

LmunA 2022

## Research report

Forum: Historical Security Council (HSC)  
Issue: Establishing rules upon the use of nuclear weapons after the bombings of 1945  
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# LMUNA

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Lorentz Lyceum  
Model United Nations  
Arnhem

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## Introduction

August 6<sup>th</sup> 1945 was a turning point in the art of war. Little Boy, a gun-type fission atomic bomb, that makes use of uranium was detonated over Hiroshima, Japan by the United States, creating an explosion of a scale that had never been seen before. Three days later, over Nagasaki, another bomb was dropped by the United States. In total, these bombs killed between 129,000 and 226,000 people, and was the last straw for Japan in the Second World War. Less than a month after these two bombs were dropped, Japan surrendered and the Second World War was effectively brought to an end.

This report will be examining the steps that the world can take to regulate the use of nuclear weapons, and to decide which countries may or may not legally be allowed to create and store nukes, all in the interest of global safety.

It must be noted that although the war may be over, the first ever use of nuclear weaponry in combat could serve as a dire warning for future conflicts, and that it is extremely risky to allow certain countries to be able to have the power to obliterate cities at their whims. We are now at a crossroads in history, and the way that this potentially world-destroying conflict is dealt with could impact the lives of all future generations of Earth.

As the HSC, this committee will simulate conditions in 1946, mere months after the U.N was created and before the first meeting of the general assembly.

## Definitions of key terms

### Manhattan Project

The idea of the first nuclear bomb began with the Manhattan Project, a massive research and development undertaking by the United States, and it resulted in the discovery and creation of the first Nuclear Bombs. Starting in 1939, the project grew until it had over 130,000 people employed, and its cost rose to US2\$Billion.

Led by J. Robert Oppenheimer, the team developed, tested, and eventually propagated the use of the first nuclear bomb in wartime.

### Nuclear bomb

The nuclear bomb itself is a weapon that weighs only 600 pounds, but can release up to the same energy as 500 kilotons of TNT. Temperatures as the bomb drops can get up to 100,000,000 degrees celsius. The destruction that it can wreak has also never been seen on our planet thus far.

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Over 130,000 people have been confirmed dead from the dropping of these two bombs, and the places where it was dropped (Hiroshima and Nagasaki) have been completely decimated. It creates a high pressure blast wave, demolishing anything in its path.

These bombs were dropped by the United States over Japan in a desperate bid to end the war, and have succeeded.

### Lesser of two evils

The idea that the nuking of Hiroshima and Nagasaki was the ‘lesser of the two evils’ was widely spread by Allied propaganda machines in an attempt to justify the mass destruction created. It involves citing the fact that many more people would have died if the originally proposed ‘operation downfall’ had been carried through, and that although innocent people may have died, a swift end of the war should be preferred to long, drawn out conflicts.

### Mutually Assured Destruction

This is a new term that has been identified and coined as the existence and importance of nukes in warfare has been revealed. If more countries have the opportunity to build a nuclear arsenal, then any little disagreement between two countries could lead to a nuclear attack, and that an attack by one superpower would certainly be met by a nuclear counter attack, in which both the attacker and counter-attacker’s nations would be annihilated.

## General overview

At the Potsdam Conference (17th July - 2nd August 1945) the Allies created and shared with Japan their terms for the end of the war. These terms with Japan were centred around the idea that Japan would unconditionally surrender, just like what had been done with Nazi Germany back in May. Since the start of the war, Japan’s Emperor Hirohito had been outspoken against acts such as Pearl Harbour, calling it ‘self-destructive’. The Allies were aware that while Hirohito may want hostilities to cease, the ever-proud Japanese military would never agree to lose that much face with such a humiliating deal, and they would likely fight to the death.

Therefore, it was no coincidence that a single day before that conference (16th July), the United States tested the world’s first nuclear bomb in the deserts of New Mexico. The detonation of the bomb showed a power that the Earth has never seen before, and in a split second, the outlook of the war changed entirely. The fact that this new knowledge and power existed was one of the driving forces for the Allied insistence upon their terms, and assured that Japan would face

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‘prompt and utter destruction’ should they not accept the deal. While the official Postdam document does not make any direct link to atomic bombs, it can be almost certainly inferred that the leaders were making veiled threats to Japan.

Until the knowledge was made available to the Allied military leaders that the nuclear bombs were ready, the plan was to conventionally prosecute and invade Japan, through land, sea and aerial means. ‘Operation Downfall’, as it was named, was set to start in late 1945, and run into spring of 1946. However, increased intelligence proved that the Japanese defences were stronger than anticipated, and the forecasted death toll was increasing, even in the millions in some estimations. The Allies had to search for options, and the new bomb of destruction that had been dropped in New Mexico proved to be a very viable one indeed.

