# MISMUN'25
# HCC: OPPENHEIMER

## Study Guide

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Dear Delegates,

It is with great joy and genuine excitement that I welcome you to the Manhattan Project Crisis Committee.

As your Under Secretary-General, I am truly honored to have you as part of this unique and challenging simulation. It means a lot to see young minds step into a space where history, diplomacy, ethics, and science collide so powerfully. This committee is unlike any other, it brings together historical facts and the human dilemmas that defined an era.

I'm beyond excited to see the perspectives, strategies, and creativity you will bring to this room. You won't just be representing historical figures, you'll be breathing life into their decisions, conflicts, and legacy. Whether you are a seasoned delegate or this is your first time in a crisis committee, I want you to know that your presence matters and your voice will shape this experience.

We've worked hard to create a committee that is immersive, thought-provoking, and filled with opportunity. I hope you walk away from it not just with new knowledge, but with new confidence in your ability to think, speak, and lead in complex moments.

I cannot wait to see the energy, passion, and insight each of you will bring. Welcome to the committee, and welcome to a world where your decisions could change the course of history.

With all my excitement,
Menna Eraslan
Under Secretary-General

### 1.3. Overview of the Manhattan Project Crisis Committee

The Manhattan Project Crisis Committee immerses delegates in the secretive and high-pressure environment of 1944, as the United States races to develop the first atomic bomb. Delegates will assume the roles of key figures, including scientists, military leaders, and intelligence officers, navigating political tension, scientific conflict, and the threat of espionage.

As a crisis committee, it will require quick thinking, strategic planning, and careful negotiation. Each delegate will have the opportunity to influence the outcome of history in a simulation where decisions carry significant weight.

This is not just a committee about science. It is a committee about power, ethics, and the unknown future of the nuclear age.

### 1.4. Timeline and Setting

The committee will begin in mid-1944, when the atomic bomb is still in development and the outcome of World War II remains uncertain. While the historical timeline provides a foundation, delegates are not bound to follow it. Instead, they are encouraged to pursue their character's goals creatively, responsibly, and within the historical setting. The outcome of the committee will depend entirely on the decisions made by the participants.

Debate will alternate between moderated and unmoderated caucuses, allowing delegates to present their views, form alliances, and craft responses to ongoing developments. In addition to formal debate, delegates will be able to submit classified communiqués, directives, and intelligence requests to the crisis team. These will allow them to operate behind the scenes, conduct covert operations, or influence events outside the committee room.

Delegates are expected to:

- Remain in character and make decisions based on their assigned role’s motivations and historical context
- Act diplomatically while pursuing strategic or ideological objectives
- Respond quickly and thoughtfully to dynamic crisis updates
- Collaborate with other delegates, while also preparing to navigate betrayals, espionage, or shifting alliances
- Use both public and private tools, debate, directives, and communiqués, to shape the course of the committee

This committee rewards historical understanding, creativity, and strategic thinking. Delegates should not simply aim to follow history but should seek to understand it well enough to reshape it.

## 2. Historical Context

### 2.1 Origins of the Manhattan Project

The Manhattan Project was not a random decision made during the war. It was the result of many years of scientific discoveries, growing political tensions, and rising military pressure. The path to building the atomic bomb started with early research in nuclear physics and was pushed forward by the urgent threat of World War II. This combination of science and government power would go on to shape the future of the world.

**Early Discoveries in Nuclear Physics**

In the early 1900s, scientists like Marie Curie, Ernest Rutherford, and Niels Bohr studied radioactivity and the structure of atoms. Their work built the base for later nuclear research. At first, this was mostly academic science, but over time, people began to realize it had real-world power.

In 1938, German scientists Otto Hahn and Fritz Strassmann split the atom while doing experiments with uranium. Two other physicists, Lise Meitner and Otto Frisch, explained this process and called it nuclear fission. They discovered that splitting the atom released a huge amount of energy.

Many scientists, especially those who had escaped from Nazi Germany, quickly understood the danger. If Germany could create a weapon using this new science, the results would be devastating. This fear led scientists to urge the Allied governments to begin their nuclear research.

**The Einstein-Szilárd Letter and the U.S. Response**

In August 1939, physicists Leó Szilárd and Eugene Wigner convinced Albert Einstein to write a letter to U.S. President Franklin D. Roosevelt. The letter warned that Nazi Germany might be working on a powerful bomb using uranium and that the United States needed to act quickly.

