UNHCC

Historical Committee

Chair:

Elisa Medina Toro

Carolina Echavarria

Topic A:

Project Manhattan, 1942

Index:

1.0 Letter from the chair

Dear esteemed delegates,

We are Elisa Medina and Carolina Echavarria, and it is with immense pleasure that we welcome you to this version of MSMUN's external model, especially the Historical Committee. A place where you can erase the original course of our history and rewrite it as you please, giving you critical thinking skills, life-lasting bonds and a lot of fun!

Here you will have thousands of opportunities to show your talents and knowledge. The UN is an unforgettable experience, and we will be with you throughout every step of the process. Don't be afraid to raise your plaque, participate in sending directives or to express your doubts. Don't be afraid to be dramatic, to scream, to shout, to argue, because that's what the UN is all about.The Historical committee will make you relive the past, relive the tragedies that make up the world that we live in now.

The importance of learning our own history lies in understanding the development of our globe and society, while also keeping in mind the deaths, sacrifices and genocides that sprawl within. We are here to support you and to take you through that journey, and if you ever need help please don't hesitate to contact either of us.

Welcome to UNHCC and remember you can always make the impossible possible.

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2.0 General Information regarding the UNHCC

2.1. History/Introduction

The historical committee is, without losing its charm, one of the fictional committees of the United Nations. It functions similarly to a regular committee, with delegations, factions, and issue resolutions. But rather than concentrating on a current problem, it discusses potential fixes or actions to take while focusing on a historical circumstance. In this way, issues that take place before 1945 (the creation of the UN) can be debated, additionally delegates can look into global situations and countries with a completely different perspective, not just the present. Historical committees may differ, but in all of them, representatives have the power to alter the course of history as well as the structure and makeup of their nations and the populations they serve.

2.2. Purpose

The Historical Comittee will be based on the events of the Manhattan Project and other circumstances related to World War II. The delegates will represent

the characters that took place in this event, whether it is scientists that participated in the making of the bomb or generals more associated with the millitary and the conflict. The committee will be placed within the timeframe of that era, specifically 1939, thus opening up possibilities to explore alternative courses of history.

The Manhattan project represents the beginning of the atomic age, it played a pivotal role in the end of World War II and in the conflicts (such as the Cold war) that followed. At its peak, the project employed 130,000 workers and, by the end of the war, had spent $2.2 billion. During this committee, delegates will have the opportunity to change the course of history, reshape the project's outcome and evaluate different solutions to address its central issues.

3.0 Topic A:

3.1. Introduction

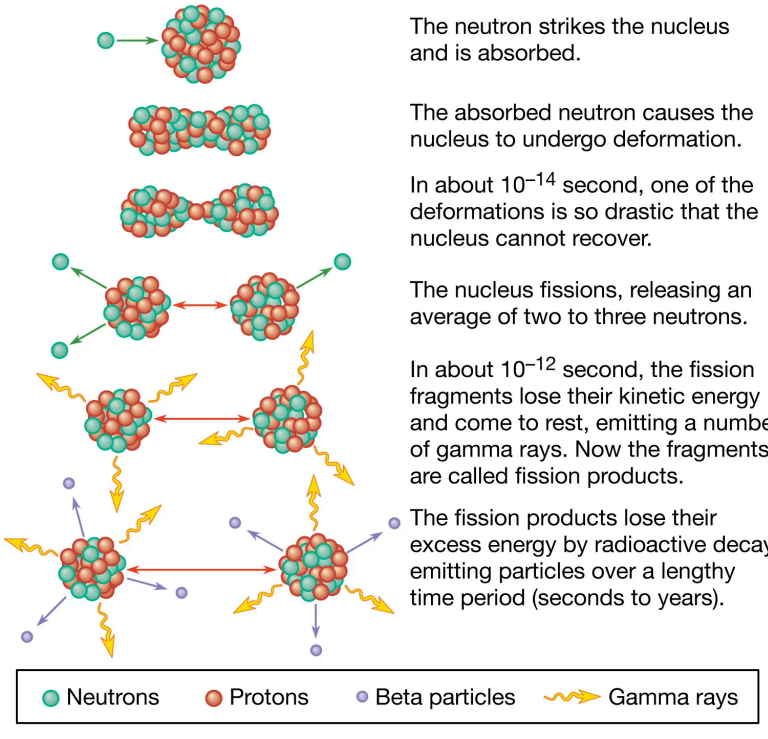
The Manhattan Project was a U.S government research top-secret project that took place between 1942 until 1945. The goal was to develop and deploy the world's first atomic weapons before Nazy Germany during World War II. At the end, the first use of these weapons was by the United States against Hiroshima, Japan in August 1945.

