# PRHSMUN VI



Non-Proliferation in the Modern Age

**Background Guide** 

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#### **PRHSMUN VI**

#### Saturday, March 1, 2025

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# Letter from the Chairs:

Hello everyone and welcome to PRHSMUN VI! My Name is Tess Wiley and I will be your Chair for the General Assembly on Nuclear Non-Proliferation in the Modern Age. I am a junior at Pearl River Highschool and have been a member of Model United Nations since freshman year. I have attended Yale's Model UN Conference and various regional day conferences. I also participate in Journalism and the Academic Team, and am a painter, potter, and musician outside of school. This will be my first time chairing, and I am very excited to have a productive conference this year. If you have any questions/concerns, please do not hesitate to reach me:

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Hi everybody! My name is Julia Kelly and I will be your co-chair for the General Assembly on Nuclear Non-Proliferation in the Modern Age. I am also a Junior here at PRHS, and I am fairly new to Model UN. I have participated in both Yale and Boston's Model UN conferences. Outside of MUN, I am a member of our school's art and literary magazine the Tenth Muse; a swimmer, and avid reader. I am very excited for my first time chairing an event! If you have any questions/concerns, please feel free to reach me: jkelly0116@learn.pearlriver.org

#### Sincerely,

**Tess Wiley** Chair, General Assembly on Non-Proliferation in the Modern Age **Julia Kelly** Co-Chair, General Assembly on Non-Proliferation in the Modern Age



## **Committee Background:**

The United Nations is an international peacekeeping organization which succeeded the League of Nations after World War II with the aim of preventing future world wars and solving humanitarian issues. It is broken into six organs all dealing with different issues and containing different members: the General Assembly (UNGA), the Secretariat, the International Court of Justice (ICJ), the Security Council (UNSC), the Economic and Social Council (ECOSOC), and the Trusteeship Council. The General Assembly meets once a year and consists of all UN Member States, which currently consists of 193 countries. Its powers include overseeing the budget of the UN, appointing non-permanent members of the Security Council, and passing resolutions to current issues. During this conference, delegates will represent current members of the United Nations General Assembly and will simulate diplomatic discussion and resolution of the issue of nuclear non-proliferation.

#### **Introduction:**

In the modern day, eight countries have nuclear weapons. Those countries are the United States, the United Kingdom, France, Russia, North Korea, China, India, Pakistan. Additionally, it is not officially confirmed if Israel has ownership. Collectively, these countries possess approximately 12,100 warheads spread amongst themselves to varying degrees [4]. Complex issues in global security and international relations cause an increasing risk of the use of nuclear weapons. Some risk factors include regional conflicts, technological pressure to compete with adversaries, and cybersecurity issues [4]. The current nuclear situation poses a unique challenge for both armed and unarmed nations to maintain peace and stability through diplomatic conversation.





## **Background & History:**

Although their looming danger seems ever present in the world today, nuclear weapons are a relatively new advancement and did not begin development until the 1940s. After the First World War, waves of scientific breakthroughs in chemistry throughout

the 1930s opened the field of nuclear chemistry and eventually led to the bombs known as "atomic bombs" or "a-bombs." During the 1940s, the United States worked with Canada and the United Kingdom on the top-secret Manhattan Project, which developed the first two bombs eventually used on Japan. The first atomic bomb was tested on July 16, 1945 in New Mexico. Less than a month later, uranium gun-type fission bomb "Little Boy" was dropped on Hiroshima and plutonium implosion type fission bomb "Fat Man" was dropped on Nagasaki. The two drops were the only combative uses of nuclear bombs in history and resulted in over 200,000 deaths [15].

There are two main types of nuclear weapons used today: those created with nuclear fission and those created with nuclear fusion. Fission bombs, also known as atomic bombs, create explosions by splitting heavy elements like uranium and plutonium. The original Hiroshima and Nagasaki bombs were of this type, which are considered far less destructive than their fusion counterparts. Fusion bombs are also known as hydrogen bombs or thermonuclear weapons. They are the preeminent form of nuclear warheads developed by nations today, and achieve great destruction by combining isotopes of a light element like hydrogen. Although hydrogen bombs have never been used in war, they have been tested extensively and are believed to be much more destructive than atomic bombs [15]. Some other types of nuclear warheads exist, including boosted fission weapons and neutron bombs [15], but these are either less effective or less efficient to make, and therefore remain uncommon in global

arsenals.