The letter made three main points:

- Germany had access to uranium supplies in Czechoslovakia
- A chain reaction in uranium could cause an extremely powerful explosion.
- The United States needed to begin its research before Germany took the lead.

President Roosevelt understood the threat and set up the Advisory Committee on Uranium in October 1939. While this group started small, it was the first official step toward what would become the Manhattan Project.

**Global Competition and Rising Concerns**

As the war continued, fear of Germany's progress pushed the United States, the United Kingdom, and Canada to work together. Britain had already begun its atomic research under a program called Tube Alloys, but it did not have enough resources. Eventually, the British joined forces with the Americans.

At the same time, many scientists began to feel uncomfortable. They knew that the science could be used to build a bomb more powerful than anything seen before. Still, they believed it was necessary to stop Germany, and the war made the choice feel urgent.

**From Science to War**

After Japan attacked Pearl Harbor in December 1941, the United States joined the war. Nuclear research became a top military priority.

In 1942, the Manhattan Project officially began:

- General Leslie Groves was chosen to lead the project on the military side. He made sure everything stayed on schedule and under control.
- J. Robert Oppenheimer was chosen to lead the scientific research at a new lab in Los Alamos, New Mexico.
- Large factories were built in Oak Ridge, Tennessee, and Hanford, Washington, to produce the uranium and plutonium needed for the bomb.

This was no longer just a science project but a massive wartime mission.

**Secrecy, Scale, and the Beginning of a New Era**

The Manhattan Project became one of the most secret and expensive projects in U.S. history. More than 130,000 people worked on it at many different sites across the United States, Canada, and the United Kingdom. Most of them did not even know they were helping to build a bomb.

To keep it secret, workers were only told the parts they needed to know. At the same time, spies working for the Soviet Union were able to gather important information from inside the project, which helped the Soviets later build their bomb.

In July 1945, the first test of a nuclear bomb was carried out in New Mexico. This test, known as the Trinity Test, was a success. It proved that the project had achieved its goal and marked the beginning of a new kind of warfare, where science could decide the outcome of wars and the future of nations.

## 2.2 The Role of Nuclear Science in WWII

The Second World War was not just fought on the battlefield but also in laboratories, where scientific advancements shaped military strategy. Among these, nuclear science played a defining role. While radar, aviation, and cryptography significantly influenced the war, the ability to harness atomic energy represented the most profound shift in military power.

### The Scientific Foundations of Nuclear Weapons

Nuclear physics had been evolving throughout the early 20th century, but it was the discovery of nuclear fission in 1938 that set the stage for atomic weapon development. Physicists recognized that splitting uranium or plutonium nuclei could produce an immense energy release, leading to the possibility of a chain reaction.

Scientists across multiple countries explored the potential of nuclear energy, but it quickly became clear that its greatest application would be in warfare. The race to develop an atomic bomb became a crucial aspect of the war effort.

### Germany's Nuclear Ambitions

Germany was initially at the forefront of nuclear science, with many leading physicists working on nuclear fission. The Uranverein (Uranium Club), a German nuclear research program, aimed to explore the possibility of an atomic bomb. However, several factors limited its progress:

- Key scientists, including Albert Einstein and Enrico Fermi, had fled Nazi-occupied Europe.
- The Nazi leadership did not prioritize nuclear research, as Hitler and military leaders focused more on conventional weapons and other experimental technologies.
- Limited access to uranium and heavy water slowed research, especially after the Allies sabotaged German supply lines.

By 1944, Germany had largely abandoned efforts to develop a nuclear weapon, leaving the United States and the Manhattan Project as the clear leaders in nuclear research.

**Allied Scientific Advancements**

The Allied powers recognized the importance of nuclear technology early in the war. British scientists had already been researching nuclear weapons under Tube Alloys, the United Kingdom's atomic bomb program. However, the British lacked the industrial capacity to develop an atomic bomb independently and later merged their efforts with the United States under the Manhattan Project.

Meanwhile, the Soviet Union monitored nuclear research through intelligence operations, gathering classified information that would later accelerate its nuclear program.

**The Manhattan Project: The Turning Point in Nuclear Science**

In 1942, the United States, with support from the United Kingdom and Canada, launched the Manhattan Project, the largest coordinated scientific effort in history. The project aimed to develop a functional atomic bomb before the Axis powers and required advancements in multiple fields:

- Physics: Scientists studied nuclear chain reactions and the critical mass required for detonation.

- Engineering: The construction of uranium enrichment and plutonium production facilities at Oak Ridge, Hanford, and Los Alamos was essential for large-scale production.