Japan still refused to comply with the ultimatum set by the Allies, so as was promised in the Potsdam document ‘prompt and utter destruction’ was to follow. The first bomb was dropped over Hiroshima, killing over 120,000 people, and the second over Nagasaki, killing over 75,000 people and crippling both cities. Japan finally realised that they could not stand the might of these weapons, and surrendered unconditionally, accepting the loss of face.

The effects of these bombs being dropped is still being investigated, and the impacts are likely to last several generations, and the death toll and people displaced will only become higher. There are various direct impacts that dropping a nuclear weapon on a city can have. Firstly, the damage to cities will be massive. Each nuke, when dropped, creates a crater around 300 meters long and 60 meters deep. Every building with a radius of around one kilometer will be instantly levelled. Buildings up to 8 kilometers away could have damaged structures, such as broken windows and broken walls. If these bombs were to be dropped on some majorly populated city anywhere around the world, the death toll could be in the millions.

Another issue that crops up is the release of vast amounts of radiation to places around the impact zone. This dangerous level of radiation could lead to serious complications with the health of not only people living there, but first responders and medical staff who try to assist victims of the bomb.

Along with the various severe immediate effects of the blast, there are also plenty of probable lingering effects that can likely be seen in the coming years. For instance, complete social instability in the areas in question. Hiroshima, who’s function prior to the war was a center for shipping, is now completely unusable for many decades at the very least, due to the extreme levels of damage and radiation surrounding it. It is complete destruction of a kind never seen before, and the regulation of it must be conducted appropriately.

Once more nations gain the scientific knowledge and the materials to produce these nuclear weapons, there could very well be a threat of all out nuclear war. If two rival nations were to both possess an arsenal of nukes, there could be threats of the most dangerous kind, and escalation that endangers the life of millions, if not billions of people. All out nuclear war would be an unprecedented disaster, killing millions, overwhelming healthcare systems and even

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stopping a country completely in its tracks. The members of this committee must ask themselves a serious question: how can this be stopped?

## **Major parties involved**

### *United States*

The United States is the country that has invested most resources, tools and people into the development, testing and launching of these nuclear missiles. Over 130,000 people and 2 billion dollars have been invested in the effort of ending the war. After Pearl Harbor, the United States joined the war with its full force, culminating in the development and launch of nukes.

### *Japan*

The Japanese have been the last form of resistance for the Allies, and are all that remains of the Axis powers. They refused the opportunity to unconditionally surrender at the Potsdam conference to save face, and as a result they had the full might of the United States' vast army upon them.

### *United Kingdom*

The United Kingdom worked closely with the United States and aided in the production of the bomb, through loaning them scientists who were experts in fields related to the production of nukes. The UK also signed the Quebec Agreement, which was a formal agreement between the UK and the US which stated that they would collectively use their resources to discover nukes, and that neither country could use nukes against the other.

### *The Allies*

Comprising Great Britain, France, the United States of America and the Soviet Union, the Allied powers fought the axis powers on various fronts, employing modern methods of warfare, to eventually win the war. The final stretch of the war comprised of the nuclear bombs being dropped by the US on Japan, as they were the only ones who had not surrendered yet. Great Britain and France supplied the US with manpower and resources that helped assist the United States with the creation of the nukes.

### *The Axis Powers*

Consisting of Nazi Germany, Imperial Japan and Fascist Italy, the axis powers waged the war against the allies, and almost succeeding in winning. The mass prosecution of people of Jewish nature, murdering of prisoners of war and the exploitation of forced labor are just some of the war crimes that the axis powers are accused of. The only nation in the Axis Powers who were reportedly anywhere near to the production of a mass-killing nuclear weapon was Nazi Germany.

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Even so, their nuclear program was considerably inferior to the Allies (specifically, the United States'), and they had only progressed with preliminary research.

