threshold of the Treaty's monitoring system, and even below the United States' own unilateral capability.

President Clinton's own former Director of Central Intelligence, Jim Woolsey, testified before the Foreign Relations Committee, on May 13, 1998, that "With the yield of zero, I have very serious doubts that we would be able to verify."

On August 5, 1999, former Secretary of State Henry Kissinger noted: "When I was involved in test-ban negotiations, it was understood that testing below a certain threshold was required to ensure confidence in U.S. nuclear weapons. It also was accepted that very low-yield tests would be difficult to detect, and an agreement to ban them would raise serious questions about verifiability."

Most significantly, Fred Eimer, former Assistant Director of the Arms Control and Disarmament Agency and chief verification expert for both the Reagan and Bush administrations, wrote to me this past Sunday stating his opposition to the CTBT.

Dr. Eimer noted that: "Other nations will be able to conduct militarily significant nuclear tests well below the verification threshold of the Treaty's monitoring system, and well below that of our own National Technical Means."

Now, of course, the Administration has claimed on a variety of occasions that the CTBT is "effectively verifiable." It seems, however, that this administration is saying one thing to the Senate and the American people, and admitting quite another thing overseas. I will read into the RECORD the criticism that was leveled against the CTBT on August 1, 1996, by Mr. John Holum—President Clinton's ACDA Director—when he was in Geneva. Mr. Holum stated:

The United States' views on verification are well known: We would have preferred stronger measures, especially in the decision-making process for on-site inspections, and in numerous specific provisions affecting the practical implementation of the inspection regime. I feel no need to defend this view. The mission on the Conference on Disarmament is not to erect political symbols, but to negotiate enforceable agreements. That require effective verification, not as the preference of any party, but as the sine quo non of this body's work. . . . On verification overall, the Treaty tilts toward the 'defense' in a way that has forced the United States to conclude, reluctantly, that it can accept, barely, the balance that Ambassador Ramaker has crafted.

"Reluctantly"?

"Accept, barely"?

Does this sound like a ringing endorsement of the CTBT's verification regime? I would say this is tantamount to "damnation by faint praise".

The fact of the matter is that the CTBT's much-vaunted international monitoring system (IMS) was only designed to detect "fully coupled" nuclear tests down to one kiloton, and cannot detect evasive nuclear testing. Any country so-inclined could easily muffle its nuclear tests by conducting them in natural cavities (such as salt domes or caverns) or in man-made excavations. This technique can reduce

the seismic magnitude of a test by a factor of 70. In other words, countries can conduct tests of up to 60 kilotons without being detected by the IMS.

Every country of concern to the United States is technically capable of decoupling its nuclear explosions. In other words, countries such as North Korea, China, and Russia will be able to conduct very significant work on their weapons programs without fear of detection by the IMS. I point out to Senators that, according to Department of Energy data, 56 percent of all U.S. nuclear tests were less than 20 kilotons in yield. Such tests, if decoupled, would all have been undetectable by the IMS. In other words, one out of every two nuclear tests ever conducted by the United States would not have been detected by the IMS—had the U.S. chosen to mask its program. I fail to see how the administration does not think this monitoring deficiency is not militarily significant.

Moreover, claims that the IMS will provide new seismic monitoring capabilities to the United States are ludicrous. The vast majority of seismic stations listed in the CTBT already exist, and were funded by the U.S. taxpayer; 68 percent of the "Primary Seismological Stations," and 47 percent of the "Auxiliary" stations called for under the treaty already are in place because the United States put them there years ago. I repeat, the only reason the IMS has any value to the United States is because it was already U.S. property long before the CTBT was negotiated.

So where are the additional 32 percent of the stations going to be located? In places such as the Cook Islands, the Central African Republic, Fiji, the Solomon Islands, Cameroon, Niger, Bolivia, Botswana, Costa Rica, Samoa, and so on and so forth. There is no benefit to having seismic stations in these places. In other words, Mr. President, the CTBT will provide zero benefit to our nuclear test monitoring.

In fact, it is going to make life more difficult for the United States. The same "overselling" of the IMS that is going on here in the United States is also occurring internationally. Ultimately, this is going to cause great problems for the United States in arguing that a country has violated the treaty when the much-vaunted IMS has not detected anything. Few nations are likely to side with the United States in situations where the IMS has not detected a test.

Moreover, the IMS also will complicate U.S. efforts by providing false or misleading data, which in turn will be used by countries to conceal treaty violations. Specifically, the CTBT fails to require nations to "calibrate" their regional stations to assess the local geology.

