Forum: Disarmament Council

Issue: The Question of the Non-Proliferation of Nuclear Weapons

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Introduction

In 1945, the first nuclear weapon, an atomic bomb, was tested by the United States of America in a desert of New Mexico. Decades later, other member states have been pressured to develop their own nuclear arsenal. Since the era of the end of the Cold War, nuclear weapons have been present as an inconceivable threat to the security of the global community. The United Nations has shown tremendous efforts in regulating the possession of nuclear weapons for the past few decades; all efforts were directed to the objective of preventing a nuclear war. Nine member states today are believed to possess a nuclear arsenal; those member states are (listed in order from highest to lower in the possession of warheads) the United States of America, Russia, United Kingdom, France, China, India, Pakistan, Israel, and the Democratic People's Republic of Korea (DPRK). The development of a nuclear arsenal is expensive; a few member states are known to be unable to provide the necessities to their citizens due to an ongoing development of a nuclear arsenal. Nuclear power states claim to only use their nuclear warheads for defending their own nation under state approved circumstances. However, this tends to be untrue for the DPRK. Despite having several nuclear proliferation treaties already in place, several member states of the UN are still threatened by the existence of nuclear warheads.

Definition of Key Terms

Nuclear Weapon

Explosive weapons causing mass destruction; its explosive capabilities are derived from from a nuclear fission, a fusion reaction, or a combination of both. Nuclear fission is the process of atoms splitting, which is the process found in fission bombs such as atomic bombs. Fusion reaction is the process of atoms fusing, which is the process found in thermonuclear bombs such

as hydrogen bombs. The blast of nuclear weapons is measured in kilotons (equivalent to one ton of TNT). Nuclear weapons are sometimes referred as "nukes".

Intercontinental Ballistic Missiles (ICBMs)

Guided ballistic missiles with a minimum range of 5,500 kilometers or 3,400 miles. These missiles are like rockets consisting of several stages, which are design for weapon delivery. ICMB have the capability of leaving the Earth's atmosphere, then re-entering to its target without annihilating itself in the entirety of the process.

Enriched Uranium

Enriched Uranium is a major component of nuclear power weapons. Uranium-235 and Uranium-238 are both isotopes of Uranium, which are highly reactive. The separation of uranium-235 and uranium-238 are crucial to a nuclear weapon's explosion. Most nuclear bombs require at least 80% of uranium-235 to produce maximum impact.

Treaty of the Non-Proliferation of Nuclear Weapons (NPT)

The Treaty of the Non-Proliferation of Nuclear Weapons, also known as the Non-Proliferation treaty is an international treaty with the objective to promote all usage of nuclear energy to be peaceful. In addition, this treaty has the goal of a nuclear disarmament to prevent the spread of nuclear weapons.

Nuclear Power State

Member states that are recognized with the possession of a nuclear arsenal.

Sanctions

A penalty to threaten a party for disobeying a law. This is often done through the withdrawal of customary trade, finance, and foreign security promises. Sanctions were often used by the United Nations as a punishment towards member states for conducting a violation to international law or endangering the security of other member states.

International Atomic Energy Agency (IAEA)

Based in Vienna Austria, the International Atomic Energy Agency is a non-governmental that promotes the peaceful use of nuclear energy. The organization also seeks to prohibit its use for military purposes, including the use of nuclear weapons. The IAEA is known for acting as the primary body in nuclear treaties including the Joint Comprehensive Plan of Action (JCPOA) and the NPT.

United Nations Office on Disarmament Affairs (UNODA)

The United Nations Office on Disarmament Affairs is a body that promotes nuclear non-proliferation, the disarmament of regimes with weapons of mass destruction, and the disarmament of regions with weapons, landmines, and small arms.

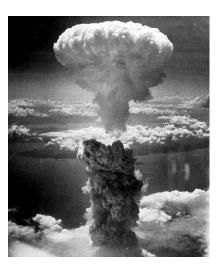
General Overview

The Manhattan Project

The president of the USA during 1939, Franklin D. Roosevelt appointed Albert Einstein and Enrico Fermi to commence the research for the development of nuclear technologies. This project was given the name "Manhattan Project". During the lifetime of this nuclear development project, the US government has employed over 120,000 employees and spent over \$2.2 billion (approximately \$20 billion 2017 USD). This project's first nuclear test in a desert of New Mexico was successful.

