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Disarmament and International Security Committee (DISEC)

#BACKGROUND GUIDE

Disarmament and International Security Committee

Topic A: Nuclear Disarmament

Topic B: Militarization of Space

HISTORY OF THE COMMITTEE

The Disarmament and International Security Committee (DISEC) is the First Committee of the United Nations.[1] It was established with the General Assembly of the United Nations in 1945, and oversees all military matters, with a special focus and target on multilateral work to reduce the number of armed conflicts, whether they be fought with firearms or nuclear weapons and other weapons of mass destruction.[2] DISEC arguably is, and always has been, the single most important committee of the United Nations because of its jurisdiction on international security, particularly as the committee was established in the aftermath of World War II, and the specter of global war loomed throughout the Cold War. The First Committee is the only UN committee that is entitled to verbatim coverage in records, showing its high prioritization within the United Nations.[3]

DISEC is responsible for several landmark United Nations Documents, including Resolution 1, which sought to ban nuclear weapons due to their destructive power in early 1946, the first General Assembly resolution that was co-sponsored by all states who were members at the time (Resolution 1378, 1959), as well as special actions on the topic of disarmament.[4] Resolutions 1 and 1378 both demonstrate DISEC's commitment to ensuring a safer world by attempting to limit the spread of nuclear weapons and proposing general and total disarmament respectively.[5] While neither of these resolutions have come to fruition yet, they nevertheless set the goal of peace in the world, and showed the United Nation's commitment, as well as that of the leading powers in the world, to creating a safer, more peaceful, and ultimately better international order.

Beyond the above, the First Committee is the United Nations committee responsible for working with the International Atomic Energy Agency on the *Non-Proliferation Treaty* (NPT) and for leading the Conference on Disarmament (CD).[6] The former is the landmark treaty that seeks to stop the proliferation of nuclear weapons and eventually a nuclear-weapon free world, and the latter is more focused on general peace-related issues, recently incorporating the prevention of an arms race in outer space.[7] Both the NPT and the CD deal with the topics of this committee at conference. While the CD has generally run into issues of divisions between nuclear powers and non-nuclear powers, and more recently, space capabilities, it has generally focused international

1 "Disarmament and International Security (First Committee)," United Nations (2017). http://www.un.org/en/ga/first/. Site visited September 1, 2018.
2 Ibid.
3 Ibid.
4 Ibid.
5 Ibid.
6 "Feature: The UN General Assembly's First Committee – disarmament and international security issues," United Nations News. December 27, 2012. https://news.un.org/en/story/2012/12/429112-feature-un-general-assemblys-first-committee-disarmament-and-international. Site visited September 1, 2018.
7 Ibid.

conversations on new and emerging issues in addition to older issues that become more prevalent.[8]

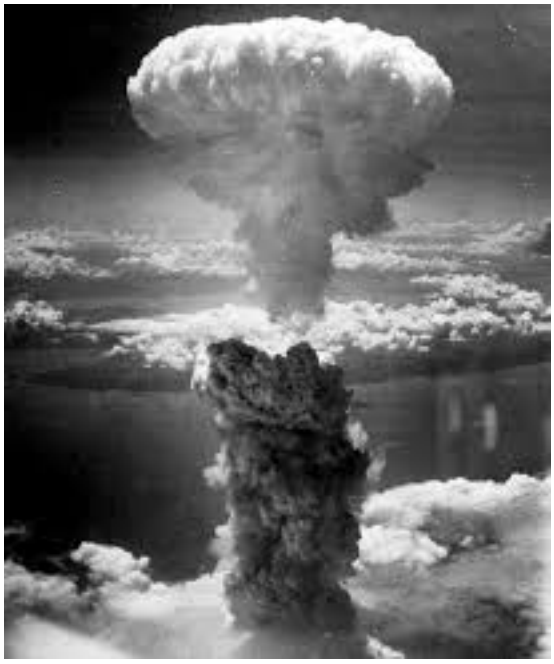
Ultimately, it is the role of DISEC to try and limit violence in the world and the ensure more peace through less conflict through disarmament.

8 Ibid.

TOPIC A: NUCLEAR DISARMAMENT

Statement of the Problem

Understanding Disarmament



Nuclear disarmament refers to the dismantling of nuclear weapons from countries that currently possess them.[9] The Disarmament and International Security Committee (DISEC) was established in 1945 with the rest of the United Nations, the same year as the first nuclear weapons were tested and used.[10] Its first resolution actually dealt with addressing the issues of using atomic energy for destructive purposes, and DISEC has never been far removed from the topic since.[11] Disarmament is based upon three fundamental premises. First, states with nuclear weapons would pursue means to remove and permanently disable and disassemble those weapons. Second, states with nuclear weapons wield a much greater amount of political power than those that do not possess those weapons. Third, the presence of nuclear weapons in the world, regardless of the state or actor that controls them, are inherently dangerous and a threat to international order. There are currently nine states in possession of nuclear weapons: the United States, Russia, Great Britain, France, China, Pakistan, India, Israel, and the Democratic People's Republic of Korea (DPRK or North Korea).[12] While the aforementioned nine nations have nuclear weapons, there are four nations to have possessed nuclear weapons at one point and then have voluntarily disarmed. These states are Belarus, Ukraine, Kazahkstan, and the Republic of South Africa.[13]

9 "Nuclear Weapons," United Nations Office for Disarmament Affairs (2018). https://www.un.org/disarmament/wmd/nuclear/. Site visited May 19, 2018.

10 "Functions and Powers of the General Assembly," United Nations (2018). https://www.un.org/ga/about/background.shtml. Site visited May 19, 2018.

11 "Disarmament and International Security (First committee)," United Nations (2018). http://www.un.org/en/ga/first/. Site visited May 19, 2018.

12 "Nuclear Weapons: Who Has What at a Glance," Davenport, Kelsey and Reif, Kingston (March 2018). https://www.armscontrol.org/factsheets/Nuclearweaponswhohaswhat. Site visited May 19, 2018.

13 "For a responsible approach to nuclear disarmament and non-proliferation," Ministry of Foreign Affairs of the Republic of Belarus (2013). http://mfa.gov.by/en/publications/review/infoprojects/fd59603ce4faa3da.html. Site visited May 19, 2018; "Nuclear Disarmament South Africa," Nuclear Threat Initiative (July 13, 2017) .http://www.nti.org/analysis/articles/south-africa-nuclear-disarmament/. Site visited May 19, 2018.

Disarmament is crucial for more equitable global politics, as nuclear weapons provide a significant military threat and confer political power to their possessors, as they are seen as symbols of military and industrial power. This aspect of nuclear weapons makes disarmament particularly challenging, as it requires nations to give up their political power and military deterrents. At the same time, having some states as nuclear states and some states as non-nuclear states (those that do and do not possess nuclear weapons respectively) concentrates international political power in the hands of those nations that do possess nuclear weapons. Consequently, the fundamental challenges facing nuclear disarmament, that it requires nations to forfeit international political and military power, are the very two things that make nuclear weapons so powerful – that they virtually guarantee those two same traits.

Why is Disarmament Important?

The United Nations General Assembly has stated that nuclear weapons pose a grave threat to human civilization.[14] As long as states have nuclear weapons, or significant numbers of nuclear warheads, those states will destabilize global political structures, and could even result in a nuclear exchange in an extreme circumstance. Even a limited nuclear exchange could result in a mass extinction killing countless individuals as a consequence of radiation and nuclear winter resulting in crop failures and famine.[15] Consequently, the United Nations is left with no choice but to attempt to limit the chances of such an exchange from ever happening. Disarmament, by reducing nuclear stockpiles, addresses this concern, as without nuclear weapons, it is impossible to have a nuclear exchange and nuclear winter. In other words, disarmament works to reduce the probability of nuclear war by eliminating the very weapons it would require – it does not necessarily work at ameliorating political relationships between the countries that have nuclear weapons, although there have been several bilateral treaties concerning disarmament that also address political interactions. Those treaties will be covered in the **Past Actions** section of the background guide.

A distinction must be made between disarmament and non-proliferation. The former, as stated above, is concerned with permanently reducing, hopefully eliminating, the nuclear weapons capability of a nation. The latter, however, focuses on preventing additional countries from acquiring nuclear weapons, and seeks to prevent the spread of rather than actively reduce existing nuclear stockpiles.[16] Focusing on disarmament allows for a conversation about how to change global political structures in such a way that eliminates the distinction between countries

14 "Resolutions and Decisions adopted by the General Assembly during its Tenth Special Session," United Nations, General Assembly (1978). A/S-10/4 (Section III, Clause 47).

15 "When Carl Sagan Warned the World About Nuclear Winter," Francis, Matthew R (November 15, 2017). https://www.smithsonianmag.com/science-nature/when-carl-sagan-warned-world-about-nuclear-winter-180967198/. Site visited May 19, 2018.

16 "Treaty on the Non-Proliferation of Nuclear Weapons," United Nations (2018). https://www.un.org/disarmament/wmd/nuclear/npt/. Site visited May 19, 2018.

with nuclear weapons and those countries without nuclear weapons. Nuclear disarmament aims to achieve this goal by completely removing all nuclear weapons from the planet so they can no longer be used as either a deterrent or an offensive weapon, equalizing the military and political powers of all nations, and consequently reducing the risk of war and conflict.

However, there are critics of nuclear disarmament, principal among these being John J. Mearsheimer, a prominent political scientist. Mearsheimer acknowledges that while nuclear weapons inherently raise the stakes of conflicts with substantial negative consequences, nuclear weapons also function as a powerful deterrent.[17] Deterrence is inextricably linked to mutually assured destruction (**MAD**); the concept is that as long as two states have nuclear weapons, they will not seek to use those weapons, as that would trigger a nuclear response, ensuring destruction. Mearsheimer's argument takes this theory one step further by qualifying reasons for nuclear armament; his example is that of Ukraine after the fall of the Soviet Union, and he argues that Ukraine needed a nuclear deterrent to prevent Russia, the Soviet Union's successor and a nuclear weapon state, from encroaching on its territory or causing conflict through other means.[18] The logical application of Mearsheimer's argument is that as long as states are in positions in which they fear another state, particularly a bordering state or a regional rival state, and especially if that adversarial state is a nuclear one, that no state would disarm because that would cause a power disparity between the two states. In other words, critics argue that there are instances in which nuclear weapons actually "promote peace."[19] Any discussion of disarmament must start with a basic political trust between nuclear nations, as only then will states be certain that their lack of a nuclear deterrent will not matter.

