

Space Force: The Harbinger of Cold War 2?

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Abstract

The US Space Force, established recently, is the sixth arm of the US Military. While the Force has not yet engaged in military activities in Outer Space, its parent act, the National Defence Authorisation Act, 2020, does not preclude the possibility of placing weapons, deploying trained personnel or even constructing bases in Outer Space. Further, it is pertinent to note that the legislation does not provide for undertaking dedicated risk assessments, which are required in order to anticipate and prevent harm to the space environment. These possibilities pose a serious threat to the peaceful use of outer space. Even though self-defence is often considered to be an inherent right of a State, the authors believe that the act of establishing commands and training individuals for warfighting missions in space is currently unnecessary, since such a practice has not been adopted by other space-faring nations. The institution of such a military force by the United States would lead to the creation of similar forces by other States, leading to a new arms race in Outer Space, which would further result in a circumstance where weapons in Outer Space would be inevitable and irreversible. Therefore, in order to keep Outer Space as a conflict-free zone, this paper aims to analyse the existing legal framework in light of recent developments, looks for solutions in general international law, and seeks to apply the same to the realm of outer space.

1. Introduction

The legal regime that controls activities in Space has always aspired to restrain space activities to peaceful purposes. It is not difficult to imagine that without this central tenet of Space Law, the powerful nations of the world would be racing to establish dominance in this realm, thereby forever confining humanity to the Earth. If Space indeed becomes a warfighting

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domain,¹ scientific exploration for the benefit of humanity will be subordinated to military goals. In this paper, the authors aim to analyse existing Space Law and expose its shortcomings in dealing with the developing scenario of the United States Space Force [“USSF”]. They will further proceed to suggest solutions to these shortcomings from general international law, and finally propose the direction Space Law must take to deal with the threats posed by the USSF.

2. Relevant Space Law: Article IV of the Outer Space Treaty

The peaceful use of Outer Space is enshrined in Article IV of the Outer Space Treaty [“OST”]. The first paragraph of Article IV clearly prohibits the placement of Nuclear Weapons or Weapons of Mass Destruction [“WMDs”], in Space, in orbit around the Earth, or on celestial bodies. There are some limitations to this provision. Firstly, it does not prohibit the placement of weapons other than the kinds mentioned above, and secondly, it does not prohibit their placement in the void of Space. In other words, other than Nuclear Weapons or WMDs, Space is open to the use or placement of any other kind of weapon.²

In particular, the term “placement” has been the centre of much controversy. As the law currently stands, Inter-Continental Ballistic Missiles, since they are only in Space for a limited time, cannot be considered to have been “placed” in Outer Space.³ Therefore, going by the text of the Treaty, the use of weapons such as ICBMs that transit through Space, is not prohibited, only their placement is.⁴

The second paragraph of Article IV is quite clear. There is a complete demilitarisation of the moon and other celestial bodies.⁵ The establishment of military bases or any kind of military manoeuvre is completely prohibited. However, military personnel or any required equipment for peaceful purposes, such as scientific research, may be permitted.⁶

We can see that there is a lot of ambiguity surrounding the exact scope of the prohibition of the military use of Outer Space. This ambiguity has led to the questions of “non-aggressive use” and the definitional issues and differences between militarisation and weaponisation.

1 Trump: 'Space is the world's newest war-fighting domain' 21 December 2019, <https://www.bbc.com/news/av/world-us-canada-50875940>, (accessed 30.05.20).

2 Bin Cheng, *Studies in International Space Law*, 518 Clarendon Press, 1997 [“Cheng”].

3 Frans von der Dunk et al., *Handbook on space law*, 337 1st ed., Edward Elgar Publication, 2015.

4 *Id.*

5 Cheng, *supra* note 2, 518.

6 Stephan Hobe et al., *Cologne commentary on space law: Vol. 1*, 73 Carl Heymann Verlag KG, 2009.

3. Militarisation v. Weaponisation

The distinction between Militarisation and Weaponisation was explicitly put forth in the 53rd session of the Assembly of the Western European Union in Recommendation 804. It defined the militarisation of the Space as the use of space systems in support of ground-based military operations and the weaponisation of Space as placing weapons in orbit. This is indicative of the stance taken by many countries, including the USA.⁷

This is a problematic distinction. Firstly, when the militarisation of Outer Space (in the sense of using military personnel for research or other peaceful purposes) is allowed, it raises the questions of “dual-use.” The test for the whether an activity or equipment is of military character is essentially a functional one, not one of nominal status.⁸ Hence, the possibility of military or aggressive use of equipment that is initially intended for peaceful purposes is significantly increased by the presence of military personnel.

