

THE OUTER SPACE TREATY AN EXHAUSTIVE ANALYSIS

Author: Kush Khandelwal, IV year of BBA.,LL.B from symbiosis law school, Hyderabad

Abstract

The United Nations have constantly stived towards peace, and when the world was exploring the space, they felt the need to formulate regulations to ensure peace is even in space. The same was first initiated in the later 1950s. The UN took over this responsibility of governing the space-related advancements can play in improving the human condition all through the globe. To this day, the UN and its specific offices lead an organized program of exercises using these advances.

Following the phase III of the Space Evolution, the Outer Space Treaty, 1967 has been a very significant regulation, put in place. The major aim of the said Treaty is to ensure that the defined Space which also included moons and other celestial bodies be used only with the intention of exploration, which is a point which is signified at many different places in the said treaty. The initiative taken by UN that is the 1967 Outer Space Treaty is another extraordinary advance forward to guarantee non forceful tranquil purposes in space. Meanwhile, we should not fail to remember that under the 1967 arrangement reference to serene purposes and different references to worldwide co-activity in space for quiet purposes not to restrict all military exercises in space.

Specifically, the UN in the Outer Space Treaty, ensures the maintenance of peace with the help of article III, IX and IX. Furthermore, in the researcher's opinion Articles; III, IX, XI and IV are collectively the pillars of peace with respect to the defined Space. With the advancement of technology in the 21st Century, at times these regulations do seem outdated, but the suggestions made by the researcher may help rectify some of the loopholes / issues present in the Outer Space Treaty, 1967 shall further extend the lifeline of the application of the respected Treaty.

Key Words: United Nation, Outer Space Treaty, Peace, Loopholes & Suggestions.

Research Objective; Legal Issue / Problems / Statement of Problem

The problem with respect to the Outer Space Treaty, is mainly with regards the **existing loopholes**. Although the Outer Space Treaty has been in force for a while, there still exists

uncertainty revolving the application, the jurisdiction, and distinction of civil and criminal liability of States.

This treaty is on the **basis of “free-will”** meaning that only the willing countries would be subjected to the provisions. This gives undue levy, whereby the states are moving in the direction of heavy exploitation of Space, which not only poses **economical** but **environmental threats** as well.

Additionally, **the lack of authorities** in this field, raises serious questions regarding the manner of application, dispute resolution process and leaves various arenas open to discretion, thereby causing additional harm.

Research Methodology

The researcher has relied on “*Qualitative*” method of research to establish the concepts of Bodily Fluids; secreted and excreted. Since there is no legal definition provided by legal regulations regarding the same, the researcher has established the definition of such influential concepts on the basis of various academic publications, journals and other research papers. Therefore, the reliance of above sources implies the utilization of “*qualitative*” methods by the researcher.

The researcher however, has primarily relied on “doctrinal” method of research to elucidate the significance that bodily fluids present as forensics evidence. The researcher has utilized various Indian, as well as International regulations that have judgements influenced by bodily fluids acting as evidence. This research design of this paper stands conclusive, as the researcher shall list down the analysis, interpretations and suggestions in a conclusive nature.

Abbreviations

Full Form	Abbreviations
And	&

United Kingdom	UK
United Nations	UN
United States of America	US
Weapons of Mass Destruction	WMD

ACKNOWLEDGEMENT

This researcher would like to express immense gratitude to Mrs. Khushi Kerur for her constant assistance provided throughout the drafting and editing of the paper. The researcher is also thankful to his family and friends for the general guidance provided. Lastly, the researcher is really grateful to the various authors and literatures who have assisted with the research, and the researcher has duly acknowledged them in the references segment of this paper.

HISTORY & DIFFERENT ASPECTS OF THE OUTER SPACE TREATY

In this chapter the researcher establishes the *History of the Outer Space Treaty, 1967(2.1.)*, furthermore the *Terms of the Outer Space Treaty(2.2.)*. Additionally, the *United Nation: The Most Vital Authority(2.3.)* is discussed, Lastly, the researcher has shed light on *Defining the boundaries of Outer Space(2.4.)*. Collectively this chapter adheres to understanding the scope of Treaty the involved parties & the significance of the same.

