
CRIMINAL JURISDICTION IN OUTER SPACE: CURRENT FRAMEWORK AND CHALLENGES

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Introduction

In the 21st century, outer space is increasingly becoming more and more accessible to private parties, corporations, and tourists, and not just state-led entities. As a result of this, legal systems around the world now face various challenges, especially with regard to the application of criminal law beyond the earth. The main question is, who has the authority to exercise criminal jurisdiction over the matters that occur beyond the terrestrial plane in situations where national sovereignty is not present.

An adequate criminal jurisdiction framework in outer space serves both a preventive and a remedial function. With the current number of multinational crews currently on the International Space Station (ISS), the growing popularity of space tourism, and with the prospect of future installations on the Moon or Mars, the possibility of criminal activities is no longer hypothetical. It can include traditional actions such as theft and assault, as well as high tech actions, like cybercrime and sabotage. International legal system needs to evolve to ensure accountability and protection of human rights and avoid a jurisdictional grey area that can hinder administration of justice.

This paper examines the legal bases of criminal jurisdiction in outer space, critically evaluates existing regimes and the limits imposed by them, identifies important gaps in space law, and proposes suggestions to create a more coherent, enforceable legal regime to facilitate more efficient justice when addressing current or future problems in space law.

Analysis

General Principles of International law

Since space is considered a common heritage of mankind, the laws governing crimes in space are a blend of general principles of international law, general international space law treaties,

and specific agreements for particular space objects like the International Space Station.

The general provisions dealing with criminal activities include the territorial principle which basically means that the state where the crime has been committed would exercise the jurisdiction. This is closely related to flag principle according to which a state exercises jurisdiction over crimes committed on board objects bearing its nationality, such as ships, aircraft, or space objects¹. Further, as per nationality principle, a state can exercise jurisdiction over its nationals for crimes committed outside its territory. For example, if an American astronaut commits a crime in space, US would exercise its jurisdiction. US can also exercise jurisdiction over matters where its national is a victim to the said crime.

Principles of international laws also dictate that a state may prosecute acts committed abroad by non-nationals if those acts threaten the state's security, sovereignty, or vital interests, for example espionage satellites etc. Furthermore, some crimes are considered so heinous that any state may prosecute the offender, regardless of where the crime occurred or the nationality of those involved². With respect to space law, this could include carriage of Weapons of Mass Destruction, etc.

Legal Framework Governing Criminal Jurisdiction in Outer Space

Today, the activities in the outer space are governed by primarily two treaties, i.e., The Outer Space Treaty, 1967, and The Moon Agreement, 1979.

Article VII of the Outer Space treaty is the primary provision that addresses criminal jurisdiction and command authority. According to it, the state of registry of a space object retains jurisdiction and control over that object and any personnel on it while in outer space or on a celestial body, this includes criminal jurisdiction and command authority. The state of registry's jurisdiction, however, is not exclusive, it allows other states to potentially exercise their jurisdiction based on internationally recognised principles if the state of registry chooses not to prosecute. Despite this, the state of registry has the primary jurisdiction, although it doesn't imply its exclusive, but it is always the starting point.³Further, article IX of the treaty

¹ B. Cheng, *Studies in International Space Law*, London 1997, p. 387

² Charles Chernor Jalloh, *UNIVERSAL CRIMINAL JURISDICTION*, Annex I - Yearbook of the International Law Commission 2018, https://legal.un.org/ilc/reports/2018/english/annex_A.pdf

³ Michael Chatzipanagiotis, *Criminal Issues in International Space Law*, 18 *EUR. J.L. REFORM* 105 (2016).

plays an important role in clarifying the jurisdiction. The article lays down the duty of the state to cooperate and consult with other states if the criminal activity interferes with the activities of other states. This could potentially oblige the state of registry to consult with national states of foreign nationals before exercising jurisdiction.

In maritime and aviation law, the master of a ship and the captain of an aircraft are ultimately responsible for the safety of those on board and possess the highest authority, requiring compliance from all individuals. Similarly, command authority under the outer space treaty is given to the commander of the space mission (Normally every space mission has a commander, e.g., Neil Armstrong was the commander of Apollo 11 Lunar Mission), which is considered a corollary of the jurisdiction and control retained by the state of registry over the object and its personnel according to Article VIII of the Outer Space Treaty. The commander is considered a representative of the state of registry, to whom that state's jurisdiction has been delegated.

Countries like US and Russia have provisions that provide authority to space flight commanders. In US, the commander of the Space Shuttle (now retired) had the authority to enforce order and discipline, take necessary actions for safety, use reasonable means including physical force or restraint, and required everyone on board to comply with their orders⁴. Similarly, in Russian Law, the space flight commander has the power and responsibility for the safety of the objects and all persons and property on board.⁵

Although the Moon Agreement, 1979 has entered into force, none of the major space powers have ratified it, the agreement is based on the Outer Space Treaty and article 12(1) of the agreement states that the state parties retain jurisdiction and control over their personnel, vehicles, equipment, facilities, stations, and installations on the moon. This acknowledges both quasi-territorial jurisdiction over lunar bases and installations and the active nationality principle. Further, article 17 of the agreement requires the state parties to conduct international consultation to avoid interference and prevent tensions, which includes discussing allegations of criminal behaviour and jurisdictional issues. The agreement is also applicable to intergovernmental organisations like EU and UN if they accept to be bound by it.

