

CHAPTER 11

THE OUTER SPACE TREATY AND ENHANCING SPACE SECURITY

Joanne Irene Gabrynowicz

The specific question that this paper was invited to address is “What progress could be made at a possible OST RevCon and how should a possible RevCon unfold?”¹ The answer to the question as framed is, with serious trepidation and extreme caution. However, the question contains the assumption that a revision conference for the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty)² ought to occur. The response to that assumption is, at this point in time, to leave the Outer Space Treaty alone. Regardless of how compelling or meritorious the reason for revising the Outer Space Treaty may appear to be, the fact is there is much more to lose than there is to gain. This paper begins with an overview of the Outer Space Treaty, a brief discussion of its provisions and its likely status during a revision conference. It then raises the hard questions that must be addressed in a discussion about potentially revising the treaty. A conclusion follows.

The Outer Space Treaty is, beyond any question, one of the most successful multilateral, international treaties ever promulgated.³ It has been accepted by a large majority of the world’s nation-states, including all of the world’s space-capable states.⁴ Nearly 40 years after it entered into force in 1967, the Outer Space Treaty still continues to garner signatories. As newly active and recently advancing space nations continue to emerge, they are also choosing to become treaty signatories.⁵ “It is also generally agreed by legal scholars and governments that the earlier Declaration of Legal Principles (which were incorporated into the Outer Space Treaty) expresses general customary law, binding on all states.”⁶ Moreover, treaties that “provide for neutralisation or demilitarisation of a territory or area, such as

... outer space" "have been held to create a status or regime valid *erga omnes* (for all the world)".⁷

The Outer Space Treaty is quasi-constitutional, which means it functions like a constitution for space. "It is a quasi constitution, not only a culmination but also an initiation."⁸ The principles it contains are the foundation of the Convention on International Liability for Damage Caused by Space Objects (Liability Convention),⁹ the Convention on Registration of Objects Launched into Outer Space (Registration Convention)¹⁰ and the Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space (Astronaut Rescue Agreement).¹¹ Because the Outer Space Treaty functions like a constitution, opening it for revision means that all of its provisions will be vulnerable to change. These provisions include some of the most important and fundamental principles in international space law. They include that the exploration and use of space is to be for the benefit and interests of all countries;¹² space is the "province of all mankind";¹³ all states are free to explore, use and scientifically investigate space;¹⁴ state appropriation of space is prohibited;¹⁵ nuclear weapons and weapons of mass destruction are prohibited;¹⁶ military bases, installations, fortifications, weapons testing and military manoeuvres are "forbidden" on the Moon and other celestial bodies;¹⁷ states are responsible for all space activities undertaken by national and non-governmental entities;¹⁸ and states can be held liable for damage caused by their space objects.¹⁹ All of these would be at risk in a revision conference.

It has been argued that "revision" is a narrow approach that can be contained and controlled; and that it is unnecessary to assume revision can or will lead to an amendment process, which, according to this view, is a broader approach that can be avoided. This view fails to take into account that the Outer Space Treaty, unlike the Liability Convention and the Registration Convention, which do provide for revision,²⁰ provides only for amendment.²¹ More importantly, to speak of "revision" rather than "amendment" is increasingly a distinction without a difference in international law. The International Law Commission, when considering the question of whether or not there is a difference between the two, "saw no essential *legal* difference in the processes of amendment and review, regarding amendment as including review".²² Without a clear legal demarcation between "amendment" and "review", the true force that will be at play in an Outer Space Treaty revision conference is politics. A

politically motivated revision process will guarantee no guarantees. All treaty provisions will be susceptible to change or elimination.

Interest groups are another force that will be activated in a treaty revision process. Some interest groups are seeking to change the Outer Space Treaty for their own reasons, including clarifying and establishing property rights in space.²³ If the Outer Space Treaty were opened for any reason, these groups would welcome the opportunity to introduce their own purposes into the process and would bring political pressure to open it up. Another force that will work to expand a revision conference is those nation-states in the current geopolitical environment that advocate eliminating all of the space treaties and beginning anew with one, single, comprehensive agreement.²⁴

In addition to interest groups and nations that advocate a new, single space agreement, another indicator that an Outer Space Treaty revision process will inevitably expand to the entire space treaty regime is the treaty drafters' intention that the space treaties be interrelated.²⁵ "The Outer Space Treaty ... provides a framework for a number of limited accords between individual countries and intergovernmental organizations as well as [the] subsequent [space] treaties."²⁶ The Astronaut Rescue Agreement is specifically based on Article V²⁷ of the Outer Space Treaty, the Liability Convention is based on Article VII²⁸ and the Registration Convention is based on Article VIII.²⁹ Together, these treaties create an interrelated legal framework that creates a legal whole that is greater than the sum of its parts—a rare condition in international law.

