



HISTORICAL DISEC

TOPIC A: NUCLEAR ARMS RACE (1967)

TOPIC B: REGULATION OF THE HYDROGEN BOMB

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HISTORICAL DISEC

Authors: Valeria Granada R, Juan Sebastian Poveda B and Tejas Raman Wattamwar Time For Opening Speech: (90 seconds) One opening speech regarding both topics

DESCRIPTION OF THE COMMITTEE

The First Committee of the United Nations General Assembly, more commonly known as the Disarmament and International Security Committee, deals with and considers all disarmament and international security matters within the scope of the United Nations Charter. It seeks to promote cooperation in the maintenance international peace and security and put forth principles governing disarmament and armament regulation. All the rules and regulations of this committee can be found in Chapter IV Although DISEC cannot directly advise the Security Council's decision-making process, the UN Charter explains that DISEC can suggest specific topics for Security Council consideration. This committee will function within a timeline and context between the 1950s to 1960s, hence, it is important to take into account the historical events and all laws,

frameworks, and regulations established in the committee must remain under the timeline boundaries.

TOPIC A: NUCLEAR ARMS RACE (1967)

HISTORICAL CONTEXT

After the end of WWII, the Cold War began brewing in the veins of the United States and the Soviet Union. Pressures between the nations were becoming increasingly stronger as the former war allies grew distant and suspicious of each other. In July to August 1945 prior to the official end of the war, the Big Three (Winston Churchill, Joseph Stalin and President Harry S Truman) held a conference in the German city of Potsdam where they seeked to negotiate terms concerning the end of the second world war and the extent of the reparations imposed Germany. During this on conference, President Truman addressed Stalin in an attempt to gain bargaining power by informing the Soviet leader that the States had successfully detonated their first A-bomb (July 19 1945). However, Truman's strong attempt at gaining bargaining power with the Soviet was rendered useless as Stalin had already been informed by his intelligence network of the





American nuclear program. The western allies' suspicion of their former ally rose even further once the war was over and the Big Three had to establish a new world order to rectify the damages made by the Nazi party. The Western allies sought to organize democratic governments in various which territories were under their occupation by allowing the nations to hold fair elections to form their leadership. Unfortunately for the West, Joseph Stalin, the dictator of the Soviet Union had other ideas regarding the ideological orientation of the countries he would oversee. From 1945, Stalin implemented "satellite states" following the Warsaw pact as a defense treaty established by the Soviet Union with 7 other Eastern Europe countries (Albania, Bulgaria, Czechoslovakia, East Germany, Hungary, Poland and Romania). These nations followed Stalinist systems by forming coalition governments primarily formed out of communist parties. If there were members of the coalitions that the Soviets disliked, they would face forced liquidation, leaving the country under the mercy of Stalinist influence. Due to the nature of these Soviet buffer zones, Winston Churchill, prime minister of the United Kingdom declared "an iron curtain

has descended across the continent" as Europe had been divided by ideological orientations.. In 1947, the Doctrine" was established prompted by the Greek Civil war (1946 to 1949) and the Turkish conflict where the United States was asked to intervene in these conflicts as a communist victory in Greece would endanger the political stability of Turkey allowing for the spread of communism. As a result, president Truman asked congress for \$400 million dollars in military and economic aid to the threatened nations helping them to resist subversion and create their destinies under their ideals. The Truman Doctrine would also change the way the U.S foreign policy would work in relation to aiding other nations and the formation of NATO in 1949. This would later establish the way NATO would respond to multiple proxy wars in the rest of the Cold War. This moment is perceived as the beginning of the Cold War, a conflict between the United States of America and the Soviet Union that would last roughly 45 years.

Due to the efforts of Project Manhattan, the United States held a global monopoly over A-bombs, maintaining calm in the West. Unlucky a couple of years later from the establishment of the **Truman Doctrine** and





the Iron Curtain the USSR (with the help of spies and rogue Project Manhattan members) successfully developed their own atomic bombs. The Soviet atomic bomb project was authorized by Joseph Stalin and led by Igor Kurchatov at a former secret site named "Arzamas-16". The Soviets had been in R&D for nuclear weaponry since 1943. Due to the aid of an array of Project Manhattan members, most prominently Klaus Fuchs, providing the Soviets intricate descriptions of the atomic bomb, the USSR successfully tested their first nuclear weapon (RDS-1) in 1949 sending the world into a frenzy. The Soviet Union would conduct 715 nuclear tests around the time of this conflict. At this point with both If the superpowers were to initiate hostile interventions, the world would be up for nuclear Armageddon.