- Military Strategy: The project was conducted under extreme secrecy, with information compartmentalized to prevent espionage.

By the final years of the war, the Manhattan Project had made nuclear science not just a theoretical pursuit, but a practical and devastating weapon.

**The Impact of Nuclear Science on Warfare**

The development of nuclear weapons reshaped military strategy and global power dynamics. For the first time, nations had access to a weapon capable of instant and unmatched destruction. The success of the Manhattan Project meant that science had become the ultimate determinant of military supremacy.

As the war neared its end, the question was no longer whether nuclear weapons could be built, but whether they should be used.

### 2.3 Key Events Leading to 1944

By the early 1940s, nuclear research had shifted from a purely scientific pursuit to a strategic wartime priority. With World War II escalating, both the Axis and Allied powers recognized the potential of atomic energy. A series of key events between 1938 and 1944 shaped the race for nuclear power, culminating in the Manhattan Project's dominance.

**1938-1939: The Discovery of Nuclear Fission and Early Concerns**

- December 1938: Otto Hahn and Fritz Strassmann discovered nuclear fission, proving that splitting an atom's nucleus released immense energy.
- January 1939: Lise Meitner and Otto Frisch correctly identified fission and its potential for a chain reaction.
- August 1939: The Einstein-Szilárd Letter was sent to President Franklin D. Roosevelt, warning that Nazi Germany might be developing an atomic bomb.

These discoveries set the foundation for nuclear weapons research and sparked the nuclear arms race.

**1939-1941: Germany, Britain, and Early Allied Efforts**

- September 1939: World War II officially began with Germany's invasion of Poland.
- Late 1939: Germany's Uranverein (Uranium Club) initiated nuclear research, but the program struggled due to internal scientific disagreements and lack of state support.
- March 1940: British scientists launched Tube Alloys, a secret nuclear research program that later merged with the Manhattan Project.
- April 1940: The Allies sabotaged Germany's heavy water production in Norway, limiting its nuclear progress.

During this period, the United States remained officially neutral, but scientific discussions on nuclear weaponization intensified.

**1941-1942: The United States Commits to Nuclear Weapons**

- December 7, 1941: Japan attacked Pearl Harbor, leading the U.S. to formally enter World War II.

- December 1941: American nuclear research accelerated after Vannevar Bush, head of the U.S. Office of Scientific Research and Development (OSRD), recommended large-scale nuclear development.

- June 1942: The U.S. government officially launched the Manhattan Project, led by General Leslie Groves and physicist J. Robert Oppenheimer.

- Late 1942: Research and production sites were established at Los Alamos, Oak Ridge, and Hanford to develop enriched uranium and plutonium.

This marked the transition of nuclear science from theoretical research to full-scale weapons development.

**1943-1944: Manhattan Project Advances and the Fading Axis Threat**

- March 1943: The main Los Alamos Laboratory was fully operational, with Oppenheimer overseeing the bomb design.

- Mid-1943: Germany's nuclear program stalled due to lack of resources, shifting Allied intelligence focus to Japan and Soviet espionage.

- August 1943: The Quebec Agreement was signed between the U.S. and U.K., ensuring continued Anglo-American nuclear cooperation.

- December 1943 - 1944: Scientists at Los Alamos made breakthroughs in bomb design, leading to the decision to pursue two different bomb types:

    - A uranium bomb (Little Boy) using enriched uranium-235.

    - A plutonium bomb (Fat Man) using plutonium-239.

By 1944, the Manhattan Project was in its final phase. With Germany no longer a nuclear threat, discussions about the use of the atomic bomb and its potential consequences became a major point of debate within Allied leadership.

## 2.4 The Post-War Reckoning and the Rise of Anti-Communism

By the time World War II ended in September 1945, the world had entered a new geopolitical reality shaped by nuclear weapons. The atomic bombings of Hiroshima and Nagasaki not only brought an abrupt end to the war but also signaled the beginning of a new global power struggle. The immediate post-war years were marked by shifting alliances, ideological conflicts, and a race for nuclear dominance between the United States and the Soviet Union.

**The Aftermath of Hiroshima and Nagasaki**

- August 6, 1945: The United States dropped the first atomic bomb, Little Boy, on Hiroshima, killing over 70,000 people instantly and tens of thousands more from radiation exposure.

- August 9, 1945: A second bomb, Fat Man, was dropped on Nagasaki, killing an estimated 40,000 people instantly.

- August 15, 1945: Japan surrendered, officially ending World War II.