The type of interrelation that exists among these treaties is unusual in international law, except in the case of the United Nations Charter and the Statute of the International Court of Justice, both of which are incorporated by reference into the Outer Space Treaty.³⁰

Opening the underlying provisions of the Outer Space Treaty upon which the latter treaties are based will, of necessity, bring their status into question as well.

A critical aspect of the Outer Space Treaty that must be raised in any discussion about its potential revision is the treaty's status in international law in the event of the outbreak of hostilities or armed conflict.³¹ Today the status of the Outer Space Treaty during hostilities is crystal clear: it remains

in force and its provisions are available during conflict. However, if hostilities were to begin while a review process was in progress, the treaty's status would be unclear.

The Outer Space Treaty is a law-making treaty³² and is, therefore, a member of a very special category of treaties that remain in force and which do not terminate with the outbreak of hostilities.³³ It is a treaty "among a multitude of states that establish[es] a rule or system of rules that govern the conduct of states in a particular area of international law".³⁴ Moreover, it is "one of the outstanding lawmaking treaties of contemporary international law as a whole".³⁵ Nor will the Outer Space Treaty suspend during conflict. The twentieth century trend—which is continuing into the twenty-first century—is the growing presumption that treaties do not suspend with the commencement of hostilities. "The outbreak of armed conflict does not *ipso facto* terminate or suspend the operations of treaties in force."³⁶ Furthermore, in the case of the Outer Space Treaty, practice is consistent with jurisprudence. The Outer Space Treaty remained in force during both the 1991 Gulf War and the 2003 Gulf War. The former is widely recognized as the "first space war" and the latter as the "second space war"³⁷ having used various space-based assets for the first and second time in a conflict. However, if hostilities were to begin while a review process was in progress, the treaty's law-making status and the availability of its provisions specifically relevant to hostilities, including limiting military activity to scientific and peaceful purposes, the ban on nuclear weapons and weapons of mass destruction, and the right to remain free from interference while using space would also be unclear.

The non-interference principle in international space law and the neutrality principle in the law of war are, in essence, the same. Both of the principles are concerned with protecting peaceful activities in an area or region used by non-belligerents. In the Outer Space Treaty, states are afforded non-discriminatory access to, and non-interference with, their use of space.³⁸ Under the neutrality principle, states that are not part of a conflict can assert their right to remain neutral and not to be interfered with by the belligerents.³⁹ If hostilities were to start during a review process the treaty's guarantee against non-interference with the use of space would be placed in doubt.

This paper was also invited to address the question of how to best leverage the Outer Space Treaty to enhance space security. The response

to that question is to not just focus on what the treaty does not provide, but also to appreciate how much it does provide. A discussion on how to best leverage the Outer Space Treaty to enhance space security must include asking hard questions. They begin with: Would the provisions that the Outer Space Treaty contains be achievable today?

Specifically, would there be agreement on banning nuclear weapons and weapons of mass destruction? Current events include rapidly developing situations in the constantly shifting geopolitical landscape that provide evidence that the nuclear regime is under stress. Developed and developing nations are realigning regarding what are considered permissible nuclear activities.⁴⁰ Ostensibly controlled nuclear access is now emerging in tandem with non-proliferation. The long-standing dichotomy between nuclear capable/developed nations and the non-nuclear capable/developing nations is shifting, as is the dichotomy between developed nation/spacefarer and developing nation/non-spacefarer.⁴¹ Nuclear and space activities are being rearranged. In light of the changes in the terrestrial nuclear regime, it is not at all clear that the Outer Space Treaty's nuclear weapons ban in space would survive a revision conference.