HISTORY OF THE OUTER SPACE TREATY, 1967

The United Nations have constantly strived towards peace, and when the world was exploring the space, they felt the need to formulate regulations to ensure peace is even in space. The same was first initiated in the later 1950s. The US and its allies offered proposition in 1957 on exploring outer space solely for “*peaceful and scientific purposes,*” nonetheless the Soviet Union excused

these endeavors since it was preparing to dispatch the world's first satellite and test its first “*intercontinental ballistic rocket*.” In 1963, the UN confirmed two goals on space that consequently transformed into the reason for the Outer Space Treaty. UN Resolution 1884 moved toward nations to disregard positioning Weapons of Mass Destruction in space. UN Resolution 1962 listed out legitimate standards on space examination, which specified that all nations save the advantage to wholeheartedly explore and utilize space. The United States and Soviet Union were of different opinion with respect to space, which was very evident due to them submitting separate draft space settlements in June 1966. A commonly agreed and negotiated deal had ended up being all through in a duration of half a year, and the UN gave its underwriting of the course of action on 19th of December, 1966. The official document was taken for signature in Washington, Moscow, and London on 27th of January, 1967 and went into power October 10, 1967. Following this a fifth meeting with respect to the same was held at Geneva from 12th of July to 4th of August and at New York from 12th of September to 16th of September, observing further the advancement achieved through resulting interviews among States Members of the United Nations. Furthermore, reaffirming the meaning of global co-action in the field of exercises in the quiet investigation and utilization of room, including the Moon and other divine bodies, and the meaning of developing the norm of law in this new domain of human endeavor.

TERMS OF THE OUTER SPACE TREATY

Following the establishment of the Outer Space Treaty it was observed that, the said treaty denies countries from passing on *atomic weapons or some different kinds of WMD* in space. The phrase ‘*weapons of mass destruction*’ is not particularly described, nonetheless it is typically fathomed to fuse nuclear, compound, and regular weapons. This respected treaty, in any case, doesn't deny the beginning of ballistic rockets, which could be outfitted with WMD warheads, through space. The game plan more than once focuses on that space is to be used for serene purposes, driving a couple of analysts to reason that the deal could thoroughly be unraveled as blocking a wide scope of weapons structures, not just WMD, in space.

Therefore, the Outer Space Treaty contemplates updates or part withdrawal. Article XV licenses countries to propose amendments. An amendment can go into power at whatever point

recognized by a lot of states-get-togethers, and it very well may be definitive on those countries that underwrite the change. Article XVI expresses a country's withdrawal from the settlement will deliver results a year after it has introduced a made admonition out of its assumptions to the depositary expresses the US, Russia, &UK.

UNITED NATIONS: THE MOST VITAL AUTHORITY

The United Nations have constantly stived towards peace, from the earliest recorded periods of space exploration, the UN took over this responsibility of governing the space-related advancements can play in improving the human condition all through the globe. To this day, the UN and its specific offices lead an organized program of exercises using these advances. UN-Space, a between office instrument for such coordination, gathers yearly meetings of the Inter-Agency Meeting on Outer Space Activities to talk about present and future exercises, developing innovations of intrigue and other related issues among UN framework elements. For more extensive shareholder's consultations, UN-Space sorts out casual meetings open to Member States, private area, non-administrative establishments and academia.

The UN for Outer Space Affairs endeavors to advance worldwide collaboration in the tranquil usage and investigation and the use of space science, and innovation for practical monetary and social turn of events. Space advancements transcendently affect practically all parts of improvement n the modern world, and therefore it's the duty of UN to oversee the same, accordingly.

DEFINING THE BOUNDARIES OF OUTER SPACE

In the earlies trace of human history, humans have always strived towards defining a boundary, to establish their place of control. We have fought wars over the same as well as ensure peace with the help of the same. Article I, II and III of the Outer Space Treaty collectively help define the boundaries or lack there of in Outer Space. As mentioned in the history in late 1950s the UN had started thinking of the possible ways in which they could govern the outer space, and there

were two broad options presents in front of them, to divide space and assign boundaries, however the same would be highly controversial as the both the moon and earth keep revolving at difference paces. Therefore, the UN decided a no boundary approach whereby space as a whole was open to exploration to all the member countries, however they made it a point to bring special emphasis on the term exploration. They have provided a definition to Space and further stated that Space includes moon; “Space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination.”¹ They have further expanded on the same in Article II stating; “Space, including the Moon and other celestial bodies, is not subject to national appointment by guarantee of sovereignty, by means of use or occupation, or by some other means.”² Lastly, with Article III, UN clearly specifies their emphasis on exploration; “States Parties to the Treaty shall carry on activities in the exploration and use of space, including the Moon and other celestial bodies, as per international law.”³