CAUSES

The Arms Race was no longer about who could develop the weapon first, it became a matter of who had the most warheads and the ability to use them. The US and Soviet Union had contrasting ideological and economic systems. While the United States focused on a capitalist-driven democratic society, the Soviets followed a

communist-socialist regime. They both wanted to impose their ideals on the rest of the world. While America saw communism as a threat to everything they stood for: Freedom, Security, Prosperity, and Democracy and Prosperity, the USSR despised the idea of capitalism and elitism as the Bolsheviks had recently overthrown the bourgeoisie when Stalin formed the Soviet Union. Due to these factors, the nations led a race to show off their military, technical, and scientific superiority. They sought to become the sole superpower in order to bestow world order (under their own terms) around the globe. By the buildup of nuclear weaponry, they hoped to have military dominance over their rivals.

REPERCUSSIONS

ECONOMIC IMPACTS:

As each superpower sought to develop a mass destruction arsenal & army worthy of making them militarily superior, most of the country's resources were allocated towards the military-industrial complex. This was due to the respective desire for political and ideological influence over the world as well as to prove the superiority of their systems,

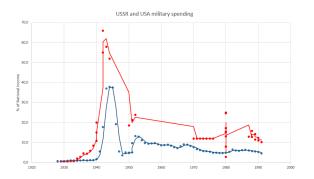




socio-political and economic.
(Socialism vs Capitalism,
Communism vs Democracy).

Life in the Soviet Union was dire, as the diverted funds led to economic stagnation and inefficiency. The centrally planned economies directed toward the armed forces led to neglect to other branches of the economy and the needs of the people such as housing, consumer goods, clothing as well as medical and educational services. In places such as Berlin, due to the scarcity in food and resources, the United States felt obligated to airlift food into Berlin as all railroads and water access had been blockaded by the Soviets. During this time, the USSR faced chronic food shortages due to declining agricultural production.

In the west, the United States economy was also being affected due to the war. Inflation was rising due to high government spending on defense, aiding European countries, and developing their nuclear/hydrogen weapons. In the 1950s a "secret" policy paper was released by the US National Security Council under the name of NSC-68. This paper would call for a quadrupling in defense spending to meet the Soviet threat.



USSR and USA military spendings (Retrieved from Nintil.com))

IDEOLOGICAL LIMITATIONS:

Communist ideals were not accepted whatsoever in the United States and Western thought was despised in the Soviet of Union. States deception were implemented in both nations to limit the input of information and control the narratives surrounding the enemy. The Soviet state exerted strict control over all sources of media, telecommunication, education, and expression. Whoever was not to comply with what the regime would mandated, face severe consequences such as persecution from the state, professional sabotage, exclusion from society, death. and other diverse consequences. Soviet propaganda would frame communism as the "movement of the future" the key to progress and everything correct, meanwhile, the West



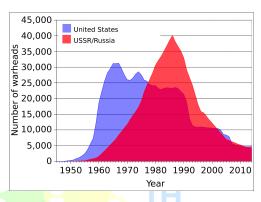


was portrayed as a decadent society that would be doomed to fall.

In the United States, the "Red Scare" was public hysteria due to fear of the rise of left ideals or communist thought. wing Simultaneously, **McCarthyism** was becoming a strong current in America where accusations towards anyone who showed true or supposed communist ideals would rise as well as portraying said individual as a traitor of the land. Under McCarthyism, an individual prosecuted for communist ideals would not face correct due process and the rights of the accused would not be taken fully into consideration.

MASS PANIC:

As of the development of the Atomic Bomb by the Soviets, the world braced itself for an all-out nuclear war. By this point in time, the near United States still held global monopoly over weapons of mass destruction, but as the Soviets advanced their development, it was evident that the US no longer held tactical control over the situation. Thousands of nuclear warheads were developed during this time, the weapons were placed in strategic places in allied countries in preparation for the worst scenario. Submarines were prepared and people feared the worst.



