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Neutrality and Outer Space

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I. INTRODUCTION

In 1959, one of the first authors addressing the issue of neutrality in outer space asked whether the topic “looms as a defiance of common sense.”¹ Although space operations were still in their infancy, Verplaetse correctly foresaw that outer space would be increasingly used for military purposes, which, of course, raised the question of whether, and to what extent, such uses would be governed by the law of armed conflict, including the law of neutrality. However, Verplaetse did not discuss the law of neutrality with a view towards protecting neutral space objects, instead, he analyzed it with a view to a then still probable appropriation of outer space and celestial bodies by States that had, or were about to have, the necessary technology to do so. Article II of the 1967 Outer Space Treaty resolved this issue by providing that outer space was not subject to claims of sovereignty,² but this does not necessarily mean that the issue of whether the law of neutrality applies in outer space is now irrelevant.

Today, outer space has undoubtedly become the fourth domain of warfare. While military confrontation in outer space have not yet occurred, space objects, such as satellites, play an increasingly important role in military operations, whether in times of peace or during an armed conflict. Obviously, hostilities that extend to, or are conducted in, outer space may have an impact on the rights of States not party to the conflict to use outer space for space navigation and on their space objects and assets. From this premise, various conclusions have been drawn, in particular with regard to the protection of neutral space objects against attack or undue interference by the belligerents. However, all too often those conclusions are based on a misconception of the law of neutrality. The law of neutrality, *stricto sensu*, is predominantly territorial in nature and its application to armed hostilities conducted in or through outer space is considerably limited. Accordingly, while at one time it was almost untenable to assert that the law of neutrality applies to belligerent military operations in outer space, such an assertion does not now defy common sense.

1. Julian G. Verplaetse, *The Law of War and Neutrality in Outer Space*, 29 NORDIC JOURNAL OF INTERNATIONAL LAW, 49, 49 (1959).

2. Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies, Jan. 27, 1967, 18 U.S.T. 2410, T.I.A.S. No. 6599, 610 U.N.T.S. 205.

II. CHARACTERISTICS OF THE LAW OF NEUTRALITY

A. Object and Purpose

Neutrality has been defined “as the attitude of impartiality adopted by third States towards belligerents and recognized by belligerents, such attitude creating rights and duties between the impartial States and the belligerents.”³ The overall object and purpose of the law of neutrality is to prevent escalation of an international armed conflict.⁴ Accordingly, States that choose not to participate on behalf of either party to the conflict are obliged to remain impartial vis-à-vis the belligerents, to prevent or terminate any violation of their neutrality by the belligerents, and to tolerate belligerent measures taken in accordance with the law of armed conflict, including the law of neutrality. The belligerents, on their part, are obliged to respect the sovereignty and jurisdiction of neutral States and to refrain from any activity incompatible with the law of neutrality.

B. Distinction from Prize Law and Targeting Law

In view of its primary purpose, it is not entirely correct, as some have done, to consider the law of neutrality as “an effort to maintain international trade during wars.”⁵ The majority of the provisions of the 1907 Hague Convention V⁶ and Convention XIII⁷ were not designed to protect neutral trade interests, but to protect neutral territory by prohibiting certain belligerent uses. Neutral trade interests are dealt with only marginally in Article 7 of Convention V⁸ and in Articles 6 to 8 of Convention XIII.⁹ One may, therefore, question

3. L. OPPENHEIM, 2 INTERNATIONAL LAW: A TREATISE 653 (H. Lauterpacht ed., 7th ed. 1952).

4. See, e.g., Wolff Heintschel von Heinegg, “Benevolent” Third States in International Armed Conflicts: The Myth of the Irrelevance of the Law of Neutrality, in INTERNATIONAL LAW AND ARMED CONFLICT: EXPLORING THE FAULTLINES: ESSAYS IN HONOUR OF YORAM DINSTEIN 543, 565 (Michael Schmitt & Jelena Pejic eds., 2007).

5. Michel Bourbonnière, *The Ambit of the Law of Neutrality and Space Security*, 36 ISRAEL YEARBOOK ON HUMAN RIGHTS 205, 226 (2006).

6. Convention No. V Respecting the Rights and Duties of Neutral Powers and Persons in Case of War on Land, Oct. 18, 1907, 36 Stat. 2310, T.S. No. 540 [hereinafter Hague Convention No. V].

7. Convention No. XIII Concerning the Rights and Duties of Neutral Powers in Naval War, Oct. 18, 1907, 36 Stat. 2415, T.S. No. 545 [hereinafter Hague Convention No. XIII].

8. Hague Convention No. V, *supra* note 6, art. 7.

9. Hague Convention No. XIII, *supra* note 7, arts. 6–8.

whether the law of neutrality can be relied upon to preserve “freedom of neutral navigation in space” and to identify “the acceptable space commercial activities of neutral States *vis-à-vis* belligerents.”¹⁰

Neutral trade interests are not the subject of the law of neutrality as laid down in the two Hague Conventions, but of the law of prize,¹¹ which was first codified in the 1856 Paris Declaration,¹² and later in the 1909 London Declaration¹³ and the 1923 Hague Rules.¹⁴ The *San Remo Manual*,¹⁵ Helsinki Principles,¹⁶ and *Air and Missile Warfare Manual (AMW Manual)*,¹⁷ which at least in part address neutrality, have been widely acknowledged as reflecting current customary law. Of course, prize law may be considered another facet of the law of neutrality in its application to neutral merchant vessels and civil aircraft and their cargoes. However, prize law also applies to enemy merchant vessels and civil aircraft and, because of that, is not exclusively part of the law of neutrality. Moreover, prize law addresses neutral States only in an indirect manner. It concerns neutral merchant vessels and civil aircraft, including their cargoes, as distinguished from State vessels and State aircraft. The neutral flag State or State of registration is bound by prize law only insofar as it must tolerate the exercise of lawful prize measures taken by the belligerents. It may claim, at most, a violation of its jurisdiction by a

10. Bourbonnière, *supra* note 5, at 226.

11. On prize law, see C. J. COLOMBOS, THE INTERNATIONAL LAW OF THE SEA 675–99, 753–93 (6th rev. ed. 1967); ERIK CASTRÉN, THE PRESENT LAW OF WAR AND NEUTRALITY 545–65 (1954); James Kraska, *Prize Law*, in MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW, <http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e383?rskey=Y6QBoz&result=3&prd=EPIL> (article last updated Dec. 2009).

