

The Nuclear Arms Race

http://www.historylearningsite.co.uk/nuclear_arms_race.htm

The nuclear arms race was central to the [Cold War](#). Many feared where the Cold War was going with the belief that the more nuclear weapons you had, the more powerful you were. Both [America](#) and [Russia](#) massively built up their stockpiles of nuclear weapons

The world greatly changed when USA exploded the H-bomb in 1952. This one bomb was smaller in size than the Hiroshima atomic bomb but 2500 times more powerful. The Russians produced an H-bomb in 1953 and the world became a much more dangerous place.

However, it is possible that the sheer power of these weapons and the fear that they evoked, may have stopped a nuclear war.

USA produced a bomber - the B52 - that could fly 6,000 miles and deliver a nuclear pay-load. Such a development required massive financial backing from the government - something which America could afford to do and which Russia could not. Russia concentrated on producing bigger bombs - a far more cost effective procedure.

In October 1957, the world was introduced to the fear of a missile attack when Sputnik was launched. This was to lead to ICBM's : Inter-continental ballistic missiles. As a result, America built the DEW line around the Artic - **D**efence and **E**arly **W**arning system.

At the end of the 1950's, American Intelligence estimated that in a Russian missile attack, 20 million Americans would die and 22 million would be injured.

During the 1960's, the Russians put their money into producing more missiles regardless of quality while America built fewer but better quality missiles - the Atlas could go 5,000 miles at a speed of 16,000 mph. By 1961, there were enough bombs to destroy the world.

Despite this, great emphasis was put on new weapon systems - mobile missile launchers were built, missiles were housed underground in silos and in 1960 the first Polaris submarine was launched carrying 16 nuclear missiles. Each missile carried four warheads which could targeted on different cities; hence one submarine effectively carried 64 nuclear warheads.

In 1967, China exploded an H-bomb. China was a communist country. In the west, NATO felt outnumbered as the table below shows and so had to place her faith in nuclear missiles.

Troops : NATO 2.6 million. Warsaw Pact 4 million

Tanks : NATO 13,000. Warsaw Pact 42,500

Artillery : NATO 10,750. Warsaw Pact 31,5000

During the 1960's the theory of **MAD** developed - **Mutually Assured Destruction**. This meant that if Russia attacked the west, the west would make sure that they would suitably retaliate i.e. there would be no winners.

By 1981, USA had 8,000 ICBM's and USSR 7,000 ICBM's

By 1981, USA had 4,000 planes capable of delivering a nuclear bomb. Russia had 5000.

USA defence spending for 1981 = 178 billion dollars. By 1986, it was 367 billion dollars.

By 1986, it is estimated that throughout the world there were 40,000 nuclear warheads - the equivalent of one million Hiroshima bombs.

British Intelligence estimated that just one medium sized H-bomb on London would essentially destroy anything living up to 30 miles away.

Confronted by such awesome statistics, world leaders had to move to a position where they trusted each other more. Throughout the 1960's and 1970's "detente" had been used to ease bad relations between the superpowers. This was to culminate in the Reykjavik meeting between presidents Reagan and Gorbachev that started real progress in the cut in nuclear weaponry in future meetings (if little was actually gained at the meeting in Reykjavik).

- 1) Why did Russia and America build up their stockpiles of nuclear weapons?

- 2) Why did the world become a much more dangerous place in 1953? Provide details in your answer.

- 3) What is the significance of the year 1961? Why do you think this is important?

- 4) Why was NATO nervous? Provide details in your answer

- 5) What is MAD? Why is this important?

- 6) What are the statistics of weapons in 1981? Why is this important?

- 7) If one medium sized H-bomb could "destroy anything living up to 30 miles away," what would happen with 40,000 nuclear warheads?

- 8) Do you think it was necessary for the USA to build up such a large stockpile of nuclear weapons? Why?