Number of warheads, US vs USSR (Retrieved from Wikimedia Commons)

If either the US or USSR were to take a hostile approach, there would be no safe place for any American, soviet, or European from nuclear armageddon and a third world war. Citizens from all over the world feared that nuclear war could surge at any moment. The United States government urged their citizens to prepare in order to survive a nuclear bombing.

The conflict raised a state of insecurity and vulnerability amongst global citizens, as well as a situation of fear and suspicion amongst communities. After all, the threat of spies, manipulation of the media and not knowing for certain the facts, censorship and more caused populations to distrust their communities, as well as their governments, the repercussions of the Cold War would





influence the mindsets of many even after the culmination of this war.

Due to the Cold War, the levels of trust in mainstream media decreased drastically giving birth to an era of conspiracy, suspicion and fear where the uncertainty of what was really happening, not knowing what was real from truth and creating a state of mass panic that unnerved the world.

CURRENT SITUATION

The Limited Test Ban Treaty:

The Limited Test Ban Treaty (LTBT) also known as the Partial Test Ban Treaty was signed by the US, USSR, and UK in 1963. This accord established that no nuclear test would be allowed in the atmosphere, space or underwater. Under the treaty, only underground tests would be accepted. The LTBT marked the beginning of the risk reduction for a nuclear conflict, as it was the first arms control agreement of the Cold War. Even though the treaty was successful at decreasing the spread of radioactive material in the atmosphere. It was still a challenge to verify the compliance of the

treaties by all parties, as well as establishing inspections to verify the good faith of the countries to follow the terms established.

The Cuban Missile Crisis:

The Cuban Missile Crisis (1962) marked a pivotal moment of the Cold War. During this time, tensions between the Soviet Union and United States were heightened. Under Fidel Castro's Cuba, the "prime minister" allowed the installation of nuclear weapons in their territory in order to be within range of nuking American soil. In October 1962, a U-2 spy plane photographed the ongoing installation of Soviet weapons on the island. After deliberations by President John F Kennedy, cabinet officials, and military & tactical advisors. The United States placed a naval blockade around Cuba. As a result of the Crisis, the USSR agreed to remove their missiles from Cuba if the US followed suit by removing their missiles from Turkey. During this time, the US agreed to never invade Cuba, nonetheless, the Cuban Missile Crisis left the island with a negative relationship with the United States. These events also led to a period of reduced tensions and cooperation known as the "détente".







The Economist

https://www.economist.com/international/2023/08/29/a-new-nuclear-arms-race-looms

OBJECTIVES OF THE COMMITTEE

The Nuclear Arms race as well as the Cold War were events which marked modern history and drove mankind into the world order which has become reality for us.

This committee will take place in 1967 meaning that all events from the end of the Second World War until the established year have happened and will be highly relevant during the debate. The committee should consider economic, political, and social aspects surrounding the Arms Race. Also, it is highly important for the delegates

to understand the underlying factors behind the Cold War, the context for this conflict and the ideological differences which led to this event. Having a deep understanding of the ideologies, political structures, context and role of your delegation are vital for this committee. The delegate should represent the interests of their country in accordance with the facts and historical context. Correct appropriation of the beliefs and interests of your delegation is highly important.

The committee should be able to reach some kind of resolution, agreement or treaty which will benefit the world during this time of crisis and new world order.

GUIDING QUESTIONS

- 1. To what extent would your country be affected by a nuclear conflict?
- 2. How much does your country rely on the United States or Soviet Union?
- 3. What is your country's relation with the US or USSR?
- 4. What is the ideological stance of your delegation?





- 5. What is the economic situation of your country after WWII?
- 6. Who were the leaders of the United States and Soviet Union during the Cold War?

GLOSSARY:

- Buffer Zones: a neutral area serving to separate hostile forces or nations
- Armageddon: terrible battle or war that some people think will lead to the total destruction of the world or the human race
- Proxy Wars: a war in which opposite sides use third parties as substitutes for fighting each other directly.
- Truman Doctrine: President Harry S.
 Truman established that the United States would provide political, military and economic assistance to all democratic nations under threat from external or internal authoritarian forces (US department of State)
- **Iron Curtain:** *a* political, military, and ideological barrier erected by the

- Soviet Union after World War II to seal off itself and its dependent eastern and central European allies from open contact with the West and other non-communist areas
- McCarthyism: political repression and persecution of left-wing individuals and a campaign spreading fear of alleged communist and Soviet influence on American institutions and of Soviet espionage in the United States during the late 1940s through the 1950s