⁴ US law, 14 CFR 1214.7.

⁵ Article 20(3), LAW of the RUSSIAN FEDERATION "ABOUT SPACE ACTIVITY", Decree No. 5663-1 of the Russian House of Soviets,
https://www.unoosa.org/oosa/en/ourwork/spacelaw/nationalspacelaw/russian_federation/decree_5663-1_E.html

Regulations on The International Space Station

The ISS is regulated and governed by the Inter-Governmental Agreement (IGA) signed between the US, Russia, Canada, Japan, and members of the European Space Agency (ESA), and the Crew Code of Conduct (COC). The rules governing criminal jurisdiction can be found in Article 22⁶ of the IGA which is based on the nationality principle. It allows the state parties to exercise criminal jurisdiction over its nationals in any flight element of the ISS. This approach was adopted due to factors like the sovereign immunity of professional astronauts as state employees, as opposed to “space tourists”, international courtesy, the practical difficulty of applying a territorial principle in a multi-module, freely traversed environment, and avoiding jurisdictional conflicts within European-contributed elements.

Secondly, the state parties can also exercise jurisdiction if their nationals have been a victim to the crime⁷. For example, if an American astronaut does a crime that affects a Cosmonaut, the Russian Federation can exercise its jurisdiction. However, this is conditional on consultations with the alleged offender's national state and that state either concurring or failing to provide assurances of prosecution within a specific timeframe. It has to be noted that these rules only apply to the nationals of the contracting state, if there is a national of any third state, say Pakistan, involved, then the general provisions of the Outer Space Treaty would be applicable.

Lacunae in the Current Framework

Although there are various treaties and national laws with regards to the regulation of criminal jurisdiction in space, their efficacy is something that needs to be analysed. Currently, there is no centralized enforcement mechanism like policing, strict extradition protocols, specialized courts etc to deal with the crimes committed in outer space. The current is mostly based on international cooperation and rules than a strict legal regime.

⁶ Article 22(1), AGREEMENT AMONG THE GOVERNMENT OF CANADA, GOVERNMENTS OF MEMBER STATES OF THE EUROPEAN SPACE AGENCY, THE GOVERNMENT OF JAPAN, THE GOVERNMENT OF THE RUSSIAN FEDERATION, AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA CONCERNING COOPERATION ON THE CIVIL INTERNATIONAL SPACE STATION, 1998

⁷ Article 22(2), AGREEMENT AMONG THE GOVERNMENT OF CANADA, GOVERNMENTS OF MEMBER STATES OF THE EUROPEAN SPACE AGENCY, THE GOVERNMENT OF JAPAN, THE GOVERNMENT OF THE RUSSIAN FEDERATION, AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA CONCERNING COOPERATION ON THE CIVIL INTERNATIONAL SPACE STATION, 1998

Secondly, the major treaties and framework concerning space jurisdiction were drafted decades ago thereby focusing mainly on state-led activities and ignoring private corporations like SpaceX, and space tourism like Virgin Galactic. This creates uncertainty over who holds private astronauts or corporations accountable for misconduct in space.

Furthermore, there is overlapping of rules which could potentially create confusion as multiple countries could claim authority over the same incident based on nationality, spacecraft registration, or territorial principles; or worse, no state may take responsibility, leading to impunity. Also, there is an uneven development of national space laws in countries. Some countries like the US have well developed space regulations, whereas countries like India are just starting to enter the realm, for example the 2023 Space Policy.

Conclusion

With time, more and more corporations and State-led organisations are going to explore space, for that, there is a strict requirement for laws which shall govern every nation equally. With intergovernmental cooperation, there is also a need for strict laws so that states and private players cannot shrug away their responsibilities. The current regime, built around the Outer Space Treaty and complementary agreements, provides a foundational structure but lacks clarity on exclusive jurisdiction, enforcement mechanisms, and accountability for private actors. The ISS Intergovernmental Agreement presents a model of cooperation, but it is only applicable to state actors and the absence of such a model for commercial or touristic missions is a matter of concern, considering that there have been successful tourist space flights.

As the private players become more dominant in space, regulatory frameworks must incorporate corporate criminal liability, safety standards, and requirements for onboard disciplinary authority similar to that granted to captains of ships or aircraft. Further international organisations like UN Office for Outer Space Affairs (UNOOSA) should play an active role in harmonization of space affairs and dispute resolution. It could serve as a central coordinating body for legal responses to crimes in space. There ought to be a balance between strict laws and state cooperation, mere latter would not be enough.

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