The Manhattan Project took place in three primary locations across the country: Hanford, Washington; Los Alamos, New Mexico; and Oak Ridge, Tennessee. All this of course couldn't have been possible without the discovery of fission in 1938 by two chemists: Lise Meitner, Fritz Strassman, Otto Frisch and Otto Hahn.

3.2 Theoretical framework

- **Fission:** When a neutron slams into the nucleus of a larger atom, it causes the atom to split into two or more smaller ones, this is the process of fission.

In the process of splitting, a great amount of thermal energy and gamma rays are released, as well as two or more neutrons. These extra neutrons also strike the surrounding uranium nuclei, thus creating more fission and emitting more neutrons. This all creates a chain reaction (like a domino), until almost all the fissionable



material is consumed. In nuclear power reactors,. Plutonium-239) and Uranium-235 are most commonly used since they undergo fission more readily and emit more neutrons per fission than other isotopes. The more Uranium, the more explosion will occur, as neutrons released by fission are also likely to leave the grouping without striking another nucleus.

- **Critical mass:** The minimum amount of a given fissile material (atomic nucleus that can undergo fission) necessary to achieve a chain reaction in fission.
- **Atomic bombs:** An atomic bomb (or nuclear bomb) is a weapon with great explosive power that derives from nuclear reactions. It also emits significant amounts of heat and radiation. The use of atomic bombs is a subject of great concern because of their destructive potential.

  NOTE: Nowadays there are multiple treaties to limit the proliferation of nuclear weapons, nevertheless keep in mind these cannot be used during the debate as they happened after 1945.
- **The roaring twenties:** A period of economic prosperity in many Western countries that was badly balanced in the 1920s.
- **Fascism:** Political ideology that emerged in the early 20th century, particularly in Italy under Benito Mussolini and in Germany under Adolf Hitler. Characterized by total control and authority, a racially/ethnically

"equal" nation, military as vital strength, anti-communism, propaganda to control public opinion suppression of political oppressions.

3.3 Antecedents

Post-World War 1 and World War II

To understand Project Manhattan, WW2 (and what led to it) has to be understood as well. From 1939 to 1945, as of today it remains the bloodiest conflict in human history, splitting the world's nations into two opposing military alliances:

The Allies: Led by Britain, the United States, the Soviet Union and France.

The Axis Powers: Led by Nazi Germany, Fascist Italy and Imperial Japan.

Barely 20 years earlier, on November 11 of 1918, Germany's emperor had been forced to abdicate, causing World War I to end. The following month, president Woodrow Wilson of the United States arrived in Europe, promising a new world order. He managed to convince world leaders to sign up to a new league of nations, thereby leading to the treaty of versailles, which stated

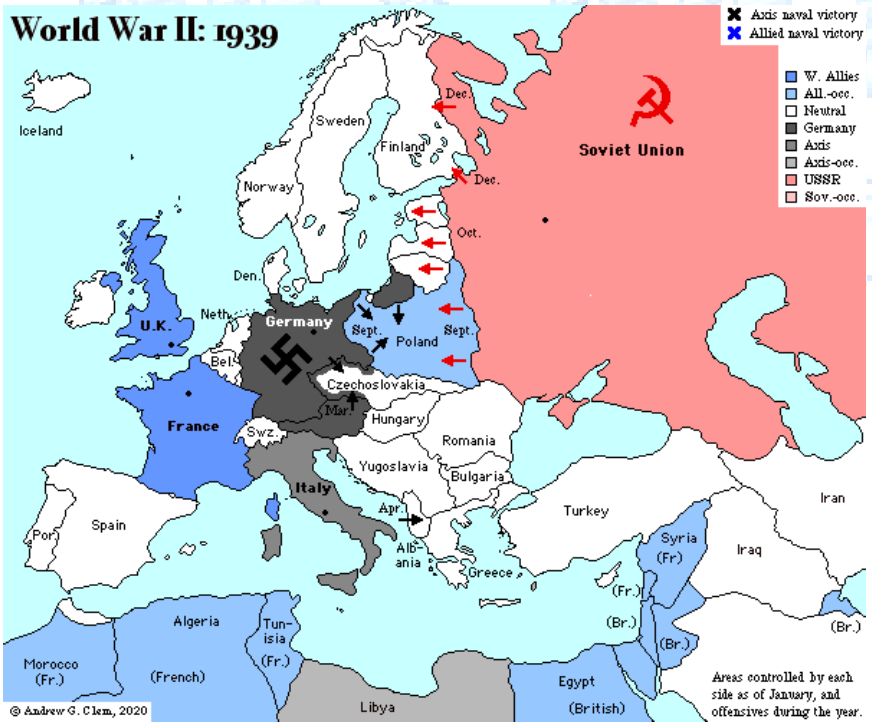
how disputes between countries would not be resolved by fighting, but by debate in the league.