SUPPORTING LINKS

- Masters, J. (2017, May 1).
 U.S.-Russia nuclear arms control.
 Council on Foreign Relations.
 https://www.cfr.org/timeline/us-rus
 sia-nuclear-arms-control
- The Editors of Encyclopaedia Britannica. (2023, December 10).
 Cold War | Summary, Causes, history, years, timeline, & facts.
 Encyclopedia Britannica.
 https://www.britannica.com/event/
 Cold-War/Toward-a-new-world-orde

r





- Nato. (n.d.). The
 Berlin airlift. NATO.
 https://www.nato.int/cps/en/natoh
 q/declassified_156163.htm
- Truman Doctrine (1947). (2022, February 8). National Archives. https://www.archives.gov/milestone
 -documents/truman-doctrine
- The Editors of Encyclopaedia
 Britannica. (2023, December 2). Iron
 Curtain | Definition & Facts.
 Encyclopedia Britannica.
 https://www.britannica.com/event/l
 ron-Curtain
- Milestones: 1945–1952 Office of the Historian. (n.d.). https://history.state.gov/milestones/ 1945-1952/truman-doctrine#:~:text =With%20the%20Truman%20Doctri ne%2C%20President,external%20or %20internal%20authoritarian%20for ces

TOPIC B: REGULATION OF THE HYDROGEN BOMB

Hydrogen Bombs, also known as H-Bombs or thermonuclear weapons, are devices that make use of atomic fission and nuclear fusion to create an explosion with severe magnitudes. This combination of processes releases massive amounts of energy, thousands of times more powerful than any existing bomb, even greater than the atomic bomb.

HISTORICAL CONTEXT

Before the World War II, multiple countries were competing towards the development of mass destruction weapons.

Between the 1930s and 1940s, the USA at power of Franklin Roosevelt was urging Albert Einstein and the scientific field to build some sort of nuclear weapon before Adolf Hitler, which a few years later the nuclear bomb was a project in development by the United States, led by the physicist Julius Robert Oppenheimer, which set off the first successful atomic explosion in 1945 in New Mexico.

Chicago Pile 1 (1942):





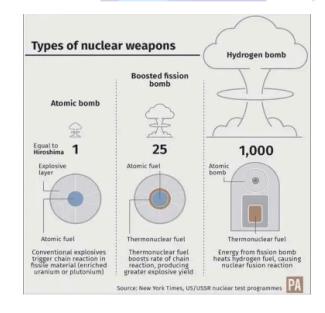
Types of nuclear bombs chart, from: https://be-orange.click/nuclear-bomb-vs-hydrogen-bomb

The first artificial nuclear reactor in history, Chicago Pile-1 (CP-1), produced the first nuclear chain reaction that could sustain itself without human intervention. Key aspects of this project were the introduction to the reactor concepts, reactor cores, control rods, and the concept of the Nuclear Chain Reaction, which explained the process in which neutrons released in fission produce additional fission in at least one further nucleus (Atomic Archive, n.d). The success of Chicago Pile-1 signaled the start of the Atomic Age and cleared the path for additional nuclear energy and weaponry research and development. Numerous scientists who participated in the project went on to work on the Manhattan Project.

Manhattan Project (1942–1945):

In the Government Top Secret Manhattan Project, the United States created and used the first atomic weapons in history before Nazi Germany during World War II. Both scientists and citizens had moral and ethical concerns about the project. One of the most contentious choices in American history was the use of atomic bombs by the United States against Japan in August 1945. The project created long-lasting effects and brought in the nuclear era.

Regardless of having successful results with past projects, the competition for mass destruction arsenal continued, US scientists started exploring a new approach in 1933, and the investigation and work with electrons from scientist Ernest Rutherford, resulted in a method of nuclear fission and nuclear chain reaction, which could result into new forms of energy that could cause even more impactful effects than the nuclear bomb. The idea of a thermonuclear







fusion bomb was first proposed by Enrico Fermi to his colleague Edward Teller in September 1941, at the start of the Manhattan Project, which spent much of the Manhattan Project attempting to figure out how to make the design of the thermonuclear bomb to work.

CAUSES

The development and investigation of the hydrogen bomb began by the United States after the successful creation of the **RDS1** atomic bomb from the USSR.