The Non-Proliferation Treaty and Disarmament

The **Non-Proliferation Treaty** (**NPT**), signed in 1968, is the most important international treaty for both nuclear disarmament and non-proliferation. Articles I and II seek to prevent states not in possession of nuclear weapons, or non-nuclear weapon states (NNWS), from acquiring them.[20] Article VI requires parties of the Treaty to commit to a "cessation of the nuclear arms race at an early race and to nuclear disarmament."[21] When taken together, these articles prohibiting nuclear proliferation and requiring disarmament make the **double bargain**.[22] The double bargain seeks to address the concerns that Mearsheimer alluded to concerning the unequal power dynamics between nuclear and non-nuclear states by setting the goal of reducing completely eliminating nuclear weapons from countries' arsenals. The alternative of encouraging all nations

17 "The Case for a Ukrainian Nuclear Deterrent," Mearsheimer, John J. In *Foreign Affairs*, (Summer 1993). Pg. 50.
18 Ibid, pg. 50.
19 Ibid, pg. 51
20 "The Treaty on the Non-Proliferation of Nuclear Weapons (NPT)," United Nations (2005). http://www.un.org/en/conf/npt/2005/npttreaty.html. Site visited May 19, 2018. Articles I and II.
21 Ibid, Article VI.
22 "Creating 'Nuclear Order'," Oznobishchev, Sergey. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav. New York, 2011. Pgs. 181-182.

to develop nuclear weapons to combat the political and military strength of nuclear nations inherently increases the risk of an accidental nuclear conflict simply because there would be more weapons and systems liable to initiate hostilities. Consequently, disarmament is the only feasible option for leveling the diplomatic playing field and reducing the dangers of nuclear weapons.

However, while the NPT has been successful for nearly 50 years at reducing the dangers of nuclear weapons, it has not come without shortfalls regarding disarmament. The nuclear weapon state countries at the time of the treaty's inception, the United States, the Soviet Union (now the Russian Federation), China, France, and Great Britain, all still have substantial nuclear arsenals, and their commitment to disarmament is halfhearted at best.[23] Their unwillingness to disarm demonstrates the challenges of achieving disarmament without political trust, and it preserves the current status quo of the five nuclear countries wielding substantial political and military power. Furthermore, there is the issue that there are currently four states that have acquired nuclear weapons against the NPT (Israel, India, Pakistan, and the DPRK), and getting these states to voluntarily disarm will be exceedingly difficult, as they developed nuclear weapons as a means of defending themselves from the aforementioned five nuclear countries.[24]

When writing working papers and draft resolutions, delegates should think about balancing disarmament against international security and political power, as disarmament cannot be done with unwilling nuclear parties. Delegates should consider how to balance the potentially competing and oppositional policies and perspectives of nuclear countries to achieve disarmament, and what positions would be unreasonable for nuclear nations to agree to, even if they all have to do the same thing.

A Brief History of Nuclear Proliferation

Nuclear disarmament is intricately connected to nuclear proliferation, as only states that have developed nuclear weapons are capable of disarmament. On July 16, 1945, the Manhattan Project, a top secret group of scientists organized by the United States, successfully detonated the world's first nuclear weapon designed to be used in World War II, and marked the beginning of the atomic era.[25] The story of the Manhattan Project, however, began in 1938, when Otto Hahn and Fritz Strassmann, two German scientists, discovered the process of **nuclear fission**.[26] Nuclear fission is when an atom of a radioactive isotope of an element, such as Uranium-235, loses at least one neutron, a particle in an atom's nucleus. In a self-sustaining

23 Introduction: the Present Nuclear Order, How it Came About, Why it Might Not Last" Blix, Hans. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav. New York, 2011. Pg. 7.
24 Ibid, pg. 7.
25 "Trinity Site – World's First Nuclear Explosion," United States Department of Energy. 2018. https://www.energy.gov/management/trinity-site-worlds-first-nuclear-explosion. Site visited June 10, 2018.
26 "Nuclear Fission," Atomic Heritage Foundation. June 4, 2014. https://www.atomicheritage.org/history/nuclear-fission. Site visited June 10, 2018.

reaction, each atom that decays releases a neutron that forces another atom to decay, like a string of dominoes set up so that knocking down a single domino sets a chain reaction off that topples the remaining ones. If the dominoes fall and do not have others to knock down, the process stops, like a nuclear reaction. There are two main sources of fissile material for nuclear weapons, uranium-235 and plutonium.[27] The bomb tested on July 16 was an implosion weapon with plutonium as its fissile material.[28] Less than three weeks later, the United States dropped a uranium nuclear bomb on the Japanese city of Hiroshima on August 6, 1945. Three days later, the United States used a plutonium nuclear weapon on Nagasaki. These two instances are the only times that nuclear weapons have been used in conflict, and while the exact consequences are unknown, an estimated 105,000 Japanese citizens died in from the two nuclear weapons.[29]

While fewer individuals died in both blasts than in the firebombing of Tokyo, one should nonetheless pause and acknowledge that two bombs killed a tremendous number of people with startling ease, and that numbers alone fail to quantify the effects of the two nuclear weapons. Regardless of whether one believes that such actions were justified or not, both Hiroshima and Nagasaki serve as solemn, stern reminders of the destruction nuclear weapons can cause, and that they can have catastrophic consequences. The first United Nations resolution ever actually sought the "elimination from national armaments of atomic weapons and of all other major weapons adaptable to mass destruction" in January of 1946.[30]

After the end of World War II, the United States was the sole nation in possession of nuclear weapons and the knowledge to produce them. However, the advent of the Cold War and the international prestige and power that came from nuclear weapons drove states to pursue them. On August 29, 1949, the Soviet Union successfully detonated its first nuclear weapon.[31] Three years later, on October 3, 1952, Great Britain became the third nation to successfully detonate and possess nuclear weapons.[32] While Great Britain was the third nation to acquire nuclear weapons, doing so placed Britain on a different footing than before; while it was losing its empire to independence movements and political power to the United States and the Soviet Union, the bomb solidified that even though Britain was in relative decline, it was still a tremendously powerful state. Beyond political importance, Britain also had a strategic interest in acquiring nuclear weapons, as it gave them a deterrent against potential Soviet aggression.[33] In other

27 Trinity Site – World's First Nuclear Explosion," United States Department of Energy. 2018. https://www.energy.gov/management/trinity-site-worlds-first-nuclear-explosion. Site visited June 10, 2018.
28 Trinity Site – World's First Nuclear Explosion," United States Department of Energy. 2018. https://www.energy.gov/management/trinity-site-worlds-first-nuclear-explosion. Site visited June 10, 2018.
29 "The Atomic Bombings of Hiroshima and Nagasaki," The Avalon Project. 2008. http://avalon.law.yale.edu/20th_century/mp10.asp. Chapter 10. Site accessed June 16, 2018.
30 "Resolutions Adopted by the First Committee," United Nations. January 24, 1946.
31 "Soviet Atomic Program – 1946," Atomic Heritage Foundation. June 5, 2014. https://www.atomicheritage.org/history/soviet-atomic-program-1946. Site visited June 10, 2018.
32 "British Atomic Bomb Project," Atomic Heritage Foundation. March 16, 2017. https://www.atomicheritage.org/history/british-atomic-bomb-project. Site visited June 15, 2018.
33 "Operation Hurricane," The National Archives. http://www.nationalarchives.gov.uk/lms/1951to1964/lmpage_oper_hurr.htm. (2017). Visited June 15, 2018.

words, nuclear weapons were important for preventing other states from using nuclear weapons or otherwise threatening the safety of a state. The next two nations to acquire nuclear weapons gave similar reasons, and were France in 1960 and China in 1964. French President Charles de Gaulle advocated for nuclear weapons in order to maintain France's decaying position in the world, similar to that of Britain, and as a deterrent from Soviet encroachment in Europe.[34] China developed its nuclear weapons program as a means to prevent war with capitalist states, and that developing nuclear weapons was the only way to ensure its survival.[35]

Collectively, the United States, the Soviet Union, Great Britain, France, and China constitute the permanent five (P5) members of the United Nations Security Council, and each has veto power over any measure that the council discusses. Their status as P5 countries and their possession of nuclear weapons created and still perpetuates a power discrepancy between the states that do possess nuclear weapons and those that do not. This divide was further solidified with the Non-Proliferation Treaty, as while it operates with the goal of reducing the total number of nuclear weapons on Earth to zero, it creates two separate classes of countries based on whether or not they possessed nuclear weapons on January 1, 1970.[36] At the time, the aforementioned five nations were the only ones known to possess nuclear weapons.

Nuclear Weapons and Non-Permanent Five Countries

However, while the NPT was generally effective at preventing nuclear proliferation, India continued its nuclear weapons program and on May 18, 1974, detonated a plutonium bomb.[37] India refused to follow the NPT because of the power discrepancy between nuclear and non-nuclear states and potential future conflicts with neighboring China.[38] India's pursuit of nuclear weapons demonstrated that the mere presence of nuclear weapons can destabilize international politics and drive more countries to obtain nuclear weapons. Even though India's actions and reasons from over 40 years ago may seem irrelevant to modern discussions of disarmament and non-proliferation, its emphasis on both security and international political power was something that the Soviet Union, Great Britain, France, and China all expressed with their nuclear programs.