Hiroshima and Nagasaki

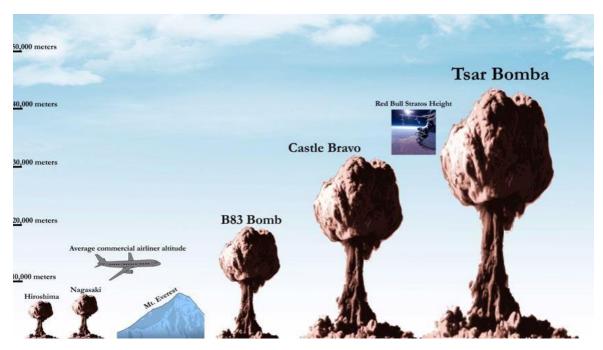
The United States dropped their first atomic bombs, codenamed Fat Man and Little Boy, on the Japanese cities of Hiroshima and Nagasaki with the hope of ending World War II. Death tolls in these cities by December 1945 were estimated between 150,000 and 200,000. Thousands more still suffer from radiation during the following decades. This was the only time in history that nuclear warheads have been fired to attack.



The mushroom cloud created by the atomic bomb that was dropped in Nagasaki

Nuclear Weapons in Modern Day

Currently, there are known to be nine nuclear power states. Out of the nine nuclear power states, India, Israel, Pakistan, and the DPRK have not yet signed the NPT. Out of all nine nuclear power states, only the USA, Russia, China, Russia, France, and India are known to possess ICMBs with the capability of travelling at ranges at least 5,500 kilometers. Over the years of nuclear development, nuclear power states have signed several nuclear disarmament treaties. The US and Russia have agreed to limit their nuclear stockpile to 2000 warheads each; this measure was effective as both nuclear power states have already dismantled several bombs with the highest destruction. In accordance to the New START Treaty, Russia has dismantled their 20 million ton missiles. Later on in 2011, the US has dismantled their 9 million ton B53 missile, which was 600 times more powerful than the bombs dropped in Hiroshima and Nagasaki. The destruction of nuclear warheads varies in an immensely large scale; any given nuclear weapon in modern day is able to annihilate towns.



The scale of the destruction and the mushroom clouds of nuclear weapons

Cold War

Immediately after World War II, The US and the Soviet Union have broken their alliance due to conflicts on different economic ideologies. This dispute instantly marked the beginning of the Cold War. The Cold War was not an actual war; in fact, this was only a 44-year standoff between the capitalist world and the communist world. Following the Hiroshima and Nagasaki nuclear bombings, nuclear weapons have started to become an inconceivable threat to the global community. With the fear of USA firing nuclear weapons to Soviet territories due to multiple disputes, the Soviets have been pressured to develop their own nuclear program and to start an arms race against the US. Several other member states have also started a nuclear research during this period in fear of a nuclear war. Despite knowing that there will not be a winner in a nuclear war, member states still developed nuclear weapons with the claim to protect their nation. As of November 2017, 2021 nuclear tests have been conducted in total and most of those were conducted during the Cold War. Nuclear Power States have been testing warheads in deserts and in oceans. Every time when the Soviets have developed a more powerful bomb, the Americans would develop an even stronger bomb to match the Soviets. At the end of the arms races and the Cold War, the development of nuclear weapons has gradually come to a stop as member states have finally realized that the possession of nuclear weapons is unnecessary.

Evaluation of the Non-Proliferation Treaty

The Treaty of the Non-Proliferation of Nuclear Weapons was signed back in 1968. The nuclear power states are segregated into two groups; one is the states which have signed the NPT and the other one is the states that have not signed the NPT or states that have opted out during the existence of the treaty. Since the formation of this treaty, China and India have adopted to a no-first use policy, which means that they will only use nuclear weapons if they were firstly attacked by one. The UK has adhered to using their nukes only if an enemy uses a weapon of mass destruction against them. The US is still unclear about their policy of their use of nuclear weapons.

The permanent five member states of the United Nations Security Council, the United States of America, Russian Federation, the United Kingdom of Great Britain and Northern Ireland, the French Republic, and the People's Republic of China are nuclear power states. These are the only nuclear power states that have signed the NPT. As part of NPT, these member states have agreed to stop developing their nuclear arsenal. In addition, these member states will eventually dismantle their nuclear arsenal. With the goal of promoting the peaceful use of nuclear energy, this treaty may seem unrealistic. There is currently no governing body enforcing the treaty; thus, these member states have no pressure to act quickly. As a result, nuclear weapons are dismantling at a sluggish rate.