Therefore, the boundaries for Outer Space, in accordance with the Outer Space Treaty, is endless. The UN had made it a point of emphasis that if the intention of the space operation is exploration, then there shall lie no boundaries to any member countries.

PEACEFUL USAGE OF THE OUTER SPACE TREATY, 1967

In this chapter the researcher establishes the *Role of Articles III, IX & XI(4.1.)*. Furthermore the researcher expands on how *Outer Space Treaty, 1967: A Tool for Peace(4.2.)*. Collectively this chapter shall help understanding how the Outer Space Treaty has been utilized to ensure peace, and furthermore the role played by a number of articles in the same.

¹“Article I of the Outer Space Treaty, 1967; The exploration and use of space, including the Moon and other celestial bodies, shall be done for the benefit and in the interests all things considered, irrespective of their level of economic or scientific turn of events, and shall be the region of all humankind. Space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any sort, on a basis of uniformity and as per international law, and there shall be free access to all areas of celestial bodies. There shall be opportunity of scientific investigation in space counting the Moon and other celestial bodies, and States shall encourage and support international co-activity in such investigation.”

² Article II of the Outer Space Treaty, 1967; “Space, including the Moon and other celestial bodies, is not subject to national appointment by guarantee of sovereignty, by means of use or occupation, or by some other means.”

³ Article III of the Outer Space Treaty, 1967; “States Parties to the Treaty shall carry on activities in the exploration and use of space, including the Moon and other celestial bodies, as per international law, including the Charter of the United Nations, in the interest of keeping up international harmony and security and advancing international cooperation and understanding.”

ROLE OF ARTICLES III, IX & XI

Article III⁴, following the said article, the parties to the treaty, that are the member countries may have no specific restriction on their outer space inventions, provided the same is done with the sole intention of exploration. With the clause specifically mentioning exploration, the constant fear of harnessing weapons in the outer space is eliminated, therefore building a foundation for this respected treaty formulated by the UN to ensure Peace. Furthermore, this article truly showcases the nature of the respected Treaty, that being of exploration. Even nonaggressive military actions, if carried with the intention of exploration would be allowed to be continued.

Article IX⁵, following the said article, if any one particular party to a treaty feels that there is a possibility of the other member countries to feel violative or face created restriction in the free use of space, moon or other celestial bodies exploration, then such an individual party shall seek 'appropriate international consultations' prior to such an initiation or experiment conducted. With the existence of this article, the UN successfully passes responsibility on every member country to ensure that their operations wouldn't be of such a nature as to restrict the other member countries free use. However, this article also depicts the lack of sternness which is a pattern in the entire Treaty. With the countries being allotted the responsibility to check from their initiative removes the control from UN. Furthermore, this presents the opportunity for unnecessary chaos, as to if, Country X fails to see that their operation would violate Country Y's operations. This would lead into Country Y being displeased and approaching the regulatory authorities displeased. All of this can be avoided if the UN takes the native to ensure that the country's proposed operation is not interfering with other country's operations.

Article XI⁶, following the said article, the member countries are instructed to inform the Secretary General of UN, and the respected scientific communities about their program in great

⁴ Ibid.

⁵ "Article IX of the Outer Space Treaty, 1967; ... if a State Party to the Treaty has reason to believe that an activity or experiment planned by it or its nationals in outer space, including the moon and other celestial bodies, would cause potentially harmful interference with activities of other States Parties in the peaceful exploration and use of outer space, including the moon and other "celestial bodies, it shall undertake appropriate international consultations before proceeding with any such activity or experiment ..."

