Union of Concerned Scientists

FACT SHEET

Success in Cutting U.S. and Russian Nuclear Arsenals

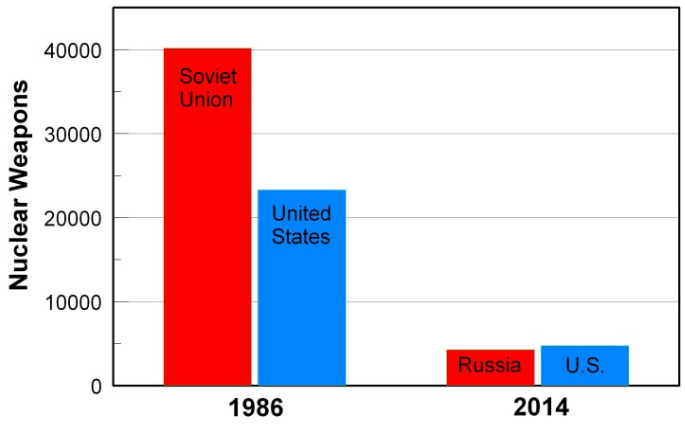
Nuclear weapons continue to pose a significant threat to humanity. However, in the past several decades the United States and Russia have made significant progress in cutting their nuclear arsenals. Many of these cuts were made by presidential order—primarily by U.S. Presidents George H.W. Bush and George W. Bush.

After several decades of cold war competition and a nuclear arms race, the U.S. and Russia had amassed arsenals of tens of thousands of nuclear weapons. At its peak, in 1986, the United States had some 23,000 warheads and the Soviet Union had 40,000 (Kristensen and Norris 2013).

Today, those numbers have dropped to about 4,800 weapons for the United States and 4,300 for Russia (FAS 2014), counting both deployed weapons and those kept in storage as a reserve (Fig. 1). Russia currently has about 1,800 weapons deployed on long-range missiles and bombers, and the United States has about 1,900.

How did this significant decrease happen?

FIGURE 1. Reductions in U.S. and Russian Nuclear Arsenals.



These figures include deployed and stored weapons, but not retired weapons that are awaiting dismantlement.

Source: Data from FAS 2014

During his four years in office, President George H.W. Bush cut the total U.S. nuclear stockpile by over 10,000 warheads—a drop of nearly 50 percent.

Deep, Rapid Cuts Under President George H.W. Bush

In the early 1990s, with the cold war ending and U.S.-Russian relations improving, President George H.W. Bush acted boldly to significantly change U.S. and Russian nuclear arsenals. He accomplished much of this independently, without negotiating with Russia—or discussing it with Congress. In consultation with his military and national security advisors, he determined that the changes would increase U.S. security, whether or not Russia reciprocated.

The president recognized that the very large nuclear arsenals amassed during the cold war posed a risk to both countries, and that certain types of weapons, especially multiple-warhead long-range missiles and short-range "tactical" nuclear weapons, were particularly dangerous. He determined that the United States would be safer if these weapons were eliminated and, under his authority to set nuclear policy for the nation, he took actions to accomplish this.

In September 1991, the president announced that the United States would eliminate virtually all battlefield, or "tactical," nuclear weapons, including nuclear artillery shells, warheads for short-range ballistic missiles, and all tactical nuclear weapons on navy ships.

In his January 1992 State of the Union speech, President Bush also announced scaled-back plans for the future U.S. nuclear arsenal. His administration would reduce production of B-2 bombers, cancel development of a new silo-based missile, end production of additional land-based missiles and of new warheads for sea-launched missiles, and end the purchase of advanced cruise missiles. He also eliminated the

U.S. Peacekeeper intercontinental ballistic missiles (which each carried up to ten warheads) and reduced the number of warheads on Minuteman ICBMs and on submarine-launched missiles.