The use of nuclear weapons shocked the world and led to debates on the ethical, political, and strategic implications of atomic warfare. While the bombings forced Japan's surrender, they also demonstrated U.S. military supremacy to the rest of the world, particularly to the Soviet Union.

**The Emerging U.S.-Soviet Rivalry**

Although the United States and the Soviet Union had been wartime allies, their relationship was built on mutual suspicion and conflicting ideologies. With Germany defeated, the two nations emerged as the world's superpowers, but their visions for the post-war world were fundamentally different:

- The United States promoted capitalism and democracy, seeking to rebuild Europe through programs like the Marshall Plan.

- The Soviet Union, under Joseph Stalin, expanded communist influence, establishing pro-Soviet governments in Eastern Europe.

**The Nuclear Arms Race Begins**

With the Soviet Union aware of the Manhattan Project's success, it accelerated its nuclear program, relying heavily on espionage. Klaus Fuchs, a German-born physicist working on the

Manhattan Project, passed classified information to the Soviets, significantly advancing their nuclear research.

- August 29, 1949: The Soviet Union successfully tested its first atomic bomb, Joe-1, ending the U.S. monopoly on nuclear weapons.
- The Cold War officially began as both nations raced to develop more advanced nuclear capabilities.

**The Birth of Anti-Communism in the U.S**

The spread of communism and the rapid Soviet nuclear advancements fueled fear and paranoia in the United States. This led to:

- The Red Scare (late 1940s-1950s): A period of intense fear of communist influence in the U.S. government and society.
- The Truman Doctrine (1947): A policy aimed at containing communism worldwide, marking the start of U.S. Cold War foreign policy.
- McCarthyism (early 1950s): A wave of anti-communist investigations, led by Senator Joseph McCarthy, targeting government officials, scientists, and Hollywood figures suspected of communist ties.

**Impact on Nuclear Policy and Global Security**

As the Cold War deepened, the United States and Soviet Union stockpiled nuclear weapons, leading to:

- The concept of Mutually Assured Destruction (MAD), where both nations understood that any nuclear conflict would lead to total annihilation.
- The creation of military alliances, such as NATO (North Atlantic Treaty Organization) and the Warsaw Pact, divided the world into two opposing blocs.
- The rise of covert operations and proxy wars, where both superpowers influenced global conflicts without engaging in direct warfare.

The post-war reckoning saw the world shifting from a conflict between nations to an ideological struggle for global influence, with nuclear weapons at its center. The decisions made in the late 1940s shaped international relations for the next five decades, defining the Cold War era.

## 2.5 The Oppenheimer Security Hearing (1954)

By the early 1950s, the Cold War was at its peak, and the United States had developed an atmosphere of intense suspicion and anti-communist sentiment. In this era of political paranoia, even the scientists who had built the atomic bomb were not immune to scrutiny. One of the most high-profile cases of this period was the security hearing of J. Robert Oppenheimer, the chief scientific director of the Manhattan Project.

### Oppenheimer's Role in the Manhattan Project

J. Robert Oppenheimer had been one of the most influential figures in the development of the atomic bomb. As director of the Los Alamos Laboratory, he played a crucial role in designing and overseeing the project. After the war, he continued to advise the U.S. government on nuclear policy and became a leading advocate for international arms control.

However, as nuclear technology advanced, Oppenheimer grew increasingly concerned about the development of the hydrogen bomb, a weapon even more powerful than the atomic bombs used on Japan. His opposition to the rapid expansion of nuclear weapons made him a controversial figure among U.S. military and political leaders.

### The Security Allegations Against Oppenheimer

By the early 1950s, the U.S. government, influenced by McCarthyism and the Red Scare, was highly suspicious of anyone with past ties to leftist or communist groups. Oppenheimer, like many intellectuals of his time, had associations with individuals linked to the Communist Party in the 1930s.

In 1953, these past connections, combined with his opposition to the hydrogen bomb, led to accusations that he was a security risk. The U.S. Atomic Energy Commission (AEC) launched an official security hearing to determine whether he should retain his security clearance.

### The 1954 Hearing and Trial

- The hearing took place from April to May 1954, conducted by a panel of the AEC Personnel Security Board.

- Oppenheimer was accused of being a Soviet sympathizer, despite no evidence that he had engaged in espionage.
- Several prominent scientists and government officials, including Edward Teller, testified against him, while others defended his integrity.
- Oppenheimer's past political affiliations and his resistance to the hydrogen bomb program were used as justification for revoking his clearance.

