

# NUKES READY TO FLY

In three weeks, NATO allies meet in Chicago with one topic on the agenda being nuclear weapons and their reduction. However, as the Federation of American Scientists pointed out this week, "since Russia, the United States and NATO cloak their non-strategic nuclear forces in a veil of outdated and unnecessary secrecy, new initiatives are needed to increase transparency of such forces." So trying to catalogue the nuclear warheads in the world is an almost impossible challenge. Secrecy aside, every country has different ways of tallying their arsenals (a weapon may be listed as decommissioned and not tallied, but could be made viable again.) This graphic attempts to look at the number of immediately available nuclear weapons in the world; weapons that could at a very short notice — because that is the point — be used in a war. Taking the latest data available from the Bulletin of the Atomic Scientists we have constructed a graph of instantly available launch devices — missiles with nuclear warheads installed and ready to fly or drop. They could be intercontinental ballistic missiles, submarine-, air- or land-launched cruise missiles, single stage nukes or just plain bombs. The graph below does not take into account that in many cases the missiles themselves may contain up to 12 warheads, nor does it take into account the size or kilo tonnage of the weapons themselves

**UNITED STATES 2010**  
**1,379 launchers**  
**(2,468 warheads)**

- 250 Mk-21 Minuteman III missiles (1 warhead).
- 200 Mk-12 Minuteman III (1-3 warheads per missile).
- 288 Trident II missiles (4-12 warheads per missile).
- 216 Air-launched Cruise Missile (1 warhead).
- 200 B-61 - 7/11 nuclear bombs (1 warhead).
- 100 Surface-launched Cruise Missiles (1 warhead).

a. One of the first missiles employing Multiple Independent Targetable Re-entry Vehicle (MIRV) carrying three warheads. Current missile uses single warhead with a yield of 300 kt. b. Submarine-launched ballistic missile (SLBM). Can carry up to 12 nuclear warheads with MIRV. These warheads can be either 100 kt yield or 475 kt yield. c. Air-launched sub-sonic cruise missile. Uses terrain contour - matching guidance system. With a small thermonuclear warhead with a yield of 5 to 150 kt. d. Gravity bomb with maximum yield of 1.2 megatons. e. SLBM uses a warhead with a yield of 5 to 150 kt.

**UNITED KINGDOM 2011**  
**180 launchers**  
**(275 warheads)**

- 180 Trident II missiles (1-3 warheads per missile).

f. Submarine-launched ballistic missile (SLBM). Can carry up to 12 nuclear warheads with MIRV. These warheads can be either 100 kt yield or 475 kt yield.

**RUSSIA 2012**  
**1,286 launchers**  
**(2,430 warheads)**

- 50 SS-18 M6 Satan (10 warheads per missile).
- 48 SS-19 M3 Stiletto (6 warheads per missile).
- 135 SS-25 Sickle (1 warhead per missile).
- 89 SS-27 Mod. 1/2 (1-6 warheads per missile).
- 48 SS-N-18 M1 Stingray (1-7 warheads per missile).
- 96 SS-N-23 M1 (1-4 warheads per missile).
- 32 SS-N-32 (6-10 warheads per missile).
- 168 AS-15A Air-launched Cruise Missiles. (1 warhead)
- 496 AS-15B Air-launched Cruise Missiles. (1 warhead)
- 156 AS-16 A Surface-launched Cruise Missiles. (1 warhead)

m. Heaviest intercontinental ballistic missile (ICBM) in the world. 10 MIRV warheads with a yield of 550-750 kt. n. Has an inertial guidance system. MIRV warheads with a blast yield of up to 5 megatons each. o. Single 800 kt warhead. Road mobile launch platform. p. Road mobile launch platform. q. Submarine-launched ballistic missile (SLBM). Up to seven warheads with a blast yield of 0.45 megatons. r. SLBM. Up to four warheads per missile. s. SLBM. Up to four warheads per missile. t. ALCM. 200 kt yield. u. Upgraded ALCM. AS-15A with extra fuel tanks. 200 kt yield. v. ALCM. Fastest air-launched missile.