The austro-hungarian empire was dismembered, nations being created out of it. Germany was greatly reduced in size, and several of the countries formed contained substantial German minorities. Additionally, Germany had to pay a debt of 6.6 billion pounds in reparations to France and Britain. As if it wasn't enough, Wilson's new world order failed as the congress didn't want to get stuck in another war, causing the U.S to not join the treaty of versailles.

Then, in 1923, Germany was devastated by hyper inflation which reached hundreds of percent a month. This gave right-wing politicians the opportunity to take control of the "weak" crowd, within these politicians, Adolf Hitler. His fiery oratory enabled him to lead a small national socialist party (The Nazi party). In 1929 the Nazis would become the biggest party in the German parliament and Adolf Hitler would become chancellor in 1933. Then, he declared himself as president when president Hindenburg died in August 1934. Because of the Versailles treaty, the German army had been

limited to a hundred-thousand men and airforce tanks or submarines were forbidden.

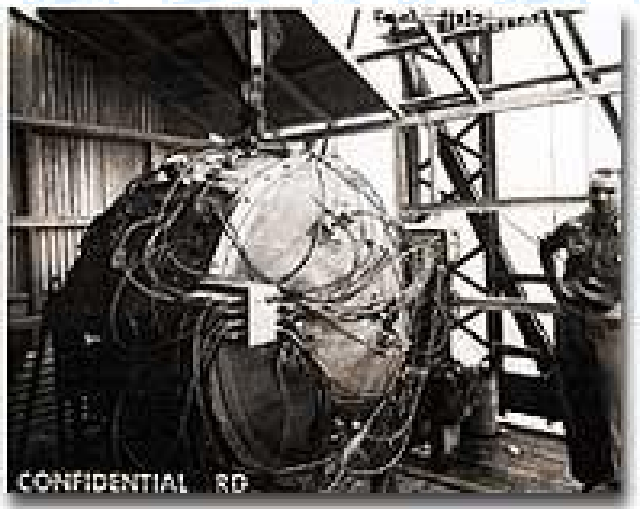
While the U.S was facing a great depression after the roaring twenties, Japan had started its territorial expansion in East Asia. This of course led to the abduction of the country out of the league of nations. In 1936, Japan signed a contract with Hitler, aiming to guard each other against any attack by soviet Russia. Meanwhile, Japan also masscred, raped and abused over 300,000 civilians while taking over China, but the league of nations could do nothing and remained out of it. On the other hand, the rise of Benito Mussolini caused Italy's invasion in Africa's region: Abyssinia. The league of nations still continued to prove itself ineffective.



After Spain's political tensions between the Nationalists (led by Francisco Franco) and Republicans (leftist and anti-fascist) caused a civil war, and after Hitler taking over

Austria to regain his old land back, he still wanted more. He targeted Czechoslovakia next, threatening the Czech government that in case of not offering the people autonomy, he would do it by himself with force. Although the Czech's military forces made Hitler back off, Britain's prime minister, Neville Chamberlain, decided to act as a peacemaker. On September 9th, 1938, France and Britain signed an agreement giving the sudentenland to Germany in return for a formal declaration by Hitler that he had no more territorial ambitions. Nevertheless, Hitler's next target became Poland, caused once again by the remain of german minorities after the treaty of Versailles. Finally, on September 1 of 1939, Germany invaded Poland, causing Great Britain and France to declare war on Germany on September 3.