The USSF contemplates the possibility of military use of their personnel and equipment.⁹ Military personnel are referred to as Guardians.¹⁰ However, this nomenclature does not affect their intended functions. All available evidence shows that they are not merely meant for peaceful, scientific purposes. The placement of troops, with possible aggressive intentions, should be prohibited.

Regarding weaponisation, while WMDs and Nuclear Weapons are clearly prohibited, space weapons of other types are, in theory, permitted. These weapons can deliver destructive energy to the target without significant mass transfer.¹¹ An example of this kind of weapon would be lasers, which are technically legal.

Given this open question, the USSF, with its stated aims as establishing Space Domination and not precluding lethality as part of achieving its objectives, can easily use the first category of weapons, though presumably only when the use of force is legitimate and justified. However, even such “legal” weapons can be extremely harmful, due to the enormous amount of space debris their use can cause.

When an explosion destroys a space object, it will create a massive amount of debris. Space debris refers to all tangible non-functional human-made objects

7 A.A. Golrounia, M. Bahrami, Distinction between Militarisation and Weaponisation of Outer Space, A Misleading Concept, I.I.S.L. 244 (2008).

8 Cheng, *supra* note 2, 561.

9 Space Capstone Publication, Spacepower, U.S.S.F (2020), https://www.spaceforce.mil/Portals/1/Space%20Capstone%20Publication_10%20Aug%202020.pdf [“Spacepower”].

10 Jim Garamone, Space Force Personnel to be Called Guardians, 19 December 2020, <https://www.defense.gov/Explore/News/Article/Article/2452910/?space-force-personnel-to-be-called%20guardians=>, (accessed 09.01.2021).

11 Bob Preston et al., Space Weapons Earth Wars, RAND (2002), https://www.rand.org/content/dam/rand/pubs/monograph_reports/2011/RAND_MR1209.pdf.

in Outer Space, including fragments of space objects.¹² Debris includes everything from non-functional satellites to small paint flecks,¹³ although only the larger ones are trackable using the existing technology. The likelihood of harm in Outer Space is significantly higher due to human-made debris than the naturally occurring residue, such as meteoroids, and poses a higher threat. This is extremely harmful, as increasing amounts of space debris will render even routine space operations nearly impossible, and has a very high possibility of causing irreparable damage to the environment. Keeping this mind, this technical legality must be removed, and there must be a complete prohibition on the use of weapons in Outer Space.

4. Non-aggressive use of Outer Space?

The USA has consistently objected to the complete de-militarisation of Outer Space. It has maintained that military installations and activity are permissible in Outer Space, as long as they are “consistent with the United Nations Charter and other obligations of the law.”¹⁴ In essence, the USA can maintain a military presence in Space as long as such presence only uses force in situations justified by the UN Charter or customary law, namely situations of self-defence.¹⁵

The USA intends to develop their “National Space Power” by placing military personnel and equipment in Outer Space. The USA defines National Space Power as “the relative strength of a state’s ability to leverage the space domain for diplomatic, informational, military, and economic purposes”.¹⁶ Besides, “as a warfighting force, military space forces must steadfastly prepare to prosecute the appropriate amount of violence against an opponent subject to strategic objectives, legal, and policy restraints”.¹⁷ It is clear that the USA, in furthering its aims of space domination, will be placing military personnel and equipment, not for peaceful purposes, but for military activities that may include the use of force, purportedly only in the context of self-defence.