The trial was widely regarded as a politically motivated attack rather than a legitimate security concern.

**Consequences and Impact**

- June 29, 1954: The AEC officially revoked Oppenheimer's security clearance, effectively ending his role in U.S. nuclear policy.
- The decision damaged his career and sent a chilling message to other scientists who questioned U.S. military policy.
- The case became a symbol of Cold War paranoia, demonstrating how political ideology could overshadow scientific contributions.
- Despite his exile from government work, Oppenheimer continued as a respected scientist and lecturer, receiving the Enrico Fermi Award in 1963 as a form of late recognition.

**Legacy of the Oppenheimer Case**

The Oppenheimer security hearing was a turning point in U.S. nuclear policy, revealing the growing tensions between:

- Scientists and government officials over the ethical use of nuclear weapons.
- Advocates of nuclear expansion and those who feared its consequences.
- Cold War political pressures and intellectual freedom.

The trial raised lasting questions about the role of scientists in national security and the dangers of political persecution in times of crisis. Today, Oppenheimer is remembered not just as the "father of the atomic bomb" but also as one of the first victims of Cold War-era political repression.

## 3. Key Figures in the Committee

The Manhattan Project was an extraordinary convergence of science, military coordination, and political oversight. The individuals involved were not only operating under immense pressure to end a global war, but also navigating complex moral, ideological, and strategic dilemmas. In this committee, delegates will assume the roles of these historical figures, each with their motivations, priorities, and potential to change the course of history.

### 3.1 Scientists

The scientists of the Manhattan Project were the intellectual engine behind the development of the atomic bomb. Many were émigrés fleeing fascist regimes in Europe, motivated both by a desire to defeat Nazi Germany and by a passion for theoretical physics. These men worked under tight security and extreme secrecy, often unaware of how their discoveries would be used until the final stages.

As the war progressed, divisions emerged among the scientific team. Some, like Edward Teller, pushed for further advancement—including a more powerful hydrogen bomb—while others, such as Leo Szilárd, began advocating against the use of the bomb altogether, fearing the long-term consequences of nuclear warfare. J. Robert Oppenheimer, the scientific director, stood at the center, torn between loyalty to the project and growing moral unease.

In this committee, scientists will need to make decisions not just based on research and efficiency, but on principle. Their influence over the project's direction will depend on their ability to communicate with military and political leaders, and on their willingness to challenge or comply with orders.

### 3.2 Military Officials

The military's role in the Manhattan Project was one of management, oversight, and control. The project was, above all, a wartime initiative, funded and directed by the U.S. Army Corps of Engineers. General Leslie Groves, its commanding officer, had enormous power over personnel, funding, and security. His top priority was ensuring the bomb was built before Germany or Japan could achieve similar capabilities.

Military officials in the committee must contend with maintaining order and speed, often clashing with the slower, more cautious pace of the scientists. They are also responsible for handling intelligence threats, overseeing infrastructure, and preparing for deployment decisions.

The military voice in the committee will likely push for direct, action-oriented strategies. However, some officials may harbor private doubts, question the long-term consequences of nuclear warfare, or worry about post-war power shifts, especially concerning the Soviet Union. Delegates in these roles must walk the line between operational command and geopolitical foresight.

### 3.3 Political and Intelligence Representatives

Though the Manhattan Project was run in technical and military circles, it existed within a much larger political and diplomatic context. Senior figures in the Roosevelt and later Truman administrations monitored its progress closely. Their concern was not just the war's end, but the world that would follow.

Delegates in these roles will be deeply concerned with managing the political optics of the bomb's use, anticipating the Soviet response, and preparing for the United States' role as a global superpower. Intelligence representatives will monitor for leaks, espionage, and ideological threats, especially as the Communist Party USA and the Soviet Union begin to attract scrutiny.

These delegates hold sway over presidential decisions, diplomatic relations, and how much autonomy scientists and generals are granted. They may also serve as internal watchdogs—investigating suspicious activity, initiating loyalty reviews, or advising restraint. Their actions will shape not only the project's success, but its political and ethical legacy.

# 4. Committee Objectives and Themes

## 4.1 Scientific Responsibility vs. Military Necessity

One of the central dilemmas of the Manhattan Project lies in the relationship between science and warfare. Delegates must grapple with the role of the scientist in times of war: Is it the responsibility of a scientist to remain neutral and focus solely on discovery, or must they also bear the consequences of their creations? As the atomic bomb nears completion, the committee will confront heated debates between those pushing for rapid deployment to end the war and those warning of irreversible ethical consequences. Delegates will explore questions about autonomy in research, the influence of military pressure on scientific work, and the responsibility of those who create weapons of mass destruction.