⁶ "Article IX of the Outer Space Treaty, 1967; In order to promote international cooperation in the peaceful exploration and use of outer space, States Parties to the Treaty conducting activities in outer space, including the

details. Furthermore, the Secretary General has the power to share the information presented. This article is very significant as transparency aside, it further ensures that the results of any operations be shared with the UN. And in cases of major discoveries, the UN can communicate the shared information with all the member countries, eliminating the possibility of shift in powers. It is to be noted that, the countries aren't mandated to share their operations result on every operation, but rather whenever demanded by the UN.

OUTER SPACE TREATY, 1967: THE TOOL FOR PEACE

*"The doubt on this problem amongst international lawyers is closer to resolution by reason of this treaty than it was before."*⁷The initiative taken by UN that is the 1967 Outer Space Treaty is another extraordinary advance forward to guarantee non forceful tranquil purposes in space. Meanwhile, we should not fail to remember that under the 1967 arrangement reference to serene purposes and different references to worldwide co-activity in space for quiet purposes not to restrict all military exercises in space. Nonaggressive military work force and logical perception from space are essential and alluring in the reason for world harmony, if for no other reason than to guarantee that all states comply with the 1967 settlement's disallowance on the circling of atomic weapons or different weapons of mass obliteration presently precluded. *"It was also clear to the United States that military personnel could be on a spacecraft engaged in the peaceful uses of outer space; in fact, for nine years military personnel have been used by both countries; Russia and United States to orbit Earth in space vehicles on purely peaceful missions."*⁸

Specifically, the UN in the Outer Space Treaty, ensures the maintenance of peace with the help of article III, IX and IX. Furthermore, in the researcher's opinion Articles; III, IX, XI and IV are

moon and other celestial bodies, agree to inform the Secretary-General of the United Nations, as well as the public and the international scientific community, to the greatest extent feasible and practical, of the nature, conduct, locations and results of such activities. On receiving the said information, the Secretary-General of the U. N. should be prepared to disseminate it immediately and effectively."

⁷Cooper, Crucial Questions on Space Treaty, 501 Air Force & Space Dig. 104 (1967); U.N.-U.S. Delegation Press Release No. 4111, December 3, 1962. See also 53 A.B.A.J. 703 (1967).

⁸Staff of Senate Comm. of Aeronautical and Space Sciences, 90th Cong., 1st Sess., Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and Other Celestial Bodies (1967).

collectively the pillars of peace with respect to the Outer Space, including the moon and other celestial bodies. *“This semantic analysis of peaceful purposes in Article IV, read in the context of the entire 1967 treaty, is further supported by a review of United Nations resolutions and learned writers of both the free and communist worlds.”*⁹ Article IV has been adhered to in the next chapter (***Chapter IV: Criminal Jurisdiction***). As far as the other three articles are concerned, Article III specifically mentioning exploration, the constant fear of harnessing weapons in the outer space is eliminated, therefore building a foundation for this respected treaty formulated by the UN to ensure Peace. With the existence of Article IX, the UN successfully paces responsibility on every member country to ensure that their operations wouldn't be of such a nature as to restrict the other member countries free use. And lastly, Article XI, ensures complete transparency with respect to all the member countries' operations in space, this ensures that UN are always in the loop. Furthermore, the results of such operations are also shared, meaning that any discovery made wouldn't be sealed off by a member country, all the member countries would be informed about the same. This also ensures that the UN is aware of the nature of operations, to ensure that even if it's a military operation that is carried out, it shouldn't be of an aggressive intention. Therefore, with respect to the definition of Space that includes moons and celestial bodies, this treaty assists UN in ensuring that peace is maintained in such a Space.

*“I believe that the outer space treaties have been effective, and their effectiveness comes from the fact that the states agreed to the early principles. It was therefore relatively easy to agree to the treaties. Some of the deficiencies have been pointed out, but those were compromises made to ensure the adoption of a firm and hard treaty.”*¹⁰

THE DAUNTING ISSUE OF CRIMINAL JURISDICTION

⁹ Legislative Reference Service, Library of Congress, Report Prepared for the Senate Comm. on Aeronautical and Space Sciences, S. Doc. No. 26, 87th Cong., 1st Sess. (1961); Lipson & Katzenbach, *The Law of Outer Space* (1961); 7 AF JAG L. Rev. (1965); Selected References on the Legal Problems of Space Exploration, U. S. Senate Space Symposium (K. A. Finch comp. 1961); U. N. Doc. (A/AC 105/33/1967).