5. Use of Force in Outer Space

The future seems to hold the promise of uses of force in Outer Space, especially considering the ambiguities in the law as discussed in the preceding

12 IADC Space Debris Mitigation Guidelines, IADC-02-01 (2007).

13 Lotta Viikari, *The Environmental Element in Space Law*, 31 Martinus Nijhoff Publishers, 2008.

14 U.N. GAOR, 17th Sess., 1289th mtg., U.N. Doc. A/C.1/PV.1289 (Dec. 3rd, 1962).

15 Charter of the United Nations art. 51, Aug. 14, 1941, 1 U.N.T.S. XVI [“Charter”].

16 Spacepower, *supra* note 9.

17 *Id.*

section. In the current legal regime, states may validly exercise force in space through the invocation of Article 51 of the UN Charter.¹⁸ In addition, as technology improves, there may also be direct attacks against space objects during an armed conflict.¹⁹ The law on self-defence and the law of armed conflict serve to circumscribe and regulate the use of force in space. The following sections will discuss their basic principles and show how they can operate as a stand in until new law is created. However, it must be kept in mind that any use of force in outer space must eventually be prohibited, not only because of the risk of significant harm to the space environment due to the formation of debris, but also because the threat of such use of force will curtail peaceful use and exploration.

5.1. Self-Defence

The rules regarding self-defence may be found in Article 51 of the UN Charter, and customary international law.²⁰ These rules provide that for a use of force in self-defence to be considered lawful it must satisfy the criteria of imminence, necessity and proportionality.

5.1.1. Imminence

Under Article 51 of the UN Charter, a bare reading of the provision suggests that only after an armed attack has taken place may a state respond with a use of force in self-defence. This right, supported by certain scholars²¹ and the ICJ,²² based on a restrictive interpretation, is purely reactionary. The restrictive interpretation, however, has been rejected by a number of authors who are of the opinion that a state can use force in self-defence even before the armed attack has finished occurring.²³ This form of self-defence is called “anticipatory”²⁴ or “interceptive”²⁵ depending on when the use of force is permitted. For the former, it is sufficient that an armed attack will occur in

18 Charter, *supra* note 15, art. 51.

19 Michel Bourbonnière, *Law of Armed Conflict (LOAC) And the Neutralisation of Satellites Or “Ius in Bello Satellitis”*, 9 J.S.C.L. 43-69 (2004) [“Bourbonnière”].

20 *Military and Paramilitary Activities in and against Nicaragua (Nicar. v. U.S.)*, 1986 I.C.J. 14, 176 (June 27).

21 Georg Nolte & Albrecht Randelzhofer, *Ch VII Action with Respect to Threats to the Peace, Breaches of the Peace and Acts of Aggression, Article 51*, in *THE CHARTER OF THE UNITED NATIONS: A COMMENTARY* 1399, 1422 (Bruno Simma et al. ed., 2012).

22 *Armed Activities on the Territory of the Congo (D.R.C. v. Uganda)*, Judgment, 2005 I.C.J., 223.

23 Michael Akehurst, *Modern Introduction to International Law*, 311 Routledge, 1971.

24 CHM Waldock, *The Regulation of the Use of Force by Individual States in International Law*, 81 *Rec des Cours* 451 (1952).

25 Yoram Dinstein, *War Aggression and Self Defence*, 200 Cambridge University Press, 2012 [“Dinstein”].

the near future, whereas the latter requires that the armed attack commence before the use of force.

The term used here repeatedly, “armed attack” has no clear or accepted definition in international law. One condition that is for certain, according to the Oil Platforms case, is that an act would constitute an armed attack only if it were carried out with the “specific intention of harming”.²⁶ This would mean that an action by a State, which has resulted in an unintentional interference with another State’s space object, would not give rise to the latter’s right to self-defence.

Regarding this criterion, the USA has taken an extremely controversial stance through the adoption of the pre-emptive self-defence doctrine, which emerged as a result of the terrorist attacks of September 2001. This doctrine is reflected in the National Security Strategy Paper issued by the White House in 2002. It dismisses the requirement of an “armed attack,” which is stated in Article 51 of the UN Charter. It also differs from anticipatory self-defence in the sense that it expands the traditional requirement for an “imminent attack” to include those situations of probable danger, where an enemy State may initiate an attack at some undefined point in the future.²⁷ The primary issue with this doctrine is that it significantly loosens the restraints placed on the right to self-defence and allows the use of force to deal with emerging threats even before they are completely formed.