After India tested its nuclear weapon in 1974, the nuclear weapon landscape remained relatively stable for almost 20 years with two notable exceptions. On September 22, 1979, the United States detected radiation consistent with a nuclear weapon detonation in the South Indian Ocean.[39] No

34 "French Nuclear Program," Atomic Heritage Foundation. http://www.atomicheritage.org/history/french-nuclear-program. (2017) Visited June 15, 2018.
35 "Departing Revolution," Jian, Chen. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). pg. 237.
36 *Treaty on the Non-Proliferation of Nuclear Weapons*, United Nations. 1968. Articles I, II.
37 Smiling Buddha: 1974," Nuclear Weapon Archive. http://nuclearweaponarchive.org/India/IndiaSmiling.html. (2001). Visited June 15, 2018.
38 "The Indian Nuclear Program," Kapur, Paul S. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). Pg.12.
39 "South Africa," Nuclear Threat Initiative. http://www.nti.org/learn/countries/south-africa/nuclear/. (2017). Visited June 15, 2018.

nation claimed responsibility for the test at the time, but it is now generally accepted that South Africa and Israel jointly conducted the test.[40] We shall return to South Africa and its nuclear program in the next section for a more thorough discussion of its nuclear program. The second exception was the first allegation of an Israeli nuclear program that came from the *Sunday Times* on September 13, 1986, but Israel has neither explicitly confirmed nor denied its program's existence, following a policy of nuclear ambiguity.[41] Former Israeli Prime Minister Ehud Olmert listed Israel along with the other known nuclear weapon states in an interview in December 2006, strongly suggesting that Israel does have a nuclear weapons program, and likely pursued such a program given regional hostility.[42] Israel believed that the only way to ensure its safety and security was to have a nuclear deterrent, even though no neighboring nations in Israel's vicinity in the Middle East had or currently has nuclear weapons. Israel has repeatedly been threatened with annihilation by neighboring or regional countries, and consequently sought to protect itself.[43]

The next state to claim nuclear weapons technology was Pakistan in 1994 when former Prime Minister Nawaz Sharif stated: "I can confirm Pakistan possesses [an] atomic bomb."[44] However, Pakistan presented no proof, and there was no evidence of testing or radiation as had been the case with other nations testing weapons, such as the 1979 South Indian Ocean detonation. On May 11, 1998, India conducted its first tests since 1974, detonating three nuclear weapons underground within 90 miles of the India-Pakistan border.[45] On May 28, Pakistan publicly detonated a nuclear weapon in response to the Indian tests earlier the same month, and detonated a second warhead on May 30, proving that Pakistan too possessed nuclear weapons.[46] These tests and their timing in relation to India's tests strongly suggests that Pakistan developed nuclear weapons as a deterrent to potential Indian aggression, and that it pursued nuclear weapons after India first acquired its own weapons.[47]

The country to most recently acquire nuclear weapons is the Democratic People's Republic of Korea (also called North Korea or the DPRK). On February 10, 2005, the DPRK announced that it had produced a nuclear weapon and stated that their program was made for self-defense.[48] North Korea eliminated any questions concerning its nuclear capabilities when it announced

40 "Nuclear Weapons Timeline," International Campaign to Abolish Nuclear Weapons. http://www.icanw.org/the-facts/the-nuclear-age/. (2017). Visited June 15, 2018.
41 Israel's Nuclear Capacity," Said, Kadry Mohamed. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). pgs. 50, 40-41.
42 *The Samson Option*, Seymour M. Hersh, (New York, 1991). Pg. 70.
43 "Israel Should be Wiped Off Map, Says Iran's President," McAskill, Ewen and McGreal, Chris. (October 26, 2005). https://www.theguardian.com/world/2005/oct/27/israel.iran. Site visited July 1, 2018.
44 "Pakistan's Nuclear Weapons Programme," Chakna, Bhumitra. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). pg 31
45 "Pakistan's Nuclear Weapons Programme," Chakna, Bhumitra. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). pg 31
46 Ibid, pg. 31.
47 Ibid, pg. 31.
48 "How to bring North Korea back into the NPT," Sigal, Leon V. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). pg 65.

on October 6, 2006 that it would detonate a nuclear weapon three days later, and did so successfully.[49] At the time of writing this background guide, no other nation claims to presently possess nuclear weapons. While it may be tempting for delegates to discount North Korea's path to an atomic weapon because of the country's unique history and development, delegates should not neglect the fact that the DPRK claimed to develop their nuclear weapons for safety and as a deterrent. The common theme with the aforementioned nine nuclear nations is that all but the United States developed nuclear weapons for deterrence and security, and many more developed nuclear weapons for political power. Delegates will have to address these issues with their draft resolutions.

Disarmed Countries

While nuclear countries have frequently proven reluctant to disarm, there have been four notable exceptions: South Africa, Ukraine, Belarus, and Kazakhstan. South Africa created six uranium gun-type bombs over the course of the 1980s as part of a deterrence strategy from Soviet invasion.[50] In 1990, then President Frederik Willem de Klerk ordered that the six warheads be destroyed and that South Africa abandon its nuclear program.[51] South Africa disarmed because the fall of the Soviet Union, Namibian independence (a formerly occupied territory by South Africa), and the removal of Cuban forces from Angola drastically reduced the need for a nuclear deterrent, and the government believed that disarming would benefit South Africa more than keeping its weapons would.[52]

Once the Soviet Union split, Ukraine, Belarus, and Kazakhstan all inherited some of the former Soviet Union's weapons that were stationed in the countries. Belarus had transferred all of its Soviet warheads to the Russian Federation (the successor state to the Soviet Union) before the end of 1996.[53] Kazakhstan transferred all of its inherited weapons to the Russian Federation by April 1995.[54] Ukraine followed suit when it transferred its final nuclear warhead to the Russian Federation on June 1, 1996.[55] While both Kazakhstan and Belarus transferred their nuclear weapons to Russia with relatively few reservations, Ukraine actually required the *Budapest Memorandum on Security Assurances* from Russia, essentially a pledge by Russia to not threaten Ukraine's security and sovereignty.[56]

49 Ibid, pg. 65.
50 "Nuclear Disarmament South Africa," Nuclear Threat Initiative. July 13, 2017. http://www.nti.org/analysis/articles/south-africa-nuclear-disarmament/. Site visited June 16, 2018.
51 Ibid.
52 Ibid.
53 "Nuclear Disarmament Belarus," Nuclear Threat Initiative. June 13, 2017. http://www.nti.org/analysis/articles/belarus-nuclear-disarmament/. Site visited June 16, 2018.
54 "Nuclear Disarmament Kazakhstan," Nuclear Threat Initiative. June 13, 2017. http://www.nti.org/analysis/articles/kazakhstan-nuclear-disarmament/. Site visited June 16, 2018.
55 "Ukraine, Nuclear Weapons, and Security Assurances At a Glance," Reif, Kingston. March 2014. https://www.armscontrol.org/factsheets/Ukraine-Nuclear-Weapons. Site visited June 16, 2018.
56 Ibid.

In all four of the above cases, countries voluntarily gave up their nuclear weapons, demonstrating that voluntary nuclear disarmament is feasible. Importantly, in two cases, security alone drove the decision to disarm, as South Africa felt that nuclear weapons were no longer necessary without the Cold War and Ukraine felt that the security assurances would ensure its security. Nuclear disarmament, in other words, has worked when it appears that they are no longer necessary for the safety of a nation. When considering disarmament, delegates should consider how to make nuclear weapons unhelpful, or even detrimental, to the security of the nations which possess them. One way to make them unhelpful and even detrimental is if the global political situation changes so that nuclear weapons are no longer necessary and that their upkeep becomes an unnecessary expense. Another way of thinking about this situation would simply be that weapons are not useful in peacetime. They would consequently become an expense without any benefit, and if fewer nations have fewer nuclear weapons, there would no longer be the need for nuclear weapons, producing a cycle of disarmament.

Past Actions

Nuclear countries have made few concrete actions to disarm. As previously stated, four nations (South Africa, Ukraine, Belarus, and Kazahkstan) have voluntarily forfeited or disarmed their nuclear weapons. Ultimately, these nations disarmed because they no longer saw those nuclear weapons as essential for their own security. While the three former Soviet bloc countries did not develop their own nuclear weapons, with the collapse of the Soviet Union and the end of the oppositional global bipolar power dynamic, they nonetheless felt that nuclear weapons would not be necessary for their safety in the future. To expand on this notion, a nation's sense of safety and security is a major, if not the only, factor in its decision to obtain or preserve its nuclear weapons. However, the aforementioned situation is quite rare, as the prevailing global order that was fostering conflict and tension fell, and should not be considered a viable way of precipitating nuclear disarmament throughout the world.

The most important treaty governing nuclear disarmament is the NPT, which, by Article VI, pledged those nuclear nations to "pursue negotiations in good faith…to nuclear disarmament.[57]" However, while the NPT pledged nations to that goal, it has no effective means of enforcing the pledge. One consequence of this facet of the NPT is that some nuclear nations have actually increased their nuclear arsenal since the passage and ratification of the NPT.[58] While nuclear arsenal sizes varied throughout the Cold War depending on the level of conflict or perceived threat, all nations other than the United Kingdom, the Russian Federation, and the United States larger nuclear arsenal sizes now than at the passage of the NPT.[59] By extension, neither China nor France have lived up completely to their NPT pledge to disarm, but notably, France has decreased its nuclear arsenal size since 1980.[60] China remains the sole nuclear nation to sign the NPT and never shrink its nuclear arsenal size, demonstrating that it, in many ways, represents one of the most dangerous threats and opposition to nuclear disarmament.[61] A further analysis of United States and Russian disarmament will be discussed later in the section.

Another flaw with the NPT is that, it does not apply to India, Pakistan, Israel, and North Korea, all of whom refused to sign it, since its statute only applies to those nations who have agreed to it. As a result of both its ineffective enforcement and non-universality, the NPT fails to actually facilitate nuclear disarmament with these nations. All of these nations have never decreased their nuclear arsenal sizes, and have only expanded their nuclear arsenals since they started their nuclear programs.[62] It is worth reiterating that none of these nations is considered to be in

57 *Treaty on the Non-Proliferation of Nuclear Weapons*, United Nations. 1968. Articles IV
58 "Nuclear Notebook," *The Bulletin of the Atomic Scientists* (2018). https://thebulletin.org/nuclear-notebook-multimedia. Site visited June 30, 2018.
59 Ibid.
60 Ibid.
61 Ibid.
62 Ibid.

violation of the treaty because it only applies to those who have signed the treaty. Another note regarding North Korea is that North Korea originally agreed to the NPT, but withdrew from it in 2003.[63] Notably, the DPRK withdrew from the NPT (which is permitted by the treaty) without consequences or sanctions, again demonstrating the weak binding power of the NPT.[64]

The nuclear weapons relationship between the United States and Russia following the fall of the Soviet Union and the end of the Cold War changed drastically and set an international precedent for nuclear disarmament, even if based on weapon reduction treaties. The **Strategic Arms Reduction Treaty** (**START**) compelled both states to reduce their offensive nuclear arsenals and their delivery systems drastically, and also implemented a means of verification for both parties.[65] START entered into force in 1994, and was replaced by **New START** in 2011, which is effectively an updated version of the original START, and extended into 2021.[66] While one could dismiss START for only concerning itself with offensive weapons, it would be foolish to ignore the influence and consequences of the treaty. Unlike the NPT, START specified how disarmament should happen and allowed each nation to inspect the disarmament process, and also made more specific disarmament goals beyond simply vowing to pursue negotiations of the topic. START in many ways addressed these two major shortcomings of the NPT and involved two nations that were deeply committed to disarmament and the establishment of a new era with the end of the Cold War.