Nuclear weapons are delivered to their target in a variety of ways, and much weaponry development focuses on the mode of transportation rather than the science behind the bomb itself. Like those used in Hiroshima and Nagasaki, early bombs dropped from aircrafts were gravity bombs. [15]. The negatives of this original strategy included limited attack range and slower response time to a counterattack. As nuclear development became more geared towards defense than offense, scientists miniaturized the bombs to enable them to be delivered quickly by strategic bombers and tactical fighter-bombers [15]. More recently, many nuclear powers have begun the development and testing of intercontinental ballistic missiles (ICBMs) and submarine-launched ballistic missiles (SLBMs), which would allow nuclear warheads to be delivered to virtually any location on the globe with high success rates. Some nations have developed systems known as multiple independently-targetable reentry vehicles (MIRVs) which could launch multiple bombs at once from a single missile [15]. As the technology around nuclear weapons has become more missile-focused, sizing has become an issue, as scientists struggle to manufacture small bombs that still cause the same amount of damage.

As technological advancement in the nuclear weaponry field speeds ahead, strategies for peacekeeping and self-protection have become increasingly essential. The gold standard for peace so far has been nuclear deterrence, which is the prevention of attacks by foreign adversaries by threatening retaliation. Nuclear deterrence is closely related to the doctrine of mutually assured destruction (MAD), which states that if one nation bombs another nation with nuclear warheads, both nations will be destroyed by continuous retaliation on both sides. While the fear of destruction has kept the peace this long, it is a delicate balance that could be disrupted by any number of nuclear events. For their own protection, many nations strive for first strike status, which is the ability for a nation to destroy their enemy's nuclear forces before retaliation could happen [15]. It is vital for states to keep the locations of their arsenals unknown in order to prevent foreign intervention. Many countries have Pearl River High School Model United Nations 6 developed early warning systems and some have attempted to develop the technology needed to intercept nuclear weapons while they remain airborne.

Nuclear weapon control is mostly managed by the leaders of government or state in nuclear powers. With the possession of nuclear weapons comes the inherent risk of sabotage by a foreign adversary, accidental deployment, or false alarms. Because nuclear business is so risky, many international agencies and NGOs have passed resolutions and conducted research to attempt disarmament and increased safety measures. Soon after the atomic bombs were used in 1945, public outrage became organized opposition. First in the form of a 1955 declaration called the Russell-Einstein Manifesto, which was signed by Albert Einstein and called for Cold War leaders to seek peaceful, non-nuclear solutions [15]. In 1957, the International Atomic Energy Agency (IAEA) was established by the UN to work towards safeguards and safety measures in the nuclear field. The Partial Test Ban Treaty was one of the first resolutions passed by the UN in 1963 and limited testing to only underground nuclear research [1]. It was ratified by the Soviet Union, the United States, and the United Kingdom. In 1968, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) placed restrictions on the nuclear actions of signatories, but major players like India, Israel, North Korea, Pakistan, and South Sudan did not sign the treaty [1]. The Comprehensive Test Ban Treaty of 1996 extended provisions stated by its Partial counterpart: it prohibited all testing of nuclear weapons for all 187 of its signatories, but the treaty still requires several key countries to sign before it is allowed to go into full effect [1, 15]. One of the most recent UN acts on nuclear weapons is the Treaty on the Prohibition of Nuclear Weapons (TPNW), which is the first legally binding agreement to fully prohibit nuclear weapons and will work towards total global disarmament. Many specific treaties exist between the United States and the Soviet Union/Russia, such as SALT I and II and START I and II, since they are the two biggest holders of these weapons. Some have expired or were never ratified, but these attempts have set a precedent for working towards peace and greater stability between the adversaries. Furthermore, small nations have become involved by becoming Nuclear-Weapon-Free Zones. Pearl River High School Model United Nations 7

The 1964 Treaty of Pelindaba banned nuclear warheads in several African countries, and the 1967 Treaty of Tlatelolco did the same in Latin America and the Caribbean [15]. Similarly, in 2006, many former Soviet nations in Central Asia established the Central Asian Nuclear Weapon Free Zone [15].

