

**Review of the Status of Outer Space Treaties:
1967 Outer Space Treaty
by Stephen E. Doyle***

Introduction

Distinguished Ambassadors and Delegates, Mr. Chairman, friends and colleagues of many years, it is a great pleasure and a privilege for me to have been invited to present comments to you on the future of the 1967 Outer Space Treaty. You, who have spent so many years in the work of generating treaties, principles, and clarifying the legal aspects of problems related to the exploration and use of outer space, do not require a description of what is in the treaty, because the Secretariat has already elaborated the treaties and presented comments on them by member states in UN Doc, A/AC. 105/C.2/L.210. To avoid bringing coal to Newcastle and ice cubes to the Eskimos, I thought I would address today the future needs of the international community concerning the exploration and use of outer space, and the legal problems emerging that are likely to require future attention by the Legal Subcommittee of the Committee on the Peaceful Uses of Outer Space (COPUOS).

Emerging Legal Problems of Space Activity

In my estimation, there appear to be at least nine issues or issue groups that are very likely to require attention and future work by the COPUOS Legal Subcommittee. I believe the expanding uses of outer space and the

expanding population of actors there will inevitably require that attention be paid to all these issues.

1. Roles and Status of International Organizations

As international organization activity in space increases, and the constitutional nature of some of these organizations gradually changes from intergovernmental to non-governmental, a variety of issues emerge, including questions of legal status, state responsibility, definitional issues related to the existing outer space treaties, and matters of jurisdiction and control over activities in space. Dr. Gabriel Lafferranderie presented an interesting paper discussing some of these issues at the 40th IISL Colloquium, in Turin, Italy last October.¹

2. Roles and Status of Private Organizations in Space

The increasing number of corporations engaging in space activity and now the possibilities of the direct use of resources in outer space by private entities raises issues, some of which were addressed in the ill-fated Moon Treaty, as well as others that will require future attention. Comments were presented in this forum in 1996 on these

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¹G. Lafferranderie, "The Outer Space Treaty and the International Organizations Conducting Space Activities," in *Proceedings of the 40th Colloquium on the Law of Outer Space, October 6-10, 1997 Turin, Italy*, 161-168, AIAA, Reston, Virginia, 1998.

subjects by Professors Ram.S. Jakhu and F. von der Dunk.²

3. An Agreement (Principles) on Space Debris

The COPUOS is already engaged in a three-year study of the specific nature of the problems related to space debris, and it clearly appears necessary that some form of internationally agreed set of rules or principles should be established at an early date. An argument for this conclusion was presented in Turin, last October, by Lubos Perek.³

4. Intellectual Properties in Outer Space

As we see permanently manned space stations expanding and more complex structures being planned, more scientific and technological development can be expected to occur in outer space, including on orbits around the Earth. As these creative activities multiply, more intellectual properties may be expected to emerge out of space activities and these developments will give rise to needs for clarification of applicable law relating to inventions, copyrights and trademarks, and to their creation, use and protection in space. An interesting exploratory paper touching on these issues was offered by Bradford Lee Smith and

²See R.S. Jakhu, "Application and Implementation of the 1967 Outer Space Treaty," in *the Proceedings of the 40th Colloquium, op. cit. note 2.*, at 442-448; and "Future Developments Related to Outer Space Treaties," *idem*, at 449-53.

³L. Perek, "Outer Space Treaty in perspective," in *the Proceedings of the 40th Colloquium, op. cit. note 2.*, at 291-295.

Elisabetta Mazzoli in Turin last October.⁴

5. Space Environmental Law

Eventually, as activities increase and the number of actors in space grows, there will need to be clearly established rules and specific regulations to manage the preservation of the environment of outer space, particularly with reference to near Earth and Earth orbital activities. Dr. Qizhi He, of China, addressed environmental issues, as well as other future questions in his paper on "The Outer Space Treaty in Perspective," presented at Turin this past October.⁵ Mark Williamson also offered useful commentary on this topic at Turin.

6. Legal Status, Rights, and Duties of Crews in Space

As crew numbers multiply, crew sizes increase and the sojourns of space crews increase in length, there will inevitably arise the need to address more extensively the legal status, rights, duties and obligations of crews engaged in spaceflight. An extensive

⁴Smith, B. L., and E. Mazzoli, "Problems and realities in Applying the Provisions of the Outer Space Treaty to Intellectual Property Issues," in *the Proceedings of the 40th Colloquium, op. cit. note 2.*, at 169-176.