3.4 Historical context

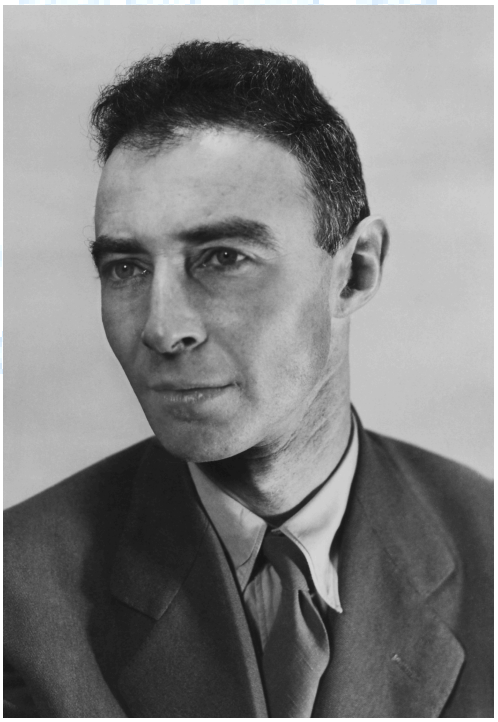


In 1939, American scientists were aware of the advances in nuclear fission, as most of them had fled from fascist regimes in Europe. These were concerned that Nazi Germany might develop a nuclear weapon. In the summer of 1939, Albert Einstein was convinced by physicists Leo Szilard and Eugene Wigner to

send a letter to U.S president Franklin D. Roosevelt about the military potential of a fission chain reaction. Roosevelt was skeptical at first, but still decided to proceed slowly and cautiously, creating the advisory committee on uranium on October 11th of 1939. Finally, on December 6, 1941, the project was put under the direction of the Office of Scientific Research and development. One day later, the Japanese attacked Pearl Harbor seeking 19 U.S Naval vessels, causing the U.S to declare war on Japan on December 8, 1941.

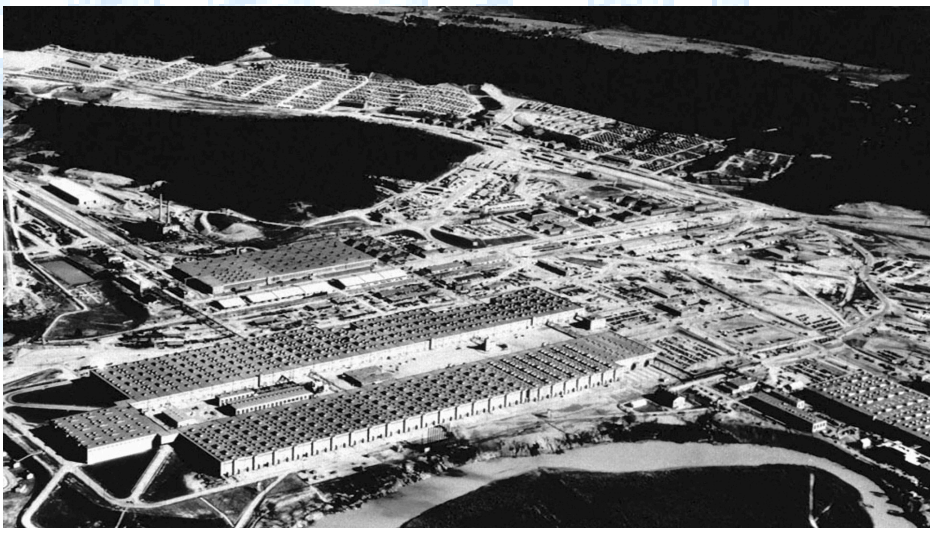
Even so, the construction of the bomb presented a lot of obstacles. As it was mentioned earlier, the most efficient material for fission is the isotope Uranium-235. This one however cannot be separated from its natural companion: Uranium-238, causing the need to separate these isotopes by physical means. Two separating methods were chosen:

- The electromagnetic process (1942): A spectrometer sent a stream of uranium atoms past a magnet. The lighter isotope (U-235) would be drawn away more than the heavier ones (U-238) → capturing one atom at a time.
- The diffusion process: Worked using a porous barrier that separated the lighter isotope from its heavier counterpart.



In September 1942, the Brigadier General, Leslie Groves, was placed in charge of all army activities relating to the project. Groves selected a bomb design site in a remote area of New Mexico; Los Alamos. It was far enough for any enemy planes or submarines to reach it, but also beautiful enough for any muses or prima donnas (main female singers in opera). Then, Groves chose as head of installation doctor J. Robert Oppenheimer, a physics professor with an unfortunate reputation of being temperamental. One of the main concerns of the construction of the bomb was the uncertainty of how the explosion would turn out, since the size of the chain reaction was completely random.

