



The Reliable Replacement Warhead Program: A Trojan Horse?

The National Nuclear Security Administration (NNSA) is the semi-autonomous agency within the Department of Energy responsible for nuclear weapons programs. The NNSA's Fiscal Year (FY) 2006 Congressional Budget Request states:

The Consolidated Appropriations Act, 2005 (P.L. 108-447), replaced the Advanced Concepts Initiative with Reliable Replacement Warhead. The Reliable Replacement Warhead (RRW) program is to demonstrate feasibility of developing reliable replacement components that are producible and certifiable for the stockpile.

There is much encoded here. First, Advanced Concepts was a NNSA initiative to pursue so-called "mini-nukes" and other exotic designs, which was given legs only after a 10-year long congressional ban against pursuing low-yield nuclear weapons was overturned by Congress (with legislation initially drafted by the Department of Defense). In less than two weeks after that repeal in November 2003 Linton Brooks, the NNSA Administrator, wrote to the directors of the three nuclear weapons labs "We should not fail to take advantage of this opportunity."

However, the House Appropriations Subcommittee on Energy and Water Development, chaired by David Hobson (R-OH), rejected funding for Advanced Concepts and a sister program for the Robust Nuclear Earth Penetrator (RNEP). It reported at length:

The Committee continues to oppose the diversion of resources and intellectual capital away from the most serious issues that confront the management of the nation's nuclear deterrent... The Committee notes that the management direction for fiscal year 2004 sent to the directors of the weapons design laboratories left little doubt that the objective of the program was to advance the most extreme new nuclear weapon goals irrespective of any reservations expressed by Congress... By contrast, the Committee's priorities are maintaining our Nation's nuclear deterrent in a safe and secure condition and maintaining our Nation's integrity in the international effort to halt the proliferation of weapons of mass destruction. The Department's obsession with launching a new round of nuclear weapons development runs counter to those priorities. The Committee directs the NNSA to focus wholly on its primary mission of maintaining the safety, security, and viability of the existing stockpile by executing the Stockpile Life Extension Program and Science based Stewardship activities on time and within budget.

Finally, in the omnibus appropriations bill for FY 2005, Congress redirected the NNSA's request of \$9 million for Advanced Concepts to the RRW Program. The NNSA has followed suit by requesting \$9.35 million for the program in FY 2006, with accelerating spending projected to be a total of \$97 million over the next five fiscal years. The danger is that the NNSA has adapted to last year's congressional directive, but will twist the RRW Program to achieve the same old aims of its now defunct Advanced Concepts Initiative.

On April 4, 2005, Litton Brook testified to the Senate Armed Services Committee:

As a result of these collective decisions [to miniaturize warheads to the detriment of "increased performance margins, systems longevity, and ease of manufacture"], it is becoming increasingly difficult and costly to certify warhead remanufacture. The evolution away from tested designs resulting from the inevitable accumulations of small changes over the extended

lifetimes of these systems means that we can count on increasing uncertainty in the long-term certification of warheads in the stockpile. To address this problem, we must evolve our strategy from today's "certify what we build" to tomorrow's "build what we can certify."

What this can point to is a pending "extreme makeover" of the U.S.'s nuclear weapons stockpile, including the production of new designs, ironically in the absence of underground tests (see Comprehensive Test Ban Treaty below). As Brooks testified, "we should be able to develop and produce by the 2012-2015 timeframe a small build of warheads in order to demonstrate that an RRW system can be manufactured and certified without nuclear testing."

Brooks went on to testify:

Today's Cold War legacy stockpile is the wrong stockpile from a number of perspectives... First, today's stockpile is the wrong stockpile *technically* [i.e., with too tight design margins]... Second, the legacy stockpile was not designed for longevity... The Cold War legacy stockpile may also be the wrong stockpile from a *military* perspective. The Nuclear Policy Review identified a number of capabilities shortfalls in the existing arsenal that could undermine deterrence in the future. Specifically, the NPR suggested that current explosive yields are too high [re: the need for mini-nukes], that our systems are not capable against hard and deeply buried targets [re: the need for the nuclear bunker-buster]. (Emphases in the original.)

Nowhere does Brooks observe that it is the wrong stockpile *morally*. Nor does he observe that it is the wrong stockpile *under international treaty and law*, to wit the NonProliferation Treaty's obligation to eventually disarm nuclear stockpiles and the aim of the Comprehensive Test Ban Treaty (observed, but not ratified by the U.S.) to cut off the further advancement of nuclear weapons. Finally, he doesn't mention that it is the wrong stockpile *with respect to encouraging proliferation by example*.

The nuclear weapons labs are likely pushing the NNSA to twist the RRW Program from its original Congressional intent. For example, the following is from the NNSA's FY04 appraisal of University of California management of the Los Alamos National Laboratory:

The [LANL] Nuclear Weapons Program brokered a RRW path forward with Laboratory Director Nanos. The Laboratory Director met with NNSA to address this issue and to gain support for RRWs... The Laboratory worked with NNSA on future stockpile strategies. Directed Stockpile Work (DSW) developed and is maintaining a set of computer codes to address future stockpile options, which are being used by the Department of Defense and Department of Energy nuclear communities.

In sum, Nuclear Watch New Mexico fears that NNSA's and LANL's embrace (no doubt echoed by the Sandia and Lawrence Livermore National Laboratories as well) of the RRW Program is a Trojan horse. Congress, when it reprogrammed Advanced Concepts money, sought to create a program that would help ensure the safety and reliability of the U.S.'s nuclear weapons on into the future (which is another issue unto itself). We fear that, if left unchecked, the NNSA and the labs will turn the program into a pending fourth generation of nuclear weapons of mini-nukes and other exotic designs.

Recommendation: Congress should proscribe constraints to the RRW Program so that it truly meets Congressional intent. More broadly, Congress should consider whether the Program aligns with international obligations under the NonProliferation Treaty.

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