The Future of U.S. Nuclear Weapons Policy

William F. Burns, former director of the Arms Control and Disarmament Agency (ACDA), spoke at the annual dinner of the Arms Control Association (ACA) October 14 on "The Future of U.S. Nuclear Weapons Policy." A member of the ACA Board of Directors, Burns was director of a similarly titled study by the National Academy of Sciences Committee on International Security and Arms Control (CISAC) released in mid 1997. (See ACT, May 1997.)

Burns, a retired U.S. Army major general, has been involved with U.S. nuclear weapons and U.S. nuclear policy since the mid 1950s, when he was commissioned in the field artillery and assigned to one of the first nuclear armed artillery battalions in Europe. Burns was appointed in 1981 as the Joint Chiefs of Staff representative to the intermediate range nuclear forces negotiations, a position he held until 1986 when he was appointed principal deputy assistant secretary of state for political military affairs. Burns retired from the Army in 1987 when he became ACDA's ninth director.

In 1992, Burns served as the first U.S. special envoy to the denuclearization negotiations with the states of the former Soviet Union, and in 1993 signed the U.S. Russian agreement on the U.S. purchase from Russia of highly enriched uranium derived from dismantled Soviet nuclear weapons. Burns now resides in Carlisle, Pennsylvania, where he is a distinguished fellow at the Army War College. The following is an edited version of his remarks.

Ladies and gentlemen, I am delighted to be here tonight for a number of reasons. First of all, I think the study we did is important, and it's an audience like this, which by better understanding the study and what motivated us, can help us to disseminate the ideas it contained. Secondly, this audience is filled with old friends, and although I would certainly not want to try to identify all of them here, let me just identify two. First, my mentor, Paul Nitze. If it had not been for Paul, I'd be a retired one star right now probably trying to teach someplace. I consider Paul to be the father of arms control in this generation. The other individual, the individual without whom we would not have had a CISAC study is Jo Husbands, the staff director of CISAC.

What I'd like to do this evening is not just talk about the CISAC study, but talk in more general terms about assessing the progress and future of arms control. I became involved in arms control many, many years ago, but I didn't realize it. I didn't realize that the military, whether you're a lieutenant or a captain or a major or a general, are certainly your primary arms controllers. When I first became involved with nuclear weapons in the mid 1950s, the Army didn't know very much about nuclear weapons but we saluted the flag and took them. We were given no particular assets with our nuclear weapons, beyond what an 8 inch howitzer battalion had.

The first nuclear weapon I saw was a training round. It contained only Uranium 238, not Uranium 235 [U 235] and was not capable of nuclear detonation. It was in the back of an M 109 van tied down with a frayed piece of hemp, and a corporal in the van was going to tell us how to put five components together and make an 8 inch projectile. After about three hours and after many false starts on his part, with the manual we were able to more or less put the projectile together. After this we were certified as being able to put together "a nuclear round," and two weeks later we deployed to the United States Army Europe.

In Europe, we suddenly found ourselves proud owners of not only a training round but several of those olive green colored nuclear rounds. For the next three years my battalion was custodian of these rounds. It was an interesting situation because there was very little guidance compared to the guidance in later years. This was before the days of Permissive Action Links or very elaborate release
systems. Release was basically tied to the command chain. I had no doubt in my military mind that if my battalion commander said "Shoot," we would shoot, and if my battalion commander said "Don't shoot," we would not shoot. It was as simple as that.

The safest place to secure nuclear rounds was in the basement of our battalion headquarters building. The building had been the former Gestapo headquarters of the town and it had cells behind steel and barred doors, making a very secure arrangement.

What strikes me about this particular weapon—a gun assembly type weapon that is very primitive by today's standards—is that it's the kind of weapon that a terrorist organization or a small, economically deprived nation state could build with a reasonably adequate machine shop; 75 to 80 kilograms of stolen U 235 or maybe plutonium; and a couple of individuals who had degrees, perhaps even a graduate degree, in physics. All you need is a system that allows you to take two sub critical masses of uranium and jam them together long enough so they become super critical. What concerns me today is that the technology of 50 years ago could be used to build a weapon that could end up in the hands of a fairly small terrorist group.

Have we made progress in the last few years? I certainly think we have. Let me give you a report card on where I think we stand.

In terms of bilateral nuclear weapons reductions, that is, between the United States and Russia involving delivery systems with ranges of over 500 kilometers, I'd give us a B+. We have the 1988 Intermediate Range Nuclear Forces [INF] Treaty, which most people forget about today but has been very, very successful. Although the INF Treaty is of indefinite duration, the on site inspections conducted under the treaty will conclude in 2001. With all the talk about START II and START III, it is important to remember that we do have a START I agreement and we are dismantling weapons at a pace somewhere near the capacity of both sides. So, I'd give us a B+ in that area.

In bilateral reductions in delivery systems with ranges below 500 kilometers, I'd give us only a D. When Presidents Bush and Gorbachev announced in 1991 unilateral reductions in non strategic weapons—weapons in Europe—I thought it was a great idea. I've rethought that since. I think it was a terrible idea because in the process we really lost count of non strategic weapons, which are the weapons that can most easily be proliferated.