However, a similar issue START has with the NPT is that it requires all parties to be completely willing to participate in nuclear disarmament, and that when any party refuses to comply or has other intentions, the treaty falls apart. Change in attitudes regarding nuclear disarmament can vary between successive administrations, or even within an administration, as most recently evidenced by United States President Donald Trump deriding the New START treaty while talking to Russian President Vladimir Putin regarding whether or not the treaty should be updated and extended beyond its current 2021 expiration date.[67] One of the challenges of both START and the NPT is that the circumstances under which any deals were once negotiated may change, and that parties may no longer want to be bound by any treaties or commitments. Delegates should consider how to make any commitments lasting despite inevitable changes in international positions.

A final recent development regarding nuclear disarmament that merits mention is the **Treaty on the Prohibition of Nuclear Weapons**, which has nearly 60 states as signatories and ratified

63 "Chronology of U.S.-North Korean Nuclear and Missile Diplomacy," Davenport, Kelsey (2018). https://www.armscontrol.org/factsheets/dprkchron. Site visited June 30, 2018.
64 Ibid.
65 *Strategic Arms Reduction Treaty*, United States and the Russian Federation (1991). Article XI, Clause 13.
66 *New Strategic Arms Reduction Treaty*, United States and the Russian Federation (2011). Preamble.
67 "In Call With Putin, Trump Denounced Obama-Era Nuclear Arms Treaty," Landay, Jonathan, and Rhode, David (2017). https://www.reuters.com/article/us-usa-trump-putin-idUSKBN15O2A5. Site visited June 30, 2018.

by seven.[68] Article 1 Clause 1 of the treaty prohibits the simple possession of nuclear weapons, which therefore necessitates complete disarmament by all nations.[69] The treaty will not enter into force until 50 nations have ratified it, and even then, it is highly unlikely that the nations with nuclear weapons will sign it.[70] Furthermore, it does not specify how states are to disarm, as Article 5, its implementation article, does not offer any specifics, standards, or procedures, beyond simply entering into discussion with the International Atomic Energy Agency, the international organization responsible for nuclear safety and entrusted with helping states comply with the NPT.[71] While it is an exceedingly optimistic goal, the *Treaty on the Prohibition of Nuclear Weapons* demonstrates a trend where non-nuclear states are far more intent on disarmament than before.

68 "Treaty on the Prohibition of Nuclear Weapons," Nuclear Threat Initiative (2018). http://www.nti.org/learn/treaties-and-regimes/treaty-on-the-prohibition-of-nuclear-weapons/. Site visited June 30, 2018.
69 "Draft Treaty on the Prohibition of Nuclear Weapons," United Nations (2016). Treaty text: http://www.undocs.org/en/a/conf.229/2017/L.3/Rev.1. Article 1, Clause 1.
70 Ibid, Article 15 Clause 1
71 Ibid, Articles 4, 5.

Possible Solutions

Cooperation between Nuclear Nations on Disarmament

One possible solution to nuclear disarmament is to get all nuclear nations to enter into a pact where they would be able to supervise the disarmament of all nuclear weapons or a large percentage of them from all the participating nations. This idea is in many ways an extension of the START and New START treaties, as well as the method the United Nations Educational, Scientific and Cultural Organization (UNESCO) recommends for addressing disarmament.[72] One of the reasons that this strategy would be effective is that it would involve international supervision of the disarmament process. This feature of supervision would enable verification of disarmament which would give nuclear nations confidence that their loss of nuclear weapons does not diminish their relative power in comparison to the others. States will likely not forfeit their nuclear weapons unless they know that all other states that possessed those nuclear weapons are also forfeiting their nuclear weapons. In other words, for complete disarmament to happen, all nine nations possessing nuclear weapons have to work together and have the trust to disclose the locations of and provide access to all of their nuclear weapons so that they can be dismantled. This proposal would also require those states with nuclear weapons that are not bound by the NPT (Israel, India, Pakistan, and North Korea) to agree to disarm, something which they have said was conditional on the other nuclear nations given their path to acquiring nuclear weapons. Furthermore, since nations have widely varied stockpile sizes, the details of disarmament should be agreed upon well in advance.

Fostering International Peace

International peace may not be the first consideration for precipitating nuclear disarmament, however, it should be remembered that the four nations that have forfeited their nuclear weapons (South Africa, Ukraine, Belarus, and Kazahkstan) did so when the world took a major step to peace. During the Cold War, the two global and nuclear superpowers, the Soviet Union and the United States, were locked in an adversarial struggle which nearly brought the entire world to one side or the other of the ideological struggle. Once the Soviet Union fell and the United States and the Soviet Union normalized relations, agreed to the START treaty, and drastically decreased the possibility of a third world war, the aforementioned four states no longer saw the need for nuclear weapons as discussed above. Importantly, this change happened when two rival nuclear nations that affected the whole world ceased hostile rhetoric and posturing. While the world does not have two clear superpowers, the same principle could be applied and a possible solution could be a peace treaty between nuclear nations and assurances of safety,

72 "Making the World Safe, Strategy 17: Dismantling/Eliminating Nuclear Weapons," United Nations Educational, Scientific and Cultural Organization (2001). http://www.unesco.org/education/tlsf/mods/theme_a/interact/www.worldgame.org/wwwproject/what17.shtml. Site visited June 30, 2018.

including nuclear disarmament and potentially partial or complete conventional disarmament as well. Nuclear weapons are effectively useless during peacetime, while disarming demonstrates a firm commitment to peace.

International Pressure

While usually thought of as a means of influencing rogue states' actions, international pressures can be used to try and pressure states into compliance with a treaty or resolution that the state has previously flaunted or ignored. There would be two approaches to such pressures; targeting only the countries that refused to abide by the NPT at its signature and currently possess nuclear weapons (North Korea, Israel, India, Pakistan) or all nuclear nations (the aforementioned four nations plus the United States, United Kingdom, France, China, and Russia). It should be noted that In Article 41 of the **Charter of the United Nations**, only the security council may actually implement sanctions that all member states of the UN must abide by.[73] However, delegates may consider the potential benefits of sanctions, whether they are economic, or relate to some other aspect of international relations, as a means to induce states to forfeit nuclear weapons. Again, states will not disarm without all other nuclear states doing so, and even then, it may be subject to regional security requirements.

73 *Charter of the United Nations*, United Nations Conference on International Organization (June 26, 1945. San Francisco). Article 41.

Bloc Positions

United States, Russian Federation, China, France, United Kingdom

The nuclear five countries frequently maintain the same positions on disarmament, even if they find themselves in opposition to each other politically. At the 2017 Conference on Disarmament, the United States emphasized the importance of the nuclear umbrella to its allies, particularly in East Asia and an increasingly belligerent North Korea with ballistic missile technology and nuclear weapons.[74] Furthermore, the United States and Russia both rely heavily on their nuclear weapons as a deterrent from not only nuclear warfare, but also conventional war.[75] Russia has declared that it reserves the right to use nuclear weapons in "a crisis situation where the national security of The Russian Federation is at stake."[76] The United Kingdom, while it does maintain a nuclear arsenal, has tried to emphasize that it only maintains the minimum arsenal required to have a credible deterrent (during the Cold War, this was a deterrent against the Soviet Union).[77]

74 "Conference on Disarmament (CD)," Nuclear Threat Initiative. January 10, 2018. http://www.nti.org/learn/treaties-and-regimes/conference-on-disarmament/. Site visited July 6, 2018.
75 "The US and the NPT 'double bargain'," Holloway, David. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). Pg. 163.
76 "The Military Doctrine of the Russian Federation," Decree by the President of the Russian Federation on April 21, 2000, No. 706.
77 "The UK, Nuclear Sovereignty and Disarmament," Walker, William. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). Pg. 196.

Furthermore, the United Kingdom has consistently pushed for nuclear disarmament, whereas France maintains an entirely different perspective; that nuclear proliferation is inevitable, and to forfeit nuclear weapons would be to forfeit political power to new nuclear states.[78] France, in other words, is not only concerned about the current threats to its nuclear position, but also threats that may emerge in the future. The last nation in this block, China, has embraced the NPT on a political level, yet has yet to make substantial advances in disarmament.[79] In addition, China's tacit enemy changed from the Soviet Union to the United States once the Soviet Union fell and it became clear that it no longer was a global superpower, and with the United States' nuclear umbrella coming to China's doorstep (South Korea and Japan), China has built up its nuclear arsenal as a deterrent.[80]

The common theme between all of these nations is that nuclear weapons are frequently a deterrent from other nuclear weapon states. A successful resolution for these states would require multilateral efforts to globally reduce all stockpiled weapons in all countries. Even though many of these countries find themselves opposing each other in the world, they do possess similar attitudes about how nuclear disarmament has to be multilateral and that additional security measures have to be implemented to ensure that no nation goes back on its disarmament.

India, Pakistan, Israel, North Korea

This block constitutes the outsiders who have nuclear weapons and are not a part of the NPT. Indian Senior Advisor on Defense and Foreign Affairs Jaswant Singh argued that India broke the "**nuclear apartheid**," or the separation of states into nuclear and non-nuclear and forbidding the acquisition of nuclear weapons, to acquire international power and security.[81] Consequently, in order to have nuclear disarmament, the old order, namely that of nuclear apartheid, has be eliminated, and so the nuclear weapon states under the NPT have to disarm in order for India to consider disarmament. Pakistan obtained nuclear weapons for its security from other nuclear powers, and North Korea claims the same reasoning, while Israel did so to protect against conventional powers. In other words, these four states acquired nuclear weapons because they feared for their safety. These countries are in favor of solutions that discuss both nuclear and conventional disarmament, as both factors contribute to a nation's security.

78 Ibid, pg. 199; "France and Nuclear Non-Proliferation," Tertrais, Bruno. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). Pgs. 202, 222.
79 "Departing Revolution," Jian, Chen. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). Pg. 243.
80 Ibid, pg. 243.
81 "The Indian Nuclear Program," Kapur, S. Paul. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). Pg. 17.

