

TACTICAL NUCLEAR WEAPONS

I. The Issue

At the height of the Cold War, Soviet and American stockpiles of “tactical” nuclear weapons numbered in the tens of thousands. Whether a nuclear weapon is designated as strategic or tactical has little to do with the size of its explosive yield, though tactical nuclear weapons tend to be smaller and more portable. Rather, the major determinant is whether the weapon is designed for long-range strikes. Thus, tactical nuclear weapons generally include land-based missiles with a range of less than 300 miles and air- and sea-launched weapons with a range of less than about 400 miles. The category also includes “suitcase” bombs, nuclear landmines, nuclear artillery shells, and air-dropped and missile-launched nuclear warheads.

Today, the United States maintains approximately 1,670-3,300 tactical nuclear weapons.¹ The Russian arsenal, according to recent estimates, ranges from as few as 4,000 to as many as 20,000 weapons.² Though tactical nuclear weapons constitute a large percentage of the arsenals of Russia and the United States, and are very attractive to a would-be nuclear terrorist, they are the least-regulated category of nuclear weapons. Unlike “strategic” weapons that the U.S. and Russia have agreed to limit the numbers of and share information about under the various arms reductions treaties, the United States cannot verify the size, safety, or whereabouts of Russia's massive and poorly protected tactical nuclear weapon stockpile as no agreement or treaty governing these weapons exists between the countries. Indeed, some experts assert that due to ineffective accounting, Moscow itself is incapable of accounting for all its tactical nuclear weapons.

In 1991 and 1992, a set of parallel, unilateral presidential nuclear initiatives agreed to by Presidents George H. W. Bush, Mikhail Gorbachev and, subsequently, Boris Yeltsin, resulted in the withdrawal and reduction of many of these weapons. It was a significant step forward. Yet, even so, it left thousands of tactical nuclear weapons still in existence. Beyond just the dangers posed by those numbers, we can now see that an even greater peril is posed by the very fact that *we don't know* how many, where, or in what condition those tactical nuclear weapons continue to exist.

The attacks of September 11, 2001 provide a particularly compelling reason to assist Russia in accounting for, monitoring, controlling and ultimately eliminating tactical nuclear weapons. Due to their relatively small size and portability—as in the case of “suitcase” bombs—tactical nuclear weapons are easier to conceal and transport, and therefore most vulnerable to theft. In the hands of a terrorist group like al Qaeda, a tactical nuclear weapon would far outstrip the damage inflicted by the September 11 attacks.

While the U.S. tactical nuclear weapon arsenal is comparatively secure, Russia's existing security structure is beset with problems of both storage and accounting. The Russian government lists up to 200 terrorist organizations it believes may be trying to obtain nuclear weapons or materials. The Russians claim to have broken up 601 attempted thefts of nuclear materials since 1998. The International Atomic Energy Agency (IAEA) reports 376 serious incidents since 1993, and Turkey has recorded 104 cases of smuggling in that same period. Recently, the IAEA sent a team to try to seize two portable nuclear devices found in Georgia fearing that they could be used to make bombs.³ While the theft of nuclear materials is worrisome, the theft of a portable nuclear device is potentially catastrophic.⁴ The importance of assisting Russia in accounting for and securing its tactical nuclear weapons cannot be overstated.

II. Recent Legislation

- Section 3 of S. 2478, the “Nuclear and Terrorism Threat Reduction Act, 2002,” introduced by Senators Mary Landrieu (D-LA) and Gordon Smith (R-OR), on May 8, 2002, called upon the United States to establish jointly with the Russian Federation comprehensive inventories and data exchanges of Russian and United States weapon-grade material and assembled warheads, with particular attention to tactical nuclear weapons and weapons that have been removed from deployment.
- Title II of H.R. 4624, the “Nuclear Threat Reduction Act, 2002,” introduced by Representatives John Spratt (D-SC) and Ellen Tauscher (D-CA), on April 30, 2002, called for the establishment with Russia of comprehensive inventories of the weapon-grade nuclear materials, tritium, and assembled warheads of the United States and of Russia followed by data exchanges between the two countries. The bill would have made the establishment of comprehensive inventories of tactical nuclear warheads a priority.
- Section 1205(b)(1) of the Senate-passed version of H.R. 4546, the National Defense Authorization Act for Fiscal Year 2003, set forth the sense of the Senate that “one of the most likely nuclear weapons attack scenarios against the United States would involve detonation of a stolen Russian tactical nuclear warhead smuggled into the country.” Therefore, section 1205(c) would have mandated that not later than 30 days after enactment, the President report to Congress on efforts to reduce the particular threats associated with Russia's tactical nuclear weapon arsenal and the outlines of a special initiative related to reducing the threat from Russia's tactical nuclear stockpile. The provision was dropped in conference.

III. Obstacles

- The precipitous decline in Russia's conventional military force has led Moscow to increase reliance on its stockpile of tactical nuclear weapons.

IV. Q & A

Q: What is a tactical nuclear weapon?

A: While there is no common definition of what constitutes a “tactical” nuclear weapon (as opposed to a “strategic” nuclear weapon), it is generally agreed that a tactical nuclear weapon is used for short-range strikes. Tactical nuclear weapons generally include land-based missiles with a range of less than 300 miles and air- and

sea-launched weapons with a range of less than about 400 miles. The category also includes “suitcase” bombs, nuclear landmines, nuclear artillery shells, and air-dropped and missile-launched nuclear warheads.

Q: How dangerous are tactical nuclear weapons if acquired by terrorists?