These various actions, many of which were quickly reciprocated by Russia, have become known as the Presidential Nuclear Initiatives (Corin 2004). As part of the Initiatives, President Bush also took U.S. nuclear bombers off alert; previously, the United States kept 40 bombers loaded with nuclear weapons on the runway around the clock ready to take off.

The president also signed the Strategic Arms Reduction Treaty (START I) between the United States and Russia, which cut the number of deployed long-range nuclear weapons on each side to 8,000 and set up measures to verify the treaty's limits (NTI n.d.a).

> *In November 2001, President George W. Bush announced that "the current levels of our nuclear forces do not reflect today's strategic realities."*

In total, during his four years in office, President Bush cut the U.S. nuclear stockpile by over 10,000 warheads—from more than 22,000 warheads to fewer than 12,000, a drop of nearly 50 percent. Numbers of deployed strategic warheads during his administration fell from more than 12,300 to slightly over 7,000.

Deeper Cuts

In the 1990s, President William J. (Bill) Clinton worked to carry out the Bush reductions and also gained U.S. ratification of the START II treaty, which among other things capped deployed arsenals on each side at 3,500 (NTI n.d.b). In addition, in 1996 the international community agreed to a treaty to end nuclear explosive testing (NTI n.d.c). While the treaty has not yet been ratified by all the countries needed to bring it into force (including the United States), neither the United States nor Russia has conducted a nuclear explosive test since 1992, and no country except North Korea has tested nuclear weapons since 1998.

President George W. Bush, like his father, made major cuts to the U.S. nuclear arsenal on his own authority, considering it unnecessary to wait for the slower process of negotiations once the need for change was clear.

His administration's nuclear review concluded that a force of 1,700 to 2,200 deployed long-range nuclear warheads was sufficient to ensure U.S. security. In November 2001, President Bush announced that "the current levels of our nuclear forces do not reflect today's strategic realities," and that the United States would cut its arsenal (The President's News Conference 2001). He later said that while it would be preferable if Russia undertook similar reductions, "the United States would be prepared to proceed unilaterally" (U.S. Department of State 2002).

President Bush's preference was that both he and Russian president Vladimir Putin would each issue statements of national policy announcing their planned levels of strategic forces. Since the nuclear review had determined the necessary level of U.S. forces, Bush considered the number on the Russian side irrelevant. But, largely at Russia's insistence, the two countries worked out a formal agreement, the Strategic Offensive Reductions Treaty (SORT, also called the Moscow Treaty) that required cutting each country's deployed strategic forces to below 2,200 deployed warheads by 2012 (NTI n.d.d). The agreement included little verification and did not even define a "strategic warhead," leaving each state to decide for itself what it would count under the limits.