Oppenheimer's team of physicists doubled the amount of Uranium-235 thought necessary to achieve critical mass and sustain a chain reaction. Additionally, 75,000 people would come to live at the site in Oak Ridge, expanding the workforce. It was hard to get construction workers during the war, therefore Grove's way of recruiting was to put on ads that didn't tell you exactly what you would be doing, just the

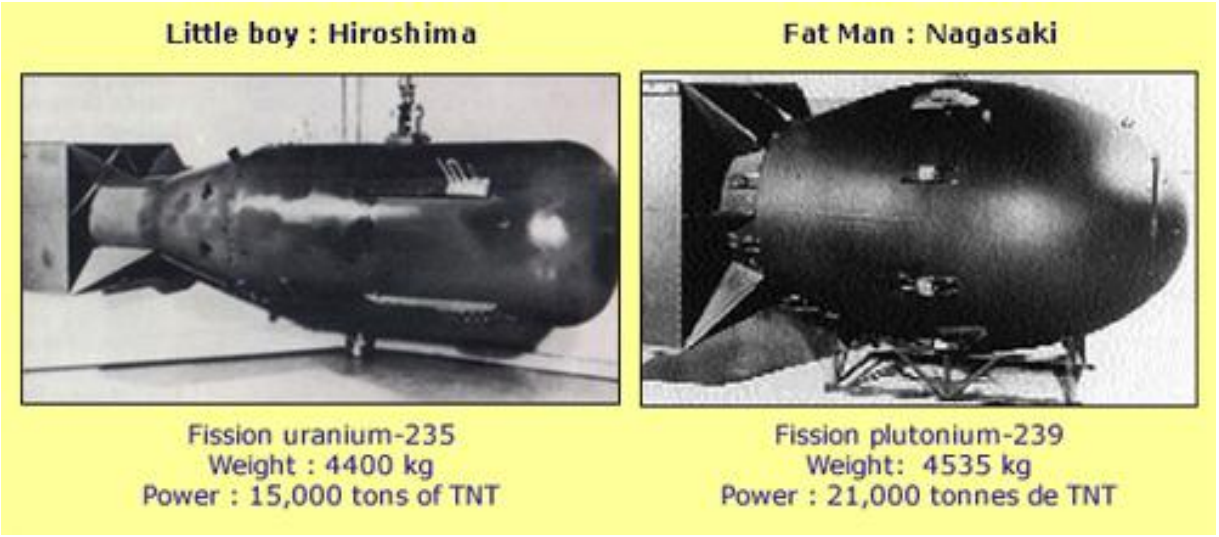


fact you would have a hot meal at the end of the day. In the same sense, hired workers were asked to be evasive about what they were doing, and say that they were doing the holes in donuts (for example).

Project Sites

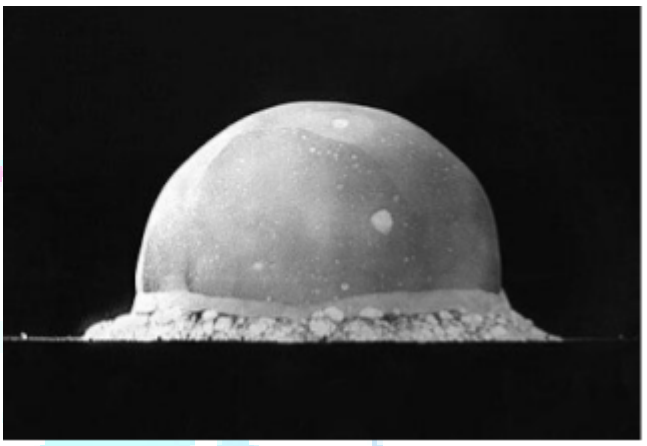
1. **Oak Ridge, Tennessee:** In early fall of 1942, General Groves purchased 59,000 acres in Oak Ridge Tennessee, becoming the main site for uranium production in the United States. Here, massive electromagnetic calutrons were built to separate U-235 from U-238 as well.
2. **Hanford, Washington**: Where reactors transformed uranium into plutonium to make it an even more powerful nuclear fuel.
3. **Los Alamos, New Mexico**: Where Oppenheimer directed the laboratory that designed and built experimental atomic bombs.