¹⁰ Stated by Paul G. Dembling, Of the District of Columbia Bar; former General Counsel, National Aeronautics and Space Administration; former member, U.S. delegation to U.N. Committee on the Peaceful Uses of Outer Space Legal Sub-Committee

In this chapter the researcher establishes the *Role of Articles IV & VIII(4.1)*. Furthermore the researcher conducts *Analysis of Criminal Jurisdiction(4.2)*. Collectively, this chapter highlights the existent issue of criminal jurisdiction in the respected Treaty, for the same the researcher elucidates on the role of a number of articles for the same.

ROLE OF ARTICLES IV & VIII

Article IV¹¹, is a very interesting regulation. While as discussed before Article IX, is based on the primary responsibility of the member countries, Article IV on the other hand is a stern requirement for the members of the treaty. The respected article is stern in its nature as it deals with the situations of aggressive military activities in the orbit of the Earth, i.e., the potential installation of WMD in the defined space. Furthermore, any use of such WMD or experimentation of the same done on a celestial body, is also a taboo following this article. As in the first few articles of the treaty, the UN had made it clear, that such defined space is to be only utilized with the intention of exploration.

Article VIII¹², the respected article deals with the principle of ownership in space. If any project is initiated in space, moons or celestial body, then the ownership of the same lies with the member country who initiated the same. This article even extends to the personnel sent by the member countries for exploration. Following this exploration, when such an object is recovered on Earth, as per this article, alongside article XI, the Country when requested to share their findings must adhere to the same.

¹¹“Article IV of the Outer Space Treaty, 1967; As far as the States Parties to the Treaty undertake not to put in orbit around the Earth any objects conveying atomic weapons or some other kinds of weapons of mass destruction, install such weapons on celestial bodies or then again station weapons in space in some other way. The Moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of army installations, installations and fortifications. The testing of a weapons and the direct of military manoeuvres on celestial bodies shall be taboo. The use of military personnel for scientific research or for some other peaceful purposes shall not be restricted. The use of any hardware or office necessary for peaceful exploration Of the Moon and other celestial bodies shall also not be precluded.”

¹²“Article VIII of the Outer Space Treaty, 1967; A State Party to the Treaty on whose registry an item launched into space is conveyed shall hold jurisdiction and authority over such article, and over any personnel thereof, while in space or on a celestial body. Ownership of objects launched into space, including objects landed or constructed on a celestial body and of their segment parts, is not influenced by their presence in space or on a celestial body or by their arrival to the Earth. Such objects or segment parts found past the limits of the State Party to the Treaty on whose registry they are conveyed shall be come back to that State Party which shall, upon request furnish distinguishing information preceding their arrival.”

Analysis of Criminal Jurisdiction

Before establishing the criminal jurisdiction of this treaty, it is important to list out what are the probable crimes whose jurisdiction are under a question, that may occur in Outer Space as defined by the Treaty are;

Registration

Issue: The primary doubt that the critics of the treaty put forth was regarding the registration of the Object, as to whether the same was required. However, this doubt was answered in Article VIII of the Treaty, where it's stated that; "a state party on whose registry an object is launched."¹³ Following this the question which troubled the critics was as to the requirement of registration, i.e., whether the object to registered national or internationally.

Analysis: "At the present time, there is no compulsory international registering authority even though states have filed with the Secretary General of the United Nations information pertaining to many objects which they had launched into outer space."¹⁴ Furthermore many professionals were of the opinion that the mere presence of the principle of ownership shouldn't act as a burden on the States for registration. "The United States has not enacted federal legislation to provide for the prosecution and punishment of civilian persons who commit crimes in outer space."¹⁵ It becomes a vital point, as if registry was mandatory then so would it be mandatory for all the countries to have regulations on punishment for crimes committed in space, which is clearly not a case. "In case of an international endeavor, if the spacecraft is registered in the national registry of a participating state which is also in charge of the technical control over the space mission, that state could claim primary criminal jurisdiction over the object's personal."¹⁶ Lastly, Article VIII has not mentioned any further details with respect to registration; be it the

¹³Ibid.

