

FREEDOM OF EXPLORATION AND THE MILITARISATION OF OUTER SPACE *

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Abstract The attitude of the outer space regime is no doubt to the effect that the environment belongs to nobody (whether as a state or individual) but to everybody (mankind) to explore and use. Ordinarily, the provisions of the international space regimes on ownership of outer space seems convincing enough to conclude that there is absolute freedom to use outer space to ones unending satisfaction, as to justify the use of this pristine environment for military purpose by the super space actors. On further thought, it is a subject of doubt to spring up further probe into the certainty or absoluteness of such freedom given to man in his quest to exploit outer space. To this work, findings as to the true nature of the 'absoluteness of the freedom of exploration and use of outer space vis-à-vis its use for military purpose and weaponisation is necessary in determining whether or not it is a matter of 'give and take' in other words, a restricted freedom. This paper would focus on the relevant international law on the use of outer space to determine whether the use is for military purpose, and can be allowed or not, in order to make proper recommendation on the findings.

I Introduction OUTER SPACE can be defined as any region of space beyond limits determined with reference to the boundaries of a celestial body or system, especially as a region of space immediately beyond earth's atmosphere or 1 the interplanetary or interstellar space. It is the common term used for the 2 areas between celestial bodies and outside of the atmosphere. This environment immediately precedes the air space, though controversies abound as to the actual delimitation of outer space and airspace i.e., 3 where does outer space begin? This controversy would forever be an issue until there is a specific legal regime to define the boundary. That been the issue, this environment's legal regimes share similarities with 4 that of the moon and Antarctica. Its resources cannot be over emphasized starting from the launching of satellite for different purposes and advantages which include communication; in the area of receiving television signals, telecommunication, transmission of wireless radio, the use of GPS systems in automobile, listening to weather forecast derived from remote sensing satellite, earth surveillance, military and war advantages and natural resources like asteroids known to be rich in valuable elements such as neodymium, scandium, yttrium, iridium, platinum and palladium which are regarded as limited and rare resources on earth and which have informed different governments to clamor for 5 property rights and settlement in outer space. Because of the importance and high advantage that this unique environment possess, states at international level have severally put their heads together to create 6 7 certain legal regimes at international level to guide and regulate the activities of man on space and even for the purpose of sustaining its utility. This paper would focus on relevant space regimes which include the Outer Space Treaty, 1967, the Partial Test Ban Treaty, 1963, the Prevention of Arms Race in Outer Space, the United Nations Charter, 1945, the Moon Treaty, 1979. 4 Robert P.M and Glenn H.R, "Space Resources, Common Property and Collective Action Problem" 6 Environmental LJ 107 (1997). 5 S Rand, "Property Rights in Space" A Journal of Technology and Society, (2012) available at: www.thenewatlantis.com (last visited on May 9, 2017). 6 Treaty Banning Nuclear Weapon Tests in the Atmosphere in Outer Space and Under Water 1963 (often called the partial test

ban treaty or Nuclear Test Ban Treaty), Outer Space Treaty of 1967, Convention on International Liability for Damaged caused by Space Objects, 1972, Convention on Registration of Objects Launched into Outer Space, 1975, Agreement on the Rescue of Astronauts, the Return of Astronauts and the Return of Objects Launched into Outer Space, 1968, Agreement Governing the Activities of states on the Moon and Other Celestial Bodies, 1979. 7 This has not hindered states like United states of America, Japan, Russia and China to put in place their own local laws on space activities. 48 | LEXIGENTIA-INTERNATIONAL LAW JOURNAL OF LLOYD LAW COLLEGE II