On the other hand, India, Pakistan, and Israel did not sign the NPT even before the date it has entered into effect back in March 1970. The reason behind this was because the NPT only permitted five member states to possess nuclear weapons. Those three member states have not developed their nuclear program back in 1968. During 1968, five member states already possessed a nuclear arsenal. India conducted their first weapon test back in 1974 and Pakistan tested theirs in 1995. Israel has never acknowledged nor denied their possession of nuclear weapons. Scientists have not yet collected any evidence of Israel conducting nuclear testing. However, the Federation of American Scientists claims that Israel has as many as 200 nukes. The only member that has withdrawn from the NPT is the DPRK.

Key Issues

Nuclear weapons have been serving as a threat to the environment of our planet and to the global security. Out of the 2021 nuclear tests that have been conducted in total, more than 60% of them were conducted by shooting into the ocean. The impact of nuclear weapons is derived by highly radioactive isotopes; the history of nuclear testing has shown that radioactive waste is capable of annihilating lives in a region. On the other hand, threats of a nuclear missile firing could possibly lead to a nuclear war. Any nuclear weapon of modern day is capable of destroying entire cities.

The Democratic People's Republic of Korea (DPRK)

Throughout the development of DPRK's nuclear arsenal, the regime has violated several international law and the agreement of the denuclearization of the Korean Peninsula, opted out on the NPT, and threatened several member states of the United Nations. With DPRK being such an isolated member state with no close relationship with any other member states, an estimation of roughly 70% of their citizens are starving in early 2017, and yet, the regime still adopts a "military first" policy. DPRK has been developing nuclear weapons from father to son, generation to generation. Despite that some nuclear tests conducted by DPRK were unsuccessful, the hydrogen bomb tested early September has proven that every test only brings DPRK closer to achieving Kim Jong Un's dream of building a successful intercontinental ballistic missile (ICBM) capable of reaching the USA. Since Kim Jong Un succeeded the throne, North Korea has opted out on the Six-Party Talks between the US, China, Russia, Japan, ROK, and themselves; the outcomes have not been showing promising results. Hence, hostile relationships still linger between DPRK and the USA. During mid-August of this year, the DPRK has once again threatened the USA with words of firing prototype missiles to the territory of Guam. In addition, DPRK has also fired missiles above the skies of Japan, causing alarms to alert the Japanese Government. With the leader of DPRK being so malicious with his nuclear research, there are no promises of DPRK being able to properly control their nuclear arsenal once they successfully develop an ICBM. If the DPRK continues to threaten other nations with their nuclear weapons, it is believed that its neighbors, Japan and South Korea, will start developing their own arsenal to defend the DPRK.



The DPRK shows off their nuclear weapons on April 15th, 2017 in their capital city, Pyongyang

Iran

The Islamic Republic of Iran has launched their own nuclear energy program back in the 1950s. As of 2017, Iran is known to have several research sites including two uranium mines, three uranium enrichment plants, and a research reactor. Iran has ratified with the NPT back in 1970; therefore, the member state is supposed to only use nuclear energy for peaceful purposes. Iran has stated to use their nuclear program for energy use only. Iran has recently missed their dateline to publicize reports to the UN regarding their nuclear explosions experiments. The status of Iran in terms of nuclear weapons is still to be assured.

Iran Nuclear Deal

The Iran Nuclear Deal is a framework agreement formed in 2015 between the permanent five members of the UN, Germany, the European Union, and Iran to cut off every possible pathway for Iran to achieve a nuclear weapon. In accordance to this series of negotiations, Iran has to give up 97% of their enriched uranium and limit their stockpile to only from 10,000kg down to 300kg. In addition, Iran may only possess uranium enriched up to 3.67%. Moreover, Iran has to narrow their centrifuges from 20,000 down to 4,000. Lastly, Iran has to grant other parties in this deal the right to inspect Iran's progress and adherence in the deal. In return for complying with this deal, Iran will be relieved from all economic sanctions that have been ruining their nation's economy.