The USA plans on applying this doctrine in Outer Space as well. This is reflected in the guiding document of the USSF titled “Spacepower”. The said document guarantees the USSF freedom of action to use force for defending the State’s interests against its adversaries. It further allows the USSF to proactively use force in situations where the adversary has not even initiated an attack.²⁸ Such an act poses a significant risk to the international community, especially in regions such as Outer Space.

5.1.2 Necessity and Proportionality

The validity of an act of self-defence requires the assessment of two further criteria, necessity and proportionality. The necessity of an act is determined through a two-pronged analysis. Firstly, it must be determined whether there were non-forcible means to deal with the attack.²⁹ Secondly, if there were no alternate means, it must be determined whether means used were necessary to achieve the legitimate ends in the specific context.³⁰ There must have been no lawful alternatives to forestall, stop or repel the armed attack.³¹ The

26 Oil Platforms (Iran v. U.S.), 2003, I.C.J. 161 (Nov. 6), 64.

27 Richard N. Gardner, Neither Bush nor the “Jurisprudes,” 97 A.J.I.L. 585 (2003).

28 Spacepower, *supra* note 9, at 36.

29 Dinstein, *supra* note 25, at 184.

30 Dinstein, *supra* note 25, at 210–22.1.

31 Olivier Corten, *Necessity*, in THE OXFORD HANDBOOK ON USE OF FORCE IN INTERNATIONAL LAW 861, 872 (Marc Weller ed., 2015).

legitimate ends are, in the context of an isolated attack, stopping that attack from occurring.³²

An act of self-defence is considered to be disproportionate when it goes beyond the purpose for which it is required, or is not necessary for the pursuit of that same purpose.³³ It is a measure of the amount of force that can be legitimately used to achieve the goal pursued.³⁴

While the thresholds are fairly high, they are quite difficult to evaluate in real life, especially for a State which is required to act in a fast manner to prevent an attack. In addition, these uses of force can only be subjected to post hoc scrutiny, meaning that the use of force in space would have occurred already. As will be discussed in further sections, any use of force will definitely catastrophically damage the space environment. For the above reasons, the self-defence exception should not be applicable to Outer Space.

5.2 Law of Armed Conflict

In case the use of force against a space object occurs in the context of an armed conflict, the law of armed conflict would apply. Through the Martens Clause, referred to in the Nuclear Weapons Advisory Opinion, and reiterated in Article 1(2) of Additional Protocol 1 to the Geneva Conventions, the principles enshrined in the Additional Protocols are applicable to Outer Space.³⁵

The relevant principles that would govern this scenario are the principles of distinction, proportionality and military necessity.

5.2.1. Proportionality

This customary principle is enshrined in Article 51(5)(b) of Additional Protocol I to the Geneva Conventions. It requires the disproportion between the military advantage obtained in the attack and the collateral damage produced by the attack not to be excessive. Therefore, a State, before launching an attack on a military target, must consider the collateral effects of its actions. In the context of Outer Space, this would mean that an act such as the launching of an Anti-satellite weapon (“ASAT”) at an adversary’s communication satellite would be considered disproportionate. This is because, firstly, it would result in the creation of the extremely harmful space debris. Even smaller debris can be fatal, owing to the high impact speed of

32 Judith Gardam, *Necessity, Proportionality and the Use of Force by States*, 9 Cambridge University Press, 2004.

33 O. Corten, *The Law Against War: The Prohibition on the Use of Force in Contemporary International Law*, 488 Hart Publishing, 2010.

34 Christopher Greenwood, *The Relationship between Jus ad Bellum and Jus in Bello*, 9 Rev. of Int. Studies 224 (1985);

35 Jack Mawdsley, *Applying Core Principles of International Humanitarian Law to Military Operations in Space*, 25 J. Confl. Sec. L. 263 (2020).

collisions in Outer Space.³⁶ Secondly, blowing up the communication satellite can harm civilian interests. The concerned satellite may have been used for providing telephone, radio, and internet services to a large section of the Adversary State's population. Destruction of the same would result in the disruption of such essential services, thereby rendering the act excessive.