The US had to push the boundaries of nuclear technology while the world was still recovering from the atomic bomb attacks that ended World War II to decide whether to proceed with a thermonuclear bomb. A fierce debate involving scientists, politicians, the armed forces, and government representatives ensued, leading to President Harry S. Truman's historic decision to move forward in January 1950.

<u>Country's Desire for Mass Destruction</u> <u>Weapons during WWII:</u>

Countries looked for mass destruction weapons during the Cold War and World

War II not only as a means of counterattack and international security but also as a means of establishing a symbol of power among the international community. The United States created the atomic bomb in 1945 (during World War II) in an effort to stop the conflict with Japan and save more American lives. The US and the USSR developed nuclear weapons during the Cold War as a means of maintaining a power balance and as a deterrent against one another. Both nations increased their nuclear arsenals in response to their growing fear of an opposing nuclear strike. Other countries such as China, France, and the United Kingdom also developed nuclear weapons as a means of demonstrating their power and influence globally. Another motivation behind the creation of chemical and biological weapons was the need to gain an advantage in warfare and deter potential enemies.

Furthermore, the creation and development of the Hydrogen bomb or thermonuclear bomb were initiated regarding the difficulties presented for the development of the nuclear arsenal considering the huge economic, social, and ethical implications that the development of this mass destruction weapon brought. Nevertheless,

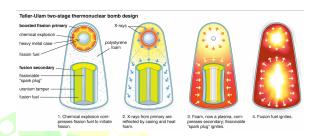




both the United States under the rule of Harry S Truman and the Soviet Union under the rule of Nikita Khrushchev had different perspectives on the development of a New Mass destruction Weapon implied, therefore, both countries sought similar approaches to a bomb that was even more powerful than the atomic bomb, to nuclear chain reactions and methods of nuclear fission to develop what resulted in the thermonuclear bomb. The atomic bombs dropped on Japan during World War II were each equivalent to just about 10,000 kilotons of TNT, while hydrogen bombs would result in a yield of about 100,000 kilotons of TNT, up to several million kilotons of TNT, which would mean more deaths.

In the United States, multiple American scientists led by Edward Teller (a.k.a "Father of the Hydrogen Bomb"), worked to convince President Truman to develop a crash program for the hydrogen bomb, after the Soviet Union detonated its first atomic bomb in 1949, which years later in 1951, in collaboration with mathematician Stanislav Ulam, Teller developed the world's first hydrogen bomb design. In 1952, the hydrogen bomb was successfully tested in

the Pacific Ocean, which results outlined that this bomb, called the Mike Shot, was 1,000 times more powerful than the uranium bomb dropped on Hiroshima in 1945. (NPS, n.d).



Teller-Ulam two-stage thermonuclear bomb design.
(Retreived from: https://www.britannica.com/technology/thermonuclear-bomb)

How does the hydrogen bomb work? (Physical - Chemical explanation)

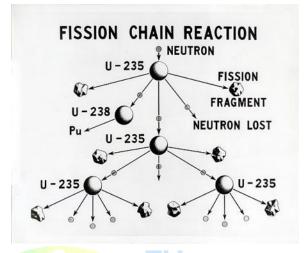
The processes of atomic fission, nuclear fusion, and nuclear chain reaction are used in the production of a hydrogen bomb. The process is started by atomic fission, which is the splitting of atomic nuclei. To do this, nuclear material is compressed using a conventional explosive, which triggers fission and releases huge quantities of energy in the form of X-rays. The nuclear fusion process, in which hydrogen isotopes such as deuterium and tritium combine to form heavier nuclei and release a large amount of energy, is subsequently started



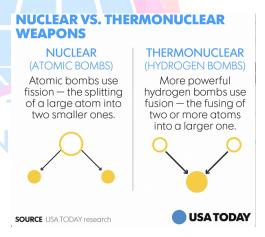


using the high temperature and pressure produced by the fission reaction. A hydrogen bomb's explosive strength is the aftermath of an uncontrollably long-lasting chain reaction that starts with the fission and fusion processes working together. Hydrogen isotopes like deuterium and tritium are used in hydrogen bombs to facilitate the fusion process, which forms heavier nuclei and releases a significant amount of energy (Arms Control Center, n.d).