## 4.2 Internal Dissent and Ethical Conflict

Despite the shared goal of defeating the Axis powers, the Manhattan Project was far from unified in its internal ideology. Many scientists involved had deep moral concerns about what they were building. Figures such as Leo Szilárd and Joseph Rotblat openly questioned the ethical legitimacy of using nuclear weapons, especially if the war appeared close to ending without them. In this committee, delegates may find themselves caught between loyalty to their country and allegiance to their principles. Some may seek to halt or slow the project, form ethical coalitions, or advocate for transparency, while others may view such actions as dangerous or even traitorous. These divisions will form the moral fabric of the committee and may shape its final direction.

## 4.3 Wartime Secrecy and Espionage

The Manhattan Project was one of the most tightly guarded operations in history, with extreme measures taken to compartmentalize information and prevent leaks. Yet despite these efforts, espionage was rampant. Soviet agents successfully infiltrated the project, most notably through Klaus Fuchs, passing critical information to Moscow. Delegates in this committee must take constant precautions to protect sensitive information, root out potential traitors, and determine how far they are willing to go in the name of secrecy. At the same time, paranoia may lead to false accusations, damaged reputations, or internal breakdowns. The tension between national security and personal freedom will be ever-present.

### 4.4 Strategic Use of the Atomic Bomb

Once the bomb is ready, the question becomes: what do we do with it? Delegates will be asked to discuss and decide on the future of the weapon they've helped create. Should the United States drop the bomb on a Japanese city without warning, or should it first conduct a demonstration? What targets are considered "acceptable," and who makes that decision? Should scientists even be involved in these conversations at all? These debates will not only involve military strategy but also diplomacy, ethics, and the long-term consequences of nuclear warfare. How the committee chooses to use the bomb or not could change the outcome of the war, and the shape of the world after it.

### 4.5 The Post-War Nuclear Future

Even before the end of World War II, many understood that the atomic bomb would define the post-war era. The emergence of the Soviet Union as a rival power, the moral burden of Hiroshima and Nagasaki, and the potential for a global arms race all point toward a new kind of conflict: the Cold War. Delegates must consider long-term questions about global nuclear policy, international cooperation, and scientific freedom. Will the bomb remain in American hands, or be placed under international control? Will nuclear weapons be seen as a deterrent or a threat? Can a new world order be built on mutual fear, or will diplomacy prevail? The choices made in this committee may set the tone for the next century.

## 5. Character List and Brief Biographies

This committee consists of scientists, military officials, intelligence agents, and political figures who were either directly involved in or closely connected to the Manhattan Project. Each delegate will assume the role of one of these historical or composite individuals. Some characters may hold secret motivations, affiliations, or personal conflicts that will influence the course of the committee. Delegates are expected to research their roles thoroughly and embody them with authenticity.

### 5.1 Delegate Roles and Powers

**J. Robert Oppenheimer:**

Scientific Director of the Manhattan Project. Brilliant, philosophical, and increasingly conflicted. Oppenheimer is responsible for coordinating the scientific teams, but he is also growing uneasy about the ultimate use of the bomb. His role places him at the crossroads of science, ethics, and politics.

**General Leslie Groves:**

Military head of the Manhattan Project. Stern, pragmatic, and determined. Groves oversees security, infrastructure, funding, and communication with the War Department. His focus is on efficiency and control. He often clashes with the scientists, especially on issues of secrecy and speed.

**Leo Szilárd:**

Physicist and one of the original proponents of nuclear weapons as a deterrent. Later became an outspoken critic of their use. Szilárd may push for ethical oversight, alternative solutions, or a petition against bombing Japanese cities.

**Edward Teller:**

Theoretical physicist. Strongly supports the rapid development of more powerful weapons, including the hydrogen bomb. Teller is ambitious, polarizing, and may attempt to shift the committee's priorities toward long-term military dominance.

**Niels Bohr:**

Danish physicist and philosophical thinker. Advocates for international scientific cooperation and transparency. Bohr believes the bomb should not be a tool for unilateral power, and he may attempt to shape post-war policy in favor of international control.

**Enrico Fermi:**

Experimental physicist and builder of the first nuclear reactor. Highly respected and technically focused, Fermi may act as a bridge between the theoretical and applied sides of the project. His loyalties lie with science, but his influence can shift based on events.