North Atlantic Treaty Organization (NATO) Nations

The North Atlantic Treaty Organization relies heavily on deterrence for the safety of its member nations, including both conventional and nuclear deterrents.[82] NATO has stated that it will remain an alliance with nuclear weapons as long as there are nuclear weapons in the world, suggesting that disarmament will have to be universal between all states with nuclear weapons for NATO nations to express their willingness to be a non-nuclear alliance.[83] NATO also includes the United States, France, and Great Britain, all of whom are nuclear nations, and so the clout of those three nations drive the majority of NATO's nuclear deterrence.

Latin and South America Block

Latin and South America nations have been strong proponents of disarmament and non-proliferation, as evidenced by the *Treaty for the Prohibition of Nuclear Weapons in Latin American and the Caribbean (Tlatelolco Treaty)*. The *Tlatelolco Treaty* bans nuclear weapons in the region as well as the testing of them.[84] In addition, the block also submitted a proposal for the complete elimination of nuclear weapons from the world to the United Nations General Assembly, thereby demonstrating their strong desire for a nuclear weapons-free world.[85]

African Block

African nations, like Latin and South American nations, have created a nuclear weapon free zone by the *African Nuclear Weapon-Free-Zone (ANWFZ) Treaty* (*Pelindaba Treaty*), which bans nuclear weapons in Africa.[86] While the treaty does allow each nation to decide whether or not a foreign nation can station nuclear weapons within that country's territory or waters, it nonetheless demonstrates a strong commitment by African nations to a world without nuclear weapons.[87] These nations, while they accept nuclear weapons in the world, would prefer to live in a world without nuclear weapons.

Asian and Oceanic Block

Nations in these regions have three nuclear weapon free treaties: the *Southeast Asian Nuclear-Weapon-Free-Zone Treaty*, the *Central Asia Nuclear-Weapon-Free-Zone Treaty*, and the *South*

82 "Arms Control, Disarmament, and Non-Proliferation in NATO," North Atlantic Treaty Organization (June 22, 2018). https://www.nato.int/cps/ua/natohq/topics_48895.htm. Site visited July 7, 2018.
83 Ibid
84 "Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (LANWFZ) (Tlatelolco Treaty)," Nuclear Threat Initiative. April 30, 2018. http://www.nti.org/learn/treaties-and-regimes/treaty-prohibition-nuclear-weapons-latin-america-and-caribbean-lanwfz-tlatelolco-treaty/. Site visited July 7, 2018.
85 Ibid.
86 "African Nuclear-Weapon-Free-Zone (ANWFZ) Treaty (Pelindaba Treaty)," April 30, 2018. http://www.nti.org/learn/treaties-and-regimes/african-nuclear-weapon-free-zone-anwfz-treaty-pelindaba-treaty/. Site visited July 7, 2018.
87 Ibid

Pacific Nuclear-Free-Zone Treaty of Raratonga.[88] These treaties all prohibit the possession of nuclear weapons within the treaty's borders, demonstrating a similar desire for nuclear-free regions, if not a nuclear-free world.

88 "South Pacific Nuclear-Free Zone (SPNFZ) Treaty of Raratonga," Nuclear Threat Initiative. April 30, 2018. http://www.nti.org/learn/treaties-and-regimes/south-pacific-nuclear-free-zone-spnfz-treaty-rarotonga/. Site visited July 7, 2018; "Southeast Asian Nuclear-Weapon-Free-Zone (SEANWFZ) Treaty (Bangkok Treaty)," Nuclear Threat Initiative. April 30, 2018. http://www.nti.org/learn/treaties-and-regimes/southeast-asian-nuclear-weapon-free-zone-seanwfz-treaty-bangkok-treaty/. Site visited July 7, 2018; "Central Asian Nuclear-Weapon-Free-Zone (CANWFZ)," April 30, 2018. http://www.nti.org/learn/treaties-and-regimes/central-asia-nuclear-weapon-free-zone-canwz/. Site visited July 7, 2018.

Glossary of Selected Terms

Deterrence Theory – a means to discourage war or conflict between nations by making the cost of war greater than the potential benefits.[89]

MAD – short for Mutually Assured Destruction, which is a defense theory that seeks to deter nuclear aggression by ensuring the destruction of any state to initiate a nuclear war, and is premised on deterrence theory.[90]

NPT – abbreviation for *Non-Proliferation Treaty*, which seeks not only non-proliferation of nuclear weapons but also a promise for nuclear disarmament.[91]

Nuclear Fission – process of nuclear decay causing a runaway reaction which most first generation nuclear weapons (i.e., a nation's first nuclear weapon series) use.[92]

Permanent Five – also known as the P5, these five nations: China, Russia, the United States, the United Kingdom, and France, all possess veto power in the United Nations Security Council.[93] These are also the five recognized nuclear weapon states under the NPT.

START Treaty – short for Strategic Arms Reduction Treaty, which is a treaty between the United States and Russia agreeing to disarm and reduce both conventional and nuclear weapons.[94]

New START – an updated version of the aforementioned START treaty.[95]

Nuclear Apartheid – term coined by Jaswant Singh to describe how the NPT perpetuates an unequal power dynamic between countries with nuclear weapons and those without them.[96]

Treaty on the Prohibition of Nuclear Weapons – proposed treaty to completely eliminate all nuclear weapons in the world by making them illegal.[97]

NATO – short for the North Atlantic Treaty Organization, which is a military alliance of nations.[98]

89 "Deterrence," Encyclopaedia Britannica (2018). https://www.britannica.com/topic/deterrence-political-and-military-strategy. Site visited July 8, 2018.
90 "How did we forget about mutually assured destruction?" de Castella, Tom. In *BBC News Magazine*, February 15, 2012.
91 "The Treaty on the Non-Proliferation of Nuclear Weapons (NPT)," United Nations (2005). http://www.un.org/en/conf/npt/2005/npttreaty.html. Site visited July 8, 2018
92 "Nuclear Fission," Atomic Heritage Foundation. June 4, 2014. https://www.atomicheritage.org/history/nuclear-fission. Site visited July 8, 2018.
93 "Current Members," United Nations Security Council (2018). http://www.un.org/en/sc/members/. Site visited July 8, 2018.
94 *Strategic Arms Reduction Treaty*, United States and the Russian Federation (1991).
95 *New Strategic Arms Reduction Treaty*, United States and the Russian Federation (2011).
96 The Indian Nuclear Program," Kapur, S. Paul. In *Nuclear Proliferation and International Order*, edited by Njølstad, Olav (New York, 2011). Pg. 17.
97 "Treaty on the Prohibition of Nuclear Weapons," Nuclear Threat Initiative (2018). http://www.nti.org/learn/treaties-and-regimes/treaty-on-the-prohibition-of-nuclear-weapons/. Site visited June 30, 2018.
98 "Arms Control, Disarmament, and Non-Proliferation in NATO," North Atlantic Treaty Organization (June 22, 2018). https://www.nato.int/cps/ua/natohq/topics_48895.htm. Site visited July 8, 2018.

African Nuclear Weapon-Free-Zone (ANWFZ) Treaty (Pelindaba Treaty) – Treaty which prohibits African Nations from pursuing nuclear weapons.[99]

Southeast Asian Nuclear-Weapon-Free-Zone Treaty – Treaty which prohibits Southeast Asian nations from pursuing nuclear weapons.[100]

Central Asia Nuclear-Weapon-Free-Zone *Treaty* – Treaty which prohibits Central Asian nations from pursuing nuclear weapons.[101]

South Pacific Nuclear-Free-Zone Treaty of Raratonga – Treaty which prohibits nations in the South Pacific from pursuing nuclear weapons.[102]

Treaty for the Prohibition of Nuclear Weapons in Latin American and the Caribbean (Tlatelolco Treaty) – Treaty which prohibits Latin American and Caribbean nations from pursuing nuclear weapons.[103]

99 "African Nuclear-Weapon-Free-Zone (ANWFZ) Treaty (Pelindaba Treaty)," April 30, 2018. http://www.nti.org/learn/treaties-and-regimes/african-nuclear-weapon-free-zone-anwfz-treaty-pelindaba-treaty/. Site visited July 8, 2018.

100 "Southeast Asian Nuclear-Weapon-Free-Zone (SEANWFZ) Treaty (Bangkok Treaty)," Nuclear Threat Initiative. April 30, 2018. http://www.nti.org/learn/treaties-and-regimes/southeast-asian-nuclear-weapon-free-zone-seanwfz-treaty-bangkok-treaty/. Site visited July 8, 2018

101 "Central Asian Nuclear-Weapon-Free-Zone (CANWFZ)," April 30, 2018. http://www.nti.org/learn/treaties-and-regimes/central-asia-nuclear-weapon-free-zone-canwz/. Site visited July 8, 2018.

102 "South Pacific Nuclear-Free Zone (SPNFZ) Treaty of Raratonga," Nuclear Threat Initiative. April 30, 2018. http://www.nti.org/learn/treaties-and-regimes/south-pacific-nuclear-free-zone-spnfz-treaty-rarotonga/. Site visited July 8, 2018

103 "Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (LANWFZ) (Tlatelolco Treaty)," Nuclear Threat Initiative. April 30, 2018. http://www.nti.org/learn/treaties-and-regimes/treaty-prohibition-nuclear-weapons-latin-america-and-caribbean-lanwfz-tlatelolco-treaty/. Site visited July 8, 2018.

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TOPIC B: MILITARIZATION OF SPACE

Statement of the Problem

What is the Militarization of Space?

The militarization of space is the placement of military weapons or military infrastructure of technology into space.[104] In many ways, the militarization of space is not focused on weapons – in the vacuum of space and Earth orbit, nearly any object in motion can be a weapon. Rather, the military infrastructure that goes into space, such as satellites, is primarily the focus of space military technology at the current moment. However, recent actions and words by multiple nations suggests that what was once science-fiction – the military in space - appears to become a reality.

While several nations have space programs, only three nations have demonstrated the ability to place humans into orbit reliably as well as heavy payloads which can, when combined form space stations. These nations are the Russian Federation, the United States, and China.[105] However, just because these are currently the only nations with the capability to have a more permanent presence in space does not mean that the topic is not applicable to other nations, as international space organizations such as the European Space Agency also has substantial capabilities, and as SpaceX has demonstrated, private corporations can also effectively and consistently send payloads into space. In other words, space is a new horizon and a place where more and more nations and entities are capable of accessing. With increased access comes more opportunities to militarize and dominate space.