Aside from groups of countries, the International Court of Justice (ICJ) has also taken a stand on the nuclear issue. In the landmark 1996 case, *Legality of the Threat or Use of Nuclear Weapons*, the ICJ advised that any usage of nuclear warheads would violate international law, including breaches to the Geneva Convention, Hague Conventions, UN Charter, and the Universal Declaration of Human Rights [15]. Scientists have also weighed in on the ever-present fear of nuclear destruction. The Bulletin of Atomic Scientists, originally made up of Manhattan Project contributors, created the Doomsday Clock, a metaphor for the likelihood of a global catastrophe because of human actions [3]. In 1953, after intensive US and Soviet testing of thermonuclear weapons during the Cold War, the clock was set to two minutes to midnight. That time was matched in 2018, in the wake of environmental issues like air pollution and Arctic ice melting [3, 15]. Since 2023, the clock has been set to 90 seconds due to the concern that the Ukraine War or other conflicts will escalate into a nuclear exchange [3].

The answer to the issue of nuclear weapons is not as simple as total disarmament, which would likely be extremely difficult to enforce. Proponents of disarmament argue it would decrease the likelihood of a nuclear war and prevent accidental exchanges. On the other hand, opponents of the solution believe the world is currently at nuclear peace and disarmament would undermine deterrence as a viable stabilizer [15]. World leaders from a variety of countries have advocated for nuclear disarmament, including the former Soviet head of state Mikhael Gorbachev, who presented a three-stage plan for disarmament in 1986. Additionally in 2009, United States President Barack Obama advocated for a world without nuclear weapons in Prague [15]. The debate about whether to completely remove nuclear weapons still continues to this day.

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#### **Current Issue:**

Currently, very few nations actually own nuclear weapons, but together the eight owners have conducted over 2,000 nuclear detonations for testing and demonstration [15]. NATO member states without ownership of warheads are allowed to participate in planning and usage of warheads through the sharing state system with the United States. To address the ultimate threat of Russia in Europe, the U.S. stores nuclear weapons in Germany, the Netherlands, Belgium, Italy, and Turkey [9]. The United States



alliance with the United Kingdom and France, both of whom own their own nuclear weapons, provides more security and protection from Russia for Western Europe.

The Arctic region has become a hotspot for nuclear storage and testing, with Russia using the Arctic

for development and nuclear bases [13]. Norway was originally given insight into the level of Moscow's involvement when elevated levels of Cesium-137, a common byproduct of nuclear testing, were found on Norway's Arctic border with Russia. Russia retaliated to Norway's claims by attacking NATO for their militarization of the region. Russia frequently uses the Arctic to test new nuclear-powered weapons, such as the Burevestnik cruise missile and the Poseidon torpedo [13]. Their rate of developing nuclear reactors in the Arctic is concerning to many nations, as the number has increased by 30% in the past 5 years, and there will likely be nearly 120 nuclear reactors under Russia's control in the Arctic by 2035 [13].



As the Arctic is used more frequently for nuclear testing, development, and storage, melting ice due to climate change means the ocean is also used for global trade routes at a growing rate. Ship traffic in the Arctic has increased by 37% over the past ten years, and will likely continue to grow [11]. The Arctic is considered the most nuclearized area in the world [11], and there is a constant threat that the mass amounts of trade and nuclear testing will come into contact and lead to global tension. The close quarters of the

Arctic Ocean's trade and nuclear development has created tensions between NATO, China, and Russia [10] is a situation that should be monitored.

The African continent stands out as mostly non-nuclearized. No countries in

Africa actively store nuclear weapons, and all except South Sudan are part of the NPT. Firstly, Nigeria individually submitted a declaration to the UN confirming it does not own, possess, or control nuclear weapons [15]. Additionally, South Africa was the only country to develop and build, and then voluntarily dismantle their own



nuclear warheads, which they did in 1989 [15]. They continue to have nuclear power plants, but do not store weapons. Later, Libya ran a nuclear program, but halted it in 2003. Lastly, Egypt is the most nuclearized country in Africa, and has a history Pearl River High School Model United Nations 10

of pursuing the construction of nuclear warheads. They are a supporter of non-proliferation, but have constructed four Russian-supplied nuclear reactors in 2024 [5].