Would there be agreement today on limiting military activity in space to peaceful or scientific purposes? The nature and role of military entities since the end of the Cold War have been undergoing questioning and changes all around the world. Recognizing and defining what constitutes "peaceful" or "scientific" activities will continue to test the limits of the Outer Space Treaty, but it will not expand the categories of permitted military actions. Revising the treaty can.

Is there a clear, present and credible threat that justifies the disruption that will inevitably occur by attempting to revise the Outer Space Treaty? In the 1960s, the nations of the world were brought to the negotiating table because both the former Soviet Union and the United States had successfully and pragmatically proven that they had existing and substantial launch and weapons capabilities. Existing rockets could have been either transportation vehicles for scientific experiments or weapons delivery systems. Existing payloads could have been scientific instruments or weapons. Does the current geopolitical landscape provide an analogous situation today? Are there any nations that now have *both* an independent, robust, long-term launch capability and proven advanced space weaponry

that create a situation dire enough to risk the stability that the Outer Space Treaty provides?

Assuming, only for the sake of argument, that there is an existing space threat analogous to the former Soviet Union–United States Cold War capabilities: will it last as long as the time required to negotiate revised or amended treaty terms? The United Nations was first asked to consider the legal issues associated with space activities in 1958.⁴² The Outer Space Treaty entered into force in 1967.⁴³ Even with the extreme pressures of the Cold War, it took nearly a decade to complete and activate the Outer Space Treaty. Nine years is definitely fast in terms of international treaty negotiations, however, the more significant fact is that at that time, space technology development was still in its early stages and less likely to outpace the speed of negotiations. Today, the intense, focused, urgent pressures of the Cold War have given way to a diverse, multipolar array of forces and space technology has advanced. Today, the likelihood is that discussions would be less focused and more wide ranging; and once opened, attempted revisions could lead to decades of debate and negotiations. At the same time, the ability to implement already developing technologies could outpace negotiations.

Also to be considered is that the original perceived threat that catalyses a revision conference could be readily overcome by more dynamic economic and political events including cyclical elections, changes of administration, changing foreign policies and national fiscal and budgetary constraints. Moreover, the original threat could be supplanted by a new, unforeseen one that might not have been activated but for the opportunity presented by the ongoing negotiations and the uncertain status of the treaty during that time. This leads to the next hard question.

What behaviour, practice or custom will develop to fill the legal ambiguity created during the revision process? Once revision begins and various political forces enter the process, the status of the Outer Space Treaty and specific provisions will be unclear for the duration of the process. Ambiguity regarding signatories' obligations will increase and some will be emboldened to take action to resolve the increased ambiguity in their favour. This is exactly what happened at the dawn of the space age. The legality of satellite overflight was not established at the time that the former Soviet Union and the United States embarked on their race to space.⁴⁴ With the successful launch of Sputnik I and lack of objection by the United

States, the precedent for satellite overflight without seeking sovereign consent was quickly set in a matter of days.⁴⁵ A variation on the theme of the role of ambiguity during a revision process is that there will be some nations that will have no incentive to resolve new ambiguities that, in their view, replace settled but inconvenient treaty obligations.

Finally, no treaty revision occurs in a legal vacuum. It must occur within the framework of the entire prevailing legal system, related agreements and general principles of law. This presents an infinite number of paths that a treaty revision conference can be made to take, increasing the likelihood of delay and uncertainty to an unquantifiable degree. Unquantifiable uncertainty ought to be risked only for the most menacing and most immediate of threats.

Taking a long look backward at the history of humanity, it becomes quickly evident that it is folly to say that anything should never change, even the Outer Space Treaty. However, for the foreseeable future, the Outer Space Treaty should be left alone. Opening it for revision now is a case of “be careful what you wish for”.

Notes

- 1 Building the Architecture for Sustainable Space Security, conference agenda, Council Chamber, Palais des Nations, Geneva, 30–31 March 2006 (on file with the author).
- 2 Outer Space Treaty, 27 January 1967, 18 U.S.T. 2410, 610 U.N.T.S. 205 (hereinafter Outer Space Treaty).
- 3 Sergio Marchisio, 2005, The Evolutionary Stages of the Legal Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS), *Journal of Space Law*, vol. 31, pp. 219–226.
- 4 There are 192 Member States of the United Nations; as of 1 January 2006, 125 have accepted the Outer Space Treaty (98 ratifications and 27 signatories), a 65% majority. United Nations, *List of Member States*, at <www.un.org/Overview/unmember.html>, last accessed on 5 May 2006. See also *UN Treaties and Principles on Outer Space Addendum*, 2005, at 1–17, UN Doc. ST/Space/11/Add.1/Rev.2, UN Sales No. E.02.I.20 (hereinafter Outer Space Addendum), at

<www.unoosa.org/oosa/en/SpaceLaw/treatystatus/index.html>, last accessed on 1 May 2006.