12. Declaration Respecting Maritime Law, Apr. 16, 1856, 115 Consol. T.S. 1, 15 MARTENS NOUVEAU RECUEIL (ser. 1) 791, *reprinted in* 1 AMERICAN JOURNAL OF INTERNATIONAL LAW SUPPLEMENT 89 (1907) [hereinafter Paris Declaration].

13. Declaration Concerning the Laws of Maritime War, Feb. 26, 1909, *reprinted in* THE DECLARATION OF LONDON, February 26, 1909, at 112 (James B. Scott ed., 1919).

14. Commission of Jurists, Rules Concerning the Control of Wireless Telegraphy in Time of War and Air Warfare, Feb. 23, 1923, *reprinted in* 32 AMERICAN JOURNAL OF INTERNATIONAL LAW SUPPLEMENT 12 (1938) [hereinafter 1923 Hague Rules].

15. SAN REMO MANUAL ON INTERNATIONAL LAW APPLICABLE TO ARMED CONFLICTS AT SEA (Louise Doswald Beck ed., 1995) [hereinafter SAN REMO MANUAL].

16. Committee on Maritime Neutrality, International Law Association, *Helsinki Principles on the Law of Maritime Neutrality*, in INTERNATIONAL LAW ASSOCIATION REPORT OF THE 68TH CONFERENCE 497 (1998).

17. PROGRAM ON HUMANITARIAN POLICY AND CONFLICT RESEARCH, MANUAL ON INTERNATIONAL LAW APPLICABLE TO AIR AND MISSILE WARFARE (2009) [hereinafter AMW MANUAL].

belligerent and, even then, only if a claim by the private owner brought before a duly established prize court has proven unsuccessful.¹⁸

Even if belligerent measures against neutral trade or other commercial activities are considered to be governed by the law of neutrality as understood in a wider sense (i.e., by including prize law), its practical relevance in outer space would be considerably limited. It has been rightly stated that “current technology does not permit interception . . . and inspection of space assets” and that “space navigation is predicated upon predictable orbital parameters or orbital coordinates.”¹⁹ Accordingly, it is difficult to see how the law of neutrality, even including prize law, could contribute to the protection of commercial (and other) rights neutral States enjoy in outer space. Such rights, which continue to apply to relations between belligerents and neutral States, are part and parcel of outer space law.²⁰ Additionally, space objects and assets used by a neutral State for non-commercial government purposes enjoy sovereign immunity,²¹ which the belligerents are bound to respect if the State has not become a party to the conflict. This is not necessarily an obligation under the law of neutrality, but rather under the general rules and principles of international law, in particular the sovereign equality of States, that continue to apply in relations between belligerents and neutral States.²²

18. According to prize law, every prize must be brought into a port for adjudication. See COLOMBOS, *supra* note 11, at 801–25. Thus, it is doubtful whether the neutral flag State is entitled to exercise its right of diplomatic protection. If such a right is acknowledged, it is subject to the exhaustion of local remedies rule. For a discussion of the exhaustion rule, see James R. Crawford & Thomas D. Grant, *Local Remedies, Exhaustion of*, in MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW, <http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e59?rskey=ZgA4lb&result=1&prd=EPIL> (article last updated Jan. 2007).

19. Bourbonnière, *supra* note 5, at 226.

20. For an overview, see Vladen S. Vereshchetin, *Outer Space*, in MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW, <http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1202?rskey=WhUdlf&result=2&prd=EPIL> (article last updated June 2006).

21. Although not explicitly provided for in treaties, this follows from the sovereign immunity of State property. Certainly, warships, military aircraft and all other State vehicles enjoy sovereign immunity. Hence, the same principle applies to State spacecraft and other space objects.

22. See, e.g., Michael Bothe, *The Law of Neutrality*, in THE HANDBOOK OF INTERNATIONAL HUMANITARIAN LAW 449, 449 (Dieter Fleck ed., 3d ed. 2013).

A similar misconception of the law of neutrality exists with regard to the targeting of neutral space objects and assets.²³ Attacks against neutral space objects and assets are governed by the law of targeting, which can hardly be perceived as a sub-category of the law of neutrality. If neutral space objects and assets make an effective contribution to a belligerent's military action by reason of their location, use or purpose, they become lawful military objectives and may be attacked if the attack offers a definite military advantage and if the other rules of targeting law (e.g., precautions in attack and the prohibition of indiscriminate attack) are observed. As in the case of prize law, it would be theoretically possible to consider the rules of the law of armed conflict regulating attacks against neutral objects as belonging to the law of neutrality.²⁴ Such a distinction, however, would be overly artificial and not very helpful. With regard to belligerent attacks against neutral space objects and assets, it is certainly not correct to rely on the fundamental obligation of belligerents to respect the inviolability of neutral States as codified in Article 1 of Convention V and Article 1 of Convention XIII.²⁵ That obligation is strictly limited to neutral territory; it does not protect objects and assets located outside neutral territory that do not enjoy sovereign immunity. Moreover, it is generally agreed that a neutral State may not claim a violation of either its sovereignty or its jurisdiction if a belligerent has attacked its space objects and assets that qualify as lawful targets.²⁶ The neutral State must tolerate the exercise of such belligerent rights if, and to the extent, they comply with the rules and principles of targeting law.