The energy generated by this process is what gives a hydrogen bomb its explosive strength. The massive destructive potential of hydrogen bombs—which make them hundreds to thousands of times more powerful than atomic bombs—as well as the radioactive fallout they produce, which can have catastrophic impacts on the environment and living things, make control of hydrogen bombs a global concern.



Nuclear Chain Reaction (Retrevidef From: https://study.com/academy/lesson/the-hydrogen-bomb-d efinition-explosion-facts.html



https://www.usatoday.com/story/news/world/2017/09/03/hydrogen-bomb-vs-atomic-bomb

REPERCUSSIONS

Economical Implications:

Nuclear weapons, particularly hydrogen bombs, have wide-ranging and complex





biases, effects, and repercussions on country investments and the global economy. Research and development of the nuclear field is very expensive and elaborated, as US nuclear weapons the program demonstrates these implications, considering that between 1940 and 1967, the U.S. spent a minimum of \$5.5 trillion on its nuclear weapons program (NTI, 2008), meaning that there are very few countries that could have the acquisition of these weapons. A limited nuclear exchange could result in unacceptably large economic disruption and long-term health effects, which raises serious concerns about the possibility of significant economic disruption during a nuclear exchange. The long-term effects on international alliances and trade should also be taken into account, since nations may reevaluate their political and economic connections in the face of such a threat.

Political Implications:

There are broad political discussions regarding the acquisition of power through the development of hydrogen bombs, considering their mass destruction and how this can represent a threat within

international politics. The United States' decision to proceed with the hydrogen bomb project during the Cold War was impacted by military and political provocations, which generated intense debates among scientists, policymakers, and military personnel. There were discussions regarding the impact of having hydrogen bombs on both national and international security policies, as it was thought to have a significant impact on global opinion. Furthermore, in the context decolonization and international relations, the development of hydrogen bombs could affect the middle and long term bombs influence and military power of world powers having such weapons can affect a nation's relations with other nations as well as its standing in the international community.

Environmental Implications:

The testing of these weapons involved the release of considerable amounts of radioactive material, (some of the considered as ODS -Ozone Depleting the current Montreal Substances by Protocol), directly into the environment, causing widespread contamination of the atmosphere, aquatic, and underground



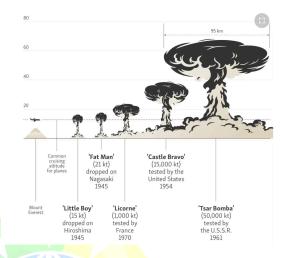


environments. The large number of nuclear tests. particularly the first nuclear explosions of the hydrogen bomb, led to severe environmental damage. Moreover, Long-term consequences of this radioactive fallout could include environmental damage, dangerous gene alterations, and genetic abnormalities. Along with causing a large blaze and the "mushroom cloud" Associated with nuclear weapons, the explosion also destroys flora, threatens wildlife, and increases the likelihood of wildfires. Since nuclear warfare, which includes the detonation of hydrogen bombs, has the potential to do extensive and permanent harm to the environment, its effects on the environment are a global concern.

CURRENT SITUATION

| Comparison Of Mushroom Cloud Heights

Selected detonations, in kilometers



https://www.rferl.org/a/tsar-bomba/31530341.html

Previous Nuclear bombs/tests and their aftermath:

Little Boy (1945): Atomic bomb dropped in Hiroshima during World War II by the US. The bomb was responsible for the destruction of the city of Hiroshima in Japan, which left 135,000 casualties (dead and injured people).

Fat Man (1945): Nuclear bomb dropped in Nagasaki during World War II by the US- The Bomb, responsible for the destruction of the city of Nagasaki in Japan, left 64,000 casualties.





Castle Bravo (1954): The greatest hydrogen bomb released by the United States during the Castle operation, detonated in the Marshall Islands. 15 islands were contaminated, and by 1963 Marshall Islands natives began to suffer from **thyroid tumors** and other health effects.

Tsar Bomba (1961): Hydrogen bomb that caused the major explosion ever caused by human beings by the USSR, denoted in Novaya Zemlya island. The blast incinerated the ground below and created a flare that could be seen from Alaska, Greenland, and Norway. This explosion made the seismic shockwave circled the globe three times.