⁵He, Q., "The Outer Space Treaty in Perspective," in *the Proceedings of the 40th Colloquium, op. cit. note 2.*, at 51-56; see also Williamson, M., "Protection of the Space Environment Under the Outer Space Treaty," also in *the Proceedings of the 40th Colloquium, op. cit. note 2.*, at 296-302.

symposium was held on this subject in Cologne, Germany a few years ago,⁶ and Qizhi He also commented on this topic at Turin.

7. Legal Regime for Space-based Navigation Systems

In the mid-1960s, the COPUOS, through a special working group established for the purpose, studied the feasibility, economics and utility of establishing global civil navigation satellite services. In parallel, the International Civil Aviation Organization (ICAO) and the Intergovernmental Maritime Consultative Organization (IMCO) conducted studies of navigation satellites to meet the needs of aviation and maritime users, respectively. During July 1966, the UN Working Group on Navigation Services Satellites met in New York to study and make recommendations to COPUOS regarding the need for, the feasibility of, and the implementation of such satellite systems. A summary of results of the preliminary studies is contained in "Working Group on Navigation Satellite Services Satellites," a survey paper by Leonard Jaffe.⁷ A more recent examination of the problems and issues related to navigation satellite systems

⁶See Bockstiegel, K.H. (ed.), *Manned Space Flight: Legal Aspects in the Light of Scientific and Technical Developments*, Carl Heymanns Verlag, Cologne, 1993, 403 pp.,

⁷Jaffe, L. "Working group on Navigation Services Satellites," being section 5., Part II, "The United Nations and Outer Space," in US Congress, *International Cooperation in Outer Space: A Symposium*, prepared for the Senate Committee on Aeronautical and Space Sciences, 92d Cong., 1st Sess., Doc. No. 92-57, Dec. 1971, at pp. 279-284.

was presented at Turin by Professor Paul Larson.⁸ As the importance of this service area grows and international dependence upon navigation satellites increases, it may become necessary for the COPUOS to reconsider this entire subject and to determine whether or not the United Nations should play a role in forming the policies and practices of states in offering these services to a large, even global, international clientele.

8. Delimitation of Outer Space

There is a declared problem, perennially discussed as a pressing issue, about which a great deal has been said and nothing has been done for more than thirty years -- the delimitation of outer space. Eventually, the COPUOS will decide this issue, probably when it is universally agreed that it is no issue at all. In all the literature and commentary that has been offered on this subject, there is probably no better solution than that offered by the USSR, more than a decade ago, to set the upper limit of airspace, and thus the lower limit of outer space at 100 kilometers (62.5 mi.) above the surface of the Earth. No flight vehicle dependent upon air for lift could sustain aerodynamic flight at that altitude, and no unpowered satellite could sustain an orbit at that altitude. It appears to be an eminently practical solution, and, in my opinion, should be considered for final action. Two recent papers on this topic were the one by professor Ram Jakhu in this forum in 1997,

⁸Larson, P. "GNSS [Global Navigation Satellite Systems] Augmentation: Legal Issues," in *the Proceedings of the 40th Colloquium*, op. cit note 2, at 271-279.

and a paper at Turin by Professor Gabriella Catalano Sgrosso.⁹

9. Problems of Terminology

In conclusion, I will simply observe that until the Legal Subcommittee undertakes to do something about the problem, COPUOS, the United Nations, other international organizations and the governments of states and their space operational organizations will continue to be frustrated, aggravated and inconvenienced by recurring problems of imprecise terminology and lacking uniform definitions of terminology in the several UN created outer space treaties. This is a problem that is allowed to survive without need or justification. It could be resolved with a minimal effort, if the Committee and its member states decided to do something about it.

There, then are my observations about the future of the Outer Space Treaty of 1967. It is destined to be a cornerstone of further legal development in the next century. The document has a strong history in its relatively short existence and it will continue to serve well for generations. Changing circumstances require that it be improved, expanded and from time-to-time updated. The Legal Subcommittee is the appropriate forum in which such work should be initiated.

Thank you for inviting me to present views here today, I appreciate your kind attention.

⁹See Jakhu, R.S. "Application and Implementation of the 1967 Outer Space Treaty," in the Proceedings of the 40th Colloquium, *op. cit.* note 2, at 442-448; and see Catalano Sgrosso, G. "Must the Special Typology of Aerospace Planes Lead to the Supplementation of the rules of the Outer Space Treaty?" in the *Proceedings of the 40th Colloquium*, *op. cit.* note 2, at 402-10.