UN Involvement, Relevant Resolutions, Treaties and Events

United Nations

The United Nations is a collective body that wholeheartedly supports the peaceful use of nuclear energy. Over the years of nuclear development, the UN has created multiple nuclear proliferation treaties. On July 7th, 2017, the UN has passed the Treaty on the Prohibition of Nuclear Weapons in the G20 Summit. There are current 53 signatories to this treaty. This Nuclear Weapon Ban Treaty is an extension to the five-decade-old NPT; the objective is to prohibit all development, testing, stockpiling, transfer, and use of nuclear weapons.

Sanctions to the DPRK

During August 2017, the DPRK has fired missiles across the skies of Japan and threatened the US by releasing plans of firing warheads the at the US territory of Guam. The UN Security Council has passed resolution 2371 in August 2017 to tighten sanctions against the DPRK. With this sanction in place, the trade partners of DPRK will no longer trade coal, iron, lead, seafood, and all item needed to construct a nuclear weapon. In addition, North Korea was prohibited from increasing the amount of workers in foreign nations. In September 2017, the UN Security Council has passed resolution 2375. This sanction limited the volume of crude oil, refined oil products, and etc. to be imported into the DPRK. Moreover, many joint ventures were discontinued and DPRK nationals were banned from working in foreign nations.

United States of America

The USA has been a major party involved in nuclear disarmament. Two of their major involvements were the Iran Nuclear deal and the non-proliferation of nuclear weapons in DPRK. The president, Donald Trump has vowed to stop the DPRK developing nuclear weapons during the beginning of his reign. The USA has issue several sanctions against the DPRK and conducted joint military activities with the Republic of Korea near the 38th parallel. During the recent months, the USA has spent immense efforts on preventing the DPRK from achieving an ICBM with the capability of striking Washington D.C.

Timeline of Events

Date Desc	cription of event
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May 12th, 1942 The Start of the Manhattan Project

> This was the first ever project to develop nuclear weapons.

September 8th, 1944 The Beginning of the Nuclear Age

> The first ballistic missiles were produced by the Germans; giving the US the urge to produce nuclear warheads.

August 6th and 9th, 1945

The US dropped an atomic bomb on Hiroshima and Nagasaki.

Hiroshima and Nagasaki Bombings

August and October, 1957 The Soviet Union First Nuclear Weapon

Test

With reasons to distrust the US, the Soviet Union has also developed their nuclear research, starting an arms race.

Signed: July 1st, 1968 **Non-Proliferation Treaty (NPT)**

Effective: March 5th, 1970 The NPT was drafted with the hopes of preventing a nuclear warfare.

1974 **India's First Nuclear Weapon Test**

> India did not sign the NPT because during the time when the NPT was drafted, India has not developed a nuclear program.

1995 Pakistan's First Nuclear Weapon Test Pakistan did not sign the NPT because during the time when the NPT was drafted, India has not developed a nuclear program. 2003 **Six-Party Talks Begin** Six parties started hosting diplomatic negotiations to prevent the DPRK from developing a nuclear arsenal. 2006 **DPRK's First Successful Nuclear Weapon** Test On this year, DPRK has finally been able to conduct a successful nuclear missile test. July 2009 **New SMART Treaty** The US and Russia have agreed in accordance to this treaty to reduce their stockpile by a third. July 7st, 2017 First Nuclear Weapon Ban Treaty Passed The UN General Assembly passed the Nuclear Weapon Ban Treaty. However, none of the nuclear power states signed the treaty. 2016 The US Lifted Sanctions on Iran In accordance to the Iran nuclear deal, the US has to lift the sanctions that have been in place for decades.

August 2017

Sanctions Against DPRK and Threats

The UNSC passed resolution 2371 to further tighten the sanctions against the DPRK after threatened several member states.

September 2017

Sanctions Against DPRK Tightens

UNSC has passed resolution 2375. This sanction limited the volume of more goods that could be imported into the DPRK.

Possible Solutions

Combatting the increase in nuclear weapons is not an easy measure. However, the goal of only using nuclear energy for peaceful purposes is still achievable. The United Nations could still toughen sanctions against member states that are still violating international law with nuclear weapon. Without any foreign trade, imports, and exports, the nuclear power state will no longer be able to economically sustain their nuclear development program. With the fair of sanctions, member states are more likely to not use their nuclear weapons. In addition, the UN could provide member states that have not yet signed the NPT with incentives only if they sign it. When all member states have signed the NPT, nuclear power states will less likely violate the international law. Most importantly, a governing body needs to be implied to the NPT. Without a governing body, there is no party there to enforce the treaty. As a result, nuclear disarmament is currently occurring at a very slow pace.

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