Naturally, countries such as Russia and China have refused to volunteer to do so. By consequence, these stations will record data that will be inconsistent with U.S. national information

and will be used to argue against U.S. on-site inspection initiatives.

While it is important to realize the deficiencies of the CTBT's seismic monitoring regime, it also is a fact that several treaty provisions will severely impair the ability of any on-site inspection, if launched, to uncover credible evidence of a violation. First, the aforementioned failure to calibrate regional stations will introduce inaccuracies in the location of suspicious events, creating a broader inspectable area than otherwise would be the case. Second, if the United States requests an inspection, no U.S. inspectors would be allowed to participate, and the country in question can refuse to admit other specific inspectors. Third, the treaty allows for numerous delays in providing access to suspect sites, which will cause dissipation of most of the best technical signatures of a nuclear test.

Indeed, in the case of low-yield testing, there are few enough observable signatures to begin with, and on-site inspections are unlikely to be of use at all. Finally, the inspected party is allowed to restrict access under the treaty and to declare up to 50 square kilometers as being "off-limits." As UNSCOM found with Iraq, any time a country is given the right to designate sites as off-limits to inspectors, the inspection regime is undermined.

In conclusion, the IMS and the inspection regime is likely to be so weak that I would not be surprised if countries such as Iraq and North Korea did not ultimately sign and ratify. Because of the technical impossibility of verifying a zero-yield test ban, such rogue regimes can credibly claim to adhere to a fraudulent, unverifiable norm against testing without fear of ever getting caught.

The only puzzling question for me, Mr. President, is why, with a Vice President who knows the truth quite well, does the Clinton administration continue to insist otherwise?

Mr. AKAKA. Mr. President, I rise in support of the Senate giving its advice and consent to the Comprehensive Test Ban Treaty (CTBT).

Debate on the CTBT has unfortunately become politicized. It should not be. The series of hearings held in the Armed Services Committee and the Foreign Relations Committee were fair and serious. I was impressed by the intelligent discussion and debate. But I wish that we had heard more. As Senator HAGEL indicated in his statement on the floor, we should not be compressing debate on this issue. We should hold more extensive hearings.

This treaty is about the future. It is about making a world more secure from the threat of nuclear war. This issue is too important, too important for the Senate of the United States not to have held hearing after hearing on all aspects of the treaty. Such hearings would, in my view, have better clarified all the benefits of the Treaty.

I have supported the treaty, I continue to support the treaty, and I will

vote for the treaty, not because it is perfect—the CTBT does not mean an end to the threat of nuclear war or nuclear terrorism or nuclear proliferation, but it does represent a step in the right direction of containing these threats.

Let us be clear on what not ratifying the CTBT means:

A vote against the CTBT is a vote for the resumption of nuclear testing by the United States.

A resumption of nuclear testing is the clear consequence of the criticism by opponents of the CTBT that the stockpile Stewardship Program is not sufficient to guarantee the safety, reliability and performance of the nation's nuclear weapon stockpile.

Critics of the Stockpile Stewardship Program argue that only actual testing can preserve our nuclear deterrence. Indeed at least one witness testifying before the Armed Services Committee advocated a resumption of 10 kiloton testing. That means testing a weapon almost the size of what was dropped on Hiroshima.

I do not believe that the American public wants to see the resumed testing of Hiroshima-sized nuclear weapons.

Nor do I believe such testing is necessary, not as long as America persists in investing sufficient resources in the Stockpile Stewardship Program.

Yes, there are uncertainties about the ability of the Stewardship Program over time to be successful. As the Director of Los Alamos National Laboratory, John Browne, has testified, "the average age of the nuclear stockpile is older than at any time in history, and nuclear weapons involve materials and technologies found nowhere else on earth." And as his colleague at the Lawrence Livermore laboratories, Bruce Tarter, stated, "the pace of progress must be quickened. Much remains to be accomplished, and the clock is running."

Indeed, the United States has no alternative to the Stockpile Stewardship Program unless we want to return to the level of nuclear testing that we saw prior to President Bush ordering a moratorium on testing in 1992.

I ask unanimous consent that a chart demonstrating the number of United States nuclear tests, from July 1945 through September 1992, be printed in the RECORD following my remarks.

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

(See Exhibit 1.)

Mr. AKAKA. The United States needs to train people, design equipment, and to invent new techniques if it is going to preserve the safety and reliability of its nuclear deterrent. The Stockpile Stewardship Program can accomplish all of these objectives.