In sum, the law of neutrality is a rather unreliable legal yardstick from which to measure the extent of the protection accorded neutral space objects and assets against belligerent interference. Either the law of neutrality is (1) to be understood in a narrow sense by limiting its scope to the provisions of Conventions V and XIII, (2) cannot be applied to outer space for practical reasons, (3) is silent on targeting issues or (4) adds nothing because it would simply be repetitive of the rules and principles of general international law,

23. See Michel Bourbonnière & Ricky J. Lee, *Jus ad Bellum and Jus in Bello Considerations on the Targeting of Satellites: The Targeting of Post-Modern Military Space Assets*, 44 ISRAEL YEAR-BOOK ON HUMAN RIGHTS 167, 213–16 (2014); Bourbonnière, *supra* note 5, at 221–22.

24. For example, the AMW MANUAL, *supra* note 17, deals with attacks against neutral aircraft in Rule 174, which is located in Section X, entitled “Neutrality.”

25. See Bourbonnière & Lee, *supra* note 23, at 213; Bourbonnière, *supra* note 5, at 218.

26. This result follows from the fact that the neutral merchant vessels and civil aircraft, which make an effective contribution to the enemy's military action by use, are liable to attack. See SAN REMO MANUAL, *supra* note 15, ¶¶ 67, 70; AMW MANUAL, *supra* note 17, r. 174.

which continue to have binding effect in relations between belligerents and neutral States. Of course, belligerents may not prevent neutral States from exercising their freedoms under the law of outer space. This prohibition, however, does not follow from the law of neutrality. Belligerents may not attack neutral space objects and assets unless they qualify as lawful targets, and they may not attack lawful targets if the attack may be expected to cause excessive collateral damage. Again, these prohibitions and obligations are not part of the law of neutrality but follow from the law of targeting that, other than prize law, does not distinguish between enemy and neutral status.

III. SCOPE OF APPLICABILITY

Although there seems to be no consensus among States as to the continuing validity of the law of neutrality,²⁷ it is accepted that neutrality only applies *ratione materiae*—in situations of international armed conflict; *ratione personae*—to States that are not parties to an international armed conflict; and *ratione temporis*—as long as a State chooses not to participate on the side of either belligerent and as long as the international armed conflict lasts.²⁸ According to the position taken here, it is quite doubtful whether—*ratione loci*—it also applies in outer space.

A. *Ratione Materiae et Ratione Personae*

While there is agreement on the limitation of the law of neutrality to situations of international armed conflict, as distinguished from non-international armed conflict, it is unsettled whether it only applies in international armed conflicts “of a certain duration and intensity.”²⁹ It is true that the practical relevance of the law of neutrality will be quite limited in an international armed conflict of short duration. For instance, the rules of Convention XIII on belligerent use of neutral waters³⁰ will be unlikely to come into operation in such a conflict. However, the inviolability of neutral territory, including neutral waters, must be observed during any international

27. See Heintschel von Heinegg, *supra* note 4, at 544–56.

28. *Id.* at 558–60.

29. OFFICE OF THE GENERAL COUNSEL, U.S. DEPARTMENT OF DEFENSE, LAW OF WAR MANUAL § 15.2.1.2 (rev. ed. Dec. 2016) [hereinafter DOD LAW OF WAR MANUAL].

30. Hague Convention No. XIII, *supra* note 7, arts. 10–25; see also COLOMBOS, *supra* note 11, at 650–51; CASTRÉN, *supra* note 11, at 514–31; SAN REMO MANUAL, *supra* note 15, ¶¶ 20–21.

armed conflict, irrespective of its intensity or duration. All States not parties to the international armed conflict must remain impartial and abstain from unneutral conduct in order to preserve the very function of the law of neutrality (i.e., to prevent an escalation of the armed conflict).³¹ In this author's view, the *essentialia neutralitatis*, that is, the core rules of the law of neutrality, therefore apply in all situations of international armed conflict.³² These rules regulate the relations between the belligerents and all States not parties to the conflict.³³

Although there is no intermediate status of "non-belligerency" that would allow neutral States to discriminate between the belligerents because one belligerent has (allegedly) resorted to a use of force contrary to its obligations under the UN Charter,³⁴ the *jus ad bellum* may impact the applicability of the law of neutrality. According to a generally held view, no State may rely upon the law of neutrality if the Security Council has taken "binding preventive or enforcement measures under Chapter VII of the Charter of the United Nations – including the authorization of the use of force by a particular State or group of States."³⁵

B. *Ratione Temporis*

Ratione temporis the law of neutrality applies until the end of an international armed conflict, which depends upon either the "cessation of active hostilities"³⁶ or on the "general close of military operations."³⁷ If a neutral State decides to become a party to the conflict it is no longer bound and protected by the law of neutrality.³⁸ It is important to note that mere violation of neutral obligations, such as the duty of impartiality, will not render a neutral State a party to the conflict. Hence, the law of neutrality ceases to apply only if, and to the extent, the neutral State resorts to a use of force

31. CASTRÉN, *supra* note 11, at 470–87.

32. Heintschel von Heinegg, *supra* note 4, at 565–67.

33. SAN REMO MANUAL, *supra* note 15, ¶ 13(d); AMW MANUAL, *supra* note 17, r. 1(aa).

34. *See* Heintschel von Heinegg, *supra* note 4, at 544–56.

35. AMW MANUAL, *supra* note 17, r. 165; *see also* SAN REMO MANUAL, *supra* note 15, ¶¶ 7–9.

36. Convention (III) Relative to the Treatment of Prisoners of War art. 118, Aug. 12, 1949, 6 U.S.T. 3316, 75 U.N.T.S. 135.

37. Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflicts art. 3(a), June 8, 1977, 1125 U.N.T.S. 3.

38. CASTRÉN, *supra* note 11, at 470–87.

against one of the belligerents.³⁹ This may include attacks, whether from Earth or from outer space, against belligerent space objects and assets that enjoy sovereign immunity.

