



Fact Sheet

Media Contact(s): NNSA Public Affairs, 202-586-7371

U.S. Nuclear Weapons Stockpile

The Department of Energy's National Nuclear Security Administration (NNSA) is responsible for maintaining the safety, security and reliability of the U.S. nuclear weapons stockpile. In doing so, it ensures that the U.S. nuclear deterrent meets the needs of the 21st century.

Reducing the Nuclear Weapons Stockpile

Under the Moscow Treaty of 2002 between the United States and Russia, the United States agreed to reduce the size of its operationally deployed strategic nuclear weapons to between 1,700 to 2,200 by 2012. In addition to this treaty, President Bush directed in 2004 that in eight years the size of the overall U.S. nuclear weapons stockpile (both reserve and operationally deployed) be reduced nearly 50 percent from the time he entered office. That goal was met five years early, so he directed that the stockpile be reduced further by almost 15 percent more by 2012.

- The current U.S. nuclear weapons stockpile is the lowest it has been since the Eisenhower Administration.
- Dismantlement of the W79 was completed in 2003.
- Dismantlement of the W56 was completed in 2006.
- 13 different nuclear weapon types have been retired and eliminated since 1992.
- 374 metric tons (MT), or roughly 15,000 nuclear weapons-worth, of highly enriched uranium (HEU) removed from U.S. stocks. 200 MT of this amount was declared excess in 2005.
- 61.5 MT, or roughly 7,600 nuclear weapons-worth, of plutonium removed from U.S. stocks. 9 MT of this amount was declared excess in 2007.

Consolidating Nuclear Material

NNSA plans to consolidate nuclear materials at five sites by 2012, with significantly reduced square footage at those sites by 2017. This will further improve security and reduce security costs, and is part of NNSA's overall effort to transform the Cold War era nuclear weapons complex into a 21st century nuclear security enterprise.

- 12 MT of special nuclear material was removed from NNSA sites in fiscal year 2008.
- Sandia National Laboratories has removed all special nuclear material quantities that require the highest level of security.
- Lawrence Livermore National Laboratory has reduced its special nuclear material by 25%.

Consolidating the Nuclear Weapons Complex

Reflecting a reduced stockpile and the need to tear down Cold War-era facilities, NNSA has a plan, known as Complex Transformation, to move from the current aging nuclear weapons complex to a 21st century national security enterprise that is smaller, safer, more secure and more cost effective. Complex Transformation would:

- Close or transfer from weapons activities about 600 buildings or structures, many by 2010;
- Reduce the footprint of NNSA operations at two major testing sites supporting its laboratories by 2015;

- Reduce the square footage of buildings and structures supporting weapons missions by 9 million square feet; and
- Employ 20-30% fewer workers directly supporting weapons missions consistent with a smaller, more efficient complex.

Maintaining the Nuclear Weapons Stockpile

The United States has not deployed a new nuclear weapon in over 20 years, nor conducted an underground nuclear test since 1992. Instead, NNSA scientists maintain current warheads well beyond their original life using sophisticated supercomputers and facilities that test the safety, security and reliability of U.S. weapons in NNSA laboratories versus through an underground nuclear test – an important nonproliferation goal.

- The life extension program for the W87 was completed in 2004.
- The first refurbished B61-7 and B61-11 nuclear bombs were delivered in 2006. This extended the lives of these weapons by at least 20 years.
- The fastest supercomputer in the world, Roadrunner, is used to perform calculations that vastly improve the ability to certify the reliability of the stockpile without conducting underground nuclear tests. NNSA's Blue Gene/L and Red Storm are some of the world's fastest supercomputers as well.
- The capability to manufacture a small number of replacement "pits," the triggers of nuclear weapons, for the W88 was reestablished in 2007. Building these replacement pits allows NNSA to continue to take apart and certify the reliability of the stockpile without conducting underground nuclear tests.
- The capability to produce tritium, a short-lasting but essential component of a nuclear weapon, was reestablished in 2006.

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