Why does the Militarization of Space Matter?

The militarization of space is a rather new source of conflict and a problem for international security. Only a select few nations have their own space programs capable of placing payloads into Earth orbit. This capability gap would allow those nations to solidify their superiority in space and further distance themselves from the remaining nations in space capabilities.

This is not a new concept either. On October 4, 1957, the Soviet Union launched Sputnik 1 into space and into an Earth orbit to demonstrate military and missile superiority, and the public response in the United States was that whoever controlled space could control the arms

104 "How China is Weaponizing Outer Space," Vasani, Harsh. In *The Diplomat* (January 19, 2017). https://thediplomat.com/2017/01/how-china-is-weaponizing-outer-space/. Site visited July 17, 2018.
105 "Making History: China's First Human Spaceflight," Space (September 28, 2005). https://www.space.com/1616-making-history-china-human-spaceflight.html. Site visited July 17, 2018.

race and have a strategic advantage in launching nukes at an enemy.[106] The Space Race, or the competition between the Soviet Union and the United States to outdo the other in space achievements and exploration, also demonstrated that the militarization of space does not have to include weapons. In fact, military infrastructure such as satellites for communication, observation, and incoming missile warning as well as offensive missile targeting were one of the most frequent pieces of cargo in rockets, demonstrating that even though no weapons were mounted on those rockets, they were moves that militarized space.

Some critics argue that discussing the militarization of space is actually quite foolish because of the *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies*, frequently called the Moon Treaty or the Space Treaty for short. These critics believe that the Moon Treaty's Article IV, which explicitly prohibits weapons of mass destruction (WMD), and names nuclear weapons among those, demonstrates that no weapons of any kind or military technology can qualify as legal in space in light of the treaty.[107] However, both the European Union and the United States, each of whom has its own space program, disagree, and United States intelligence believes that China and the Russian Federation are developing offensive non-WMD weapons for space.[108]

Furthermore, the weaponization of space is not something that can be solved by simply banning ideas from science fiction movies or other obvious weapons such as guns or missiles. To even get into Earth orbit, objects have to travel 28,000 kilometers per hour (17,500 miles per hour).[109] At this velocity, a collision between any two objects would be catastrophic and would result in the loss of whatever objects collided due to the force of impact at such high velocities. One example of collisions in space is the collision of Iridium 33 and Cosmos 2251, communications satellites for the United States and the Russian Federation respectively, collided on February 10, 2009.[110] Cosmos 2251 was actually a dead satellite, meaning that it no longer functioned, but Iridium 33 was fully functional before the collision.[111] After the collision, the Iridium satellite stopped functioning, demonstrating that even though the Cosmos satellite was non-functional and was space junk, it nevertheless was able to functionally destroy another satellite as a projectile.[112]

106 "60 Years Ago: The U.S. Response to Sputnik," National Aeronautics and Space Administration (November 16, 2017). Site visited July 18, 2018.
107 *Agreement Governing the Activities on the Moon and Other Celestial Bodies*, United Nations Office for Disarmament (1979). http://disarmament.un.org/treaties/t/moon/text. Site visited July 28, 2018. Article IV.
108 "The Militarization and Weaponization of Space: Towards a European Space Deterrent," Association Aéronautique de France. In *Space Policy, Vol. 24. Issue 2*, May 2008.; "Russia and China are developing 'destructive' space weapons, US Intelligence Warns," Chandran, Nyshka (February 14, 2018). https://www.cnbc.com/2018/02/14/russia-china-developing-destructive-space-weapons-us-intelligence.html
109 https://www.nasa.gov/centers/kennedy/about/information/shuttle_faq.html. Site visited July 29, 2018.
110 "The Collision of Iridium 33 and Cosmos 2251: The Shape of Things to Come," National Aeronautics and Space Administration. At the 60th International Astronautical Congress, Daejeon, Republic of Korea. October 16, 2009. https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20100002023.pdf.
111 Ibid.
112 Ibid.

In other words, everything can be a projectile weapon in space, from satellites to even small pieces of space debris. Another example is in 2007, China intentionally destroyed its Fengyun-1C weather satellite launched in 1999 with a missile, which then created a debris cloud where "any [of the debris even less than 1 centimeter in diameter had] the potential for seriously disrupting or terminating the mission of operational spacecraft in low-earth orbit" according to Nicholas Johnson, who was NASA's Chief Scientist for Orbital Debris at the time.[113] Since even space debris as small as 1 centimeter is lethal to other spacecraft, targeted projectiles are weapons in space.

Space Weapons and Earth

While projectiles are in all likelihood the weapon of choice for combat in space, there remains the question of weapons stationed in space that are utilized to target Earth, or even the non-weaponized auxiliary components and technology that make combat possible. For the latter, the United States Air Force had a powerful influence when NASA was planning the Space Shuttles, and required that the Space Shuttle be able to carry classified payloads into space.[114] The Soviet Union was puzzled by the growing size of the space shuttle because it made less economic and technological sense than a smaller vehicle size, and it came to the conclusion that the United States was attempting to deploy conventional weapons in space.[115] While the Soviet Union's guesses were incorrect, they were not wrong in believing that the United States developed the Space Shuttle program without the capacity to create a military advantage in space.[116]

The classic example of this military advantage is United States President Ronald Reagan's March 1983 proposal to create a missile defense shield from space, often colloquially referred to as the Death Star idea; the Soviet Union also had a similar idea.[117] Currently, the United States Pentagon is reportedly looking into the use of kinetic energy projectiles.[118] These projectiles are essentially high density metal rods, with tungsten appearing to be the favored element at this moment.[119] These rods then are dropped (and guided) to the surface of the planet from almost any altitude, but ideally from space, and accelerate due to gravity, and ideally these rods have minimal surface area so that they do not slow down due to massive air resistance.[120] The entire explosive potential of the weapon comes from this gravitational acceleration rather than a chemical or atomic reaction, and while it is the same principal of why it hurts when

113 "China's Anti-Satellite Test: Worrisome Debris Cloud Circles Earth," David, Leonard (February 2, 2007). https://www.space.com/3415-china-anti-satellite-test-worrisome-debris-cloud-circles-earth.html. Site visited July 29, 2018.
114 "The Rise and Fall of the Soviet 'Death Star'," Weintz, Steve (January 8, 2016). https://nationalinterest.org/feature/the-rise-fall-the-soviet-death-star-14854. Site visited July 29, 2018.
115 Ibid
116 Ibis
117 Ibid
118 "The Pentagon's New Super Weapon is Basically a Weaponized Meteor Strike," Keller, Jared (June 7, 2017). https://taskandpurpose.com/kinetic-bombardment-kep-weaponry/. Site visited July 29, 2018.
119 Ibid.
120 Ibid.

you drop a box of books on your feet, the impact occurs at such a speed and with such a high mass that it can have a devastating effect on Earth, with the explosive potential between that of nuclear weapons and the current most powerful conventional weapons.[121] Furthermore, dropping these weapons from space would make intercepting them exceptionally difficult, as they would virtually be guaranteed to strike their targets at terminal velocity.[122] Put simply, there have been a plethora of ideas about space weapons and the possibilities, and now what was once the subject science-fiction movies and video games may well become reality within the forseeable future.

How to think about the Militarization of Space:

There is no easy way to think about the militarization of space given how nearly any object can become a weapon, and banning any object that could be a projectile from being in space is unrealistic. Delegates should instead focus on what can exclusively be used to militarize space by being a weapon or providing essential infrastructure for the function of weapons, whether in space or on Earth. These can be military systems, satellites, or the aforementioned kinetic energy projectile. It is of paramount importance for delegates to consider their definitions and proposals in the context of what precisely constitutes a weapon in space.

121 Ibid.
122 Ibid.

History of the Problem

The militarization of space formally started on October 4, 1957 when the Soviet Union launched Sputnik, a satellite, into orbit.[123] The American public feared that the success of Sputnik demonstrated a Soviet capacity to strike the United States with a nuclear weapon launched from a missile in mainland Russia.[124] The Soviet success let directly to the *National Aeronautics and Space Act of* 1958 the creation of the National Aeronautics and Space Administration (NASA).[125] In the act, Congress ensured that the civilian space agency would have to report any discoveries that may have any military significance to the Department of Defense.[126] This requirement and responsibility to inform the Department of Defense about potential military applications of space was the first step towards the militarization of space because it formally acknowledged that space was a realm of military organizations and that the military should consider it as a place of mandatory expansion.

While the Soviet Union and the United States were the only two nations to have viable space programs throughout the early days of space exploration, no outright militarization took place. However, that is not to say that there was not serious thought given to demonstrating military dominance in space. In 1958, the United States Air Force (whose jurisdiction includes space) considered detonating a nuclear weapon on the Moon in a display of military force and superiority over the Soviet Union.[127] The United States Army planning Project Horizon which was intended to place a military base on the Moon, further demonstrating that the militarization of space is not a new phenomenon.[128] The Soviet Union's first space stations came in military and civilian variants, called Almaz and Salyut units respectively within the Soviet space program, but both publicly referred to as Salyuts to confuse the West.[129]

After the preliminary space flights from both nations in Vostok and Mercury Redstone, the two nations sought to create long-term dominance in space. The American Saturn program, which would later take the Apollo missions to the Moon, was explicitly created for the purpose to "meet Russia in space weapons delivery," and would give the Americans a significant heavy lifting capacity for potential military bases in space (including on the Moon).[130] The outpost on the

123 "Sputnik and the Dawn of the Space Age," National Aeronautics and Space Administration (October 10, 2007). https://history.nasa.gov/sputnik/. Site visited August 10, 2018.
124 Ibid.
125 *National Aeronautics and Space Act of 1958*. United States Congress (Washington D.C., July 19, 1958). https://www.hq.nasa.gov/office/pao/History/spaceact.html. Site visited August 10, 2018.
126 Ibid, Sec. 102, b.
127 "Remember That time the US Thought About Nuking the Moon?," Cheadle, Harry. Vice News. September 13, 2016. https://www.vice.com/en_us/article/dpk7pv/remember-that-time-the-us-thought-about-nuking-the-moon. Site visited August 10, 2018.
128 Ibid.
129 "The Station," Public Broadcast Service. 1999. https://www.pbs.org/spacestation/station/russian.htm. Site visited August 10, 2018.
130 *Manned Space Flight Programs of the National Aeronautics and Space Administration.* Committee on Aeronautical and Space Sciences, United States Senate (Washington, D.C., 1962). Pg. 186.