The Stockpile Stewardship Program has had problems but it has made great progress. As Director Tarter noted, it has opened up new possibilities for weapons science not even contemplated a few years ago.

This is the future: one of science, not one of testing.

As a strong advocate of National Missile Defense, I have been struck by how some are willing to have such extraordinary confidence in the ability of American scientist and engineers to overcome problems in missile defense but do not seem to place the same confidence in the ability of American scientists and engineers to do the same with stockpile stewardship.

Choosing the path of science does not mean the United States cannot test if science proves inadequate to practice. The assurances contained in the President's six safeguards attached to this treaty mean that, if necessary, we can resume testing. I have full confidence in this President or any future President being willing to take this extraordinary step, and I have full confidence that this or any future Congress will back that President up should such a decision to return to testing be necessary.

Supporting the CTBT does not preclude America from taking whatever steps are necessary to preserve our national security.

I would argue, as have many of my colleagues, and interestingly enough, many of our allies, that ratification of the treaty helps preserve American security by locking in our nuclear superiority and limiting the abilities of other nations to match our nuclear capability. Our allies, who benefit from the security of the American nuclear umbrella, want the CTBT because they know it enhances, not detracts, from their security.

Yes, it is true that the treaty will not prevent proliferation absolutely. A country does not need to conduct nuclear tests to have a nuclear capability. But will it have a reliable weapons system? I do not think so.

Yes, it is true that the CTBT will not prevent a country from trying to hide small scale nuclear tests. But I believe that the international monitoring system which will be in place as well as the United States' own national technical means will be so extensive that any test will be detected. That country will then be subject to an international inspection. Some suggest that the United States will not be able to gain a consensus for such an inspection. I do not see why not: it will be in the interest of all signatories to ensure that no countries violate the agreement. I cannot envision a majority of states not agreeing to an inspection of a suspected nuclear test.

I do not know if the CTBT will create a new international norm discouraging nuclear weapons development. I do know that the CTBT will make such development technically more difficult to do and politically more difficult to deny.

Let me conclude by asking this simple question: do my colleagues who oppose the CTBT want our country to resume nuclear testing?

If not, then I suggest that the only course is to invest in the Stockpile Stewardship Program. I say, give

American science a chance. Invest in the future of weapons science, not in the past of weapons testing by ratifying the Comprehensive Test Ban Treaty.

EXHIBIT No. 1

	U.S.	U.S.-U.K.
Total tests by calendar Year:		
1945	1	0
1946	2	0
1947	0	0
1948	3	0
1949	0	0
1950	0	0
1951	16	0
1952	10	0
1953	11	0
1954	6	0
1955	18	0
1956	18	0
1957	32	0
1958	77	0
1959	0	0
1960	0	0
1961	10	0
1962	96	2
1963	47	0
1964	45	2
1965	38	1
1966	48	0
1967	42	0
1968	56	0
1969	46	0
1970	39	0
1971	24	0
1972	27	0
1973	24	0
1974	22	0
1975	22	0
1976	20	0
1977	20	0
1978	19	2
1979	15	1
1980	14	3
1981	16	1
1982	18	1
1983	18	1
1984	18	2
1985	17	1
1986	14	1
1987	14	1
1988	15	0
1989	11	1
1990	8	1
1991	8	1
1992	7	1
1992	6	0
Total tests	1,030	24
Total tests by location:		
Pacific	4	0
Johnston Island	12	0
Enewetak	43	0
Bikini	23	0
Christmas Island	24	0
Total Pacific	106	0
Total S. Atlantic	3	0
Underground	604	24
Atmospheric	100	0
Total NTS	813	24
Central Nevada	1	0
Amchitka, Alaska	3	0
Alamogordo, New Mexico	1	0
Carlsbad, New Mexico	1	0
Hattiesburg, Mississippi	2	0
Farmington, New Mexico	1	0
Grand Valley, Colorado	1	0
Rifle, Colorado	1	0
Fallon, Nevada	1	0
Nellis Air Force Range	5	0
Total Other	17	0
Total tests	1,030	24
Total tests by type:		
Tunnel	67	0
Shaft	739	24
Crater	9	0
Total underground	815	24
Airburst	1	0
Airdrop	52	0
Balloon	25	0
Barge	36	0
Rocket	12	0
Surface	28	0
Tower	56	0
Total atmospheric	210	0
Total underwater	1,030	24
Total tests	1,030	24

Total detonations by purpose: Joint US-UK, 24 detonations; Plowshare, 35 detonations; Safety Experiment, 88 detonations; Storage-Transportation, 4 detonations; Vela Uniform, 7 detonations; Weapons Effects, 98 detonations; Weapons Related, 883 detonations.

