



A Background Guide for the
*Special Political and
Decolonization Committee*



Harbin No.3 High School Model United Nations

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A Letter from the Director

Dear delegates,

As the director of this year's H3Z MUN, it is my honor to welcome you to the General Assembly Special Political and Decolonization Committee. My name is Han Te, and I am now a Senior of Harbin No.3 High School. My intimate friends call me Hunter, the one that always preys.

Model UN for me is not where I perform myself and show my quality to others. Instead, it is where I meet people. Muners are everywhere: in the midnight hotel hall of EXPO, struggling with their Draft Resolutions, in the narrow lifts of HMUN, talking aloud about the shitty things in the last session, or in the committee rooms of H3ZMUN, staring at each other and striving for their countries' profits. I'm fond of people here, people that rush about for everything, people that can make both an effective speech and a heart-to-heart talk, people that discuss each clause of the documents attentively. They seem motivated and hopeful. I value all the people in my past MUN life, and today, it's your turn to meet those people in your own MUN life.

Although it will be only a one-day MUN, it will still be a meaningful MUN for you. There is no need to be afraid of attending your first MUN like this, because the most important task of us is to understand the rules, clarify the procedure, and be familiar with documents. I believe you can have a better understanding of the whole MUN. During the conference, you can ask questions in any time by using a point, but don't interrupt other delegates' speech. I hope we can solve most of your problems about the conference and make you more confident and capable about your future MUN.

Our topic for this conference is related to the Space and it's quite easy to understand. You can read this Background Guide for several times to make a good understanding of the problems and thought out

some feasible solutions. You should try to do some research from the Internet and I will put some important websites you need to explore on the last part of this BG. After that, you need to finish a Position Paper by yourself. You need to stand for your country's interests and needs. I believe you guys can make a good preparation.

If there is any problem, you can contact me in any time. I'm anxious to see you Saturday!

Best wishes,

Trafalgar, Director

Director, Special Political and Decolonization Committee

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Introduction

With the development of space technology, human beings now figured out more ways to explore the outer space and find resources that can be applied to various fields like weather forecasting, GPS location, Remote Sensing, etc. Countries now regard space technology as an important factor to judge the strength of a country; therefore, the competitions among all countries are getting more and more intense. Meanwhile, rockets, satellites, spacecrafts and space stations not only consume energies and disturb the outer space but also produce space debris that contaminate the outer-space environment and even threaten the safety of following space explorations. Since the orbits of the debris often overlap that of the new spacecrafts, debris may collide with operational spacecrafts and cause disastrous accidents. Realizing the importance of saving a sustainable and secure outer space for ourselves, GA-SPECPOL has the

responsibilities to show feasible solutions to member states and direct the consultation among countries. In this case, the actions of the committee have profound implications on outer space security, technology sustainability and further movements concerning outer space exploration of member states.

History of the Committee

The General Assembly was established by the 1945 United Nations Charter to be the main deliberative body of the UN. It is comprised of all 193 member states of the United Nations, and thus deals with a wide array of international issues affecting the world. There are six committees that compose the General Assembly, which are tasked with discussing pertinent questions under the General Assembly's jurisdiction, developing solutions, and presenting their draft resolutions to the Assembly at large.

Established by Resolution 1514 in 1960 as the Committee of 24, the Fourth Committee originally dealt with issues of Trusteeship and Decolonization. Until 1978, an ad hoc unnumbered Special Political Committee sat; in 1993, GA Resolution 47/233 merged the two into the body known today as the Special Political and Decolonization Committee (SPECPOL). It joins five additional main committees of the General Assembly, the others being the Disarmament and International Security Committee; the Economic and Financial Committee; the Social, Humanitarian, and Cultural Committee; the Administrative and Budgetary Committee; and the Legal Committee.³ It is comprised of all 193 members of the United Nations, who each receive one vote.

