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U.S. alters nuclear weapons policy: Congress rejects 'bunker busters' for more reliable arms

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After struggling in recent years to redefine U.S. nuclear policy, Congress turned the country in a new direction this month by giving millions of dollars for a program aimed at producing a smaller arsenal of more reliable warheads.

Lawmakers killed the widely criticized nuclear "bunker buster" concept, which critics regarded as too aggressive, and instead appropriated \$25 million for research on what is called the reliable replacement warhead, or RRW. Though that initial sum is relatively modest, it signifies an important policy shift that could end up costing many billions of dollars.

Even some arms control advocates have applauded the decision, because many see the new program as a sharp scaling back of the Bush administration's once soaring nuclear ambitions.

Democrats as well as Republicans were so enthusiastic that they voted for almost three times the amount of money requested by the White House, in large part because the program is viewed as an exercise in restraint.

"This is about tinkering at the margins of the existing weapons systems, nothing more," said Rep. Ellen Tauscher, D-Walnut Creek, a member of the House Appropriations Committee's energy and water subcommittee, which controls the nuclear weapons budget "They (the White House) aren't getting what they wanted."

But while the vote was decisive, just what the nuclear future will look like is not. Some experts caution that more than tinkering may be involved.

"The answer to every question at this point is, 'It depends,'" said Philip Coyle, a senior Pentagon official in the Clinton administration and a nuclear scientist at the Lawrence Livermore National Laboratory for 33 years. "A new warhead can be new in a wide variety of different ways, and nobody knows what that will mean yet."

Indeed, the reliable replacement warhead is a strikingly elastic concept that, at this stage, each side can define as it likes. One of the few clear guidelines is that Congress has ordered that, whatever it is, it must be deployed without new underground testing, which President George H.W. Bush banned in 1992. But few agree on whether that is even feasible.

Beyond that, experts generally agree, the new program will mean spending billions of dollars to ensure that nuclear weapons remain a fundamental element of military planning, at a time when many other countries -- some friendly, some not -- are making similar calculations. The commitment is, in short, part of a global trend.

"It's not just that the Cold War is over, the post-Cold War period is over, too," said **Nikolai Sokov**, a senior research associate at the Monterey Institute for International Studies and a former Russian arms control negotiator. "What you're seeing now is a whole wave of policies of this kind being discussed in Russia and the United States and other places. There is an active process in a wide variety of countries. They are all exploring the option of nuclear weapons."

He added, "**We're not talking about disarmament, we're talking about optimization.** What you're doing is reducing the warheads to a more appropriate size." To those who believe in nuclear restraint, the program is a modest upgrading of existing weapons. For instance, optical fiber detonator cables would replace electrical wires and safer high explosives would be used to initiate the implosion of the radioactive core, which starts the nuclear chain reaction.

"This is not a sneaky way to get a whole new powerful warhead type of thing in the future," insisted Rep. David Hobson, R-Ohio, chairman of the House Appropriations Committee's energy and water subcommittee, and the most influential voice for restraint. "We're not trying to do separate missions than those the warheads were designed for today."

Nuclear weapons proponents, however, see it in more expansive terms. Although the initial funding is just for research, and Congress will have to approve any further steps, nuclear proponents regard the program as an efficient new production platform for rapidly developing new warheads for specialized missions.

For some government officials, the code word is capability. When the talk turns to warheads with new capabilities, or of dealing with new threats, the implication is that whole new weapons designs will be required.

"Part of the transformation will be to retain the ability to provide new or different military capabilities in response to (the Department of Defense's) emerging needs," Linton Brooks, administrator of the National Nuclear Security Administration, which builds and maintains the stockpile, said at a Senate hearing earlier this year.

That increases the possibility, many experts say, that the warheads may need not only testing, but also the development of heavily modified missiles or new missiles to deliver them, adding billions of dollars more to the ultimate cost.

William Schneider Jr., chairman of the **Defense Science Board**, an influential advisory body to the Pentagon, said in a report last year that "**the nature of the potential threat demands that we consider solutions that go beyond improvement on the margin,**" and that the country should build "**weapons more relevant to the future threat environment,**" including nuclear warheads.

Cutting through the distrust and disagreements, there are critical areas of bipartisan agreement. First, the method of maintaining the Cold War-era stockpile -- the so-called life extension program - - cannot last indefinitely because the warheads are aging. Some experts dispute this, but Congress

seems to have accepted the view that a new approach is required.