Freedom of exploration and use of outer space The right to, or simply put, the freedom of exploration and use of outer space is a well established principle, as laid down in article 1 of the Outer Space Treaty and which is mentioned repeatedly in almost all the 8 outer space treaties. Just like the provisions of the earlier declarations encapsulated in the provisions of the 1967 Outer Space Treaty, the exploration and use of outer space is accepted and encouraged by the space regimes. Article 1 of the treaty declares that the outer space environment as the province of mankind and provides that the exploration and use of outer space, including the moon and other celestial bodies, shall be carried out for the benefit and in the interests of all countries, irrespective of the discrepancies in the degree of their 9 economic or scientific development. The essence of the provision, obviously, is to encourage beneficial use of the space resources worldwide, so that the whole universe will enjoy any benefit accruing from the exploitation of outer space achievable through strong and irrefutable commitment and adherence of the provision by every single 10 member of the international community. Exploration and use of outer space requires substantial financial capability and technology prowess. So far, the numbers of space actors are low compared to the numbers of countries in the world. Therefore, it is encouraged that while few countries are able to tap outer space resources, it is to be adopted and utilized for such that would impact mankind generally. As other states, (who are not able to engage in space activities as a result of their inability due to lack of requisite economy and technology) become capable to engage in outer space activities, so does the door to outer space become open to them. This is because of the provision on 8 Declaration on Legal Principles Governing the Activities of state in the Exploration and Use of Outer Space, 1963. 9 The Moon Treaty, 1979, Preamble and art. 4. 10 UN General Assembly, Fourth Comm. of the Special Political and Decolonisation debate on "Peaceful Use of Outer Space", October 19, 2005, available at: www.un.org/press/en/2005/gaspd323.doc.htm (last visited on February 11, 2017). Freedom of Exploration and the Militarisation of Outer Space | 49

freedom of access to outer space and its resources. Accordingly, outer space, including the moon and other celestial bodies, is shrouded with freedom of exploration and use by all states without discrimination of any kind, on a basis of equality and in accordance with international law as well as freedom to access all areas of celestial bodies. III The military use of outer space As absolute as the freedom of exploration and use seem, the outer space regimes frowns at what could be described as 'weaponisation or militarization of outer space, as the presence of weapons in space would jeopardize the inherent benefit of outer space for mankind while the peaceful use of outer space may be marred if the area is allowed to be used as war field. states parties are allowed only to use military personnel for 11 scientific research or for any other peaceful purposes as well as the use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies. However, the establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manoeuvres on celestial bodies is forbidden. 12 In addition, it provides that: states parties to the treaty undertake not to place in orbit

around the earth any objects carrying nuclear weapons or any other kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner. 13 Space weaponisation has been categorized into three forms: (i) Space strike or orbital bombardment weapon systems (ii) Anti-satellite (ASAT) weapon systems launched for the purpose of interfering, destroying or degrading other satellites and 11 Outer Space Treaty, 1967, art.IV. 12 Ibid. 13 Ram Jakhu, "Legal Issues Relating to the Global Public Interest in Outer Space" 32 (1) Journal of Space Law 31 (2006). 50 | LEXIGENTIA-INTERNATIONAL LAW JOURNAL OF LLOYD LAW COLLEGE (iii) Ballistic Missile Defence (BMD) weapons system. The provision, does not mention forms of weapons except for nuclear weapons or any other type of weapons of mass destruction and a further reading of the article suggest that even these weapons are not banned to be 'placed' in outer space but the object carrying such weapons. The saving grace of the provision from being misinterpreted are the words 'install' and 'station' such weapons' and not the object carrying the weapons this time around. This may depend on the difference or similarity between these words with the word 'place'. The use of words, intergral part of treaty, is very important in drafting agreements. In this circumstance, except where install and/or station are interpreted to include the word 'place', then the provision would be open to many absurd interpretation as to affects its compliance. While the words install and station suggest a sense of permanence, placing could be temporary or for a certain period. Still on interpretation, what is the meaning of 'any other kind of weapons of mass destruction because, the treaty makes no definition for it. The notion of weapons of mass destruction connotes weapons capable of harming a large number of lives and property and these weapons could include not just nuclear but biological, chemical or radiological weapons which may have serious 14 and damaging effect like that of nuclear weapon. The urge of the world community to make the area of outer space a sanctuary free of weapons and military acts can be very well traced to the Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space 15 and Under Water, 1963 (hereinafter PTBT). The six-articled treaty was drafted at the dawn of space exploration for the purpose of keeping space 14 s.2332a defines weapons of mass destruction as (a) any destructive device as defined in sec. 921 of this title (b) any weapon that is designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals, or their precursors (c) any weapon involving a biological agent, toxin, or vector (as those terms are defined in section 178 of this title or) (d) any weapon that is designed to release radiation or radioactivity as a level dangerous to human, available at: <http://www.law.cornell.edu/uscode/text/18/2332a> (last visited on June 2, 2017). 15 Also referred to as the Partial Test Ban Treaty or the Limited Test Ban Treaty. Freedom of Exploration and the Militarisation of Outer Space | 51 free of nuclear force, nuclear pollution, and nuclear explosions for both testing and non-testing purposes. The need to put such measures in place became more imminent particularly when the United States of America (hereinafter US) and the Union of Soviet Social Republic (hereinafter USSR) in 1952 and 1953 respectively exploded hydrogen devices which raised concerns as to the possible radioactive fallout. Succeeding event by the United states in 1954 in exploding an experimental thermonuclear device led to an accidental contamination of a Japanese fishing vessel named 'Lucky Dragon' causing its crew to suffer from radiation 16 sickness. The military use of space could pose many inevitable risks, firstly, it negates the idea of outer space being a pristine domain intended for peaceful use, once a state starts developing weapons in outer space, expectedly, other states out of fear of being the target of such act or outran in arms race could also find a way of