¹⁴ "For a brief review of U.S. and Soviet practices with respect to filing information with the Secretary General of the United Nations, see Sheldon & DeVoe, United Nations Registry of Space Vehicles, Proc. 13th Colloquium on the Law of Outer Space 127 (1971)."

¹⁵ Stephen Gorove, Criminal Jurisdiction in Outer Space, (American Bar Association, 1972).

¹⁶ Ibid.

validity of the same, the duration and the procedure. Therefore, with respect to registration, the criminal jurisdiction for the same is not clearly specified, and hence under different circumstances, there might be a jam with respect to the regulations about the same.

Personnel

Issue: This is with respect to the term personnel used in Article VIII of the Treaty. The biggest question here is with reference to the scope of personnel term, as to what are the different people that can be regarded as personnel in the respected Treaty.

Analysis: *“Whether the literal interpretation of Article VIII, to the effect that the jurisdictional authority of the state of registry over the personnel of its registered spacecraft, should continue even if such personnel is within the confines of a foreign spacecrafts.”*¹⁷The area of concern here is that, since the principle of ownership stands applicable then the State is directly responsible for the safety of objects and personnel. However, the scope of personnel is the concern here. Whether the term personnel shall only include the crew or does it even extend to passengers travelling. Furthermore, building upon the point of registration, would it be expected by the State to register such visitors and passengers. Also, if so, is the case why would the State of registry, be ready to ‘surrender’ the said personnel to another state.

Crimes Committed on a Celestial Body

Issue: If the crimes are committed on a celestial body itself, meaning that the crime in question has not taken place in a facility or spacecraft present on the Celestial body, but directly on celestial body. In such a situation where would the criminal jurisdiction fall.

Analysis: This is the most evident loop hole of the provided regulation, as such is also a possibility where the crime had taken place on the premises of the celestial body itself. Add to this the ownership of the state extending towards the personnel of the state, providing an additional layer of complication impacting the implementation of the regulation. The above was under the assumption that passengers would fall under the scope of the term personnel, but in the

¹⁷ Cf. Jenks, Space Law 294 (1965).

cases where the term personnel are not in such a broad sense, then the situation would get further more complicated. Making all these issues of application of criminal jurisdiction interlinked.

Lastly, there is another prominent issue with the existent Treaty that being the binding powers of the treaty being on a “free-will” basis. Meaning that it’s totally up to the country’s discretion whether they want to abide by the same or not. This concept is nice in theory, however Space Law being as newish as it is, the existent laws will have to be sterner and at the very least ensure that they are abided by globally.

CONCLUSION&SUGGESTIONS

Following the phase III of the Space Evolution, the Outer Space Treaty, 1967 has been a very significant regulation, put in place. The major aim of the said Treaty is to ensure that the defined Space which also included moons and other celestial bodies be used only with the intention of exploration, which is a point which is signified at many different places in the said treaty. The role of UN is to ensure peace, and therefore the regulation has the primary objective of limiting the utilization intention to that of exploration. This treaty even though not blatantly created to counter WMD, it is also ensured with Article IV, that such means not be adopted in the Outer Space. This treaty has annexure alongside 17 Articles, which govern the world’s use of space, moon and other celestial bodies. With the advancement of technology in the 21st Century, at times these regulations do seem outdated, but this is the case only in certain situations, as has been expanded upon in *Chapter IV: The Daunting Issue of Criminal Jurisdiction*. However, other than those few issues, the remaining regulations and the essence of the Treaty have aged well. Therefore, despite few issues the manner in which this respected treaty was constructed is impressive.

Suggestions

As far as the suggestions are concerned, it can be observed that the variety of issues that are raised with respect to the Treaty are a direct result of Article VIII of the said Treaty. However, it is important to note that; “*any form of solution would run counter the literal interpretation of Article VIII.*”¹⁸ The logical action possible here would be that of repealing the said provision, however the same would lead to a more disastrous outcome, as Article VIII signifies an influential aspect of the Treaty. Therefore, the researcher has put forth some practical suggestions;

- ❖ **Formulating an International Registry Body;** the formulated body would be responsible for the registration of the foreign objects as well as the personnel heading towards the defined space. To avoid confusion, the researcher proposed that such a regulation have no retrospective effect.