As evidenced by the ambiguity of its name, SPECPOL deals with a wide array of topics, from territorial disputes between ethnic groups and/or sovereign nations to decolonization, international peacekeeping efforts to the question of Palestine, outer space to land mines. Since many of these issues may also be considered to be under the

purview of the Security Council or the Disarmament and International Security Committee (DISEC), SPECPOL as a body often may make recommendations to these two other bodies.

As outlined by Chapter 4, Article 10 of the Charter of the United Nations, as a committee of the General Assembly SPECPOL is permitted to “discuss any questions or any matters within the scope of the present Charter or relating to the powers and functions of any organs provided for in the present Charter, and, except as provided in Article 12, may make recommendations to the Members of the United Nations or to the Security Council or to both on any such questions or matters.” The Charter continues in Article 11 that as a member of the General Assembly, SPECPOL may consider “general principles of co-operation in the maintenance of international peace and security” and make recommendations to the Members of the United Nations and/or the Security Council on such matters. However, SPECPOL is not permitted to directly take action by itself. It cannot impose or enforce its recommendations to the Security Council, the Members of the United Nations, or other groups.⁴ Still, since all Members of the United Nations are represented and each allocated one vote, SPECPOL provides a unique forum for expressing the interests of the world's nations and constitutes a powerful deliberative and wholly representative body in the international arena.

Topic: The Security and Sustainability of Outer Space Technology

Statement of the Problem

On June 20th 2008, the United Nations had a 10-day session that focused on the use of space technology for disaster management. Experts from all over world presented the reports on water resource management initiatives that use space technology to monitor and mitigate the effect of

flood disasters and to improve the timeless and accuracy of forecasts. The UN body then noted global initiatives to use space-derived geospatial data for sustainable development in areas such as agriculture, deforestation assessment, disaster monitoring, drought relief and land management. In addition, the committee heard about a number of educational initiatives that use satellite technology for distance education to reach teachers and students at all levels, including the Space Education Programme of the UN Educational, Scientific and Cultural Organization (UNESCO). Under the theme “Why should we go to space?” the Chairman of the United Nations Committee on the Peaceful Uses of Outer Space said

“In a way the situation was like that in Europe before 1492. The discovery of the new world made profound differences to the old. Spreading out into space will have even greater effect. It will completely change the future of the human race and maybe determine whether we have any future at all. Hopefully, it would unite us to face a common challenge,” he said.

Then on October 23th 2013, SPECPOL held a conference debating on the peaceful uses of outer space that space systems contributed significantly to the functioning modern societies, but that there was a risk of a “sudden, possibly, irreversible deteriorating of the orbital environment” owing to a number of factors, not least, space debris, as well as the use of that domain for military purposes.

Meanwhile, debates about the outer space technology are discussed more and more widely and usually all over the world. People concern about the development of their countries as well as the benefits they can get from space technologies. Yet still the negative sides are relatively weak voices in the world. What this committee should do is to confront these issues with empathy, diplomacy, and tact, yet pursue innovative solutions with assertion, creativity, and urgency. As a member of the General Assembly with full representation of the United Nations’ 193 member states, this committee is poised in a vital position to immediately take decisive strategic action.

History of the Problem

On October 10th 1957, in Site No.1 at NIIP-5, a desert now in Kazakhstan, Soviet Union launched the first artificial satellite, Sputnik 1 of human beings into the outer space. Since then, human beings formally entered the “Space Age”. Sputnik 1 was launched into an elliptical low Earth orbit (LEO) and was visible all around the Earth. The launch ushered in new political, military, technological, scientific and economic developments and the exploration became one of the most pivotal projects that represent the strength of a country. Then the achievements of first human spaceflight (1961), the first spacewalk (1965), the first moon landing (1969) and the first launch of space station (1971) etc. were reached one by one like competitions. Human beings shifted their attention from the resources on the earth to those in the space, and it is true that many common everyday services such as weather forecasting, remote sensing, GPS systems, satellite televisions, etc. critically rely on space infrastructure. What’s more, new technologies originating with or accelerated by space-related endeavors are often subsequently exploited in other economic activities.