5.2.2. Distinction

A State must keep in mind the Jus in Bello principle of distinction, which requires a State to distinguish between military objectives and civilian objects.³⁷ This intransgressible principle of customary international law also prohibits the use of weapons that are incapable of distinguishing between civilian and military targets.³⁸ A State would therefore violate international law if it were to attack a satellite of another State, which was merely being used for civilian purposes. The principle would also protect astronauts not involved in military activities.³⁹

Further problems may arise in the application of the distinction principle when the target in question is a dual-use object, for example - a dual-use satellite. blowing up the communication satellite can harm civilian interests. An analysis of Article 52 of the Additional Protocol I helps solve this issue. The wording of Article 52(1) and (2) clarifies that an object, irrespective of its civil uses, when used actively for significant contribution to military action, would qualify as a military objective. Therefore, an attack by a State on such an object would be considered valid. However, the State must keep in mind the high risk of collateral damage that would occur.⁴⁰

5.2.3. Military necessity

The principle of military necessity circumscribes the use of force. It requires belligerents to specify the advantage gained by an attack.⁴¹ It also therefore ties in with the question of targeting, as only an attack on military objectives can result in an advantage. The relevant provision is Article 52 of Additional Protocol 1. In Outer Space, it can become difficult to identify which targets can offer such an advantage. Therefore, the question becomes one of

36 J.-C. Liou, Risks from Orbital Debris and Space Situational Awareness Jan. 14-16, 2020, <https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20200000450.pdf> (accessed 12.06.20).

37 Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), 8 June 1977, 1125 UNTS 3 ["AP1"], art. 48.

38 Legality of the threat or use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226 (Jul. 8) ["Nuclear Weapons"], 74.

39 Olusoji Nester John et al., Practical Application of jus in bello and jus ad bellum to the Legal Regulation of Outer Space Environment, 2 I.I.S.L. 58 (2015).

40 Yoram Dinstein, The Conduct of Hostilities Under the Law of International Armed Conflict, 120 C.U.P., 2004.

41 Bourbonnière, *supra* note 19.

targeting. The process of targeting is the process by which targets are chosen for attack.⁴² The process of such targeting is very difficult in Outer Space. Senior Space Force Officials have admitted that the space force requires new sensors in order to help them distinguish between benign objects and threats.⁴³

This is further complicated by the fact that it is extremely difficult to distinguish between military, commercial and civil satellites. This problem is complicated by the dual-use of satellites. Therefore, even with publicly available information augmented by intelligence, there is a high chance that a use of force against a satellite will violate the principle of military necessity, along with the principle of distinction.

6. The Protection of the Space Environment and Why the Space Force Endangers It

Owing to the unique nature of the Outer Space environment, the activities carried out in the said region are considered ultra-hazardous. These activities, although permitted by international law, always have the risk of causing significant harm to the Outer Space environment,⁴⁴ especially through the generation of space debris.

To deal specifically with the problem of space debris, certain legal safeguards were devised, in particular, the Space Debris Mitigation Guidelines (“SDM Guidelines”)⁴⁵ and the Guidelines for Long-Term Sustainability of Outer Space Activities (“LTS Guidelines”).⁴⁶ The SDM Guidelines expressly recognise certain consequences of the generation of space debris, such as forestalling the use of Outer Space, danger to lives, mission and spacecraft.⁴⁷ The SDM Guidelines, in particular, have been received enthusiastically, with the General Assembly calling on States to implement them through their relevant national mechanisms.⁴⁸ Since then, 30 States have adopted national

42 P.J. Blount, ‘Targeting in Outer Space: Legal Aspects of Operational Military Actions in Space’ 25 November 2019, <https://harvardnsj.org/2012/11/targeting-in-outer-space-legal-aspects-of-operational-military-actions-in-space/> (accessed 30.05.20).

43 Sandra Erwin, Space Force needs sensors to distinguish weapons from benign objects, January 6, 2021, <https://spacenews.com/space-force-needs-sensors-to-distinguish-weapons-from-benign-objects/> (accessed 10.01.2021).

44 Sergio Marchisio, Article IX Outer Space Treaty, in: Stephan Hobe, Bernhard Schmidt-Tedd (eds.), *Cologne Commentary on Space Law*, Carl Heymann Verlag KG, 2009 [“Marchisio”], 176.

