DUMUNC XL

# Background Guide

## The Manhattan Project

***Chair:***

Chloe Chun

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# *Letter from the Dais*

Dear Delegates,

Welcome to DUMUNC XL and to the most radioactive committee of the conference—The Manhattan Project! Whether you're a war-hardened MUN veteran or just here to try and stop a nuclear apocalypse for the first time, we're thrilled to have you.

Over the weekend, you'll be walking in the boots of some of the brightest (and possibly most stressed-out) minds of the 1940s. The lab coats are metaphorical, but the stakes? Oh, those are very real. You'll juggle atomic ethics, national secrets, inter-ally distrust, and sabotage

This weekend, you will step into the shoes of some of the most brilliant and controversial figures of the 20th century. Set during World War II, your committee will take on the role of the scientists, military officials, and policymakers behind one of the most consequential projects in human history: The Manhattan Project. Your challenge is not only to navigate the scientific and logistical challenges of building the atomic bomb, but to grapple with the moral, political, and global consequences of your decisions.

This is a committee grounded in real historical precedent, but it's also your playground for debate, drama, and nuclear-powered creativity. Engage deeply, debate ethically, and don't be afraid to stir the beaker.

We challenge you to approach this committee with creativity, collaboration, and just the right amount of paranoia. Remember: someone's always watching, your fellow delegates may not be who they seem, and history is very much up for debate.

Sincerely,

Chloe Chun

*Chairs, The Manhattan Project*

## *Expectations for Debate*

Delegates in this crisis committee are expected to stay in-character throughout the weekend, representing the motives, personalities, and priorities of real or composite historical figures involved in the Manhattan Project. You may be a Nobel Prize-winning physicist, a shrewd military commander, or a skeptical politician. Know your character well and be prepared for both formal and informal debate.

This committee will feature fast-paced crisis updates, press releases, backroom diplomacy, and creative directives. All delegates are expected to:

- Remain historically grounded, while being imaginative.
- Maintain professionalism and follow the DUMUNC Code of Conduct.
- Treat one another with respect and remain engaged.

We reserve the right to remove delegates for inappropriate conduct, including discriminatory language or behavior. If you have any concerns, please speak with the dais or DUMUNC staff

# *Introduction*

The Manhattan Project was a top-secret research and development program initiated by the United States during World War II to build the first nuclear weapons. It was established in 1942 under the direction of President Franklin D. Roosevelt following the warning by physicists Leo Szilard and Albert Einstein that Nazi Germany might be working on similar technology. The project was driven by the fear that if the Axis powers developed an atomic bomb first, it would pose an existential threat to the Allied war effort.

The project was led by General Leslie Groves of the U.S. Army Corps of Engineers and physicist J. Robert Oppenheimer, who oversaw the scientific efforts at the Los Alamos Laboratory in New Mexico. Additional key sites included the Clinton Engineer Works in Oak Ridge, Tennessee (focused on uranium enrichment), and the Hanford Site in Washington (plutonium production). Together, these facilities represented a massive and coordinated national effort involving over 130,000 personnel.

The Manhattan Project was not only a scientific and military breakthrough but also a pivotal moment that raised profound ethical, political, and diplomatic questions—many of which remain relevant today. The project introduced the world to the potential of nuclear energy and the unprecedented destructive capacity it holds.

But the stakes went far beyond engineering. Delegates must contend with espionage, scientific rivalry, ethical dilemmas, and the escalating pressure of war. Germany is rumored to be developing its own bomb, while tensions between Allied powers—especially between the U.S. and the Soviet Union—simmer beneath the surface.

As delegates, you will determine not just whether the bomb gets built, but how it is used, what its legacy will be, and how the future of global warfare, diplomacy, and science will be shaped.

Key questions to consider:

- How do we manage secrecy while coordinating a vast project across multiple sites?
- Can we trust every scientist and official involved?
- Do we pursue maximum power, or cautious restraint?
- Should the bomb be used at all—and if so, when, where, and how?