However, although it has a long history and extremely beneficial applications, the outer space technologies are still causing numerous dangerous consequences. In this conference we will mainly focus on space debris and territory occupation. It is also important to mention the negative effect on the astronauts’ health and safety as well as the risk future spacecrafts may face. In that case we will emphasize the security and sustainability development of space technology and the solutions

to them.

To make sure that the outer space technology is safe as well as sustainable enough for humans' further research, the United Nations has made great effort to help. Since 1963, the United Nations has proclaimed a series of regulations of the outer space. For example, the Outer Space Treaty, which is the work of the United Nations, entered into its force in October, 1967. The treaty provides the basic framework on international space law, including the principles that require cooperation and mutual benefits to all member states, the limitations of the use and purpose of space technology and the responsibilities countries should take.

Current Situation

Human's exploration of the outer space has never stopped. Now with the rapid development, people have superb technology to explore the outer space. Up to now, people have already finished thousands of launches of different kinds of spacecrafts and have already completed numerous researches.

Artificial Satellite Technology

The artificial satellite is a man-made object that orbits another object in the outer space. And the artificial satellite is a type of spacecraft which has the largest amount, widest use and the fastest development among various kinds of aircrafts. The amount of the artificial satellite constitutes a majority of more than 90% of the sum of all of the launched spacecrafts.

Most of the artificial satellites orbit the Earth, but some of them also orbit other planets, such as Saturn, Venus, Mars and the moon. Up to now, humans have set up more than 800 artificial satellites into the outer space for research, in order to provide useful information about the weather, accurate data about the resources and environment, and also the access to make communication more convenient through the communication apparatus.

The idea of the artificial satellite can be traced back to Isaac Newton's cannonball experiment. Later,

Jules Verne wrote about an artificial satellite in 1879 in a book called *Begum's Fortune*. And that was the first mention of the artificial satellite. Since 1957 when the first artificial satellite was launched, the satellite technology has been progressing day by day. Satellites varied in size: while some cube satellites are as small as 10 cm, some communication satellites are about 7m long and have solar panels that extend another 50m. Also with the development, the design and workmanship of satellite tend to be more qualified and economic so that more countries are able to launch their own satellites successfully. Nowadays, artificial satellites come from more than 50 countries and have used the satellite launching capabilities of ten nations. A few hundred satellites are currently working up above in the starry sky, but thousands of unused satellites and satellite fragments orbit the Earth as space debris, which might cause horrifying damage in many aspects.



For the artificial satellites which orbit different planets, there are two kinds of orbits. First, most of the artificial satellites are in a low Earth orbit (LEO) or a geostationary orbit. In order to stay in this orbit, the satellite's sideways speed must balance the force of gravity. Satellites in low orbit are often less than one thousand kilometers above the ground. Close to the Earth, in LEO, the satellites must move faster to stay in this orbit. Low orbits work well for satellites that take pictures of the Earth. Many do jobs that call for high orbital inclination (they swing above and below the equator), so they can communicate, or look at other areas. It is easier to put a satellite in low Earth orbit, but the satellite appears to move when viewed from Earth. This means a satellite

dish (a type of antenna) must be always moving in order to send or receive communications with that satellite. Second, medium orbit works well for GPS (Global Positioning System) satellites——receivers on Earth use the satellite's changing position with precise time (and a type of antenna that does not have to be pointed) to find where the receivers are on the Earth. But constantly changing positions does not work for satellite TV and other types of satellites that send and receive a lot of information——they need to be in the geostationary orbit.

Although the level of the artificial satellite technology is getting much higher than before, there are also many failed incidents existing. For example, the United States, which is one of the countries that own the most excellent outer space technology, also failed in setting up satellites for over 14 times from the beginning of its first launching. And since the artificial satellite is so helpful for humans' exploration of the outer space, much more energy is required to be focused on the technology of the artificial satellite.