45 Report of the Committee on the Peaceful Uses of Outer Space, U.N. GAOR, 62nd Sess., Supp. No. 20, at 47, U.N. Doc. A/62/20 (2007) [“SDM Guidelines”].

46 Report of the Committee on the Peaceful Uses of Outer Space, U.N. GAOR, 74th Sess., Supp. No. 20, at 50, U.N. Doc. A/74/20 (2019) [“LTS Guidelines”].

47 SDM Guidelines, *supra* note 45, at 47.

48 UNGA Resolution A/RES/62/217, paragraph 27, 22 December 2007.

mechanisms, through legislation, to implement the Guidelines.⁴⁹ Such implementation of the Guidelines could see them evolve into customary international law.⁵⁰

While the Guidelines are not binding per se, they are examples of soft law. The role of soft law in creating international standards of conduct, especially in international environmental law, should not be underestimated. Especially in evaluating standards of due diligence, the violation of multiple soft law norms can constitute evidence of an illegal act.⁵¹

There are no binding hard law obligations upon states to mitigate the generation of space debris. However, Article IX of the OST may serve this purpose, as it enshrines the obligation to protect the Outer Space Environment. The bundle of obligations therein may be read as cumulatively requiring a state to conduct an Environmental Impact Assessment to ascertain any adverse impact of an activity on the environment.⁵² This is further supported by the fact that Article IX enshrines due regard obligations and requirement to consult.⁵³ This interpretation is supported by state practice, as several domestic space legislations mandate measures for the protection of the Space environment or conducting Environmental Impact Assessment before undertaking activities in Outer Space.⁵⁴

The Doctrine for USSF mentions Space Domain Awareness which seeks to assess the space domain's impact on the space operations of the USSF.⁵⁵ It is unclear whether this will include an Environmental Impact Assessment for the activities undertaken by it, since it refers to the impact of Outer Space environment on the activities of USSF, and does not seem to apply vice-versa. Another source of obligations to protect the outer space environment is the law of armed conflict. Article 35(3) of the Additional Protocol I to the Geneva Conventions proscribes methods or means of warfare which can cause widespread, long-term and severe damage to the natural environment.⁵⁶

49 Compendium of space debris mitigation standards adopted by States and international organizations, U.N. Doc. A/AC.105/C.2/2019/CRP.14 (Apr. 9, 2019).

50 James Crawford, *Brownlie's Principles of International Law*, 238 O.U.P., 2012.

51 Pierre-Marie Dupuy, *Soft Law and the International Law of the Environment*, 12 Mich. J. Int'l. L. 420 (1991).

52 U.N. Conference on Environment and Development, Rio Declaration on Environment and Development Principle 17, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), annex I (Aug. 12, 1992).

53 Lotta Viikari, *Environmental Impact Assessment and space activities*, 34 *Advances in Space Research* 2363 (2004).

54 NASA Process for Limiting Orbital Debris 2007 (U.S.); Law of the Russian Federation "About Space Activity" 1993, art. 4 (Russ.); Space (Launches and Returns) (General) Rules 2019, rule 21 (Austl.); Act on Space Activities 2018, sec. 10 (Fin.).

55 Spacepower *supra* note 9.

56 AP1, *supra* note 37, art. 35(3).

Article 55 reinforces this prohibition and provides a positive duty to protect the natural environment from such damage.⁵⁷ The ultra-hazardous nature of the Space environment makes it highly probable that any use of force there would lead to producing space debris, which would satisfy all the three conditions mentioned in the provisions noted above.