**Klaus Fuchs:**

German-born physicist. Brilliant and cooperative on the surface, but secretly passing information to the Soviet Union. Fuchs's role is a hidden crisis element. Depending on actions taken by others, his espionage may be discovered or may go unnoticed.

**Colonel Kenneth Nichols:**

Deputy military commander under Groves. Focused on logistics, construction, and efficiency. Loyal to Groves but practical in decision-making. It could be used as a stabilizer or as a quiet operator for more covert military strategies.

**Henry L. Stimson:**

Secretary of War. Highly influential, politically connected, and directly involved in decision-making with the President. Stimson can set the tone for long-term US policy regarding the bomb and the post-war order.

**James B. Conant:**

Scientific liaison and president of Harvard University. Acts as a middleman between the government and the scientific community. Conant must manage tensions, resolve conflicts, and advise on both technical and political implications of the bomb's use.

**Vannevar Bush:**

Head of the Office of Scientific Research and Development. A quiet bureaucratic power, Bush is involved in strategic oversight and long-term planning. He may push for government control over nuclear research and the future of American science.

**William L. Borden:**

Advisor involved in security and intelligence reviews. May support aggressive anti-communist measures or propose loyalty reviews of the scientists. Could be a key figure in internal investigations or post-war political pressure campaigns

## 6. Research and Recommended Resources

Delegates are encouraged to conduct thorough research to accurately represent their assigned roles and contribute meaningfully to debate and crisis interactions. The Manhattan Project intersects science, war, politics, and ethics, so delegates should familiarize themselves with both historical facts and the broader ideological context of the era. Below is a curated list of essential primary documents, recommended readings, and films to support your preparation.

### 6.1. Key Documents and Speeches

*The Einstein–Szilárd Letter (1939)*

This letter warned President Franklin D. Roosevelt that Nazi Germany was likely working on nuclear weapons. It was co-authored by physicist Leo Szilárd and signed by Albert Einstein. It played a pivotal role in prompting U.S. interest in atomic energy.

*The Franck Report (1945)*

Written by a group of Manhattan Project scientists, this report urged the U.S. government to reconsider the use of the bomb on civilian targets and instead suggested a demonstration to avoid a nuclear arms race.

*The Szilárd Petition (1945)*

This petition, organized by Leo Szilárd and signed by other scientists, formally appealed to President Truman to consider the moral consequences of using atomic bombs on Japan.

*The Smyth Report (1945)*

An official government report summarizing the scientific and technical work of the Manhattan Project, released shortly after the bombings of Hiroshima and Nagasaki.

*Excerpts from the Oppenheimer Security Hearings (1954)*

Testimonies and transcripts from the hearings in which Oppenheimer was stripped of his security clearance during the Red Scare. This material is vital to understanding Cold War politics and the internal divisions within the U.S. nuclear program.

## 6.2. Suggested Readings and Films

**Books:**

*American Prometheus by Kai Bird and Martin J. Sherwin*

A Pulitzer Prize-winning biography of J. Robert Oppenheimer that explores both his scientific achievements and the political fallout that followed.

*The Making of the Atomic Bomb by Richard Rhodes*

A comprehensive and accessible history of nuclear physics, the development of the bomb, and the people behind it.

*109 East Palace by Jennet Conant*

Focuses on the human side of Los Alamos, with a particular lens on the scientists' families and their lives during the project.

*Day of Trinity by Lansing Lamont*

An engaging account of the Trinity Test and the final push toward deployment.

**Films and Documentaries:**

*Oppenheimer (2023), directed by Christopher Nolan*

A dramatized retelling of Oppenheimer's life and the Manhattan Project, including his rise, internal conflicts, and post-war downfall.

*The Day After Trinity (1981)*

A powerful documentary based on interviews with key scientists and archival footage, providing insight into the emotional toll of the bomb's development.

*Trinity and Beyond: The Atomic Bomb Movie (1995)*

A documentary using restored footage of nuclear tests to show the visual and technical evolution of atomic weapons during the Cold War.

*The Fog of War (2003)*

Although not solely focused on the Manhattan Project, this documentary features Robert McNamara and explores nuclear warfare, ethics, and decision-making in the 20th century.

Delegates should use these resources to enrich their understanding of the Manhattan Project and be ready to explore a range of complex, high-stakes decisions during the committee.

## 7. Appendices

### 7.1. Glossary of Terms

**Allied Powers:**
The group of countries that fought against the Axis Powers in World War II. This included the United States, the United Kingdom, the Soviet Union, China, and others.