C. *Ratione Loci*

As seen, an extension of the applicability of the law of neutrality to outer space does not seem tenable. States agree that

law of war treaties and the customary law of war are understood to regulate the conduct of hostilities, regardless of where they are conducted, which would include the conduct of hostilities in outer space. In this way, the application of the law of war to activities in outer space is the same as its application to activities in other environments, such as the land, sea, air, or cyber domains.⁴⁰

Such statements do not, however, justify the conclusion that States also agree on the application of the law of neutrality in outer space. The law of neutrality may be considered a branch or sub-category of the law of armed conflict, but States have to date refrained from making positive statements as to its applicability to outer space.⁴¹

The law of neutrality as codified in Conventions V and XIII is intrinsically linked to the territorial sovereignty of neutral States. Under Article 1 belligerents are obliged to respect the inviolability of the “territory of neutral Powers”⁴² and of “neutral waters.”⁴³ The prohibitions on belligerents relate to conduct in the territory and territorial waters of neutral States.⁴⁴ The obligations of neutral States equally relate to belligerent uses of

39. See INTERNATIONAL COMMITTEE FOR THE RED CROSS, COMMENTARY ON THE FIRST GENEVA CONVENTION: CONVENTION (I) FOR THE AMELIORATION OF THE CONDITION OF THE WOUNDED AND SICK IN THE ARMED FORCES IN THE FIELD ¶¶ 217–43 (2016).

40. DOD LAW OF WAR MANUAL, *supra* note 29, § 14.10.2.2.

41. For example, Chapter XV of the DOD LAW OF WAR MANUAL, which deals with the law of neutrality, does not mention outer space or neutral space objects.

42. Hague Convention No. V, *supra* note 6.

43. Hague Convention No. XIII, *supra* note 7.

44. Hague Convention No. V, *supra* note 6, arts. 1–4; Hague Convention No. XIII, *supra* note 7, arts. 1–5.

their territory and waters,⁴⁵ or to other activities occurring within their territory over which the neutral State is able to exercise effective control.⁴⁶

According to Article II of the Outer Space Treaty, “outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means.” Prior to the adoption of the Outer Space Treaty in 1967, it was unsettled whether States were allowed to extend their sovereignty into outer space.⁴⁷ Today, Article II is considered to reflect customary international law because outer space, including the moon and other celestial bodies, is a *res communis omnium*.⁴⁸ Accordingly, Conventions V and XIII are not applicable in outer space because any claim of territorial sovereignty by a neutral State would lack a legal basis.

In this context, it is important to note that the mere exercise of jurisdiction or effective control is not sufficient to bring into operation the law of neutrality. A State may exercise its prescriptive and/or enforcement jurisdiction in outer space by, for example, regulating mining activities on celestial bodies.⁴⁹ This, however, does not result in an extension of the State’s territorial sovereignty to that object. A belligerent’s obligation to refrain from interfering with a neutral State’s exercise of jurisdiction in outer space does not stem from the law of neutrality, but from either general international law, space law or the law of targeting. And even if the law of neutrality was understood in a wider sense, that is, to include belligerent measures other than attacks against neutral space objects and assets, these rules would, at present, fail to apply in outer space for practical reasons. The fact that outer space is being used by public and private actors for various purposes and that it is a *res communis omnium* may justify an assimilation of outer space to the high seas. Nonetheless, it does not justify a conclusion that the law of

45. Hague Convention No. V, *supra* note 6, arts. 5, 11–19; Hague Convention No. XIII, *supra* note 7, arts. 8, 10–25.

46. Hague Convention No. V, *supra* note 6, arts. 6–8; Hague Convention No. XIII, *supra* note 7, arts. 7–8.

47. Verplaetse, *supra* note 1, at 52.

48. Vereshchetin, *supra* note 20, ¶ 5.

49. In November 2015, the United States enacted legislation that would permit U.S. citizens to engage in commercial exploration and recovery of space resources. U.S. Commercial Space Launch Competitiveness Act, Pub. L. No. 114-90, 129 Stat. 704 (2015). Luxembourg recently adopted a similar act. See *Luxembourg Law on the Exploration and Use of Space Resources Entered into Force*, ARENDT (Aug. 2, 2017), <http://www.arendt.com/publications/pages/luxembourg-law-exploration-use-space-resources-into-force.aspx>.

neutrality is “necessary for the maintenance of the global public order”⁵⁰ and, therefore, applicable in outer space.

IV. RIGHTS AND DUTIES LINKED TO TERRITORIAL SOVEREIGNTY

Although the law of neutrality does not apply to outer space activities—whether those of a belligerent or neutral—this does not mean it is irrelevant with regard to the conduct of hostilities in or through outer space. In particular, if military space operations can be linked to neutral territory, the law of neutrality determines the rights and obligations of belligerent and neutral States by modifying or amending the peacetime rules that, in principle, continue to apply.

A. Inviolability of Neutral Territory and Neutral Airspace

According to Article 1 of Convention V the territory of neutral States is inviolable.⁵¹ Article 1 of Convention XIII may be interpreted as extending the inviolability of neutral territory to “neutral waters,” which “consist of the internal waters, territorial sea, and, where applicable, the archipelagic waters of neutral States.”⁵² Neither Convention addresses neutral airspace (i.e., the airspace above neutral territory and neutral waters), but, according to customary international law, neutral national airspace is equally inviolable.⁵³ The inviolability of neutral territory, neutral waters and neutral airspace is not limited to the explicit prohibitions of Articles 2 through 5 of Convention V and Articles 1 through 5 of Convention XIII, nor to the customary prohibitions restated in the *San Remo Manual* and the *AMW Manual*.⁵⁴ Rather, belligerents must refrain from any violation of the territorial sovereignty of neutral States.⁵⁵ This includes damage inflicted to neutral territory from outer space.