developing a more dangerous weapons in outer space- this is not ideal as far as outer space is concerned, as conflict in the area could create debris field (as discussed later herein) ¹⁷ making exploration almost impossible. For instance, the US views outer space, through its Department of Defence and Air Force, as a battle space that should be dominated and controlled, this has been its stance since the environment has been used for military and intelligence purpose for the conduct of war in the 1980s, most especially during the gulf war in 1991, and also, China has been reported to be developing anti-satellite ¹⁹ weapons in response to the belief that the US space based weapon would ¹⁶ “Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water’ Bureau of Arms Control, Verification and compliance: A Narrative”, available at: <http://www.state.gov/t/isn/4797> (last visited on June 6, 2017). ¹⁷ Benko M, Schrogl (eds.), *The Problem of Space Debris: A Valid Case against the Use of Aggressive Military System in Outer Space* 155 (Eleven International Publishing, Utrecht, Netherlands, 2005). ¹⁸ Supra note ¹⁷ at 59. ¹⁹ Art. 51 of the Charter of the United Nations provides for a counterbalance provision for any state against another state that has acted contrary to the provision of art.2(4), that is the right to engage in individual or collective self defense. ⁵² | LEXIGENTIA-INTERNATIONAL LAW JOURNAL OF LLOYD LAW COLLEGE be targeted at its state of which the US is also developing weapons to ²⁰ China's threat. Orbital debris fall-out could also be dangerous for space travel as space shuttle would be on the lookout not to collide with orbital debris. The risk of the possible weaponisation of outer space outweighs the benefit as the same satellite use for communication, positioning, navigation and meteorology would become more vulnerable. Space debris, an inevitable result of military activity in outer space would further affect the operations of launched satellite. Therefore, the knowledge of the nature and resultant effect of nuclear fallout increased and the fact that radioactive debris could spread to any region coupled with probable inability of states to cooperate at the international level while they have space based weapons ready to be used against one another at any moment informed the need for international negotiation on agreement to end nuclear test. The parties to the treaty are enjoined to prohibit, prevent and not to carry out any nuclear weapon test explosion or any other nuclear explosion. Article 1 of the treaty though taking a bold step at preventing the use of weapons in outer space, does no more than prevent nuclear ²¹ 'explosion'. Each of the parties to this treaty undertakes to prohibit, to prevent, and not to carry out any nuclear weapon test explosion, or any other nuclear explosion, at place under its jurisdiction or control. ²⁰ Brian Weeden, “The Still Untrodden Heights: Global Imperative for Space Exploration in the 21 Century. A report of the Human Space Initiative Center for Strategic and International Studies”, available at: <http://www.thespacereview.com/article/1474/1> (last visited on December 26, 2017). ²¹ Art. 1 of PTBT states: 1. a) In the atmosphere; beyond its limits, including outer space; or under water, including territorial waters or high seas; or b) In any other environment if such explosion course radioactive debris to be present outside the territorial limits of the state under whose jurisdiction or control such explosion is conducted. It is understood in this connection that the provisions of this subparagraph are without the prejudice to the conclusion of a treaty resulting in the permanent banning of all nuclear test explosions, including all such explosions underground, the conclusion of which, as the parties have stated in the preamble to this treaty, they seek to achieve” 2. Each of the parties to this treaty undertakes further to refrain from causing, encouraging, or in any way participating in the carrying out of any nuclear weapon test explosion, or any other nuclear explosion, anywhere which would take place in any of the environments described or have the effect referred to , in paragraph 1 of this article. Freedom of