Currently, (1967) six countries can be considered "nuclear powers" which own nuclear capacities in terms of resources, scientific. investigation, and program investment which are: The Soviet Union, The United States, The United Kingdom, China, France, and Israel. Other countries, such as India and Pakistan, had not yet tested weapons but were technologically advanced enough to build them. Argentina, Brazil, South Korea, Sweden, Australia, and Taiwan also pursues nuclear weapons programs.

OBJECTIVES OF THE COMMITTEE

The Disarmament and International Security Committee must evaluate through the debate whether the hydrogen bombs are a threat or a warfare strategy for the international community, considering all the implications (regarding social, economic, environmental, political, and ethical) and the past affects the development of the atomic bomb brought. Also, the committee should consider how the use or ban of the hydrogen bomb or its development could have beneficial or prejudicial aftermath among the international community and international conflict-solving while establishing regulation frameworks that could suit the international community standards and boundaries of international law. Moreover, the committee should consider the maintenance of international legal frameworks, the power and reach of the organ, and treaties established between a timeline of 1930 to 1967. Take into consideration that to this date, the Non-Proliferation Treaty (1970)is nonexistent, therefore, the committee should attempt to establish binding frameworks that could arrive at an agreement or control of nuclear weapons,





hence, delegates should consider failures of the NPT to take them into account for the committee to attempt creating a successful resolution for the theme.

GLOSSARY

- Atomic fission: nuclear reaction in which a heavy nucleus splits spontaneously or on impact with another particle, with the release of energy
- Nuclear fusion: nuclear reaction in which atomic nuclei of low atomic number fuse to form a heavier nucleus with the release of energy
- Nuclear Chain Reaction: process in which neutrons released in fission produce additional fission in at least one further nucleus
- RDS1 atomic bomb: The first Soviet atomic test was internally code-named First Lightning. August 29, 1949, and was code-named by the Americans as Joe 1. The design was similar to the first US "Fat Man" plutonium bomb
- Casualties: a person killed or injured in a war or accident

• Thyroid Tumors: benign (non-cancerous) or malignant (cancerous) cell growths

GUIDING QUESTIONS

- 1. Does your country have possession of a hydrogen bomb, atomic bomb, or a Mass Destruction Weapon?
- 2. Has your country been involved in tech/science research towards the development of a nuclear arsenal?
- 3. Is your country one of the six countries that have nuclear capabilities? What is their weapon status?
- 4. Has your country been affected by an attempt, test, or release of nuclear arsenal or other mass destruction weapons?
- 5. Has your country participated in nuclear test-related projects?
- 6.

SUPPORTING LINKS

 United Nations. (n.d.). UN General Assembly - First Committee -Disarmament and International Security.





https://www.un.org/en/ga/first/index.shtml

- The Editors of Encyclopaedia Britannica. (2023, October 21). Thermonuclear bomb | History, Principle, Diagram, Yield, Effects, & Facts. Encyclopedia Britannica. https://www.britannica.com/technology/thermonuclear-bomb
- Why hydrogen bomb is more dangerous than an atom bomb.
 (n.d.). NDTV.com.
 https://www.ndtv.com/cheat-sheet/why-hydrogen-bomb-is-more-dangerous-than-an-atom-bomb-1262653
- BBC News. (2023, August 3).
 Oppenheimer: What is an H-bomb? BBC News [Video]. YouTube.
 https://www.youtube.com/watch?v
 =TpX89DHbNPo
- NTI. (2008, September 30). The costs of U.S. nuclear weapons. The Nuclear Threat Initiative. https://www.nti.org/analysis/articles/costs-us-nuclear-weapons/

- The Editors of Encyclopaedia Britannica. (2023b, December 7).
 Manhattan Project | Definition, Scientists, Timeline, Locations, Facts, & Significance. Encyclopedia Britannica.
 https://www.britannica.com/event/
 Manhattan-Project
- Air & Space Forces Magazine. (2009, February 23). Making the H-Bomb |
 Air & Space Forces Magazine.
 https://www.airandspaceforces.com/article/0309h-bomb/
- atomicarchive.com: Exploring the History, Science, and Consequences of the Atomic Bomb. (n.d.).
 https://www.atomicarchive.com/index.html
- Schumann, A. (2022, November 18).
 Fact Sheet: Thermonuclear weapons. Center for Arms Control and Non-Proliferation.
 https://armscontrolcenter.org/fact-s
 heet-thermonuclear-weapons/