Advantages:

- An official body to look after registry to avoid the confusion with respect to existing question about registry.
- Have a well-defined structure and instructions with respect to duration, validity and procedure.
- Reduces the burden of State Registry, and at the same time offer much needed clarity.

Disadvantage: Creating a new official body, would make it difficult for the UN to manage both the newer objects being registered with the official body, and the number of existent bodies being registered in an older manner.

- ❖ **Defining the Scope of Personnel;** the researcher suggests to formally define the term personnel to include visitors and passengers as well in form of an amendment. Given the progress technology is at, it’s only a matter of time when we start having space tourists, therefore such an amendment could help bring clarity as to these space tourists would fall

¹⁸ Dembling and Arons, *The Treaty on Rescue and Return of Astronauts and Space Objects*, 9 Wm. & Mary L. Rev. 630 at 652 (1968); Haley, *Space Salvage -Artifacts and Personnel in Space and on Terrestrial Jurisdictions*, Proc. 8th Colloquium on the Law of Outer Space, 1 19 at 121-2 (1966).

under the purview of the term. This would also help solve the third issue of crime taking place on a celestial body, as now the states would have defined jurisdiction of broader scope of personnel.

- ❖ **Sternier Application;** the existent laws will have to be sterner and at the very least ensure that they are abided by globally, given how newish Space Law is, therefore the researcher proposes to get rid of the “free-will” basis and all the UN member countries be instructed to abide by the respected Treaty.

In conclusion, the above suggestions may help rectify some of the loopholes / issues present in the Outer Space Treaty, 1967 which shall further extend the lifeline of the application of the respected Treaty.

REFERENCES

Articles

- ❖ Daryl Kimball, the outer space treaty at a glance, Arms Control Association (2020).
- ❖ Loren Grush, how an international treaty signed 50 years ago became the backbone for space law, The Verge (2017).
- ❖ “Dembling and Arons, The Treaty on Rescue and Return of Astronauts and Space Objects, 9 Wm. & Mary L. Rev. 630 at 652 (1968); Haley, Space Salvage -Artifacts and Personnel in Space and on Terrestrial Jurisdictions, Proc. 8th Colloquium on the Law of Outer Space, 19 at 121-2 (1966).”
- ❖ “For a brief review of U.S. and Soviet practices with respect to filing information with the Secretary General of the United Nations, see Sheldon & DeVoe, United Nations Registry of Space Vehicles, Proc. 13th Colloquium on the Law of Outer Space 127 (1971).”
- ❖ Stephen Gorove, Criminal Jurisdiction in Outer Space, (American Bar Association, 1972).

- ❖ Cooper, Crucial Questions on Space Treaty, 501 Air Force & Space Dig. 104 (1967); U.N.-U.S. Delegation Press Release No. 4111, December 3, 1962. See also 53 A.B.A.J. 703 (1967).
- ❖ Staff of Senate Comm. of Aeronautical and Space Sciences, 90th Cong., 1st Sess., Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space Including the Moon and Other Celestial Bodies (1967).
- ❖ Legislative Reference Service, Library of Congress, Report Prepared for the Senate Comm. on Aeronautical and Space Sciences, S. Doc. No. 26, 87th Cong., 1st Sess. (1961); Lipson & Katzenbach, The Law of Outer Space (1961); 7 AF JAG L. Rev. (1965); Selected References on the Legal Problems of Space Exploration, U. S. Senate Space Symposium (K. A. Finch comp. 1961); U. N. Doc. (A/AC 105/33/1967).

Books

- ❖ Frans von der Dunk, Handbook of Space Law, (Edward Edgar Publishing 2015).
- ❖ Imre Anthony Csabafi, The Concept of State Jurisdiction in International Space Law, (MartinusNijhof Publications 1971).
- ❖ Jack M. Bread, Soft Law's Failure on The Horizon: The International Code of Conduct for Outer Space Activities (Penn Law: Legal Scholarship Repository 2017).
- ❖ Olavo de Oliveira Bittencourt Neto, Defining the Limits of Outer Space for Regulatory Purposes (Springer International Publishing Switzerland 2015).
- ❖ Cf. Jenks, Space Law 294 (1965).