Space Station

One important part of the space exploration is the founding of the space station. As the term suggests, the space station is a spacecraft capable of supporting a crew, which is designed to remain in space for an extended period of time and for other spacecraft to dock. Also, the space station provides a platform to perform experiments in the real outer space but not in the model environment on the Earth. The space station not only has large bulk, long orbiting time and various functions but also has economical benefits. Besides, in the space station, it is capable for astronomers and scientists to perform various space scientific research projects which are accurate, deep and convincing.

Space stations have been envisaged since at least as early as 1869 when Edward Everett Hale wrote "The Brick Moon", and this conception was first put forward then.

People have devoted a lot into the space station. In 1929 Herman Potočnik's *The Problem of Space*

Travel was published, the first to envision a "rotating wheel" space station to create artificial gravity. And in 1967, the first space station, the Salyut 1, was launched into the outer space by the Soviet. Although the 3 astronauts suffocated in the Salyut 1 and died unfortunately, the first space station still has its great significance. After that, the United States and China emitted their own space stations successively and more and more countries became the member of 'space family'. In order to classify the space stations, there are several levels of generation:

The 1st generation: one cabin and one interface
(Examples: Salyut 1~5)

The 2nd generation: one cabin and two interfaces
(Examples: Salyut 6~7)

The 3rd generation: several cabins and modular constructions (Example: The Mir Space Station)

The 4th generation: several cabins, both truss structures and modular constructions (Example: International Space Station)



Problems of the space stations refer to not only security but also sustainability. For example, these space stations mentioned above have various issues that limit their long-term habitability, such as very low recycling rates, relatively high radiation levels and a lack of weight; therefore, some of these problems cause discomfort and long-term health effects. In the case of solar flares, all current habitats are protected by the Earth's magnetic field, and are below the Van Allen belts.

Future space habitats may attempt to address these

issues, and could be intended for long-term occupation. Some designs might even accommodate large numbers of people, essentially "cities in space" where people would make their homes. No such design has yet been constructed, since even for a small station, the current (2010) launch costs are not economically or politically viable.

Manned Space Flight

In order to explore the outer space more completely and accurately, people start to send human beings into the outer space to experience, research and study. Studying the situations and phenomenon directly by human beings is a more effective and accurate way to explore space not only because human beings have the judgment of emergency and ability to regulate but also because the meaning of sending human beings to the space is profounder than that of sending machines. In addition, considering the current situation that human beings are looking for other suitable residence apart from the earth, human beings themselves can analyze the environment and conditions using their experience and intelligence much better than computers and machines do using merely set data and parameters. Therefore, it is necessary to develop manned space flight technology for each country which is willing to utilize the outer space more efficiently.

To make sure the quality of the manned space flight, countries should concentrate the energy to train and select perfect astronauts or the manned space flight plans with rigorous requirements. Suitable astronauts for the manned space flight should have strong physical bodies, high education, the competence to analyze and solve problems and excellent mental disposition, etc.

On April 12th, 1961, the Soviet Union Yuri Alekseyevich Gagarin entered into the unknown outer space, and thus made a great step of human beings' exploration while represented the real start of manned space flight. Now, the United States, Russia, China, Japan, Europe and many other countries and regions have developed manned space flight technology to get more information of

the outer space. And so far, only the European Union, India and Japan can be ranked as the quasi manned space flight countries.



Thus it can be seen that manned space flight technology is not so easy to be accomplished since only a few countries can master the manned space flight technology. In order to complete the manned space flight mission, the country should own the capacity to carry heavy spacecrafts into the orbits, the ability to control the satellite to return safely and the technology to supervise the outer space environment, etc. Besides the need for technology and full-experienced staff to control manned rockets, a country must have a solid national strength, a booming economy, and certain financial support. Due to the fact that manned space flight is tightly related to astronauts' health and lives, it should be as consummate as possible because a single mistake may result in a horrible tragedy of human beings. On April 23rd, 1967, "Soyuz 1" space capsule crashed after re-entry due to a parachute failure, and the Soviet astronaut Vladimir Komarov thus sacrificed his life. On January 28th, 1986, the spaceship "HMS Challenger" crashed because of an O shaped ring on the right side of solid rocket propulsion broke, and this time the heavy cost was the lives of seven Americans on the spaceship.