# *Historical Background*

## *Overview:*

The Manhattan Project, initiated in 1942 and culminating in 1945, was one of the most ambitious and secretive scientific undertakings in modern history. Sparked by the 1938 discovery of nuclear fission by German physicists Otto Hahn and Fritz Strassmann, the possibility of unleashing unprecedented amounts of energy from splitting atoms immediately captured the attention—and alarm—of scientists worldwide. As World War II intensified, a group of exiled European physicists, including Leo Szilard and Edward Teller, feared that Nazi Germany might harness this newfound power to create a devastating weapon. In August 1939, Szilard and Albert Einstein co-signed a letter to U.S. President Franklin D. Roosevelt, urging the United States to begin nuclear research before the Axis powers could weaponize fission.

This letter led to the establishment of the Advisory Committee on Uranium, which evolved into the S-1 Committee, and eventually the Manhattan Engineering District—commonly known as the Manhattan Project. Officially formed in August 1942, the project was spearheaded by General Leslie Groves of the U.S. Army Corps of Engineers and scientific director J. Robert Oppenheimer. It was not only a scientific effort, but also a logistical and military operation, spanning multiple sites across the United States and involving collaboration with the United Kingdom and Canada under the Quebec Agreement. The project ultimately employed more than 130,000 people and cost approximately $2 billion (equivalent to over $25 billion today), while operating under intense secrecy.

The scientific work was decentralized across three primary sites: Oak Ridge, Tennessee; Hanford, Washington; and Los Alamos, New Mexico. Oak Ridge specialized in uranium-235 enrichment, employing electromagnetic separation and gaseous diffusion techniques. Hanford focused on producing plutonium-239 in nuclear reactors—an element newly isolated by Glenn Seaborg and his team. Los Alamos, under Oppenheimer's leadership, served as the headquarters for bomb design and testing. Here, theoretical physicists, chemists, engineers, and military personnel worked under extreme pressure to solve problems that had never before been encountered in human history, including achieving critical mass, sustaining chain reactions, and designing stable bomb casings.

Two types of atomic bombs emerged from this effort: a uranium-based "gun-type" bomb dubbed Little Boy, and a plutonium-based "implosion-type" bomb named Fat Man. The complexity of plutonium required a more sophisticated design, involving the simultaneous compression of the

core using explosive lenses. This design was successfully tested during the first-ever nuclear detonation on July 16, 1945, in the New Mexico desert—an event known as the Trinity Test. The explosion produced a yield equivalent to around 20 kilotons of TNT and irrevocably altered the course of global warfare and diplomacy.

Espionage and secrecy were vital to the project's integrity. Despite the project's rigorous security protocols, Soviet intelligence successfully infiltrated the operation through spies such as Klaus Fuchs, Theodore Hall, and Julius and Ethel Rosenberg. Their reports allowed the USSR to rapidly accelerate its own atomic weapons program, laying the groundwork for the Cold War arms race. Many scientists, including Szilard and Niels Bohr, expressed concern over the project's lack of international oversight and its long-term implications. These concerns were encapsulated in the Franck Report, which urged that the bomb's use be demonstrated publicly before any civilian deployment.

In August 1945, the U.S. dropped Little Boy on Hiroshima and Fat Man on Nagasaki, leading to the deaths of over 200,000 people, mostly civilians, and contributing to Japan's surrender and the end of World War II. While the mission had succeeded in its goal, the ethical consequences reverberated immediately. Debates over the morality of using atomic weapons, the responsibility of scientists in war, and the potential for nuclear proliferation remain central to global policy discussions today.

The Manhattan Project not only marked the dawn of the nuclear age but also forged an enduring legacy of tension between scientific advancement and ethical responsibility. It redefined warfare, catalyzed the Cold War, and reshaped the global order, all while operating under a veil of unprecedented secrecy. For delegates in this committee, understanding this complex history—where geopolitical urgency, groundbreaking science, and moral ambiguity intersected—is essential for navigating the debates ahead.

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## *Previous UN Action:*

Although the Manhattan Project concluded before the founding of the United Nations in October 1945, its legacy immediately shaped some of the earliest and most consequential debates within the UN. The unprecedented power of nuclear weapons—demonstrated through the bombings of Hiroshima and Nagasaki—forced the global community to confront questions about arms control, scientific ethics, and international security. As the only nation to have used nuclear weapons in war, the United States quickly found itself at the center of both condemnation and diplomatic pressure. The birth of the atomic age became one of the United Nations' defining early challenges.