176 detonations (1980–1992) 14 detonations (1980–1992)
Note: Totals do not include two combat uses of nuclear weapons, which are not considered "tests." The first combat detonations was a 15 kt weapon airoddropped 08/05/45 at Hiroshima, Japan. The second was a 21 kt weapon airoddropped 08/09/45 at Nagasaki, Japan.

Mr. HELMS. Mr. President, yesterday President Clinton sent a written request to the Senate asking that we "postpone" a vote on the CTBT. In light of the President's outburst on Friday lashing out at Senate Republicans, and his adamant declaration that he would never submit a written request asking the Senate to withdraw the CTBT from consideration, his decision to send just such a letter is interesting.

His letter, was a baby-step in the right direction, insufficient to avert a vote on the CTBT today. The President is clearly playing poker with the Senate, but he doesn't have a winning hand, and I think he knows it.

The President sent this letter only because he realizes he has failed to make a compelling case for the treaty, and failed to convince two-thirds of the Senate that this treaty is in the national interest. He knows that if we vote on the CTBT today, the treaty will be defeated.

His letter did not meet both the criteria set by me and others. For example, he requested: (a) that the treaty be withdrawn and (b) that it not be considered for the remainder of his presidency.

The President has repeatedly dismissed the critics of this treaty as playing politics. Look who's talking. In his mind, it seems, the only reason anyone could possibly oppose this treaty is to give him a political black eye. Putting aside the megalomania in such a suggestion, accusing Republicans of playing politics with our national security was probably not the most effective strategy for convincing those with substantive concerns about the treaty.

The fact is, we are not opposed to this treaty because we want to score political points against a lame-duck Administration. We are opposed because it is unverifiable and because it will endanger the safety and reliability of our nuclear arsenal. The White House and Senate Democrats have failed to make a compelling case to the contrary. That is why the treaty is headed for defeat.

Of course, treaty supporters want to preserve a way to spin this defeat into a victory, by claiming that they have managed to "live to fight another day." That's probably the same thing they said after President Carter requested the SALT II Treaty be withdrawn. But they will be fooling no one but themselves.

Before this debate is over, it must be made clear that to one and all this CTBT is dead—and that the next President will not be bound by its terms. The next administration must be left free to establish its own nuclear testing and nuclear non-proliferation policies, unencumbered by the failed policies of the current, outgoing administration.

Without such concrete assurances that this CTBT is dead, I will insist that the Senate proceed as planned and vote down this treaty.

LEGISLATIVE SESSION

The PRESIDING OFFICER. Under the previous order, the hour of 4:30 p.m. having arrived, the Senate will now return to legislative session.

AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES APPROPRIATIONS ACT, 2000—CONFERENCE REPORT

The PRESIDING OFFICER. The Senate will now resume consideration of the conference report to accompany H.R. 1906, which the clerk will report by title.

The legislative assistant read as follows:

A bill (H.R. 1906) making appropriations for Agriculture, Rural Development, Food and Drug Administration, and Related Agencies programs for the fiscal year ending September 30, 2000, and for other purposes.

The Senate resumed consideration of the conference report.

The PRESIDING OFFICER. The Senator from Mississippi is recognized.

Mr. COCHRAN. Madam President, I am pleased to present to the Senate the conference report on H.R. 1906, the Fiscal Year 2000 Agriculture Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act.

The conference agreement provides total new budget authority of \$60.3 billion for programs and activities of the U.S. Department of Agriculture with the exception of the Forest Service, which is funded by the Interior appropriations bill.

The Food and Drug Administration and Commodity Futures Trading Commission are included also, and expenses and payments of the farm credit system are provided.

The bill reflects approximately \$5.9 billion more in spending than the fiscal year 1999 enacted level and \$6.6 billion less than the level requested by the President.

It is \$418 million less than the House-passed bill level and \$391 million less than the Senate-passed bill level.

I must point out that we, of course, are constrained with the adoption of this conference report by allocations under the Budget Act. The bill is consistent with the allocations that have been made to this subcommittee under the Budget Act, and it is consistent in other respects with the Budget Act.

The increase above the fiscal year 1999 enacted level reflects the additional \$5.9 billion which the administration projects will be required to reimburse the Commodity Credit Corporation for net realized losses.

The conference report also provides an additional \$8.7 billion in emergency appropriations to assist agricultural