These destructive catastrophes cause not only the loss of the excellent astronomers but also a crush of the countries' economy. Therefore, the safety and reliability of these spaceships became another concern to us.

Space Debris

The space debris is the collection of defunct objects in orbit around Earth. The space debris mainly includes the dead spacecrafts, lost equipment, boosters and weapons. Discussions of space debris categorize the debris by size. "Large" debris is considered to be 10 cm (3.9 in) across or more, with typical masses of about 1 kg (2.2 lbs). The technical measurement cutoff is 1 cm (0.39 in) or less. As the number of successfully launched spacecrafts increases rapidly, the accumulation of space debris produced by them comes along as well. According to a report from NASA on September 27th, 2013, over 50,000 pieces of space junk in the Earth orbit are surveyed, most of which are the satellite fragments demolished after launching missiles. The debris travels at the speed of 17,500 mph, fast enough to damage a satellite or a spacecraft.



Basically on one hand, the safety of coming spacecrafts is threatened severely; on the other hand, the debris occupies too much space as well, which is not sustainable for future exploration. In detail, member states are supposed to pay more attention to these possible consequences space debris may cause and the solutions to them:

A. To unmanned spacecraft

Since the orbits of dead spacecrafts namely debris and new spacecrafts may overlap sometimes, the possibility of collision is high enough to cause negative effects. Because the surface of some solar panel-powered spacecrafts is covered by an important material called 'Whipple shields' in order

to eliminate the damages caused by solar, once the collision happen, even a small damage of the surface can lead to the direct explosion to sun. The solar panels will produce a cloud of gas-sized particles which are electrical risk to the panels themselves.

B. To manned spacecraft

Considering the consequence debris leads to unmanned space crafts, the danger to manned spacecrafts is obviously horrible. NASA started to use the NORAD database to monitor the Shuttle's orbital path for debris since the early explorations. The first Space Shuttle collision-avoidance maneuver occurred during STS-48 in September 1991, in which a seven-second reaction control system burn was performed to avoid debris from Kosmos 955. Similar man-oeuvres followed on missions 53, 72 and 82.

Damage from smaller debris has become a significant problem, with window chipping and minor damage to thermal protection system tiles (TPS) common by the 1990s. To mitigate its impact, when the Shuttle reached orbit it was flown tail-first to take as much of the debris load as possible on the engines and rear cargo bay (not used in orbit or during descent, and less critical for

The increase in debris led to a re-evaluation of the issue, with a catastrophic impact with large debris considered the primary threat to Shuttle operations on every mission. Mission planning required a thorough examination of debris risk, with an executive-level decision to proceed required if the risk of catastrophic impact is greater than 1 in 200. On a normal (low-orbit) mission to the ISS the estimated risk was 1 in 300, but the STS-125 mission to repair the Hubble Space Telescope at 350 mi (560 km) was initially calculated at a 1-in-185 risk (due to the 2009 satellite collision). A re-analysis with better debris numbers reduced the estimated risk to 1 in 221, and the mission was allowed to proceed.

C. To International Space Station

Similar to the unmanned spacecrafts, although being protected by Whipple shields, the Space

Stations still cannot avoid being damaged if the portions (notably its solar panels) are crushed. In 1989 the ISS panels were predicted to experience about 0.23 percent degradation in four years, and they were over-designed by one percent. Because International Space Stations serve as the great contributions of human beings, the risks they are facing are threatening many related functions such as working place of astronauts and data center in the space and thus impede the development of human beings' space exploration.