The United States and Russia have remained the two biggest nuclear stockholders, with Russia possessing 5,580 and the United States possessing 5,044 as of January 2024 [4]. Since the first Cold War, tensions have remained between the two superpowers, who have both consistently made major advancements and developments in nuclear technology. Disputes have broken out over several regional conflicts, including the war in Ukraine, which the Biden-Harris administration was highly opposed to. Many high ranking officials believe the world is currently in a second Cold War, with the second pole to the US now being China instead of the Soviet Union [8]. The main point of contention today is China's objective to take over Taiwan, which could lead the United States to becoming involved in the region [8].

Other regional tensions and recurring conflicts threaten possible nuclear escalation. Between Pakistan and India, a violent history and a checkered past with



diplomacy leave the two nuclear powers in a state of delicate peace. The two nations mostly exchange blows over the contested Kashmir region, an area of Muslim majority which both claim, and hostility stems from the 1947 Partition of India. India has approximately 164 warheads, and Pakistan has approximately 170 [7]. An accidental firing of a missile from India to Pakistan in 2022, allegedly caused by a technical malfunction, reignited tension between the

nations [6]. Though they have both pledged not to use their warheads, any small exchange across the border could break that agreement.

One of the world's most concerning nuclear hotspots is North Korea. The small nation is a tightly censored dictatorship and possesses 50 warheads [2]. The issue in North Korea is not their stockpile, but rather their unpredictable leaders who Pearl River High School Model United Nations 11 use fear mongering over their isolated nation. As recently as October of 2024, Kim Jong Un threatened to use nuclear warheads against South Korea in the ongoing war to dominate the peninsula [12], and has called the United States a nuclear threat. In the Middle East, Israel's decades-long quest to take back the West Bank of Palestine has brought up worries that they may use a nuclear arsenal. Israel employs a policy of deliberate ambiguity, wherein they refuse to confirm or deny whether they possess nuclear weapons. However, experts estimate Israel may have approximately 90 warheads [4]. In November of 2023, during the war against Hamas, junior Minister Amihay Eliyahu called for the dropping of a nuclear bomb on Gaza [14]. Though this has not occurred, Israel has proved they are willing to pour massive amounts of resources into the war in Gaza, and they have not yet signed the NPT [14].

Russia's invasion of Ukraine in early 2022 brought up concerns about another major regional conflict. Since the war's beginning in 2014, Ukraine has been on the defensive against their much stronger neighbor. Germany, the UK, and the United States financially and militarily support Ukraine, and foreign intervention has been a large factor to Ukraine's benefit. However, many experts argue western powers are not doing enough to aid Ukraine, and the smaller country will find it hard to win the war [8]. The Biden-Harris administration has faced accusations of being intimidated by Putin's threats of nuclear war [8], and when one country is fearful, the doctrine of nuclear deterrence is ineffective. Russia is currently spending 7% of their GDP on defence and military development [8]. Experts and foreign powers alike are concerned Moscow may use their large arsenal in the fight for Ukraine, which would lead to western powers getting involved in retaliation.

Because of the numerous regional and transoceanic tensions that exist in the world's current geopolitical atmosphere, the issue of nuclear technology and non-proliferation is extremely important. It is vital to prevent any nuclear exchanges, because a small dispute could spell involvement for the globe at large. The task of this General Assembly is to use diplomacy to work towards a safer world with reduced risk of nuclear escalation.



# **Focus & Consider Questions:**

Focus questions emphasize important facets of the issue at hand which may be discussed during the conference sessions.

- Is disarmament the path towards greater global stability and peace? If so, how will disarmament be established?
- How might international trade and freedom of the seas be affected by the presence of nuclear warheads in the Arctic?
- Is there enough regional balance in nuclear weapons possession to apply the doctrine of nuclear deterrence?
- What is the environmental impact of nuclear testing in the Arctic and other regions?

Consider these questions when creating your paper -

- What is your person's position on the topic?
- Who are your allies? Enemies?
- What could my person stand to gain from this conflict?
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