

Estimates of the U.S. Nuclear Weapons Stockpile (2007 and 2012)

Robert S. Norris, Natural Resources Defense Council
Hans M. Kristensen, Federation of American Scientists

April 2007

(Update: http://www.fas.org/blog/ssp/2007/12/white_house_announces_secret_n.php)

The Bush administration declared in June 2004 that the U.S. nuclear stockpile will be cut “nearly in half” by 2012. The exact numbers are classified, but based on our knowledge about the current stockpile and future force structure plans we estimate that the total number of warheads will decline from approximately 9962 today to 5032 by the end of 2012 (see Table).

There are three categories of warheads that must be counted; active deployed, active non-deployed and inactive. Active deployed warheads are those on fielded systems such as ICBMs, SLBMs, and bomber and fighter bomber weapons. Active non-deployed warheads are the usual number of spares plus what has been referred to as “responsive” warheads, i.e., those warheads that could be returned to the field quickly to increase the number of deployed warheads. All active warheads are filled with limited life (i.e., tritium) components and maintained through regular surveillance schedules. Inactive warheads are still intact but have had their tritium removed and thus it would take longer to return them to service, if a decision were made to do so.

Finally there are warheads that have been removed from active service (the stockpile) and are in the process of being fully retired. Warheads stored in weapon bunkers at military bases are in DOD custody until they are handed over to DOE and sent to Pantex outside of Amarillo, Texas, for dismantlement. Over the coming years this category will increase to a sizable number of almost 5,000 warheads. Pantex’s priority is not dismantlement but life-extension of active warheads, however, so dismantling the retired warheads will not be completed by 2012 but take another decade under current plans.

The types of warheads in the stockpile will be reduced from 15 different versions of nine basic types of warheads today, to an estimated 12 different versions of seven basic types in 2012.

Of the 5032 warheads we estimate will be left in the stockpile by 2012, most will not be counted under the provisions of the 2002 SORT agreement between the United States and Russia. Because the agreement only counts “operationally deployed strategic warheads,” only 2176 warheads will be counted while another 2856 will be excluded.

The estimate for 2012 is based on statements about force structure plans made by government officials, and assumptions made by us about warhead retirements that are necessary to meet the declared force limits (see Table for details).

Estimates of the U.S. Nuclear Weapons Stockpile, 2007 and 2012

Warhead Type	2007			2012			Warheads to be Dismantled
	Active	Responsive/ Inactive*	Total	Active	Responsive/ Inactive*	Total	
B61-3	200	186	386	200	50	250	136
B61-4	200	204	404	200	50	250	154
B61-7	215	224	439	120	300	420	19
B61-10	0	206	206	0	0	0	206
B61-11	20	21	41	20	15	35	6
W62	300	280	580	0	0	0	580
W76	1632	1398	3030	0	800	800	1430
W76-1	0	0	0	752	48	800	0
W78	550	255	805	200	200	400	405
W80-0	100	194	294	0	0	0	294
W80-1	1400	411	1811	300	228	528	1283
B83-0	0	306	306	0	300	300	6
B83-1	320	0	320	100	220	320	0
W84	0	383	383	0	0	0	383
W87	50	503	553	300	225	525	28
W88	384	20	404	384	20	404	0
Total	5371	4591	9962	2576	2456	5032	4930**

Notes and Assumptions

The table estimates that U.S. "operationally deployed" forces under the 2002 SORT agreement will be 2176 warheads by the end of 2012. Another 2856 warheads will not be counted under SORT. This is based on the following assumptions:

- 450 MMIII ICBMs with 500 warheads, including 150 W87 warheads deployed at both Warren AFB and at Malmstrom AFB, 200 W78 warheads at Minot AFB.
- 12 SSBNs MIRV x 4 with 1152 warheads (2 SSBNs in overhaul not counted), 800 W76-1s in initial Life Extension Program, no W88 depletion due to new pit production.
- 32 B52 and 16 B-2 Combat Coded bombers with 520 warheads at Barksdale, Minot and Whiteman AFBs.
- Consolidate all 528 ALCMs at Minot AFB, retire all Advanced Cruise Missiles.
- Retire all B61-10 bombs.
- Retire all W62 warheads.
- Retire all nuclear W80-0 SLCM warheads.
- Retire all W84 GLCM warheads.
- Partial retirements of W78, W76, W80-1, B61-3/4.

* Active means warheads on fielded systems such as ICBMs, SLBMs, and bomber and fighter bomber weapons. Responsive means warheads fully maintained but not operationally deployed and in storage. Inactive means the warhead has had its tritium removed.

** Warheads withdrawn for dismantlement for the period 2007-2012 could be completed by 2023, according the National Nuclear Security Administration.

For more information contact Robert S. Norris (202-289-2369) and Hans M. Kristensen (202-454-4695)