In January 1946, just three months after the UN's first General Assembly convened, the

organization established the United Nations Atomic Energy Commission (UNAEC). Its purpose was to propose methods for the control of atomic energy and the elimination of nuclear weapons as tools of warfare. The U.S. introduced the Baruch Plan, which proposed the international control of atomic energy, complete disarmament of nuclear arsenals, and a verification mechanism through inspections. However, the plan required that existing nuclear powers (namely the U.S.) retain their weapons until a system of safeguards was established—an approach that the Soviet Union viewed as favoring American hegemony. The USSR refused to accept inspections without guarantees that the U.S. would relinquish its monopoly on nuclear weapons. The plan failed, and the UNAEC dissolved by 1952 without achieving its goals.

As Cold War tensions escalated, nuclear proliferation and disarmament remained central to UN discourse. In 1953, U.S. President Dwight D. Eisenhower delivered his famous "Atoms for Peace" speech before the UN General Assembly. This marked a strategic pivot in U.S. policy from military secrecy to controlled dissemination of nuclear technology for peaceful purposes. Eisenhower proposed the creation of an international agency to promote the peaceful use of atomic energy while preventing its weaponization. This led to the founding of the International Atomic Energy Agency (IAEA) in 1957, which remains one of the UN's most significant institutions in nuclear oversight.

## *Key Issues to Consider:*

**Legal and Ethical Considerations:**

The Manhattan Project presents a rare convergence of science, ethics, secrecy, and state power. Delegates must balance the rapid development of unprecedented technology with philosophical dilemmas and geopolitical risk. As you navigate crisis scenarios, directives, and speeches, consider the following key issues:

Scientific Innovation vs. Ethical Responsibility: The Manhattan Project was a feat of scientific achievement—but it also introduced humanity to weapons capable of annihilation on a mass scale.

- Should scientists be held accountable for how their discoveries are used?
- Is progress still "progress" if it leads to destruction?

Secrecy, Surveillance, and Espionage: Total secrecy defined the project. Even among colleagues, information was strictly compartmentalized. However, despite these efforts, Soviet infiltration was successful.

- How do you protect classified research while maintaining collaboration?
- To what extent is surveillance of your own personnel justifiable?
- What are the consequences if internal dissent or leaks occur?

Dissent and Internal Conflict: Not all contributors supported the end use of the bomb. Some pushed for international regulation or a demonstration instead of bombing cities.

- How should disagreement be handled within high-stakes operations?
- Is loyalty to the mission or to moral values more important?

Weaponization of Science: Delegates must face the reality that their scientific breakthroughs are being developed for destruction.

- How do you reconcile scientific ambition with the human cost of its application?
- Does the end (ending the war) justify the means?

Geopolitical Power and Post-War Consequences: The bomb could win the war—but it will also shape the postwar world.

- Should the U.S. remain the sole nuclear power, or share the technology with allies (or the world)?
- Will nuclear weapons make the world safer through deterrence—or more dangerous?

Espionage and Foreign Influence: Soviet spies were embedded within the project, shifting the course of international relations.

- How do you identify and neutralize threats from within?
- What are the risks of overreaching in anti-espionage efforts?

# *Additional Committee Information*

### *Position Papers*

- In order to be eligible for awards, a **one-page** single-spaced position paper is due the night before DUMUNC (11:59 PM EST on April 4th), outlining your delegation's position on **1** of the topics outlined. You may choose the topic and style. We would prefer them as PDFs.
- Position papers should be emailed to **tg217@duke.edu** with the email title "[WHO] Delegation Name," i.e., "[WHO] USA"

### *Preferences of the Dais*

- Do **not** prewrite any resolutions, amendments, or other materials before the first committee session.
- Conduct all **committee work within committee time and spaces** to ensure equitable access to policymaking for all parties involved.
- Be respectful to your fellow delegates and the activity of Model United Nations as a whole. Stay attentive, respectfully engage with your peers, and ensure that you are fighting for your interests well.

### *Notes on Procedure*

- We understand that as a General Assembly, some delegates may be new to Model United Nations and may need procedural assistance or reminders. Do not hesitate to tell us (e.g. passing a note) if you need a moment to catch up on procedure!
- Accordingly, to the more experienced delegates of the committee: be ready and willing to assist your less experienced peers with procedure! The chairs will look favorably upon being a team player and non-exploitative! :)

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