**PAKISTAN 2009**  
**70 launchers**  
**(90 warheads)**

- Ghauri (1 warhead).
- Babur-HATF-7 (1 warhead).
- Ra'd-HATF-8 (1 warhead).

w. Medium-range ballistic missile. Fired from transporter-erected launcher. x. Medium-range ground-launched cruise missile. Fired from transporter-erected launcher. y. Air-launched cruise missile. Could be launched at sea-based targets as well as land.

**CHINA 2011**  
**138 launchers**  
**(178 warheads)**

- 16 DF-3A (1 warhead).
- 12 DF-4 (1 warhead).
- 20 DF-5A (1 warhead).
- 60 DF-21 (1 warhead).
- 20 DF-31 (1 warhead).
- JL-1 (1 warhead).
- JL-2 (1-4 warheads).
- H-6M Cruise missiles (1 warhead).
- DH-10 Cruise missile (1 warhead).

z. Considered China's first domestic intermediate-range ballistic missile. An improved version with a conventional warhead was exported to Saudi Arabia. aa. China's first two-stage missile. Developed to provide strike capability against Moscow and Guam. bb. Designed to intercept ballistic missiles and satellites. cc. China's first medium-range ballistic missile. Used to carry out China's first nuclear ballistic missile test. dd. Road mobile launched ICBM. Can carry a single one megaton warhead or up to three 26-150 kt MIRV warheads. ee. China's first Submarine-launched ballistic missile (SLBM). Carries a single 250-300 kiloton warhead. ff. China's second generation SLBM. Can be equipped with a single 250-1,000 kiloton warhead or three or four 90 kiloton MIRV warheads. gg. Air-launched Cruise Missile. hh. Subsonic cruise missile. It is believed it carries a 90kt warhead.

**INDIA 2008**  
**50 launchers**  
**(60 warheads)**

- Agni III (1 warhead).
- Prithvi (1 warhead).
- Brahma (1 warhead).

ih. Intermediate range Ballistic missile. Most accurate ballistic missile in its range category. ii. Short-range ballistic missile. First missile developed under India's Integrated Guided Missile Development Program. jj. Supersonic cruise missile. Fastest cruise missile in operation in the world.

**FRANCE 2008**  
**98 launchers**  
**(300 warheads)**

- 48 M45 missiles (4-6 warheads per missile).
- 10 TNA ASMP-A missiles (1 warhead).
- 50 TNA ASMP missiles (1 warhead).

g. Submarine Launched Ballistic Missile (SLBM). Contains six MIRV warheads with a yield of 110 kt each. h. Medium-range Air-Launched Cruise Missile (ALCM) replaces the earlier free-fall AN-22 bomb. Warhead has a yield from 100 to 300 kt. i. Medium-range ALCM. Warhead has a yield from 150 to 300 kt.

**ISRAEL 2002**  
**70 launchers**  
**(270 warheads)**

- MD-620 Jericho III missiles (1 warhead).
- Delilah Cruise Missiles (1 warhead).
- Harpoon missiles (1 warhead).

j. Thought to be an Inter-continental Ballistic Missile (ICBM). Can be equipped with a 750 kg nuclear warhead or two to three low-yield MIRV warheads. k. Originally developed as an aerial decoy. It can be fired from aircraft, helicopter, or ground launcher. l. Air- or submarine-launched - short-range.

1. As of January 2010 the United States maintained an arsenal of 2,468 operational warheads. The arsenal consists of roughly 1,968 strategic warheads deployed on 798 strategic delivery vehicles and 500 nonstrategic warheads. In addition, approximately 2,600 warheads are held in reserve. Another several thousand warheads designated retired - probably 3,500-4,500 - are awaiting dismantlement. 2. It is estimated that as of early 2012 Russia had 2,430 nuclear warheads to its ICBMs, SLBMs and heavy bombers. Russia also keeps an inventory of 2,000 non-strategic warheads for potential use by ships, aircraft and air defence forces. An additional 5,500 already retired strategic and non-strategic warheads may be awaiting dismantlement, for a total inventory of 10,000 nuclear warheads.