As for the accountability of nuclear material in Russia, I'd give us a C+. I had great hopes in 1993 that the agreements we had signed under Nunn Lugar would give us a clear handle on these materials, and it has helped. But we've been very slow in the last few years in moving to build a facility there to store the material, to develop a system of accountability to which the Russians agreed, and to encourage greater openness with regard to this nuclear material in the hands the Russians.

In verification procedures I'd give us a B. I think this grade mostly accrues to the On Site Inspection Agency [OSIA], which has done a tremendous job in establishing routine procedures for the verification of all sorts of things pertaining to nuclear weapons. OSIA has been able to respond with great alacrity to the kinds of unknowns that have developed over the last several years.

With regard to the inclusion of third parties in the control of nuclear weapons, I would give only a C. We haven't done very much with the Chinese, although some would argue that that's a very difficult task. Well, it was a very difficult task in 1981 to begin to convince the Soviets that "zero zero" was a reasonable option in the INF talks. We could exert ourselves a little bit more in dealing with the Chinese. We also should be exerting ourselves more with the British and the French to make sure that, if we can make substantial reductions in the U.S. and Russian arsenals, the British and the French are prepared to join that process.

The final area to which I would give a grade is surveillance and defeat of non state actors such as terrorist groups bent on acquiring nuclear weapons. I would say that we've got a solid D or D+ here. One of the problems the United States government has is that it often slogansizes itself into meaninglessness. Remember counter terrorism in the 1970s? We were going to solve the problem of terrorism in the world. We were also going to solve the problem of insurgency in the 1960s. And I
just watched on television a travelogue on Vietnam, where we didn't make out so well. I hope that's not the case in our counter proliferation efforts, where we're at the beginning stage, not the end stage.

The greatest threat to our security today is not the threat of nuclear weapons in the hands of other nation states, necessarily, but the threat posed by the proliferation of these weapons into the hands of states that may not show the same restraint that the nuclear weapon states have over the last 50 years.

**The CISAC Study**

Let me talk a bit about the CISAC study, which is entitled "The Future of U.S. Nuclear Weapons Policy." It was a difficult undertaking because we had a very broad range of views in our committee. I think the strength of our study is that after literally two and a half years of arguments—face to face or via fax and e mail—we were able to reach a fairly strong consensus and there were fairly strong arguments supporting that consensus.

The study recommends significant changes to U.S. nuclear weapons policies to reflect the realities of the post Cold War world. The central recommendation is that the core mission of U.S. nuclear weapons should be to deter the use of nuclear weapons by others. Reflecting this limited role, the study calls for a regime of progressive constraints on U.S. and Russian forces to levels of 2,000 strategic warheads and then to levels of 1,000 total warheads each, with concurrent steps to reduce alert levels and reorient nuclear doctrine away from rapid, massive responses. It further concludes that, given the right security environment, verification procedures and participation of other declared nuclear powers, reductions to a few hundred nuclear warheads would assure the core deterrence mission. Finally, the study examined a number of paths by which the possession of nuclear weapons might be safely prohibited even though their absolute permanent elimination might not be guaranteed.

I assume most of you have read the study, and I'm not going to bore you with a line by line recital of all of the study's many conclusions and recommendations. Let me explain to you what the CISAC study does not say or does not do.

The CISAC study does not minimize the continuing value of nuclear weapons in deterring the escalation of conflicts into unlimited war among major powers. In fact, it suggests, quite the contrary, that nuclear weapons, even after they are reduced to very low levels, or even prohibited, will continue to deter conventional war among major powers simply because these weapons can always be resurrected. The study does not advocate a unilateral commitment to eliminate nuclear weapons now. We are not ban the bomb advocates in the sense that we say that the primary necessity is to eliminate nuclear weapons. We recognize that nuclear weapons have served a necessary and essential role for the last 50 years and that to eliminate nuclear weapons right now is not possible. We do not advocate unilateral reductions by the United States. We do not ignore the threat of other weapons of mass destruction. We do not advocate de alerting because of perceived concerns that U.S. nuclear weapons are unsafe or dangerous in any absolute sense. We do not advocate the prohibition of all ballistic missile defenses. And we do not advocate the abandonment of target planning against potential nuclear adversaries.

What the CISAC study does do is provide tools to continue the process of reducing nuclear weapons, both strategic and non strategic, in the hands of declared nuclear weapon states. It also provides motivation for the non declared weapon states to reassess their security needs, and provides the United States with timely methods of monitoring the stockpiles of others.

The CISAC response to the present nuclear situation suggests the following: There are risks in the world today because of nuclear weapons. They're not the same risks that existed when the United States and the Soviet Union faced off against each other, but they're still risks. The risks now tend to be associated with proliferation and the dangers of erroneous or unauthorized or accidental use of
nuclear weapons.

The CISAC study really argues for a two pronged approach to address these dangers. First, the reduction of nuclear weapons to the lowest possible levels, whatever those levels might be. And, second, a concomitant regime of progressive constraints which will ensure that nuclear weapons, as they are being reduced, are less likely to be used. I group these constraints into several kinds of initiatives.

