

# [Arms race in development of the cold war history essay](https://assignbuster.com/arms-race-in-development-of-the-cold-war-history-essay/)

\n[toc title="Table of Contents"]\n

\n \t

1. [Summary of evidence](#summary-of-evidence) \n \t
2. [Weapon](#weapon) \n \t
3. [USA](#usa) \n \t
4. [USSR](#ussr) \n \t
5. [C. Evaluation of Sources](#c-evaluation-of-sources) \n \t
6. [D. Analysis](#d-analysis) \n \t
7. [E. Conclusion](#e-conclusion) \n \t
8. [F. Sources and word count](#f-sources-and-word-count) \n \t
9. [Word count: 1946](#word-count-1946) \n

\n[/toc]\n \n

At the end of WW2 the world suffered a major change, the views of the countries focused on economical and political ideologies that were not noticed before due to the tense environment caused by the war. Communism and capitalism became strong ideologies between the Communist east (Russia, China and Japan) and the non-communist west (E. U, England and France) and the idea of imposing their ideology to developing countries such as Korea, led to the search for ways to demonstrate their force to the opposing countries and to the development of weapons of mass destruction, in what is known now as the arms race. The tension between the different countries ultimately led to espionage and to the cold war. This paper will attempt to demonstrate that the arms race was the defining factor in the development of the cold war after the world war two and a direct consequence of the development of the A-bomb.

## Summary of evidence

The main example of the arms race was the A-bomb which surged as a consequence of the tension held between US and USSR during the World War Two. Each one of these countries wanted to be the first in the arms race so the development of the A bomb was the main interest in the time, and led the US one step ahead before the Manhattan Project (in WW2 when the famous scientist, Einstein, started investigating nuclear power) . Oppenheimer was the main figure of this project, he was one the main scientists related to the development of the A bomb; although he developed atomic energy use he didn’t think that the consequences would be so devastating. In the research that led to the development of nuclear energy, Oppenheimer didn’t realize that it would be used for military purposes, he did not expect it to be used as a mass destruction weapon.

The nuclear project experimented by the US from 1942 to 1945 that ultimately became “ The Manhattan Project” was the specific research that wanted to develop the first Atomic Bomb. This project was under the lead of Robert Oppenheimer and the Manhattan Engineer District. The scientists of the project made efforts to find the behavior of the uranium and plutonium isotopes and the feasibility of these materials to be used as weapons. Oppenheimer was in charge of the Acceleration project that would provide the missing data that would allow the scientists to know how the materials would suffer a chain reaction. The main site to test the nuclear energy experiments was located at Los Alamos, New Mexico, there Oppenheimer and his group of renowned scientists that included Enrico Fermi, Hans Bethe, Edward Teller, Victor Weisskopf, Richard Feynman, and many more, went over the previously found data on the reaction on Uranium and Plutonium and made possible the idea of using a fission bomb as the trigger of a mass destruction weapon. Oppenheimer’s critical and main contribution that would give him the title of the father of the A-bomb was the discovery of the critical mass defined as the minimum amount of fissionable material (uranium and plutonium) to make them begin a chain reaction and end up as a detonation.

After the first detonation of the recently discovered A-bomb, three years later in Japan at the end of the second world war, using the fissionable materials, uranium in Hiroshima and plutonium in Nagasaki, and even after he knew how the materials would react, Oppenheimer’s reaction to the detonations was contradictory with his work. Quoting the Baghavad Gita with a clearly troubled face, he said “ I have become death, the destroyer of worlds”

The Alamos research facility was supposedly the safest and most clandestine place of the US to hold their experiments because of it is a desert and nobody lives there. But despite this, the USSR had spies working in favor of the development of nuclear weapons in the United States. The USSR suspected about the creation of an extremely powerful weapon and started to spy the movements of the US weapons development, the US also started to apply espionage to the developments made by the Russians, this power struggle between both countries led to the development of the arms race. In 1949, after years of investigation and espionage, the Soviets tested the first atomic bomb in a project called “ First Lightning” . Something very important because it created even more tension and a hostile environment, because of the fear of attacking each other.

The beginning of the arms race between the two major superpowers was a big issue in the development of the cold war because it helped to maintain the hostility between the two countries. Because of the new powerful weapons, the countries had to look for new strategies and military tactics. The development of even stronger weapons before the other countries became the main objective of the years following the end of the World War two.

The detonation of the A-bomb in 1945, has been viewed by some historians as the first act of the arms race that would lead to the cold war. The researches made after the success of the A-bomb would lead to the discovery of even more powerful mass destruction weapons (both from the US and the USSR) such as the Hydrogen Bomb, 1000 times more powerful than the bombs dropped in Hiroshima and Nagasaki.

The following data shows the tireless race held between the two superpowers to be the first one in developing new and more powerful weapons.