Moon, proposed in the 1959 Project Horizon phase 1 report, was set to be a military base and established sometime in 1966 in the earliest draft of the report, demonstrating that even though NASA was a civilian agency at the time of the Project Horizon report, it was still very much a government administration intended to aid the United States achieve military supremacy in space.[131] However, as is clear with the benefit of passed time, the American hopes of lunar outposts and a significant military presence in space by the end of the end of the 20th Century did not come to fruition.

The Soviet concept of the Salyut, however, was far more feasible as far as long-term habitation in space, as well as providing a space base. The Soviet Union launched Salyut 1 in 1971, and would eventually launch six more Salyut (both civilian and Almaz military) space stations through 1982, demonstrating that humans could establish a presence in space for significant periods of time, which is a requirement for militarization.[132] This principle of space stations would, in 1986, give rise to the Soviet Space Station Mir, which lasted for 15 years in space, including the beginnings of American-Russian cooperation in space after the Soviet Union fell.[133] Mir paved the pathway for the International Space Station (ISS), an international project by the United States, the Russian Federation, and many more states to perform peaceful and scientific work in space.[134] Even though international cooperation has essentially been the status quo in space for the past quarter century, there are reasons to question whether or not this status will last.

Even during the period of international cooperation, the United States flew a series of Space Shuttle missions that were classified, or had classified components, including military cargo.[135] In fact, military capabilities and payloads were instrumental in the Space Shuttle design, specifically requiring that the Shuttle's cargo bay be larger so that it could accommodate larger, military-purpose satellites.[136] Some of the suspected functions of these satellites that the Space Shuttle placed into orbit were reconnaissance satellites that used the entire electromagnetic spectrum of light to observe targets on the ground regardless of weather cover and military communications satellite.[137] In addition, China wanted to join in the ISS effort a decade ago, however, the United States Congress passed the 2011 federal budget with a clause prohibiting scientific activities in space with China for fear of the transfer of military technology and information.[138]

131 Ibid, pg. 169.
132 "A Station in Space," *Science News*, Vol. 99, No. 17 (April 24, 1971). Pg. 278. https://www.jstor.org/stable/3956229?Search=yes&resultItemClick=true&searchText=Salyut&searchUri=%2Faction%2FdoBasicResults%3Fsi%3D1%26amp%3Bfc%3Doff%26amp%3Bgroup%3Dnone%26amp%3Bso%3Dold%26amp%3Bwc%3Don%26amp%3BQuery%3DSalyut%26amp%3Bacc%3Don&refreqid=search%3A5c5665938bf6b12d0d86b7e6988e69d4&seq=1#page_scan_tab_contents
133 "Mir Space Station," National Aeronautics and Space Administration. https://history.nasa.gov/SP-4225/mir/mir.htm. Site visited August 10, 2018.
134 Ibid.
135 "Classified Shuttle Missions: Secrets in Space," Howell, Elizabeth. October 16, 2016. https://www.space.com/34522-secret-shuttle-missions.html. Site visited August 11, 2018.
136 Ibid.
137 Ibid.
138 *Budget of the US Government, Fiscal Year 2011.* Office of Management and Budget (Washington, D.C., 2011).

China, in response, has launched its own space stations and has made its own advances in space technology, particularly with regards to space stations. In 2011, after it was apparent that China could not be a part of the ISS due to US opposition from the FY 2011 budget, launched its own space station, the Tiangong-1, to demonstrate its own space-faring prowess.[139] While Tiangong-1 crashed back into Earth earlier in 2018, it was a proof-of-concept for China's space program, and informed its construction of the Tiangong-2, China's second space station, as well as informing larger stations that will succeed the Tiangong-2.[140] While China has only recently started to assert itself in space, it nonetheless represents a future source of conflict and probable militarization.

United States intelligence agencies believe that both Russia and China are developing space weapons designed to destroy satellites.[141] While satellites themselves may not necessarily provide overwhelming military superiority, they do enable a highly functional and effective means of communication and surveillance, potentially giving one side a decisive advantage in combat regardless of what combat forces may be. It may be tempting to distinguish satellites as separate from the military; however, modern military and warfare is highly dependent on satellite communication and surveillance, and destroying a large portion of a nation's military satellite capabilities would severely cripple its military capacity. For example, triangulation of a position, whether it would be a missile, a ship, or an aircraft, would be incredibly difficult without a largely intact satellite fleet. Military infrastructure increasingly relies on such infrastructure in space, and disabling or dismantling a significant portion of that satellite infrastructure could enable a party to launch an offensive with a significantly reduced military capacity, if not outright crippling its defense.

The most recent development in the militarization of space is the explicit creation of a military branch whose sole domain is space. The United States announced that the sixth branch of its armed forces, the United States Department of the Space Force, would be in many ways the future of the nation's armed

139 "Tiangong-1, China's First Space Station, Crashes Into the Pacific," Chiang, Kenneth (April 1, 2018, *The New York Times*). https://www.nytimes.com/2018/04/01/science/chinese-space-station-crash-tiangong.html

140 Ibid.

141 "Russia and China are developing 'destructive' space weapons, US intelligence warns," Chandran, Nyshka. February 14, 2018. https://www.cnbc.com/2018/02/14/russia-china-developing-destructive-space-weapons-us-intelligence.html. Site visited August 11, 2018.

forces.[142] United States Vice President Mike Pence claimed that developments in technology in the early 21st Century have made it apparent that space will be the battlefield of the 21st Century as aviation advances made the primary battlefield of the 20th Century in the air.[143] The aim of the United States Department of Defense is to formally establish the Space Force by 2020.[144] However, while this new brand of combat forces will constitute a new branch of the military, it does not mean that the Space Force will be built from scratch. Pence stated that throughout the United States, there were thousands of individuals throughout the country already helping the effort of asserting United States military primacy in space.[145]

The United States Department of Defense asserted that the formation of the Space Force was in response to actions of other states that militarized space.[146] Mike Pence specifically mentioned Iran, China, Russia, and North Korea as pursuing weapons designed to destroy or inhibit navigation and communications satellites and infrastructure.[147] In response, the United States intends to take three concrete steps. The first is to create a unified combat command for space.[148] The second is to establish the Space Operations Force, "an elite group of joint warfighters, specializing in the domain of space," who will become the foundation of the warfighting capability.[149] Lastly, the establishment of the Space Development Agency that will provide the most up-to-date technology for combat in space.[150] Collectively, these actions demonstrate a formal action to organize American resources and militarize space.

142 "Space Force to Become Sixth Branch f Armed Forces," Ruolo, Claudette. August 9, 2018. https://www.defense.gov/News/Article/Article/1598071/space-force-to-become-sixth-branch-of-armed-forces/. Site visited August 12, 2018.
143 Ibid.
144 Ibid.
145 Ibid.
146 Ibid.
147 Ibid.
148 Ibid.
149 Ibid.
150 Ibid.

Past Actions

The first international action regarding outer space was the *Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space*, a resolution passed on December 13, 1963.[151] The declaration itself is not explicitly about the military use – or prohibition thereof – but rather concerns the general conduct of states in space. The first three clauses assert that the exploration of outer space is to be done for the benefit of all of mankind and that space and celestial bodies cannot be claimed by any nation.[152] These three clauses lay the groundwork for clause four, which states that actions in space are to be carried out "in the interest of maintaining international peace and security and promoting international cooperation and understanding."[153] The combination of these clauses essentially makes a soft ban on the militarization of space because it seeks to make space a realm of peaceful exploration.

However, clause four, that which states that space exploration is to be done for maintaining peace, is problematic because it does not explicitly prohibit military expansion into space. In turn, this interpretation can allow states to justify the militarization of space by claiming that it is for international peace and preventing further violence; simply put, forcing peace through force and military might. It is a dangerous precedent and interpretation because states can use that clause to assert that its actions in space, whether or not they are actually peaceful, are to maintain peace and international security in space. The clause can be used as justification for aggressive actions in space, and further specification of what constitutes aggression or escalation should be considered as a viable possible solution.

There are five treaties the UN has passed regarding space, and they are known as the "five United Nations treaties on outer space."[154] The first of these, Resolution 2222, the *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Celestial Bodies*, was based nearly entirely off of the aforementioned declaration of legal principles. [155] Article four from the declaration of legal principles exists in Resolution as article three in the treaty without any notable alteration in language. The most important addition is article four, which forbids states from placing "in orbit around the Earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station weapons in outer space in any other manner."[156] Article four is significant because it explicitly deals with weapons, especially weapons of mass destruction.

151 *Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space*, United Nations. December 13, 1963. http://www.un-documents.net/a18r1962.htm.
152 Ibid. Clause 1-3.
153 Ibid. Clause 4.
154 "Space Law and Treaty Principles," United Nations Office for Outer Space Affairs. August 24, 2018. http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties.html. Site visited August 31, 2018.
155 *Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Celestial Bodies*, United Nations. January 27, 1967.
156 Ibid.

This article effectively bans warfare as it was then, and frankly, is now currently, conceived. It was the first action against the militarization of space, and brought the issue of the militarization of space to the fore.

In addition to banning nuclear weapons and other weapons of mass destruction, article four also prohibits the "establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military maneuvers" on celestial bodies.[157] This part of the treaty further prevents the militarization of outer space through conventional means. Without weapons or military infrastructure, military forces cannot operate in space under a highly militarized state without breaking the aforementioned rules. However, military personnel are not banned from space. Article four also states that the "use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited," which allows states to at least have military personnel in space.[158] The treaty also states that "the use of any equipment or facility necessary for peaceful exploration of the Moon and other celestial bodies shall also not be prohibited."[159] However, this clause allows the testing of technologies that can be transferred for military purposes.

The next three treaties, colloquially known as the "Rescue Agreement" and the "Liability Convention" and the "Registration Convention" are largely irrelevant for the militarization of space. The final treaty, the *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies*, often referred to as the Moon Treaty, does add to past actions against the militarization of space. Article three of the treaty prohibits hostile acts or uses of force, or threats of the aforementioned, against the Moon.[160] The treaty further limits the potential military actions that can be taken in space and against the Moon, and is the most recent (1984) action to curb the militarization of space.[161]

157 Ibid, article IV.
158 Ibid, article IV.
159 Ibid, Article IV.
160 *Agreement Governing the Activities of States on the Moon and Other Celestial Bodies*, United Nations. December 18, 1979. Article III.
161 Space Law and Treaty Principles," United Nations Office for Outer Space Affairs. August 24, 2018. http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties.html. Site visited August 31, 2018.