In this context, it is important to emphasize that the rules governing belligerent uses of neutral airspace may not be transferred to outer space.

50. Bourbonnière, *supra* note 5, at 216.

51. Hague Convention No. V, *supra* note 6, art. 1.

52. SAN REMO MANUAL, *supra* note 15, ¶ 14.

53. AMW MANUAL, *supra* note 17, r. 170(a); SAN REMO MANUAL, *supra* note 15, ¶ 14; *see also* 1923 Hague Rules, *supra* note 14, arts. 39–40.

54. SAN REMO MANUAL, *supra* note 15, ¶¶ 15–18; AMW MANUAL, *supra* note 17, rr. 166–67, 170–72.

55. *See, e.g.*, CASTRÉN, *supra* note 11, at 459–65.

Bourbonnière interprets Article 40 of the 1923 Hague Rules, according to which “belligerent military aircraft are forbidden to enter the jurisdiction of a neutral State,” as follows:

Although strictly speaking this paradigm cannot easily be transposed to apply to space assets and their applications, from a space law conceptual perspective the use of the word ‘jurisdiction’ is nonetheless very interesting. Considering that sovereign territory in outer space does not exist but that States have ‘jurisdiction and control’ over their space assets, by transposing the Hague Rules paradigm involving the use of the term ‘jurisdiction’, interference with the national jurisdiction of States in outer space could be determined to be a violation of neutral rights.⁵⁶

The use of “jurisdiction” instead of “national airspace” in the 1923 Hague Rules may not be understood as extending the prohibition of Article 40 to all aspects of a neutral State’s jurisdiction. First, the use of the verb “enter” indicates that the drafters considered what they described as “jurisdiction” to be a certain space or area, hence, the verb may not be interpreted as meaning “to violate.” Second, even if the wording of Article 40 was meant to include more than the national airspace of neutral States, it would be obsolete today. According to customary international law, the prohibition is limited to the “incursion or transit by military aircraft into or through neutral airspace.”⁵⁷ Third, as stated above, the rules are designed to protect the territorial sovereignty of neutral States. Fourth, the jurisdictional rights neutral States enjoy outside their territories are the subject of the law of prize and the law of targeting; they are not as protected as though they are within the territorial sovereignty of neutral States.

B. Prohibited Uses of Neutral Territory and Neutral Airspace

The exercise of belligerent rights in neutral territory, neutral waters and neutral airspace is prohibited.⁵⁸ Specifically, in those areas belligerents are prohibited from engaging in hostile actions, establishing bases of operations or using them as a sanctuary.⁵⁹ The same holds true for “any other activity

56. Bourbonnière, *supra* note 5, at 220.

57. AMW MANUAL, *supra* note 17, r. 170(a); *see also* SAN REMO MANUAL, *supra* note 15, ¶ 18; 1923 Hague Rules, *supra* note 14, arts. 40–41.

58. AMW MANUAL, *supra* note 17, rr. 166–67; SAN REMO MANUAL, *supra* note 15, ¶ 16.

59. Hague Convention No. XIII, *supra* note 7, art. 5; SAN REMO MANUAL, *supra* note 15, ¶ 17; AMW MANUAL, *supra* note 17, r. 167(a).

involving the use of military force or contributing to the war-fighting effort.”⁶⁰ Accordingly, the launching of belligerent military space objects from neutral territory constitutes a violation of neutrality.

This prohibition applies even if the neutral State, because of an agreement (servitude, lease or status of forces agreement) with the belligerent, is prevented from exercising its territorial jurisdiction in the area of the launching site. When a prohibited use occurs of its territory, territorial waters or national airspace occurs, the neutral State is obliged to take the measures necessary to terminate the violation of its neutrality.⁶¹ In this instance, in this author’s view, the obligations under the law of neutrality prevail over the agreement with the belligerent. If the neutral State is unwilling or unable to terminate the violation of its neutrality and if the violation is serious, the aggrieved belligerent is entitled to use proportionate force to terminate the violation.⁶² The fact that in past international armed conflicts (e.g., during the 2003 Iraq War) neutral States tolerated uses of their territory by a belligerent inconsistent with the law of neutrality and that the aggrieved belligerent did not respond is inadequate evidence of State practice to justify the conclusion that these rules of the law of neutrality have become obsolete. The neutral States were simply in the fortunate position that the aggrieved belligerent lacked the military capability to effectively respond to the violation.

Seemingly, because there is no consensus on a definition of outer space and its delimitation from airspace,⁶³ it is not settled whether belligerents are prohibited from launching space objects outside neutral territory or neutral waters if the space object transits neutral airspace before reaching outer space. Moreover, some States have taken the position that, although the space above 100 to 110 kilometers would be considered outer space, other States would retain a right of passage below that altitude “for the purpose of reaching orbit or returning to earth.”⁶⁴ Irrespective of whether this position is reflective of customary law, it cannot be considered to apply to the national airspace of neutral States in times of international armed conflict. It is generally agreed that “any incursion or transit by a belligerent aircraft (including a UAV [unmanned aerial vehicle]/UCAV [unmanned combat

60. AMW MANUAL, *supra* note 17, r. 171(d).

61. Hague Convention No. V, *supra* note 6, art. 5; SAN REMO MANUAL, *supra* note 15, ¶ 22; AMW MANUAL, *supra* note 17, r. 168; 1923 Hague Rules, *supra* note 14, art. 42.

62. SAN REMO MANUAL, *supra* note 15, ¶ 22; AMW MANUAL, *supra* note 17, r. 168.

63. Vereshchetin, *supra* note 20, ¶¶ 8–14.

64. *Id.*, ¶ 12.

aerial vehicle]) or missile into or through neutral airspace is prohibited.”⁶⁵ This prohibition must be extended to military space objects, including spacecraft, transiting neutral national airspace.