Second, the U.S. nuclear weapons manufacturing capability, all but halted after the Cold War, needs to be resuscitated. It could cost tens of billions of dollars over the coming decades and, as some envision it, could give the United States the capacity to produce more than a hundred warheads a year.

How the new warheads would be delivered to their targets has been little discussed, but expensive missile improvements are a prospect, even though Hobson and others insist this will not be called for. But making the new warheads more reliable and safer, weapons experts say, could make them heavier and bulkier. At the least, that would require extensive retesting of missiles.

The first warhead to be upgraded will be the W76, which is deployed on the submarine-based Trident missiles. But whether that missile will still work as designed with a new warhead, without substantial modifications, is yet to be proven.

"You can't just have a conversation about the warheads -- it has to be about the delivery systems and even the military's command and control," said **John Browne**, a weapons designer and former director of the Los Alamos National Laboratory. **"These things are part of an interrelated system. That's what people forget."**

The rethinking of the U.S. nuclear posture began after the collapse of the Soviet Union. Underground nuclear testing was banned, warhead production was stopped, and thousands of weapons were decommissioned.

Some demanded that the nuclear stockpile, with more than 10,000 warheads, be scrapped. Instead, the Clinton administration started increasing the budgets for the nuclear design labs, at Livermore, Los Alamos and Sandia National Laboratory, for what was called "science-based stockpile stewardship," a program of maintaining and refurbishing aging warheads.

While the nuclear weapons budget has more than doubled since the mid-1990s to about \$6.5 billion, some now argue that the old warheads are growing less reliable with age and are not suited for deterring new types of enemies, such as North Korea or Iran, in part because they are too powerful.

In 2001, a conservative Washington think tank, the National Institute for Public Policy, called for the development of new types of specialized warheads, such as "bunker busters" -- warheads in super hard casings that would allow them to burrow deep into the earth before exploding -- to destroy deeply buried targets or caches of chemical and biological weapons.

That report became the backbone of the Bush administration's new nuclear strategy, the Nuclear Posture Review, issued in 2002. Half a dozen members of the group that drew up the 2001 study assumed senior positions in the Bush administration, including Brooks at the National Nuclear Security administration, Schneider at the Defense Science Board and Stephen Hadley, now the president's national security adviser.

In 2003, the White House won funding in Congress for the bunker buster study and research into other new types of warheads.

But that is when Hobson, concerned that the weapons could spur a new arms race, surprised fellow Republicans by pushing back. He later slashed some of the funding and strongly criticized some of the White House plans. He wanted, he said, a more restrained policy, one that would survive pressure from nuclear hawks.

"My problem is I can only be chairman for six years," Hobson said. "That's why I'm trying to lock in place a footprint for the future. I'm trying to kill things so they don't come back."

But California Sen. Dianne Feinstein, a member of the Senate's energy and water appropriations subcommittee, said she did not trust the administration and expected to fight the same battle again.

"This administration continues to try to reopen the nuclear door," she said. "So we must remain vigilant in ensuring that the reliable replacement warhead program does not lead to the development of new nuclear weapons and the resumption of nuclear testing."

Hobson and others say they fully expect the government to try at some point to expand the program, and they insist they are prepared to fight back. But some nuclear proponents are angry at what they see as a weakened Bush administration backing off at all.

"This 'modernization' is not a modernization of the weapons' capabilities," said Kathleen Bailey, a senior associate of the National Institute for Public Policy and a co-author of the 2001 nuclear study. "That's what is needed. But the administration has already shown it doesn't have the willingness to stand up and go to bat on this. So I can't imagine the Republicans or the Democrats in the future doing so."

Surprisingly, one of the few groups that seems not to have engaged directly in the debate is the military.

William Odom, a retired lieutenant general trained in nuclear warfare and former director of the National Security Agency, said one reason was that professional military leaders regarded the weapons as too dangerous and too difficult to protect and maintain, given the modest probability that they would ever be used, particularly as conventional bombs become more powerful and more accurate.

"Once you get through all the imponderables of using these things, you increasingly lose your enthusiasm for the desirable effects of the weapons," said Odom, who also helped put together the 2001 study but has a limited belief in the usefulness of nuclear weapons. **"From a professional's perspective, it's damn hard to work up any excitement about them. Eventually, they'll go the way of chemical weapons."**