## Weapon

## USA

## USSR

Atom bomb

1945

1949

Hydrogen bomb

1952

1953

ICBM

1958

1957

First satellite

1958

1957

Early warning radar

1960

1958

SLBM

1960

1968

ABM

1972

1968

MIRV

1970

1975

Sea cruise missile

1982

1971

Word count: 792

## C. Evaluation of Sources

Source 1: Article about “ Los Alamos” found in http://ohst. berkeley. edu/publications/oppenheimer/exhibit/chapter3. html Berkeley, 2004 by Wellerstein, Alex.

Uses: It was a useful source because it shows the entire the life of Oppenheimer, it shows how Oppenheimer got involved in the Manhattan project and was involved with other scientists in researches that took place in the Alamos facilities to develop the uses of nuclear energy that would lead to the generation of the Atomic Bomb.

Limitations: It only takes in consideration the development of the nuclear weapons by the US and some information is not objective because it’s only showing the Western developments.

Source 2: Article about the Manhattan project found in, http://www. cfo. doe. gov/me70/manhattan/note\_sources. htm by the Office of History and Heritage Resources.

Uses: It is a really detailed webpage because it shows the development of nuclear energy by other scientists besides Oppenheimer and how the contributed to development of the A-bomb.

Limitations: It uses a very scientific terminology that sometimes can be confusing but besides that it was a complete and accurate resource.

Source 3: Article about the arms race found in Rogers K., Thomas J. History 20th century world, the cold war, Chapter 10: “ What was the impact of the arms race on the cold war” page 104-106.

Uses: This article showed the real statistics and development of weapons not only by the US but also by Russia. It allows the analysis of statistics and roles of each one of the countries involved in the arms race and in the cold war.

Limitations: The information is not very detailed and it summarizes just relevant information because it’s a book with just general information about the arms race and the Cold War.

Word count: 277

## D. Analysis

This investigation is important because of the historical context implied in the development of the A-bomb and considering as a direct consequence the arms race and the beginning of the cold war, because of it was the most destructive weapon of that time and a very important symbol in history which ended WW2.

Analyzing the statistics of the years of creation of new stronger weapons, we can see that the arms race went on from more than 40 years and that became more intense during the cold war was a major factor in the development of the Cold War because of several aspects such as the tense political relations between the countries, constant development of new technology and the constant power struggle that shook the world.

From all the details considered so far, we can assume that the cold war was mainly a problem concerning different political tendencies that caused a hostile environment between communism and capitalism. There was obviously a huge tension implied in knowledge and technology when compared to the adversaries as shown in the considered statistics.

Each country involved in the development of the Cold War played a part in the expansion of the conflict. But each one of them blamed their adversaries for the beginning of the dilemma. The Americans blamed the Russians because they believed in a system what was absolutely opposite to the capitalism and the democracy that stood as the base of the American society. The USSR blamed the USA because of the strong and discriminative politics held openly against the communist and socialist ideals. The US politics against the whole idea of communism surged because of the fear of having a complete ideological, economical and political change. After analyzing the position held by both sides of the conflict, it’s evident that both sides had some responsibility in the development of the conflict; we can’t point fingers to just one side blaming them for the development of the whole situation. A clear example of the similar roles that each country held on the development of the Cold War, was the constant struggle to prove themselves as the most powerful countries through the research for new war technology, the race in the discovery of new weapons was always very close between the US and the USSR, tension arose during the 40 years of the arms race and for that reason we cannot blame just one country for starting the Cold War.

Word count: 407

## E. Conclusion

The arms race development was even and well balanced between the US and the USSR and a direct consequence of the ideological tensions between the capitalism and the communism as political and economical systems. The tension between the countries involved in the cold war is evident in the period of time since the beginning of nuclear power researches up the ultimate development of the conflict. Although US and USSR had major political differences we cannot blame any of these countries as the one who is responsible for the cold war. The creation of the A-bomb thanks to the Manhattan project and to Oppenheimer as the main responsible, created not only the beginning of the arms race but the main factor implied in the rise of the tension between the US and the USSR, espionage was a clear consequence of the need to build even more powerful weapons.

As we saw in the statistics, during the 40 years of the Cold War there was an environment filled with constant tension between the countries and of the need to demonstrate their power to the rest of the world. The arms race was the defining factor in the development of the cold war after the world war two and a direct consequence of the development of the A-bomb and of the arms race between the US and the USSR. The arms race and the development of mass destruction weapons such as the A-bomb is an undeniable consequence for the world that surged during the cold war years. We live in a world that is in a constant research of new weapons and of new ways to improve the outcome of possible wars, the fear of the development of even more destructive weapons is something that is present in everyday life, we live, after all, in the nuclear era.

Word count: 305

## F. Sources and word count

Office of History and Heritage resources, http://www. cfo. doe. gov/me70/manhattan/index. htm,

Oppenheimer, R. Declarations after the detonation of the A-bomb http://www. youtube. com/watch? v= pdATuDKYlgA. 1945.

Rogers K., Thomas J. History 20th century world, the cold war, Chapter 10: “ What was the impact of the arms race on the cold war” page 104-106.

Wellerstein, Alex. http://ohst. berkeley. edu/publications/oppenheimer/exhibit/chapter3. html Berkeley, 2004.

## Word count: 1946