Possible Solutions

Possible solutions to the weaponization of space focus on issues and gaps in the current treaties on outer space. One possible solution would be to ban specific types of weapons that have emerged since the *Outer Space Treaty*.[162] Such new weapons include anti-satellite weaponry and electromagnetic or radiation weapons.[163] However, one of the difficulties with explicitly banning certain types of weapons is that new technologies are always under development, and so specific enumeration of particular technologies to be banned may not be effective over time as new weapons technologies may emerge.[164] One suggestion is that the international community should address this issue by adopting language or rhetoric that expressly forbids the use of technologies that can damage or incapacitate or eliminate other objects in space that belong to another party.[165] While such vague language can lend itself to standing a test of evolving technology over time, it can also leave much to be desired in the short term, as it allows countries to plausibly disagree with other countries about what constitutes a technology made expressly for the destruction of space technology. This issue is further compounded by the fact that as discussed earlier in the background guide, almost anything can be a weapon in space, particularly if it is in orbit because its velocity is so high. When considering potential solutions, delegates should consider how to balance these two conflicting goals, and be specific in their rhetoric as much as possible.

The other possible way forward could be to establish rules and regulations concerning the research and deployment of space weapons.[166] These steps could help contain an arms race in space and limit the potential expansion of space weaponry. In other words, the international community could create a framework to try and limit any expansion of space weaponization, thereby at least slowing the problem so that it does not outpace the current international stance or current treaties. While containment of an issue is not a solution, it is a means to turn the figurative tide of an issue, and would be a solid start to preventing the weaponization of space.

A third potential solution is to create an international agency specifically tasked with enforcing a treaty or policy of non-militarization in space. Such an agency would have a plethora of benefits, from being able to establish international definitions of what constitutes a space weapon or aggression in space to overseeing space military technology to ensure that it falls within the letter of the law.[167] In addition, an oversight agency with international backing would likely ease potential fears of nations, and could prevent a space arms race from occurring as a consequence

162 "The Weaponization of Outer Space: Preventing an Extraterrestrial Arms Race," Kuplic, Blair Stephenson. In *North Carolina Journal of International Law and Commercial Regulation,* Volume 39, Number 4 (Summer 2014). . Pg. 1158.
163 Ibid, pg. 1158.
164 Ibid, pg. 1158.
165 Ibid, pg. 1158.
166 Ibid, pg. 1158.
167 Ibid, pg. 1159.

of removing states' fears.[168] The creation of an agency exclusively devoted to monitoring space weapons is not without precedent, as the International Atomic Energy Agency (IAEA) is the international agency responsible for overseeing the *Non-Proliferation Treaty* in addition to monitoring the use of nuclear energy in the world. The hope for such a space agency would be to have similar powers to the IAEA, in that it would ideally supervise and enforce whatever international agreement is the operating policy for space. In other words, an international space oversight agency could be to space weapons what the IAEA is to nuclear weapons.

When considering possible solutions, delegates should think carefully about how to balance definitions of what constitutes a weapon in space with ensuring that whatever actions they take will keep pace with technology, or at least be relevant in several decades. As for an international agency responsible for overseeing the militarization of space, delegates should note that national sovereignty may prove to be a stumbling block, and that compromises could prove to be invaluable in terms of establishing an international and widely-approved agency.

168 Ibid, pg. 1159.

Bloc Positions:

United States, Russia, and China

These nations are grouped together not because they act in concert under a unified notion of how to address the militarization of space, but because they are combative about space strategy.[169] The Russian Federation has created its own organization dedicated to the research of the militarization of space, the Russian Space Forces (KVR).[170] China also has created its own space military force, the Strategic Support Force in the People's Liberation Army (PLA).[171] As mentioned above, the United States has recently ordered the establishment of the Space Force, and the United States Air Force also has operated with space capabilities.[172] These three countries are seeking to achieve peace in space through military deterrence, and that makes them unique obstacles in working for a peaceful resolution. While it is unlikely that they will violate treaties by placing nuclear weapons or other prohibited weaponry in space (or on another celestial body depending on the treaty), that does not mean that they will not militarize space legally by using the gaps and holes in the current space militarization legal framework.[173] These nations will require the participation of the others and an earnest commitment to work together and come up with a framework that is acceptable to all parties that seeks to limit the militarization of space.

Japan and India

Japan and India find themselves in similar positions, again, not necessarily because of ideological similarities but because they both find their current situations to be unsafe, principally because of China. As China continues to rise, both India and Japan will feel threatened, which would require them to either accept their new, less secure position or to try and increase their own space power. In addition to China, India is concerned about Pakistan, and if it is able to maintain space superiority and locate all of Pakistan's nuclear weapons, the concepts of nuclear deterrence and mutually assured destruction will fail to prevent war.[174] Japan's concerns, China and to a much lesser extent, North Korea, are also threatening its safety through the buildup of military forces and military technology, mainly missiles.[175] Japan, however, does not have nuclear weapons, although it is closely allied with the United States, so its only military path forward is in fact

169 "Space Standoff: Uncertainty in Militarized Space," Lossner, Elton. In *Harvard Political Review*, August 13, 2017. http://harvardpolitics.com/world/space-standoff-uncertainty-in-militarized-space/. Site visited September 8, 2018.
170 Ibid
171 Ibid.
172 Ibid.
173 Ibid.
174 "Defiance of Nuclear Deterrence and Indian Space Militarization," Khan, Ayousha (December 26, 2017). http://foreignpolicynews.org/2017/12/26/defiance-nuclear-deterrence-indian-space-militarization/. Site visited September 8, 2018.
175 "Hiding in Plain Sight? Japan's Militarization of Space and Challenges to the Yoshida Doctrine," Kallender, Paul and Hughes, Christopher W. March 5, 2018. Pg. 2.

through space, and likely with United States support.[176] These nations see space not as a way to achieve or to maintain global dominance, but rather to achieve relative parity to nations they believe to pose a threat and deter them from acting aggressively. That being said, one of India's motives is about Pakistan and decisively becoming more powerful than it, but its principal concern is China. These countries would prefer that they did not have to militarize space, which requires that the situation on the ground in East and Southeast Asia be dealt with in such a way that it poses less of a threat, or even no threat, to Japan and India.

European Space Agency

Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland, and the United Kingdom, along with Slovenia, Canada, Blugaria, Croatia, Cyprus, Malta, Latvia, and Slovakia as explained below.

The European Space Agency (ESA) is the final entity on this list with space capacity, but it is notably different from the previous five nations because it is composed of 22 European nations. [177] Canada, Blugaria, Croatia, Cyprus, Malta, Latvia, and Slovakia also occasionally partake in some missions based on cooperation agreements with the Agency.[178] Slovenia is an associate member of the Agency.[179] ESA's sole purpose is to "find out more about Earth, its immediate space environment, our Solar System and the Universe, as well as to develop satellite-based technologies and services, and to promote European industries."[180] In other words, ESA is a non-military multinational space agency expressly created for the conduct of scientific research. Even if ESA tried to militarize, it would require all 22 member nations, and likely the associate and cooperating members, to concur.[181] It also is far less funded than other space programs, which makes the militarization of space through ESA impossible.[182] Nations that are a part of ESA believe that space is meant for peaceful research and exploration, and that the militarization of space is neither beneficial is the present nor in the future.[183] These nations would prefer that space militarization be firmly and explicitly banned, and that current holes in the jurisprudence be fixed.

Other nations

This situation is one of the rare ones in which there is a distinct "other" category or bin for bloc positions, and it is not because these nations are unimportant. The fact is, very few nations have space programs, and most nations that have access to space are part of the multinational ESA.

176 Ibid, pg. 2.
177 "About Us," European Space Agency (2018). https://m.esa.int/About_Us/Welcome_to_ESA. Site visited September 8, 2018.
178 Ibid
179 Ibid.
180 Ibid.
181 Ibid.
182 Ibid.
183 Ibid.

These nations back the *Prevention of An Arms Race in Outer Space* (PAROS), which is a United Nations resolution, and they do not have any reasons at the moment for a militarized space environment.[184] It has been voted on for multiple years, and Israel frequently abstains and the United States votes against it.[185] It is not particularly surprising that these are the results, as the United States has the most advanced space military infrastructure and Israel frequently abstains from security resolutions. What is important to note is that most nations overwhelmingly support the use of space purely for peaceful purposes, and that it is of paramount importance to prevent the militarization of space, particularly regarding weaponry.

184 "Prevention of an Arms Race in Outer Space," Federation of American Scientists (2013). https://fas.org/programs/ssp/nukes/ArmsControl_NEW/nonproliferation/NFZ/NP-NFZ-PAROS.html. Site visited September 8, 2018.
185 Ibid.

Glossary

Militarization of space - the placement of military weapons or military infrastructure of technology into space.[186]

Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies – treaty that prohibits nuclear weapons in space.[187]

Kinetic Energy Projectiles – high density rods whose destructive potential comes entirely from the projectile's velocity.[188]

Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space – first international statement regarding legal principles of space exploration and the non-militarization of space.[189]

Agreement Governing the Activities of States on the Moon and Other Celestial Bodies - the treaty prohibits hostile acts or uses of force, or threats of the aforementioned.

186 "How China is Weaponizing Outer Space," Vasani, Harsh. In *The Diplomat* (January 19, 2017). https://thediplomat.com/2017/01/how-china-is-weaponizing-outer-space/. Site visited July 17, 2018.

187 *Agreement Governing the Activities on the Moon and Other Celestial Bodies*, United Nations Office for Disarmament (1979). http://disarmament.un.org/treaties/t/moon/text. Site visited July 28, 2018. Article IV.

188 "The Pentagon's New Super Weapon is Basically a Weaponized Meteor Strike," Keller, Jared (June 7, 2017). https://taskandpurpose.com/kinetic-bombardment-kep-weaponry/. Site visited July 29, 2018.

189 *Declaration of Legal Principles Governing the Activities of States in the Exploration and Use of Outer Space*, United Nations. December 13, 1963. http://www.un-documents.net/a18r1962.htm.

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