Article 10 of Convention XIII, according to which the “neutrality of a Power is not affected by the mere passage through its territorial waters of warships or prizes belonging to belligerents,” does not support the conclusion that belligerents are entitled to launch military space objects via neutral national airspace. In neutral waters, the ships of all States enjoy certain passage rights. The peacetime right of innocent passage in the territorial sea and, where applicable, archipelagic waters, continues to apply in times of armed conflict⁶⁶ unless a neutral State has, in accordance with the law of maritime neutrality, prohibited belligerent warships from exercising that right.⁶⁷ Such passage or transit rights do not exist in neutral national airspace however it is defined and delimited from outer space. A neutral State is not entitled to allow belligerent aircraft or spacecraft the use of its national airspace, including for the purpose of transiting to outer space. To the contrary, if belligerent military aircraft or spacecraft enter neutral airspace, the neutral State “must use all means at its disposal to prevent or terminate that violation.”⁶⁸ Again, if the neutral State is unwilling or unable to comply with its duty of preventing or terminating the violation of its national airspace, the opposing belligerent “may, in the absence of any feasible and timely alternative, use such force as is necessary to terminate the violation,”⁶⁹ as the belligerent’s use of the airspace would constitute a serious violation of neutrality.

C. *Belligerent Use of Communications Infrastructure Located in Neutral Territory*

According to Article 3 of Convention V, belligerents are

forbidden to—

65. AMW MANUAL, *supra* note 17, r. 170(a). A UAV is an unmanned aerial vehicle; a UCAV is an unmanned combat aerial vehicle. *Id.* at 6.

66. SAN REMO MANUAL, *supra* note 15, ¶¶ 31–33. Note that neutral States may not “suspend, hamper, or otherwise impede the right of transit passage nor the right of archipelagic sea lanes passage.” *Id.*, ¶ 29.

67. *Id.*, ¶ 19.

68. AMW MANUAL, *supra* note 17, r. 170(c); 1923 Hague Rules, *supra* note 14, art. 42.

69. AMW MANUAL, *supra* note 17, r. 168(b); *see also* SAN REMO MANUAL, *supra* note 15, ¶ 22 (stating that the use of force must be “strictly” necessary).

(a) erect on the territory of a neutral Power a wireless telegraphy station or other apparatus for the purpose of communicating with belligerent forces on land or sea; (b) use any installation of this kind established by them before the war on the territory of a neutral Power for purely military purposes, and which has not been opened for the service of public messages.

Similarly, Article 5 of Convention XIII prohibits belligerents from erecting in neutral ports and waters “wireless telegraphy stations or any apparatus for the purpose of communicating with the belligerent forces on land or sea.” The wording—“or any apparatus”—is sufficiently broad to permit the prohibition to be extended to the erection and use in neutral territory of ground stations controlling, or communicating data to, military space objects. The fact that the prohibitions are limited to communications with belligerent land and sea forces is not an obstacle to such an extension. Even if Articles 3 and 5 were understood literally, which would exclude communication with belligerent military space objects and assets, there is today general agreement that the erection and use of such installations is to be considered a “hostile action” because the belligerent would be using neutral territory as a base of operations.⁷⁰

The prohibition of Article 3(b) is not absolute in nature. In view of its wording, it is arguable that the use of preexisting belligerent communications infrastructure in neutral territory, including ground stations, is not prohibited if it is not exclusively used for military purposes. This would exclude from the prohibition the use of any belligerent communications infrastructure that also serves non-military purposes. It must be borne in mind, however, that this would apply only if the communications infrastructure was also open for sending and receiving public messages. The use of the word “and” indicates that the two requirements must be fulfilled concurrently and, in reality, ground stations designed for the communication with military satellites will not be open for the service of public messages. If a belligerent uses its communication infrastructure located in neutral territory for military purposes in violation of Article 3 or of Article 5, the neutral State is obliged to take the measures necessary to terminate the violation, even if the infrastructure is located in an area in which it is prevented from exercising territorial jurisdiction.⁷¹

70. SAN REMO MANUAL, *supra* note 15, ¶ 16.

71. AMW MANUAL, *supra* note 17, r. 168(b); SAN REMO MANUAL, *supra* note 15, ¶ 22.

Another provision concerning belligerent uses of neutral communications infrastructure is Article 8 of Convention V, which provides, “A neutral Power is not called upon to forbid or restrict the use on behalf of the belligerents of telegraph or telephone cables or of wireless telegraphy apparatus belonging to it or to companies or private individuals.”⁷² Whereas Article 3 of Convention V and Article 5 of Convention XIII apply to communications infrastructure belonging to a belligerent located in neutral territory, Article 8 applies to infrastructure belonging to either the neutral State or to private individuals or companies.⁷³ Arguably, the provision is applicable to any communications infrastructure, including neutral ground stations and satellites (although the latter are not within neutral territory). The word “use” can be extrapolated to include “a long-term leased capacity or commercial acquisition of satellite services, such as mobile satellite telecommunications and remote sensing imagery.”⁷⁴ Still, it is questionable whether this would be reconcilable with the neutral obligation of abstaining from any activity in support of belligerent military operations. In particular, the provision of remote sensing imagery or other satellite capacity or services that are used for target acquisition purposes could be considered by the opposing belligerent as an act of active involvement in the hostilities, even if the neutral State is prepared to provide the services impartially to all the belligerents. On the other hand, the States parties to Convention V did not exclude from Article 8’s authorization of the continued use of neutral communications infrastructure the transmission of information of military significance, hence, under Article 8 the provision of such capacity or services does not violate the law of neutrality, provided the neutral communications infrastructure is made available impartially to all belligerents.

