

Source Material: Basic Information on Nuclear Weaponry and Arms Control Negotiations (1941-2010)

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Overview

The five 'nuclear' states that signed the Nuclear Non-Proliferation Treaty – the USA, the USSR, the United Kingdom, France and China – held stockpiles totalling almost 70,000 nuclear weapons at the height of the Cold War.

	1945	1955	1965	1975	1985	1995	2000	2009
USA	2	2,28	32,4	28,1	23,5	14	10,5	9,4
USSR/ Russia	0	200	6,3	23,5	44	28	20	13
United Kingdom	0	10	310	350	300	300	185	180
France	0	0	32	188	359	500	450	300
China	0	0	5	185	426	400	450	240
Total	2	2,49	39,05	52,32	68,59	43,2	31,54	23,12

Data source up to 2000: <http://www.atomicarchive.com/Almanac/Stockpiles.shtml>

Timeline

9th October 1941: US President Franklin D. Roosevelt gives the go-ahead to the "Manhattan Project", a well-funded research and development programme to build an atomic bomb.

11th February 1943: The State Defence Committee of the USSR resolves to develop a nuclear reactor capable of producing weapons-grade plutonium.

16th July 1945: First successful test of an atomic bomb in the USA.

6th August 1945: US President Harry S. Truman orders the first military use of an atomic bomb on the Japanese city of Hiroshima; three days later a second bomb is dropped on Nagasaki.

29th August 1949: The USSR carries out its first successful test of an atomic bomb.

1st November 1952: First successful test of a hydrogen bomb in the USA.

12th August 1953: First successful test of a hydrogen bomb in the USSR.

12th December 1954: The American strategy of 'massive retaliation' (MC 14/2) is announced, under which deterrence will be guaranteed without excessive costs: military capability will be so deployed that the USA will be able to respond immediately to an attack with all available means and wherever it chooses.

4th October 1957: The USSR launches a satellite into earth orbit ('Sputnik Shock'). America now

fears that the Soviet Union could attack with intercontinental ballistic missiles equipped with nuclear warheads.

1st December 1959: The Antarctic Treaty is the first international agreement to designate a demilitarised zone free from nuclear weapons.

30th October 1961: The USSR explodes its biggest hydrogen bomb yet.

16th – 28th October 1962: The Soviet positioning of middle-range rockets in Cuba provokes the Cuban Missile Crisis, and brings the USA and the USSR to the brink of nuclear war. The crisis is only resolved through a secret exchange of letters, in which the Soviets agree to remove their rockets from Cuba and the Americans to remove rockets from Turkey.

5th August 1963: The USA, USSR and the UK sign the Nuclear Test Ban Treaty.

12th December 1967: The NATO strategy of 'flexible response' (MC 14/3) supersedes that of 'massive retaliation' and remains in place until 1991. It envisages three possible responses to an attack, along a scale of escalating levels: direct defence, deliberate escalation, general nuclear response.

1st July 1968: The Nuclear Non-Proliferation Treaty is signed by the USA, USSR and UK, to come into force in 1970. All the nations of the world are expected to sign up.

26th Mai 1972: The USA and USSR sign the Anti-Ballistic Missile Treaty (ABM), to limit the spread of defensive rocket systems; and the SALT-1 Treaty (Strategic Arms Limitation Talks), which limits the number of strategic nuclear weapons systems.

22nd June 1973: Agreement on the prevention of nuclear war between the USA and the USSR.

18th June 1979: Signing of the SALT-2 Treaty between the USA and USSR: further reductions in the quantity and quality of strategic weapons systems are planned. The ratification of the treaty is postponed because of the Soviet invasion of Afghanistan.

8th December 1987: Signing of the INF Treaty (Intermediate Range Nuclear Forces): the USA and USSR agree to disarm land-based middle-range systems.

31st July 1991: The USA and USSR sign the START-1 Agreement (Strategic Arms Reduction Talks) to reduce the numbers of strategic nuclear weapons. It comes into force on 5th December 1994 after ratification by the United States Senate.

3rd January 1993: America and Russia sign the START-2 Agreement on the reduction of strategic nuclear weapons. This envisages a further halving of nuclear warheads deployed by both sides.

24th September 1996: Comprehensive Test Ban Treaty, under which all types of nuclear weapons tests and all other types of nuclear explosions are banned. (Up to now, 150 states have ratified the Treaty – but not, amongst others, the USA.)

24th May 2002: America and Russia sign the SORT (Strategic Offensive Reduction) Treaty in Moscow. Both sides commit to reducing their strategic arsenals to between 1,700 and 2,200 nuclear weapons by 2012.

13th June 2002: The USA withdraws from the ABM Treaty, in order to expand its capability in the future to deploy more rocket-based defence systems than were allowed under the treaty.

8th April 2010: The USA and Russia sign the NEW START Treaty. This replaces the START-1 and SORT Treaties. Strategic delivery systems are to be reduced to 700 (plus 100 in reserve) and warheads to 1,500.

Recommended reading (a selection):

Stephanie Cooke, Atom. Die Geschichte des nuklearen Irrtums (Atom: The History of Nuclear Error), Köln 2011

Lawrence Freedman, The Evolution of Nuclear Strategy, Hampshire/New York ³2003

John Lewis Gaddis, We Now Know. Rethinking Cold War History, Oxford 1997

Helga Haftendorn, Deutsche Außenpolitik zwischen Selbstbeschränkung und Selbstbehauptung 1945-2000 (German Foreign Policy between Self-restraint and Self-assertion), Stuttgart/München 2001

Joachim Krause, Strukturwandel der Nichtverbreitungspolitik. Die Verbreitung von Massenvernichtungswaffen und die weltpolitische Transformation (Structural Change in Non-proliferation Policy. The Proliferation of Weapons of Mass Destruction and the Transformation of World Politics), München 1998

Uwe Nerlich, Trutz Rendtorff (Eds.), Nukleare Abschreckung – Politische und ethische Interpretationen einer neuen Realität (Nuclear Deterrence – Political and Ethical Interpretations of a New Reality), Baden-Baden 1989

Michael Paul, Atomare Abrüstung. Probleme, Prozesse, Perspektiven (Nuclear Disarmament: Problems, Processes and Perspectives), Bonn 2012 (i.E.)

Richard Rhodes, The Making of the Atomic Bomb, New York 1986

Michael Rühle, Gute und schlechte Atombomben. Berlin muss die nukleare Realität Mitgestalten (Good and Bad Atomic Bombs. Berlin Must Help Shape Nuclear Reality), Hamburg 2009

Bernd Stöver, Der Kalte Krieg 1947-1991. Geschichte eines radikalen Zeitalters (The Cold War 1947 – 1991. The History of a Radical Age), Bonn 2007

Useful Links:

<http://www.armscontrol.de/>

<http://www.atomicarchive.com/historymenu.shtml>