The weapon design of Uranium was completed in February of 1945, with the name “Little Boy " because of its small size of 10 feet long and less than 10,000 pounds. On the other hand, the plutonium bomb (made and worked differently



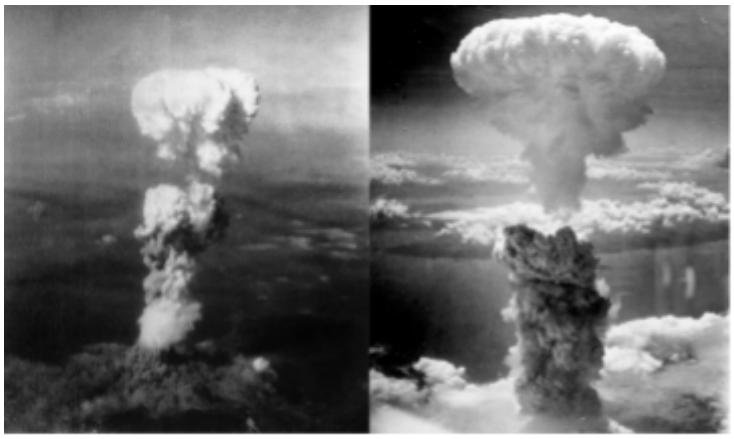
from the Uranium one) was called “Fat man” for its round shape, and it was approved in March of the same year.

The secrecy of the project was so much that President Truman did not know about it until he became president after Roosevelt’s death on April 12th, 1945. Less than a month later, German armed forces surrendered in Europe, but Japan persevered.



Trinity Test, 1945

The first implosion test of a bomb - with ”Trinity " as its code name - took place 200 miles south of Los Alamos on July 16th 1945 at 5:30 AM. A sudden wave of heat followed by a tremendous shock wave welcomed the world into a new era, the atomic era. After the success, Groves returned to Washington to report the results to the secretary of war, Henry Stimson, in order to make use of the bomb to attack Japan.



Atomic bombings of Hiroshima and Nagasaki

Little boy goes into combat first as an untested weapon, carried by the Enola Gay 31,000 feet over Hiroshima

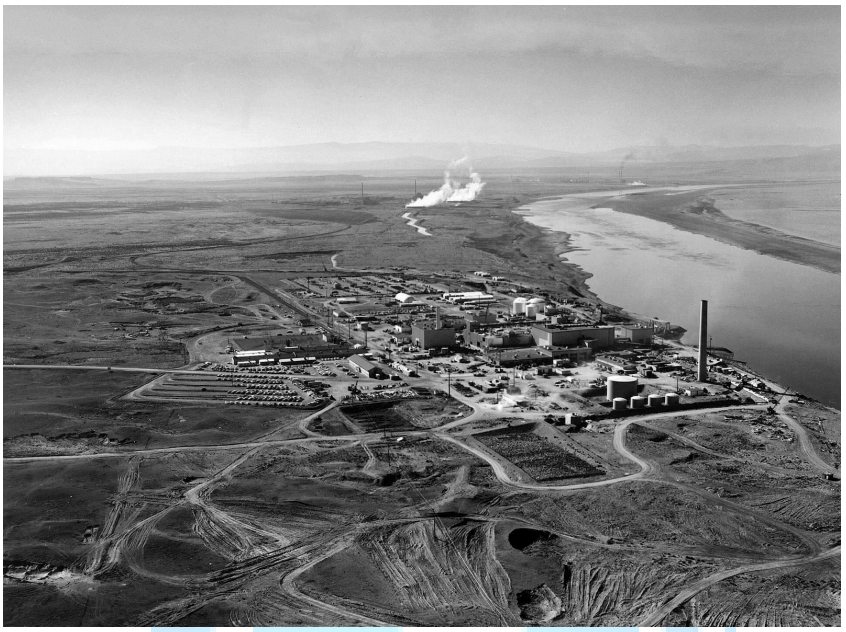
on August 6th, 1945 at 8:15 AM. The bomb detonated 1,900 feet above the city with a force of 12,500 tons of TNT. Ninety-percent of the city was leveled by the 500-mile an hour winds of the blast, which scorched victims' skin 2 miles away and incinerated those directly beneath the detonation. The Japanese death toll rose to 130,000 people killed by the blast and ensuing radiation sickness. Three days later, Fat Man fell on Nagasaki with similar results, causing Japan to surrender on August 14th of 1945.