D. To Earth

Although most of the debris will burn up in the atmosphere, some larger objects can still reach the ground. Data show that an average of one cataloged piece of debris has fallen back to Earth each day for the past 50 years. Fortunately, apart from the damage caused by the size of the debris, so far there has been no significant property damage from the debris. But the loss these damages cause still concern a lot.

Due to the fact that the disturbance of space debris is getting more and more frequent, and also it is important to keep the orbits as clean as possible for future development, there are several existing solutions to the debris problem. Although there is no international treaty minimizing space debris, there are voluntary guidelines and 'rule of the road' to prevent collisions between satellites. Many countries have set standards and policies to mitigate the space debris damage and obey the 'one-up, one-down' launch-license policy for Earth orbit. Launch-vehicle operators would pay for debris mitigation, capture and de-orbit a derelict satellite from the same orbital plane. Also, the robotic refueling of satellites serves as another possibility to mitigate. Besides the mitigation activities, both self-removal and external-removal function effectively in controlling space junk. Delegates should develop feasible methods either to enhance or to improve the technology based on the currently existing study and accomplishment.

Military Use

Military activities in space are fundamental to

national security. The unique characteristics of space have made practical the development of a multitude of systems to support and enhance military operations. These include systems for navigation, weather forecasting, communications, mapping and geodetic measurement, nuclear explosion detection and monitoring, ballistic missile early warning, photo reconnaissance and surveillance including arms control treaty monitoring. These systems are crucial to the employment of our military forces and provide a significant increase in the effectiveness of the force. They have been characterized as force multipliers, thus permitting the accomplishment of national goals and objectives with fewer, although more efficient, forces.

As the applications of space technology getting wider and wider, it is related to a lot of national secretive missions usually. The parameters and details of the design on the other hand become another point that involves military competitions. Therefore, the security of space technology does not only limit to spacecrafts themselves but also include the relationships between countries.

Relevant UN Actions

Committee on the Peaceful Uses of Outer Space

The Committee on the Peaceful Uses of Outer Space (COPUOS) was set up by the General Assembly in 1959 to govern the exploration and use of space for the benefit of all humanity: for peace, security and development. The Committee was tasked with reviewing international cooperation in peaceful uses of outer space, studying space-related activities that could be undertaken by the United Nations, encouraging space research program, and studying legal problems arising from the exploration of outer space.

The Committee was instrumental in the creation of the five treaties and five principles of outer space. International cooperation in space exploration and

the use of space technology applications to meet global development goals are discussed in the Committee every year. It adopts an annual resolution on international cooperation in the peaceful uses of outer space.

Until now, it has held 58 sessions in total, ended the most recent session on 19th June 2015, in Vienna. The latest conference emphasized space debris migration and appealed to its awareness. Under the establishment of surveillance system, plenty of countries have already implemented space debris migration measurements, consistent with the Inter-Agency Space Debris Coordination Committee (IADC) Space Debris Mitigation Guidelines. Other states have developed their own criteria of debris migration as well for the sake of outer space technology security. The committee are generating more state members exposed to increasing numbers of violent problems on outer space technology unsolved.

United Nations Institute for Disarmament Research

The United Nations Institute for Disarmament Research (UNIDIR) is a voluntarily funded autonomous institute within the United Nations. An impartial actor, the Institute generates ideas and promotes action on disarmament and security.

On 19th March, 2014, the UNIDIR held its 2014 Space Security Conference entitled “The Evolving Space Security Regime: Implementation, Compliance, and New Initiatives”. Before this, it has held several conferences including “Outer Space and Global Security” in 2003 and the series of Space Security Conference from 2001. It had examined the current and future uses of space, assessing ways to prevent the deployment or use of weapons in, from and against outer space. Governmental and non-governmental representatives discussed a wide range of short-term and long-term measures to enhance space security, including the need for such new international legal instruments as treaties and space

sustainability.