President Obama and New START

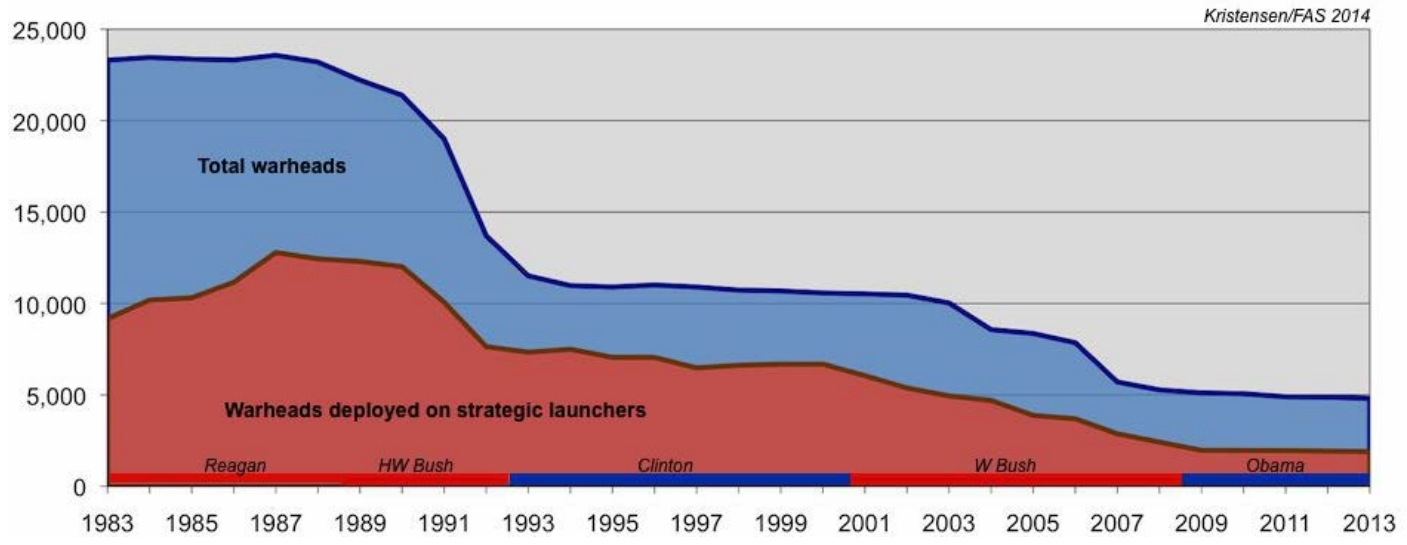
President Barack Obama took steps early in his presidency to further cut U.S. and Russian nuclear arsenals as part of a more traditional bilateral treaty that included inspections and other verification measures. In 2010, the two countries concluded the New START treaty (UCS 2011), in which each side agreed to limit the number of strategic nuclear warheads deployed to 1,550 by 2018 (the actual number of warheads will be somewhat higher because the treaty counts all weapons on one bomber as one weapon.)

More Work Is Needed: Next Steps

Despite progress since the mid-1980s, the thousands of remaining weapons continue to pose a serious threat to humanity, and more reductions need to be made. The United States and Russia continue to possess large numbers of weapons, each far more destructive than those that destroyed Hiroshima and Nagasaki.

Moreover, there are no treaty limits on nuclear weapons in storage. In addition to the 1,900 weapons currently

FIGURE 2. Reductions in the U.S. Nuclear Arsenal



These figures include deployed and stored weapons, but not retired weapons that are awaiting dismantlement.

Source: Kristensen 2014

deployed on long-range missiles and bombers, the U.S. keeps some 2,700 warheads in storage as a so-called "hedge" force (FAS 2014). The hedge allows the United States to increase its deployed arsenal by putting more weapons on its missiles and bombers, if for any reason it decides to do so. The number of Russian long-range warheads in storage is estimated at about 700 (Kristensen and Norris 2014a).

Nor do any treaties cover short-range "tactical" weapons. Currently the United States deploys an estimated 200 such weapons and stores some 300 in the United States (Kristensen and Norris 2014b), while Russia is estimated to have roughly 2,000 battlefield weapons in storage (Kristensen and Norris 2014a).

In addition, the two countries have a total of more than 6,000 retired nuclear warheads that are waiting to be dismantled, but in the meantime are stored intact and could be returned to service. The United States has approximately 2,500 and Russia has some 3,700 of these warheads (FAS 2014).

Additional steps to further reduce the risks posed by nuclear weapons include:

- Cutting further the number of deployed long-range weapons in both countries. The Pentagon has determined that the United States needs no more than 1,000 deployed nuclear warheads, regardless of what Russia does. President Obama should take a page from the playbook of both Presidents George H.W. Bush and George W. Bush, and make these cuts without negotiating a treaty with Russia.
- Cutting the number of stored weapons and dismantling them. A future agreement should cap the total number of deployed and stored weapons.
- Speeding up dismantlement of retired warheads, to make reductions less easily reversible.
- Eliminating the remaining short-range battlefield weapons.
- Taking ballistic missiles off hair-trigger alert, to reduce the chance of an accidental or erroneous launch. As a first step, President Obama should take U.S. land-based missiles off hair-trigger alert immediately (UCS 2015).

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