First of all, there are the policy initiatives. We argue that it's time for the United States to adopt a no first use policy because the first use policy has more or less outlived its usefulness. But, we argue that if we are to adopt a no first use policy, the United States must maintain strong conventional forces so that it can meet its commitments and, if you will, execute its will without resort to nuclear weapons.

I don't think many of us really realize, unless we've done a lot of traveling outside the United States, what the effects of the Gulf War have been on the rest of the world. They give us much more credit than we deserve for our conventional capability. They believe that the M 1 tank will cut through anything anybody has, and that the F 16 fighter and the various Stealth fighters and bombers can do what they want and there's no stopping them. They believe that the U.S. cruise missiles are absolutely systems against which there is no defense.

And ladies and gentlemen, I'd like to keep the rest of the world thinking that. But, that means that we need to maintain a strong conventional defense.

We believe that we must maintain a strong system of strategic warning. I don't mean warning of a missile attack, but warning through intelligence channels, so we know well in advance, years in advance, perhaps, of any other nation that might be considering a clandestine buildup. We believe strongly that we should maintain the ABM Treaty as it currently exists with regard to a nationwide strategic defense, but we should also ensure that our forces deployed in the field are protected against missile attack.

With regard to operational initiatives, we believe that mutual de alerting should be employed as soon as possible to expand the amount of time—from minutes to hours to days, perhaps to weeks—that decision makers have in the event of a nuclear crisis. We also believe that to maintain the deterrent credibility of our forces, the readiness of individual nuclear elements must remain high.

With regard to technical initiatives, we have a number of challenges ahead of us. If we are to bring down the numbers of nuclear weapons that we have, and we believe that a level below 1,000 is possible, then it's essential that this thousand include all nuclear warheads—deployed, non deployed and so forth. Right now we don't have a system or a theory or an approach that will allow us to count, with great accuracy, nuclear warheads. So we believe that verification of compliance in such a regime will require us to develop a technical system for counting warheads.

We also need to develop systems for securing warheads. If a de alerting measure requires you to remove warheads and place them in a common storage area, obviously under national control, then how do you secure these warheads to the satisfaction of the other side? Sandia National Laboratory has done some very interesting work along these lines in cooperative monitoring, and it seems to me that that kind of work must be extended.

Also important from a technical point of view is how you extend this regime to third parties. In one sense it's fairly simple for the United States and Russia to come up with verification measures. But we found out with the Conventional Armed Forces in Europe [CFE] Treaty how difficult it is to extend these measures to multilateral agreements. I found out in 1988 how difficult it was to take the bilateral INF agreement and extend it to our allies where these systems were based. In 1988, we had not really thought too much about how we were going to deal with the verification provisions of our own agreement. I remember sitting in a meeting in the State Department when it was suggested that we should talk to the basing country allies about inspections. So we called a meeting and within about 10 minutes it was obvious that we were not prepared to deal with allies' concerns.
I remember one representative who said, "Do you realize that you're prepared to sign an agreement with the Soviet Union that authorizes you and the Soviets to do away with our customs regulations and bring anyone into our country without our permission?" And I said, "Well, we haven't really thought about it that quite that way." Nine months later we concluded negotiations with five basing countries that would enable us to execute the verification provisions of the INF Treaty. We cannot afford to make this miscalculation again.

That convinced me that we should not take it as a given that at some time in the future other nuclear powers are suddenly going to say to the United States: "You've done such a great job in this. We're just anxious to sign your treaty as another partner." It's not going to happen. We must take that into consideration right now.

There are other technical problems as well. For instance, let's say that at some point we abandon our nuclear triad. What does that mean? How far do you shift into what we call "adaptive targeting" and away from the present single integrated operational plan [SIOP] targeting? What are the effects as you get down to very low numbers, say, in the hundreds of warheads? One of the issues we raised in our study was the fact that we will probably never be able to eliminate nuclear weapons, at least in a verifiable way. But perhaps nuclear weapons can be prohibited in terms of their use. We haven't really thought enough about that, and that's an area that we suggest needs to be explored.

I think it's important that we learn from our own experience. Let's make sure that we understand the technical problems that proliferators face, and how we dealt with them in a less sophisticated time and how we might deal with them in the future. By profiting from what we learn, perhaps we can cope better with issues of "loose nukes" in the 21st century as the declared nuclear powers continue to reduce their stockpiles. I am optimistic that we can do this and do it well.

The CISAC study, obviously, is not a "be all" and an "end all"; it's a beginning. I encourage and charge others to think more deeply than we were able about some of the problems that we raised. But I see a general sea change beginning. Some of the things that we talk about in the study would have been anathema five years ago, certainly 10 years ago, in government circles. Today, in my private conversations with individuals in government, the anathema is not holding quite as strongly.

So, it seems to me that now is the time and now is the opportunity, for us as individuals and groups we might represent here tonight, to move forward and seize the opportunities as they present themselves, to ensure that the Pandora's box which was opened in 1945 is at least managed carefully, if the lid cannot be shut completely. Thank you very much.

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