- 5 For example, Nigeria ratified the Outer Space Treaty due to the successful launch of its first satellite, NigeriaSat 1, on 27 September 2003. See Outer Space Addendum, *op. cit.*
- 6 Lori F. Damrosch et al., 2001, *International Law Cases and Materials*, Fourth edition, Rule 15.1 and 15.4, American Casebook Series, Eagan, MN, Thomson West.
- 7 Antony Aust, 2000, *Modern Treaty Law and Practice*, Cambridge, Cambridge University Press, pp. 208–209, citing M. Ruggazzi, 1997, *The Concept of International Obligations Erga Omnes*, pp. 24–27.
- 8 George S. Robinson and Harold M. White, Jr., 1986, *Envoys of Mankind: a Declaration of First Principles for the Governance of Space Societies*, Washington, DC, Smithsonian Institution Press, p. 181.
- 9 Convention on International Liability for Damage Caused by Space Objects, 29 March 1972, 24 U.S.T. 2389, 961 U.N.T.S. 187 (hereinafter Liability Convention).
- 10 Convention on Registration of Objects Launched Into Outer Space, 14 January 1975, 28 U.S.T. 695, 1023 U.N.T.S. 15 (hereinafter Registration Convention).
- 11 Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched Into Outer Space, 22 April 1968, 19 U.S.T. 7570, 672 U.N.T.S. 119 (hereinafter Rescue and Return Agreement).
- 12 Outer Space Treaty, *op. cit.*, Article I.
- 13 *Ibid.*
- 14 *Ibid.*
- 15 *Ibid.*, Article II.
- 16 *Ibid.*, Article IV.
- 17 *Ibid.*
- 18 *Ibid.*, Article VI.
- 19 *Ibid.*, Article VII.
- 20 Liability Convention, *op. cit.*, Article XXVI; Registration Convention, *op. cit.*, Article X.
- 21 Outer Space Treaty, *op. cit.*, Article XV.
- 22 Antony Aust, *op. cit.*, p. 220 (emphasis in original).
- 23 Robert A. Fabian, 2003, *Space Economic Development in the Province of All Mankind: If No One Goes, We All Lose*, *Astropolitics*, vol. 1, pp. 89–98. Here, the Outer Space Treaty is characterized as

“the current legal obstacle to any effort to develop space resources like asteroids or solar power.” *Ibid.*

- 24 Joanne Irene Gabrynowicz, *Space Law: Its Cold War Origins and Challenges in the Era of Globalization*, 2004, Boston, Suffolk University Law Review, pp. 1041–1053.
- 25 Walter A. McDougall, 1985, *The Heavens and the Earth, a Political History of the Space Age*, New York, Basic Books, Inc., p. 431.
- 26 Robinson and White, *op. cit.*, pp. 181–182. The Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (Moon Agreement) also relates back to the Outer Space Treaty. However, the Moon Agreement relates back to the Outer Space Treaty as a whole, without reference to a specific article.
- 27 Outer Space Treaty, *op. cit.*, Article V: States’ Parties to the Treaty shall regard astronauts as envoys of mankind in outer space and shall render to them all possible assistance in the event of accident, distress, or emergency landing on the territory of another State Party or on the high seas. When astronauts make such a landing, they shall be safely and promptly returned to the State of registry of their space vehicle. In carrying on activities in outer space and on celestial bodies, the astronauts of one State Party shall render all possible assistance to the astronauts of other States’ Parties. States Parties’ to the Treaty shall immediately inform the other States’ Parties to the Treaty or the Secretary-General of the United Nations of any phenomena they discover in outer space, including the Moon and other celestial bodies, which could constitute a danger to the life or health of astronauts.
- 28 *Ibid.*, Article VII: Each State Party to the Treaty that launches or procures the launching of an object into outer space, including the Moon and other celestial bodies, and each State Party from whose territory or facility an object is launched, is internationally liable for damage to another State Party to the Treaty or to its natural or juridical persons by such object or its component parts on the Earth, in air space or in outer space, including the Moon and other celestial bodies.
- 29 *Ibid.*, Article VIII: A State Party to the Treaty on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object, and over any personnel thereof, while in outer space or on a celestial body. Ownership of objects launched into outer space, including objects landed or constructed on a celestial body, and of their component parts, is not affected by their presence in outer space or on a celestial body or by their return to the Earth. Such objects or component parts found beyond the limits of the State