3.5 Current situation

The Manhattan Project, a groundbreaking collaboration of renowned scientists, industry, and ordinary Americans during World War II, resulted in the creation of the atomic bomb, bringing an end to the war and marking the beginning of the atomic age. The project's immense legacy has shaped global geopolitics and influenced the development of nuclear technology, with significant impacts on today's world.

In response to the Manhattan Project's historical significance, the Department of Energy (DOE) has undertaken preservation efforts. These include documenting and interpreting key project properties and artifacts, resulting in the establishment of the Manhattan Project National Historical Park in 2015. This

park, encompassing Oak Ridge, Hanford, and Los Alamos, preserves the core sites essential for understanding the project's mission.



The DOE has also provided extensive historical resources, such as the Manhattan Project: Resources website, offering comprehensive information, declassified documents, and a virtual museum. Additionally, the K-25 Virtual Museum focuses on the East Tennessee site's contributions to the atomic bomb.

However, alongside these achievements, the long-term effects of nuclear weapons, including radiation exposure and radioactive fallout, remain complex and impactful. The Manhattan Project's legacies, spanning from nuclear

advancements to tragic consequences like the bombings of Hiroshima and Nagasaki, continue to shape our world, underscoring the multifaceted nature of this historical and scientific endeavor.

3.6 Possible Outcomes

1. *Nuclear Arms Race:*

The successful development and use of atomic bombs during the Manhattan Project accelerated a nuclear arms race during the Cold War. The United States' possession of nuclear weapons influenced global power dynamics, prompting other nations, including the Soviet Union, the United Kingdom, and France, to develop their nuclear programs.

2. *Peaceful Nuclear Innovations:*

Despite its destructive nature, the Manhattan Project also contributed to the development of peaceful nuclear innovations. The groundwork laid during the project paved the way for advancements in nuclear power, leading to its

applications in generating electricity, medical treatments, and scientific research.

3. *Global Environmental Impact:*

The environmental consequences of the Manhattan Project, particularly at sites like Hanford and Oak Ridge, continue to pose challenges. Cleanup efforts and the management of radioactive waste remain ongoing concerns, underscoring the long-lasting impact of the project on the environment.

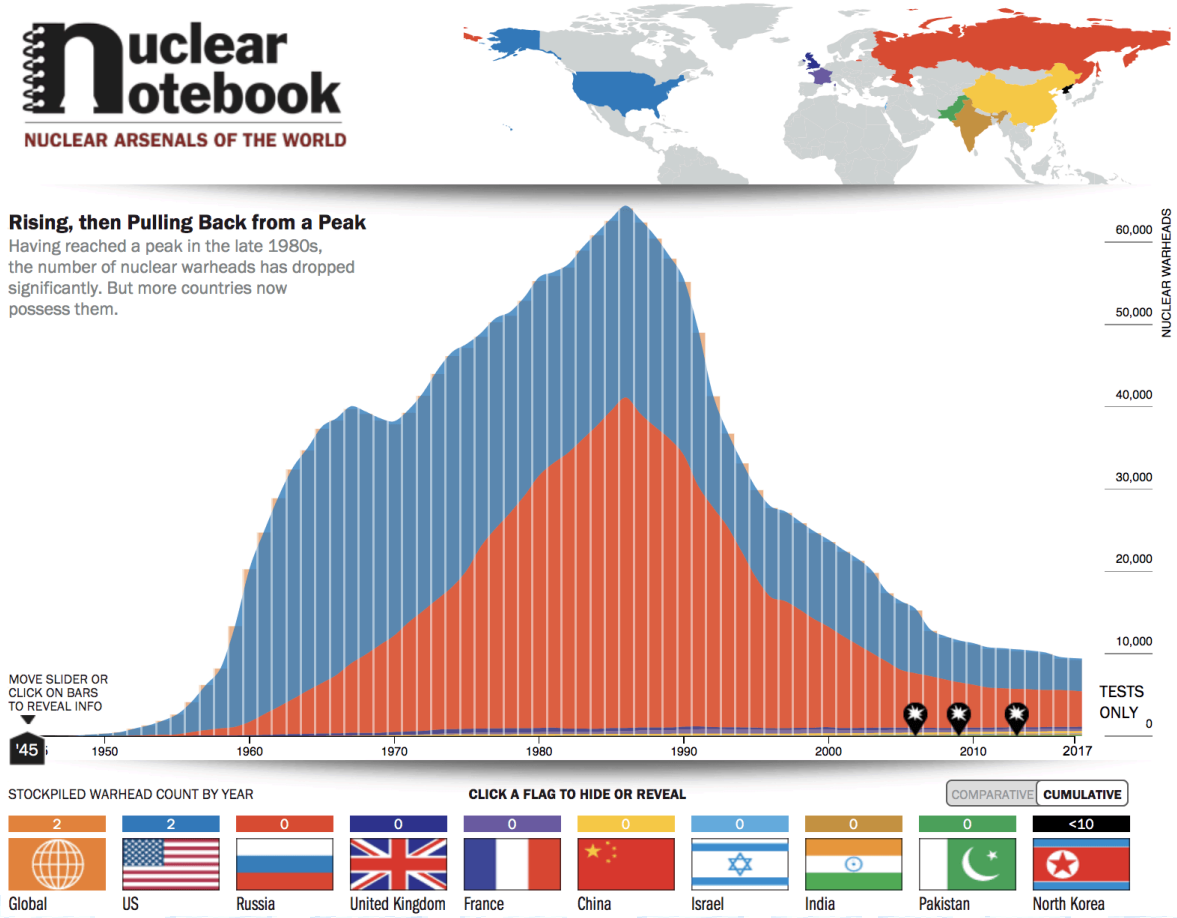
4. Controversial Legacy:

The Manhattan Project remains a subject of controversy and debate, particularly regarding the ethical considerations of using atomic bombs on Hiroshima and Nagasaki. The cancellation of the proposed Enola Gay Exhibition in 1995 highlights the ongoing sensitivities surrounding the project's legacy, while the establishment of the Manhattan Project National Historical Park in 2015 reflects a renewed effort to interpret its history and lessons.

5. International Nuclear Proliferation:

The Manhattan Project's success influenced the global perception of nuclear weapons as powerful tools of deterrence. This perception, coupled with the proliferation of nuclear capabilities to other nations, has shaped international

relations and arms control efforts, leading to ongoing debates about non-proliferation and disarmament.



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3.8 Expectations for Debate

At this historical committee in MSMUN, we would like to encourage each delegate to actively engage in the historical complexities and ethical dilemmas that defined this pivotal moment in human history. The Manhattan Project. The simulation offers a unique opportunity to step into the shoes of the scientists, policymakers, and leaders who grappled with the unprecedented challenges of the atomic age. Your active participation is not merely a contribution to the debate; it is an exploration of the multifaceted issues surrounding the development and use of nuclear weapons. Dive into the scientific, ethical, and geopolitical dimensions of the Manhattan Project with enthusiasm and curiosity, as we collectively seek to understand the past and draw lessons for the present and future.

In this committee, the dynamics of the Manhattan Project simulation will thrive on your engagement, research, and diplomatic acumen. As we delve into the historical intricacies, I urge each delegate to bring forth their unique perspectives, propose innovative solutions, and foster collaborative discussions. For this, you will need to be deeply cultured with the subject and so we encourage you to take notes of the sources provided by us and this MSMUN guide. Consider the moral implications of your decisions, empathize with the dilemmas faced by those in the past, and contribute to a nuanced exploration of the consequences of the atomic bombings. This simulation is not just an intellectual exercise; it is an opportunity to hone your negotiation skills, build consensus, and deepen your understanding of the interconnected issues surrounding nuclear weapons. So, let your voice be heard, actively participate in the discourse, and together, let us unravel the complexities of the Manhattan Project with diligence, and a commitment to historical accuracy.

4.0 QARMAS

1. How did the Manhattan Project reshape the geopolitical landscape at the end of World War II, and what were the immediate consequences of the atomic bombings on Hiroshima and Nagasaki?

2. Considering the ethical dimensions surrounding the development and use of nuclear weapons during the Manhattan Project, what debates did your representative engage in (if any), regarding the situation?
3. What was the critical role of your representative regarding Project Manhattan?
4. What scientific breakthroughs and innovations were pivotal to the success of the Manhattan Project, and how did these advancements contribute to the subsequent development of nuclear technology for both peaceful and military purposes?
5. How did the Manhattan Project set the stage for the Cold War, and in what ways did it influence subsequent arms races?

5.0 Delegation list

Albert Einstein

J. Robert Oppenheimer

Leo Szilard

Ernest O. Lawrence.

Glenn Seaborg

Leslie Groves

Enrico Fermi

Werner Heisenberg

Vannevar Bush

Klaus Fuchs

Edward Teller

Norris Bradbury

Hans Bethe

Robert Bacher

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