Short-term measures included a variety of confidence-building measures, space debris mitigation measures, cooperative space traffic control, non-offensive defenses for space assets, agreements on non-interference with space assets, and increased public engagement on space security issues.

In discussions of longer-term strategies, participants explored the potential role of the private sector and commercial interests in support of space security, the feasibility of negotiating a space weapons ban in the foreseeable future, and plans for encouraging the Conference on Disarmament to work on the space security challenge.

Other actions all over the world

A policy brief entitled “Advancing a Cooperative Security Regime in Outer Space” was developed as part of the collaborative project between the Global Security Institute and the Secure World Foundation basically concerning current threats, peaceful cooperation universally, avenues for progress and merits of secure outer space technology for human being.

The two organizations are well-renowned organizations which boost the steady and peaceful development of the world. The Global Security Institute (GSI) is a largely private (through partly bipartisan) non-governmental international organization founded by US Senator Alan Cranston in October, 1999, with an aim to influence national laws, seeking to accomplish its mission by focusing on nuclear arms control, non-proliferation, and disarmament. The Secure World Foundation collaborates with governments, industry international organizations and civil society to develop and promote ideas and actions for multinational cooperation which achieves secure, sustainable and peaceful uses for outer space.

They have attracted the positive attention from all parts of the world.

Questions a Resolution Must Answer

- Are there any other effective solutions to cope with the increasing numbers of debris brought by high technology in the outer space?
- The space trash may disturb the orbit of other satellites or harm human health, what actions are supposed to put into practice?
- Should the research results of space technology be exposed to some dominating countries having strength in technology deliberately?
- How can UN and other NGOs manage the safety problem of current launching processes?
- What kind of measurement can be taken to alleviate the collision among debris and satellites?
- How can less-developing countries do to offset the economic gap with developed countries?

The answers may not be presented in each delegate's position paper, but you have to form a clear framework composed of these answers in your mind, which will be the topic center during the conference.

Bloc Position

European Countries

According to the European Space Agency(ESA),on the conference in Paris on 30 May 1975, the Convention for the establishment of a European Space Agency (CSE/CS(73)19, rev.7) was opened for signature by the Member States of the European Space Conference, until 31 December 1975.The Final Act of the Conference of Plenipotentiaries and the associated Resolutions (CSE/CS(73)20, rev.7) established conditions for signature of the Convention and for the functioning of the European Space Agency.

Until 1975, the Convention had been signed by: the Federal Republic of Germany, the Kingdom of Belgium, the Kingdom of Denmark, Spain, the

French Republic, the Italian Republic, the Kingdom of the Netherlands, the United Kingdom of Great Britain and Northern Ireland, the Kingdom of Sweden, the Swiss Confederation and Ireland. Until now, other states including Austria, Norway, Finland, Portugal, Greece, Luxembourg, Czech Republic, Romania and Poland had signed for the ESA Convention.

The ESA Convention clearly stipulated the use of facilities and services, assistance to member states and supply for products. Simultaneously, they achieved agreements on sharing information together with database, common legislation on access to the space and maintaining the security of the space. Despite of the disputes on several opinions between the member states, European countries have enacted their own policies to guarantee the security of outer space technology, combining with each other closely.

The United States

On April 15th, 2010,the National Space Policy of the Barack Obama administration was announced by U.S. President Barack Obama,which promotes the security outer space technology development in the USA. Dating back to 1960s,the policy had laid stress on safety of American space technology, and has a more profound influence after Obama's speech. Inside the United States, scientists tend to develop new technology for crafting as well as coping with the current contaminant in the space, and gave gained support from the government and scientific field.

As a power in space technology, the United States claimed that they were willing to be the sponsor of the "Outer space, international code of conduct" together with European Union and other countries in 2012.Before in 2009,European Union had offered a proposal to enact a law, however being postponed for some reasons and eventually brought forth the draft in 2013.After the announcement from the United States, some European countries challenged the assumption by considering it as "disguise benefit for the US".