Party to the Treaty on whose registry they are carried shall be returned to that State Party, which shall, upon request, furnish identifying data prior to their return.

³⁰ Robinson and White, *op. cit.*, p. 182.

³¹ Much of the research for this particular topic was done by LaToya Tate, a third year law student at the University of Mississippi School of Law and a researcher at the National Remote Sensing and Space Law Center. The subject is examined in depth in her paper, see LaToya Tate, 2006, *The Status of the Outer Space Treaty at International Law During "War" and "Those Measures Short of War"*, *Journal of Space Law*, vol. 32.

³² Marchisio, *op. cit.*, p. 226.

³³ Lord McNair, 1961, *The Law of Treaties*, Oxford, Clarendon Press, p. 723. See also L. Oppenheim and H. Lauterpacht, 1952, *International Law a Treatise*, Seventh edition, London, Longmans, Green and Co Ltd, p. 304; J. Delbruck, 1982, *War, Effect on Treaties*, in: R. Bernhardt (ed.), *Encyclopedia of Public International Law*, Amsterdam and New York, Max Planck Institute for Comparative Public Law and International Law, p. 310–312; US Supreme Court, *Society for the Propagation of the Gospel in Foreign Parts v. New Haven*, 21 U.S. 464, 8 Wheat. 464 (1823), Washington, DC.

³⁴ McNair, *op. cit.*, p. 723.

³⁵ Marchisio, *op. cit.*, p. 226.

³⁶ Institut de Droit International, *The Effects of Armed Conflicts on Treaties*, Articles 2 and 5, 28 August 1985, at <www.idi-iil.org/idiE/navig_chon1983.html>.

³⁷ *The Second Space War*, *Space News*, 31 March 2003, at <www.space.com/spacenews/archive03/editarch_033103.html>.

³⁸ *Outer Space Treaty*, *op. cit.*, Articles I, IX and XII.

³⁹ Leslie C. Green, 1993, *The Contemporary Law of Armed Conflict*, Manchester, Manchester University Press, p. 259.

⁴⁰ *US and India Seal Nuclear Accord*, BBC News, 2 March 2006, at <news.bbc.co.uk/1/hi/world/south_asia/4764826.stm>; *Australia, China Sign Nuclear Deal*, News.com.aun, 3 April 2006, at <finance.news.com.au/story/0,10166,18692623-31037,00.html>; *Security Council, in Presidential Statement, Underlines Importance of Iran's Re-establishing Full, Sustained Suspension of Uranium-Enrichment Activities; Calls on Iran to Take Steps Required by IAEA Board of Governors; Requests Report from IAEA Director General in*

30 Days, Press release, UN Doc. SC/8679, 29 March 2006, at <www.un.org/News/Press/docs/2006/sc8679.doc.htm>.

⁴¹ Joanne Irene Gabrynowicz, *Comments on the Discussion Paper, Space Law and Remote Sensing Activities*, Workshop on Space Law Disseminating and Developing International and National Space Law: the Latin America and Caribbean Perspective, United Nations Office of Outer Space Affairs (UNOOSA), Rio de Janeiro, 22–25 November 2004, UN Doc. ST/SPACE/28, at <www.unoosa.org/oosa/en/SpaceLaw/workshops/index.html>.

⁴² McDougall, *op. cit.*, p. 184.

⁴³ The Outer Space Treaty opened for signature on 27 January 1967 and entered into force on 10 October 1967. See United Nations Office of Outer Space Affairs, *United Nations Treaties and Principles on Space Law*, at <www.unoosa.org/oosa/en/SpaceLaw/treaties.html>.

⁴⁴ McDougall, *op. cit.*, pp. 119–120.

⁴⁵ *Ibid.*, pp. 134, 187.