It is important to emphasize that a determination that the activity does not violate the law of neutrality is without prejudice to the question of whether a neutral satellite qualifies as a lawful target. The fact that a neutral State acts in compliance with the law of neutrality does not exclude a neutral object from becoming a military objective by reason of its use. It is, therefore, not reasonable to hold that “the mere availability of such capacity or services provided by a neutral State or a person or entity of its nationality would not be sufficient to make their satellite a legitimate target for armed attack.”⁷⁵ This conclusion confuses the law of neutrality with the law of

72. Hague Convention No. V, *supra* note 6, art. 8.

73. *Id.*

74. Bourbonnière & Lee, *supra* note 23, at 214.

75. *Id.*

targeting. Neutral merchant vessels and civil aircraft are liable to be attacked as lawful targets if they “are incorporated into or assist the enemy’s intelligence system.”⁷⁶ There is no logical operational or legal reason why neutral satellites should be treated differently. It is important to note that the vessels and aircraft may be attacked only if they are outside neutral territory or neutral waters. Whereas an attack against neutral communications infrastructure located in neutral territory would be unlawful, even if it qualified as a military objective by its use, an attack against a neutral satellite (or any other neutral space object) that makes an effective contribution to the enemy’s military action would be lawful under the law of armed conflict.⁷⁷

D. Exports from Neutral Territory

According to Article 7 of Convention V and the identical Article 7 of Convention XIII, a neutral State is not obliged “to prevent the export or transport, on behalf of one or other of the belligerents, of arms, munitions of war, or, in general, of anything which can be of use to an army or a fleet.”⁷⁸ These provisions apply to military space objects, remote sensing data, and to any other satellite services, as long as they are provided by private companies or individuals.⁷⁹ The fact that many States have implemented far-reaching export control regimes under their domestic law does not imply an obligation under the law of neutrality also to apply them to the parties to an international armed conflict.

The law of neutrality is, however, less liberal with regard to the “supply, in any manner, directly or indirectly, by a neutral Power to a belligerent Power, of warships, ammunition, or war material of any kind whatever.”⁸⁰ In

76. SAN REMO MANUAL, *supra* note 15, ¶ 70(d); AMW MANUAL, *supra* note 17, r. 174(d); 1923 Hague Rules, *supra* note 14, art. 6(1).

77. Interestingly, Bourbonnière arrives at the same conclusion, although he previously expressed doubts as to whether the neutral satellite qualified as a lawful target. Bourbonnière, *supra* note 5, at 221

In applying this rule [Article 6(1) of the 1923 Hague Rules] to space based earth imaging it can be cogently argued that the transmission of earth imaging data and/or of the information resulting from the processed data, which has either tactical or strategic significance, in real time to a belligerent is a hostile act. In these circumstances the ‘neutral’ or private space asset violating these norms would then be liable to capture or attack as a legitimate military objective.

78. *See also* 1923 Hague Rules, *supra* note 14, art. 45.

79. Bourbonnière, *supra* note 5, at 220.

80. Hague Convention No. XIII, *supra* note 7, art. 6; *see also* 1923 Hague Rules, *supra* note 14, art. 44.

other words, the law prohibits neutral States, as distinct from neutral nationals, from engaging in such activities. Accordingly, it can be concluded that the “supply by a neutral State of earth imaging data to a belligerent, either raw or processed, would then be a violation of neutrality.”⁸¹

According to Article 8 of Convention XIII, a neutral government is under an obligation of due diligence

to employ the means at its disposal to prevent the fitting out or arming of any vessel within its jurisdiction which it has reason to believe is intended to cruise, or engage in hostile operations, against a Power with which that Government is at peace. It is also bound to display the same vigilance to prevent the departure from its jurisdiction of any vessel intended to cruise, or engage in hostile operations, which had been adapted entirely or partly within the said jurisdiction for use in war.⁸²

Thus,

it can be argued that a State must use due diligence to prevent the launch of a satellite from its territory when it has reasonable grounds to believe that the satellite is intended for military use in a conflict within which it is neutral. Similarly a neutral State is bound to employ the means at its disposal to prevent the fitting or arming of a satellite within its territory which it has reason to believe is intended for hostile operation against a belligerent with which it is at peace.⁸³

In view of the overall object of the law of neutrality, that is, the prevention of the escalation of an international armed conflict, neutral States must refrain from providing any direct support of military equipment, such as objects intended for military operations in or through outer space, or militarily relevant material, such as satellite imagery, to the belligerents. Their obligation to prevent their nationals (individuals or companies) from supplying a belligerent is, however, limited to satellites and space objects designed for military uses in or through outer space.

81. Bourbonnière, *supra* note 5, at 220.

82. 1923 Hague Rules, *supra* note 14, art. 46.

83. Bourbonnière, *supra* note 5, at 221.

E. Duty of Impartiality

It has been shown that a neutral State is not obliged to prevent all belligerent uses of its territory or of the infrastructure located within its territory. In an exercise of its sovereign prerogative it may, however, impose conditions, restrictions or prohibitions on the provision by private companies or individuals of military space objects, remote sensing data and any other satellite services, and on the use of their communications infrastructure, including ground stations controlling satellites. If the neutral State so decides, it is obliged to apply the conditions, restrictions or prohibitions impartially to all belligerents.⁸⁴

V. FURTHER ISSUES

Finally, there are some issues that, strictly speaking, are not governed by the law of neutrality, but must be briefly addressed for reasons of completeness.

A. Entitlement to Exercise Belligerent Rights in Outer Space

The first issue relates to the question whether belligerents are obliged in the exercise of its belligerent rights in outer space to use only space objects that fulfill the conditions applicable to warships and military aircraft. This question arises because in naval warfare and air warfare the exercise of belligerent rights is limited to warships and military aircraft.⁸⁵ Other vessels or aircraft, even if they qualify as State vehicles enjoying sovereign immunity, are not entitled to exercise belligerent rights.⁸⁶ If outer space is assimilated to the high seas and to international airspace as a *res communis omnium* that all States are entitled to use for commercial and military purposes, there may be a need to limit the exercise of belligerent rights to belligerent space objects

84. Hague Convention No. V, *supra* note 6, art. 9; Hague Convention No. XIII, *supra* note 7, art. 9.

85. 1923 Hague Rules, *supra* note 14, art. 13; AMW MANUAL, *supra* note 17, r. 17. With regard to warships, this follows from the prohibition of privateering under the 1856 Paris Declaration. *See also* Robert W. Tucker, *The Naval Forces of Belligerents*, 50 INTERNATIONAL LAW STUDIES 38, 38 (1955).