A: Tactical nuclear weapons can have an explosive yield of between 0.1 and 1,000 kilotons. In comparison, the bomb that was dropped on Hiroshima was only 12.5 kilotons, while the bomb that destroyed the Federal Building in Oklahoma City was only 0.002 kilotons. Due to their smaller size and portability, they are particularly attractive to terrorists. Their use in an urban area would far outstrip the damage inflicted on September 11.

Q: Why aren't they regulated the same way that long-range strategic nuclear weapons are?

A: Long-range or “strategic” warheads were regulated and monitored closely by both sides even before the collapse of the Soviet Union by a series of bilateral agreements. During the Cold War, it was feared that the nuclear superpowers might destroy one another in an all-out nuclear exchange using strategic weapons. Overall numbers of warheads and their means of delivery were therefore carefully monitored. Attempts to control overall stockpiles were negotiated to attempt to ensure stability between the two countries. Throughout the Cold War, tactical nuclear weapons were seen as less destabilizing to the global balance of power and therefore, were never the subject of mutually binding agreements between the two countries.

Q: Why don't the Russians account for their own weapons?

A: Throughout the Cold War, Moscow operated a highly effective security network around its nuclear weapons and materials. With the collapse of the Soviet Union, that system—designed for a single state with a closed society and closed borders—faced realities that it was ill equipped to manage. Today, the Russian economy and military are no longer able to support and maintain such a large force of weapons, nor are they able to ensure their physical security. Since the diversion of just one tactical nuclear weapon could be catastrophic if it fell into the hands of a terrorist and was used in the U.S., it runs counter to U.S. national security interest to stand idle and wait for Russia to deal with the problem on its own.

V. Talking Points

- Though tactical nuclear weapons constitute a large percentage of the arsenals of Russia and the United States, and are most attractive to would-be nuclear terrorists, they are the least-regulated category of nuclear weapons.
- In a meeting with a U.S. Congressional delegation in May 1997, and again in an interview broadcast on *60 Minutes* on 7 September 1997, former Russian National Security Advisor Aleksandr Lebed claimed that the Soviet Union created as many as one hundred suitcase atomic bombs. He later claimed that the Russian Federation could not account for the whereabouts of many of these devices.
- In the hands of a terrorist group like al Qaeda, a tactical nuclear weapon would far outstrip the damage inflicted by the September 11 attacks.

- Many experts believe that Moscow is incapable of accounting for its stockpile of tactical nuclear weapons.
- As the U.S.-Russian relationship continues to strengthen and emerge from mutual Cold War suspicion, new opportunities for cooperation and threat reduction continue to surface. The Russian Federation has no interest in seeing tactical nuclear weapons diverted to terrorists and, given the proper environment, there is no reason to believe that they would not welcome assistance in accounting for their weapons arsenal.

VI. Factoids

- There are an estimated 22,000 tactical nuclear weapons in the world today.⁵
- There is no treaty or other agreement that regulates these weapons.
- The Russian government lists up to 200 terrorist organizations it believes may be trying to obtain nuclear weapons or materials.
- The Russians claim to have broken up 601 attempted thefts since 1998.
- The International Atomic Energy Agency (IAEA) reports 376 serious incidents since 1993.
- Turkey, a common transit point to smuggle materials out of Russia, has recorded 104 cases of smuggling since 1993.
- Recently, the IAEA sent a team to try to seize two portable nuclear devices found in Georgia fearing that they could be used to make bombs.

VII. Applicable Treaties, Legislation, and Other International Agreements

- U.S.-Russia Presidential Nuclear Initiatives of 1991 and 1992. In 1991 and 1992, Presidents George H.W. Bush and Mikhail Gorbachev—and subsequently Boris Yeltsin—agreed to a set of parallel, unilateral presidential nuclear initiatives promising to withdraw tactical nuclear weapons from deployment in Europe and eliminate many of them. The presidential agreements provided no means for transparency and verification. Thousands of tactical nuclear weapons remain in existence.

¹ Robert S. Norris and William M. Arkin, “U.S. Nuclear Forces 2000,” *Bulletin of the Atomic Scientists*, May/June 2000, vol. 56, no. 3, p. 69, accessed at: <http://www.bullatomsci.org/issues/nukenotes/mj00nukenote.html>.

² Estimates of Russia's tactical nuclear weapons arsenal differ greatly. According to a 2000 report of the Stockholm International Peace Research Institute, there are 3,590 Russian tactical nuclear weapons, see Kristensen and Handler, “Appendix 6A: Tables of Nuclear Forces,” Year 2000, SIPRI Yearbook 2001. The NRDC estimates for the year 2000 are approximately 4,000, see *Bulletin of the Atomic Scientists* online at: <http://www.bullatomsci.org/issues/2000/ja00/images/chart1.gif>. This calculation is complicated further by competing estimates of deployed tactical nuclear weapons versus those stored or slated for elimination. According to the Fourth Freedom Forum, most recent estimates of deployed Russian tactical nuclear weapons are in the 3,500 to 5,000 range, but when non-deployed Russian tactical nuclear weapons are included, estimates increase to over 8,000, see also William Potter, “Practical Steps for Addressing Non-Strategic Nuclear Weapons,” in *Controlling Non-Strategic Nuclear Weapons: Obstacles and Opportunities*, Jeffrey Larsen and Kurt J. Klingenberger, eds. (Colorado Springs, CO: INSS, U.S. Air Force Academy, 2001), pp. 223-226.

³ “U.N. Seeks Nuclear Devices in Georgia,” *The Washington Post*, February 1, 2002, A26.

⁴ Jeffrey Kluger, “The Nuke Pipeline,” *Time*, December 17, 2001.

⁵ Center for Defense Information, “Current World Nuclear Arsenals,” accessed at:
<http://cdi.org/nuclear/database/nukestab.html>.