## Timeline of Key Events

- |                |  |
|----------------|--|
| December 1938  | Physicists Lise Meitner and Otto Frisch discover the concept of nuclear fission, the ability to split atoms.   |
| January 1939   | Robert Oppenheimer hears about the discovery of fission, realising that this can lead to the creation of a bomb.   |
| September 1939 | Nazi Germany invades Poland, marking the beginning of the Second World War.  |
| May 1940       | Nazi Germany attacks the Netherlands, France and Belgium. Winston Churchill is elected prime minister.   |
| June 1941      | Nazi Germany invades Soviet Russia with operation Barbarossa.  |
| June 1941      | The Office of Scientific Research and Development (OSRD) established in the United States. This federal government creates this to coordinate research and scientific development for the military during the war. |
| September 1941 | The British Chiefs of Staff consent to starting work on an atomic bomb with the support of Winston Churchill.  |
| December 1941  | Japan attacks Pearl Harbour causing the U.S. to declare war. Subsequently Italy and Germany turned against the United States. The U.S. became fully involved in the Second World War.                              |
| June 1942      | Japan's naval advance is blocked by the U.S. navy in the Central Pacific.  |
| August 1942    | The Manhattan Engineer District is officially established.   |
| September 1942 | J. Robert Oppenheimer and his team in Manhattan suggest building a <i>fast-neutron lab</i> to research rapid neutron physics and construct atomic bomb prototypes.   |

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- February 1943      The Soviet Union launches a secret program for the development of nuclear weapons under Igor Kurchatov's supervision.
- August 1943      President Roosevelt and Winston Churchill sign the Quebec Agreement, outlining the conditions for a coordinated development of scientific research on nuclear energy.
- March 1944      First atomic bomb mock-up drop experiments start from modified B-29s in Utah.
- September 1944    By signing the Hyde Park Memorandum, President Roosevelt and Prime Minister Churchill committed to continuing the study of atomic technology.
- December 1944    The first *Fat Man* bomb is assembled and used for airdrop and ground handling practice.
- May 1945      The *Little Boy* bomb is almost completed, only missing its U-235 core.
- June 1945      The United Nations charter is signed by the delegations of 50 nations.
- July 1945      First nuclear explosion in history. *Gadget* is detonated in Alamogordo.
- July 1945      The *Little Boy* is finally completed.
- August 1945      *Little Boy* is detonated over Hiroshima, killing 130,000.
- August 1945      *Fat man* is detonated over Nagasaki, killing 72,000.
- September 1945    Japan surrenders unconditionally, and the war ends.



## **Possible solutions**

### **Regulation of nuclear weapons**

Now that the technology and the capacity to produce such weapons of mass destruction exists, it would be unreasonable to assume that more and more countries would not try and create their own version of nuclear weapons. Due to this, it can be proposed that only certain countries will be given the legal approval to manufacture a specified amount of nukes. The idea that more countries need to produce nukes stems from the fact that the United States already has the knowledge to produce more nukes. Other superpowers would likely feel overly threatened by the fact that the United States holds the power to demolish their cities at the press of the button. Therefore, it is advised that at least one other country may produce nukes, to even the playing field with the United States. We could ask the United States to destroy the knowledge of the production of nuclear weapons, but we are aware that the Russian nuclear program is also gaining traction. It is an extremely tricky situation, and the best option is to let other superpowers produce nukes, and understand that the use of nukes would never be threatened, or used for fear of mutually assured destruction. If certain countries who are not deemed allowed to produce nukes attempt to research or produce nukes illegally, they can and will be punished in an appropriate manner.

### **Calling for the disarmament of all nukes and knowledge thereof**

In an ideal world, this solution would be the best. It removes the immense, overwhelming power that the United States holds over its competitors, and evens the playing field once more. The power that the US has over its competitors could very well lead to increased tensions between the great superpowers of the world, leading to a situation where millions of lives may be in danger. However, it is overwhelmingly unlikely that the superpowers, especially the United States, would agree to this, since billions of dollars have been spent by them in developing these weapons, and the ask to simply destroy them all would be tough to convince them of.

### **Allow the United Nations to regulate all nuclear materials**

This proposed solution would involve the creation of a new UN committee, designated solely to the regulation of materials used in the creation of nukes all over the world. The new committee in question would have full control of all aspects of the production process of nukes, and instead distribute fissile material to various countries for the non-threatening, regulated development of atomic energy systems. Materials such as Plutonium-239, created first by Glenn Seaborg and his team in 1940, can only be reproduced in laboratories, under specific conditions. If the United

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Nations were to hold the equipment and the uranium required to produce it, no countries that were not meant to produce nukes would produce them, and control could be achieved.

### **Allow the freedom for all nations with the technological ability to produce nukes to keep them**

Possibly the most hands-off solution possible, this entails simply trusting that the various countries, each with their own agendas and prejudices would not mass-produce nuclear bombs and certainly not use them as a threat against fellow nations.

## Further reading

- [https://www.un.org/en/ga/first/#:~:text=Resolution%201%20\(I\)%3A%20The,24%20January%201946%2C%20in%20London.](https://www.un.org/en/ga/first/#:~:text=Resolution%201%20(I)%3A%20The,24%20January%201946%2C%20in%20London.)
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