86. *See* PROGRAM ON HUMANITARIAN POLICY AND CONFLICT RESEARCH, COMMENTARY ON THE HPCR MANUAL ON INTERNATIONAL LAW APPLICABLE TO AIR AND MISSILE WARFARE r. 17 cmt. 2 (2010) (“Just like civilian aircraft, State aircraft other than military aircraft are not entitled to engage in attacks, even if they are owned by or under the exclusive control of the armed forces and being used for government non-commercial service.”).

(1) operated by the armed forces of a State, (2) bearing the military markings of that State, (3) commanded by a member of the armed forces and (4) manned or preprogrammed by a crew subject to regular military discipline.⁸⁷ The strict requirements of the law of naval and air warfare are closely linked to the prohibition of privateering under the 1856 Paris Declaration⁸⁸ and to the need of neutral ships and aircraft to be able to clearly distinguish a lawful exercise of belligerent rights from acts of privateering (or of piracy). In view of a lack of a consistent State practice, it is, however, doubtful that the principle of transparency also applies in outer space. For the foreseeable future belligerents will not have the capability to exercise prize measures in outer space. Space navigation will continue to be “predicated upon predictable orbital parameters or orbital coordinates.”⁸⁹ Accordingly, it is unnecessary to limit the exercise of belligerent rights in outer space to space objects or spacecraft that comply with the requirements applicable to warships and military aircraft.

B. *Belligerent Use of Neutral Space Objects*

Another issue concerns the use by belligerents of neutral space objects for military purposes. This raises the question of whether international law provides sufficiently clear standards for the determination of the nationality of space objects. Unfortunately, space law treaties do not define nationality and, thus, do not provide guidance as to the determination of the neutral status of a space object.⁹⁰ The treaties either refer to the “launching authority,” the “launching State,” “jurisdiction and control” established through registration, which is reserved to the launching State or States, or to “ownership.”⁹¹ It has been rightly stated that jurisdiction and control may not coincide with ownership, and that it is difficult to determine “the legal status of a satellite as an asset of either a belligerent or neutral State.”⁹² Moreover, a satellite may be under the jurisdiction and control of a neutral State, but the “payload may be subject to independent command and control

87. AMW MANUAL, *supra* note 17, r. 1(x).

88. Paris Declaration, *supra* note 12 (“Privateering is, and remains, abolished”).

89. Bourbonnière, *supra* note 5, at 226.

90. *Id.* at 217–19.

91. Stephan Hobe, *Spacecraft, Satellites and Space Objects*, in MAX PLANCK ENCYCLOPEDIA OF PUBLIC INTERNATIONAL LAW ¶¶ 10–13, <http://opil.ouplaw.com/view/10.1093/law:epil/9780199231690/law-9780199231690-e1222?rskey=Tc7awU&result=1&prd=EPIL> (article last updated June 2007).

92. Bourbonnière, *supra* note 5, at 219.

from a different ground control facility.”⁹³ To date, State practice has not provided legal clarity on this question. In sum, without “a harmonization of State practice on this issue,”⁹⁴ the determination of the neutral status of satellites and other space objects remains unsettled.

These difficulties are, however, less grave than they may seem at first glance. First, whether a satellite or other space object has belligerent or neutral status is an issue unrelated to the law of neutrality. It is, therefore, misleading to hold that belligerents are obliged to “respect the neutrality of a non-belligerent in outer space.”⁹⁵ Second, belligerents are not prohibited from using neutral satellites or other space objects, unless they enjoy sovereign immunity. Third, the lawfulness of an attack against a satellite or other space object will in most instances depend on its use (i.e., whether it makes an effective contribution to military action), not on its nationality. The nationality of a space object is relevant only if it contributes to military action by its nature or if it enjoys sovereign immunity.

If a belligerent uses a neutral space object for military purposes, the opposing belligerent would be entitled to consider it a lawful military objective. Unless there is an urgent necessity to neutralize the object immediately, the aggrieved belligerent is arguably obliged to request the neutral State to terminate the use of its space object by the other belligerent. If the neutral State is unable to comply with the request because, for example, the payload is under the command and control of that belligerent, the aggrieved belligerent is not obliged to refrain from an attack, provided that the rules and principles of targeting law are observed.⁹⁶

VI. CONCLUDING REMARKS

It is difficult to assess the legality of the use of modern technology and of a new domain of warfare—outer space—under rules that were adopted more than one hundred years ago when earthbound flight itself was still in its infancy. While the law of neutrality is of continued validity with regard to belligerent uses of neutral territory and of infrastructure located therein, it is not possible to extend its scope of applicability to outer space, because its rules are predominantly linked to the territorial sovereignty of neutral States. The efforts to assess the legality of belligerent military operations in outer

93. Bourbonnière & Lee, *supra* note 23, at 214.

94. Bourbonnière, *supra* note 5, at 219.

95. *Id.* at 218.

96. See Bourbonnière & Lee, *supra* note 23, at 214.

space in light of the law of neutrality are based on an approach that confuses that law with the law of targeting, or one that ignores the very nature of the law of neutrality. Therefore, the importance of the law of neutrality should not be overestimated or excessively interpreted in an effort to extend it to activities in outer space. The protection of neutral space objects and of other neutral uses of outer space against belligerent interference is sufficiently provided for by the principles and rules of the law of armed conflict regulating the conduct of hostilities and by the principles and rules of space law and general international law that continue to apply in relations between belligerents and neutral States.