As a leader among all space-faring nations, the

United States accounts for 75 percent of worldwide governmental space funding, and U.S. government or industry owns and operates roughly 40 percent of all the active spacecraft in orbit. To alleviate the threat posed by space debris, U.S. Strategic Command's Joint Space Operations Center (JSPOC) detects, tracks, and identifies space objects through an elaborate constellation of twenty-nine ground-based radars and optical sensors. In addition to protecting U.S. spacecraft, JSPOC extends this capability—at no cost to the international community—by warning countries and commercial space operators when their satellites are at risk from large space debris or other satellites.

The Russian Federation & People's Republic of China

With China under sanctions which prohibit space cooperation with the U.S., and Russia under broad sanctions which have also interfered with cooperative U.S. space programs, it is not surprising that cooperation between Russia and China in space technology and exploration is being given more depth and breadth. High-level discussions have been underway since the Spring, to create a framework for areas of joint work. China has benefited, especially in its manned space program, from Russian in-put and training, but additional areas of applications, such as navigation, and deep-space planetary exploration, are also now on the agenda. Considering the scope of the problems, and the parade of failed missions, in the Russian program, these cooperative projects are most importantly a political statement of intent by these two leading Eurasian nations.

In 2014, China and Russia have jointly submitted an updated draft international treaty on banning the deployment of weapons in outer space. The updated draft Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force Against Outer Space Objects, was presented at a plenary session of the Conference on Disarmament, the world's sole multilateral forum for disarmament negotiations. The Treaty on Prevention of the

Placement of Weapons in Outer Space and of the Threat or Use of Force Against Outer Space Objects (PPWT) was first proposed by China and Russia in February 2008 as an international legally binding treaty. China and Russia are willing to include suggestions and ideas from other parties and continue to improve the draft treaty in order to lay a foundation for the start of practical negotiations.

Suggestions for Further Research

Although most of the important details of our topic is presented in the Background Guide, we still hope you can do some research by yourself. You can utilize your country's national website site for Space Research to form your idea about your country's situations about our problems. You can also try several websites below:

- ❓ www.un.org (United Nations official website)
- ❓ www.wikipedia.org (Wikipedia)
- ❓ www.unbisnet.un.org (UN official Document center)
- ❓ www.cia.gov/library/publications/resources/the-world-factbook/ (CIA World Fact Book)

Position Paper

Each delegation is required to submit one position paper. Each position paper should be one and a half pages, single-spaced, twelve-point Times New Roman font (approximately 750 words). Your names, country name, school, and topic area should be in the upper left hand corner. The paper should be outlined in three paragraphs. The first two paragraphs should make up about half of the paper; the third and final paragraph should make up the remainder, and bulk, of your paper. These paragraphs are in a logical procession, and each paragraph should build analytically on the last.

The first paragraph should consist of your country's

experience or particular connection to the topic. For instance, how well your country has developed in space technology area? How was your country affected by the development of space technology?

The second paragraph should discuss your nation's policy on the issues, as supported by relevant national documents. This differs from the first paragraph because it should also include a short description of agreements, statements, and lessons learned from your history and choices in the past. You should also discuss your current diplomatic arrangements with relevant nations in this paragraph. Research for this paragraph could include speeches given by heads of state or ambassadors, or national studies and policy statements.

The third, final, and most important paragraph is your country's plan going forward. Given your history and your policy going forward, what does your country believe is the best course of action to pursue? This should be a unique mixture of international work and your country's personal past and experiences. For example, given risk factors and past experiences, what is the most logical and effective way to address space debris?

These length guidelines are meant to focus your research in the places that will be most productive for committee debate. Understanding your country, however, is important for creating a plan to undertake on an international level, and I highly encourage you to conduct your investigations and learning with vigor and curiosity. Please cite all your sources with endnotes. And of course absolutely do not hesitate to contact me with questions.

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8 SOVIET SPACE PROGRAMS, *supra* note 6, at 383-384. O Hearings on S.357, *supra* note 7.