**Axis Powers:**
The countries that fought against the Allies in World War II. The main members were Nazi Germany, Fascist Italy, and Imperial Japan.

**Atomic Bomb:**
A powerful weapon that uses nuclear reactions to create a massive explosion. It was used by the United States on Hiroshima and Nagasaki in 1945.

**Chain Reaction:**
A process in nuclear science where one reaction causes more reactions, leading to a large release of energy.

**Classified:**
Information that is kept secret by a government or military because it is considered very important or dangerous if shared.

**Cold War:**
A time after World War II when the United States and the Soviet Union were in conflict without fighting directly. They competed in politics, technology, and military power, especially nuclear weapons.

**Critical Mass:**
The minimum amount of nuclear material needed to start a chain reaction.

**Enrichment:**
The process of increasing the percentage of a specific type of uranium (uranium-235) to make it usable in nuclear weapons.

**Espionage:**
The act of spying, especially by governments, to gather secret information.

**Ethical Dilemma:**
A difficult choice between two options, where each may have serious consequences or raise moral questions.

**Fallout:**
Radioactive particles that fall to the ground after a nuclear explosion. They can be harmful to people and the environment.

**Fission:**
The process of splitting an atomic nucleus to release energy. This is how atomic bombs work.

**Geopolitical:**
Related to how geography and politics affect the relationships between countries.

**Hydrogen Bomb:**
A nuclear bomb is more powerful than an atomic bomb. It uses both fission and fusion reactions.

**Isotope:**
Different forms of the same element. Some isotopes are used in nuclear reactions.

**Los Alamos:**
The secret laboratory in New Mexico where the United States developed the atomic bomb during the Manhattan Project.

**Manhattan Project:**
The secret U.S. project during World War II to build the first nuclear weapons.

**Mutual Assured Destruction (MAD):**
The idea is that if two countries both have nuclear weapons, neither will use them because it would destroy both sides.

**Nuclear Physics:**
The branch of science that studies the particles and forces inside atomic nuclei.

**Pearl Harbor:**
The location of a surprise attack by Japan on the U.S. on December 7, 1941. This event caused the U.S. to enter World War II.

**Plutonium-239:**
A radioactive material used to make nuclear bombs.

**Proliferation:**
The spread of nuclear weapons to more countries.

**Radioactivity:**
The energy given off by certain atoms when they break down. It can be dangerous to living things.

**Red Scare:**
A period in the United States during which there was fear of communism and suspicion of anyone with leftist ideas.

**Soviet Union:**
A former communist country that included Russia and other states. It was a major rival of the United States during the Cold War.

**Trinity Test:**
The first ever test of a nuclear bomb, conducted by the United States in 1945.

**Uranium-235:**
A type of uranium used to make nuclear bombs.

## 7.2. Timeline of Nuclear Physics Discoveries

**1896** – *Henri Becquerel discovers radioactivity*
While experimenting with uranium, Becquerel finds that certain materials can give off energy by themselves. This is the first step toward understanding atomic energy.

**1898** – *Marie and Pierre Curie discover polonium and radium*
They study radioactive elements and show how atoms can break down naturally.

**1911** – *Ernest Rutherford proposes the nuclear model of the atom*
Rutherford discovers that atoms have a small, dense center (nucleus), changing how scientists view atomic structure.

**1932** – *James Chadwick discovers the neutron*
Chadwick proves that the nucleus contains not only protons but also neutrons, which later play a key role in nuclear reactions.

**1938** – *Otto Hahn and Fritz Strassmann discover nuclear fission*
They split a uranium atom in a laboratory experiment. Lise Meitner and Otto Frisch explain that this splitting releases a huge amount of energy.

**1939** – *The Einstein-Szilárd Letter is sent to President Roosevelt*
This letter warns the U.S. government about the possibility of Nazi Germany building a nuclear bomb. It marks the beginning of U.S. involvement in nuclear research.

**1942** – *The Manhattan Project officially begins*
The U.S. begins its secret project to build an atomic bomb. Research centers are built at Los Alamos, Oak Ridge, and Hanford.

**1945** – *The Trinity Test: First successful test of a nuclear bomb*
On July 16, the first nuclear bomb is tested in New Mexico. It marks the start of the nuclear era.

**1949** – *The Soviet Union tests its first atomic bomb*
Ending the U.S. monopoly on nuclear weapons, the Soviets entered the nuclear arms race.

## 7.3. Map of Manhattan Project