The USA has not ratified the Additional Protocol I to the Geneva Conventions. Further, despite the fact that these provisions are said to reflect customary rules of international law,⁵⁸ the USA has repeatedly rejected them,⁵⁹ and is now accepted to be a persistent objector.⁶⁰ This position is especially worrisome in the context of Outer Space, because the USSF could cause the generation of vast amounts of space debris through the use of force. Some solace could be sought in the fact that the USA has ratified the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (“ENMOD”).⁶¹ The purpose of this Convention is to prevent the modification of the environment for warfare, in such a way that it will have widespread, long-lasting, or severe effects.⁶² Article II of the Convention mentions explicitly Outer Space, stating that an environmental modification technique is one that manipulates the natural environment in such a way that it will have the aforementioned effects.⁶³

As is evident from the discussion above, the risk of harm being caused to the Space environment by the USSF is very high. The generation of a vast amount of space debris by ASATs evidences the highly destructive nature of weapons, which are not prohibited by international law. This is inevitable when Outer Space is used as a theatre of warfare. Mainly, if USSF is envisaged to “deter aggression and attacks in space and, if deterrence fails, be capable of winning wars that extend into space”,⁶⁴ the use of force either through weapons or through other strategic means is inevitable. This leads to a situation where the various means of addressing the issue of space debris and Space Sustainability could not co-exist with the USSF.

57 AP1, supra note 3, art. 55.

58 United States Department of State, *Digest of United States Practice in International Law* 287 (2015).

59 United States, *Statement on Ratification of the CCW, Accepting Protocols I & II*, Mar. 24, 1995, U.N.T.S. 482,483.

60 ICRC CIL Rules, supra 57, at 151.

61 Convention on the prohibition of military or any other hostile use of environmental modification techniques, Dec. 10, 1976, 1108 U.N.T.S. 151 [“ENMOD”].

62 ENMOD, supra note 61, art. I.

63 ENMOD, supra note 61, art. II.

64 U.S. Dep’t of Defense, *Department of Defense Releases Defense Space Strategy* Jun. 17, 2020, [https://www.defense.gov/Newsroom/Releases/Release/Article/2223539/department-of-defense-releases-defense-space-strategy/#:~:text=Through%20the%20strategy%2C%20DOD%20will,Operations%3B%20and%20Ensure%20Space%20Stability,\(accessed 30.06.2020\).](https://www.defense.gov/Newsroom/Releases/Release/Article/2223539/department-of-defense-releases-defense-space-strategy/#:~:text=Through%20the%20strategy%2C%20DOD%20will,Operations%3B%20and%20Ensure%20Space%20Stability,(accessed 30.06.2020).)

7. Conclusion

The USSF, from its very inception, poses a lot of challenges to the legal regime governing Outer Space. The preceding sections highlight the failures of the current regime in dealing with said challenges. The international community, at the present moment, is reduced to relying on general international law. The rules of general international law also fail to prohibit the very formation of the USSF. Unfortunately for the advocates of peaceful use, this lack of prohibition means that there is a high probability that other states will soon follow suit. Japan announced the formation of its Space Operations Squadron in May.⁶⁵ France has also unveiled similar intentions, with President Macron announcing that the nation's air force will begin developing a space command.⁶⁶ The vision for France's Space Force includes plans to arm satellites with weapons such as machine guns or lasers.⁶⁷ This trend must be nipped at the bud if humanity is to one-day roam the stars.

The future development of Space Law will play a pivotal role in humanity's destiny. Notwithstanding France's Space Force, with the current state of a global tension between the three great powers of the world, the USA, Russia, and China, USSF has prompted a drive from each of the nations to develop new technology and weapons that will give it supremacy over Space. We will witness a new Cold War, whose objective and the final frontier will be Space. This situation must be avoided at all costs. The role of Space Law and the United Nations Office for Outer Space Affairs must be to prepare adequate legal safeguards against the problem, at least sufficient to force the great powers to the negotiating table in the face of enough possible illegality. The questions raised above must be answered, and the stance of the world must be united and decisive; for the sake of our future, Space must remain unsullied by blood.

65 Mari Yamaguchi, Japan launches new unit to boost defense in space May 18, 2020, <https://www.defensenews.com/global/asia-pacific/2020/05/18/japan-launches-new-unit-to-boost-defense-in-space/>, (accessed 30.06.2020).

66 Hanneke Weitering, France is Launching a 'Space Force' with Weaponized Satellites Aug. 2, 2019, <https://www.space.com/france-military-space-force.html>, (accessed 30.06.20).

67 Space: France will arm its next military satellites Jul. 25, 2019, https://www.lepoint.fr/societe/espace-la-france-va-armer-ses-prochains-satellites-militaires-25-07-2019-2326872_23.php# (accessed 30.06.20).