Exploration and the Militarisation of Outer Space | 53 Activities involving the use of weapons in outer space cannot be said to be limited to just carrying out test explosion for the treaty to be applauded as exhaustive enough. Outer space can be a haven for temporary or permanent placement for weapon, nuclear or not. It can also be used to develop, assemble, install, manufacture and production, use or deploy weapons using space based technology. Again, the treaty is quite restrictive in the type of banned weapons. What would be the situation where the nuclear weapon test explosion does not create any or result into the presence of radioactive debris outside the territorial limits of the state under whose jurisdiction or control such explosion is conducted. A nuclear weapon test explosion can result in the damage or interference of the functionality of another satellite. Also, debris, not radioactive, like junks can also find its way to the earth surface. The only excuse for such lacuna could be an explanation as to the fact that the Treaty was clearly the first step towards a complete preservation of outer space for peaceful purpose as it was drafted at the beginning of both space exploration and nuclear development. Bilateral agreements SALT I, II and START agreements are bilateral treaties on arms control entered into by US and USSR. The first of the two SALT I, is the 22 now defunct Anti-Ballistic Missile Treaty of 1972, majorly negotiated 23 by the two states, as part of the Strategic Arms Limitation Talk, to control and curb obviously, the two states offensive and defensive arms race. The treaty made restrictive provision on the limit in the use of Anti 24 Ballistic Missiles (ABM) systems to the extent that the two parties are 22 Treaty on the Limitation of Anti-Ballistic Missile Systems (signed at Moscow on 26 May 1972. Not in force as a result of the United states withdrawal from the Treaty in June 13, 2002). 23 Negotiations on the limitations of arms began in 1969. 24 Art. II of the Treaty on the Limitation of Anti-Ballistic Missile Systems defines an anti-ballistic missile system as a system to counter strategic ballistic missiles of their elements in flight trajectory, currently consisting of ABM interceptor missiles, which are interceptor missiles constructed and deployed for an ABM role, or of a type tested in an ABM mode, ABM launchers constructed and deployed for launching ABM interceptor missiles and ABM radars which are radars constructed and deployed for ABM role, or of a type tested in an ABM mode. 54 | LEXIGENTIA-INTERNATIONAL LAW JOURNAL OF LLOYD LAW COLLEGE refrained from deploying ABM systems for a defense of the territory of its country and not to provide a base for such purpose. Furthermore, parties undertake not to develop, test, or deploy ABM systems or components which are sea-based, air-based, or mobile land-based as well as banned from developing, testing and deploying ABM launchers for launching more than one ABM interceptor missile at a time from each launcher, nor to modify deployed launchers to provide them with such capability, nor to develop, test, or deploy automatic or semi-automatic or 25 other similar systems for rapid reload of ABM launchers. The treaty disallows parties from entering into any agreement with 26 contrary provisions to the provisions of the treaty. The agreement was a needed idea to curb the two countries from developing more of their weapons for the purpose of overcoming any defense that one believes the other might deploy against its country. Though the US withdrawal put the treaty in a halt, it nevertheless, during the tenure of the treaty, expressed its dissatisfaction on the effect of the treaty preventing it not to be able to 27 develop defenses against possible terrorist's ballistic missile attack. The second of the SALT I agreement was an interim agreement on 28 the Limitation Of Strategic Offensive Arms 1972 with five years tenure. This agreement was intended to halt the number of strategic ballistic 29 30 missiles, whether operational or under construction and to complement the ABM Treaty with the opportunity for further negotiation 31 widely opened. For both parties to be assured of compliance with the provisions

of the agreement, article V allows for the 'use of national 25 Supra note 26 at art. V. 26 Supra note 26 at art. XI. 27 The Anti-Ballistic Missile (ABM) Treaty at a Glance, available at: <http://www.armscontrol.org/systems/files/AbmTreatyglance.pdf> (last visited on June 13, 2017). 28 Interim Agreement Between the United States of America and the Union of Soviet Socialist Republics on Certain Measures with Respect to the Limitation of Strategic Offensive Arms. Signed at Moscow on 26 May 1972, entered into force on October 3, 1972. 29 Strategic and Tactical Missiles, available at: (last visited on June 30, 2017). 30 Supra note 26 at art. II. 31 Supra note 26 at art. VII. Freedom of Exploration and the Militarisation of Outer Space | 55 technical means of verification at its disposal in a manner consistent with generally recognized principle of international law.' By late 1972 when 32 SALT II was signed, each state had developed new strategies in its arms development. While the United States was investing more on missiles with greater accuracy, the Soviet was focused on missiles with larger warheads, so this called for changes in the specifications of missiles mentioned in the earlier treaties. Though the Salt II agreement was signed in June 1979 by both parties, the US refused to ratify the treaty due to 33 tensions and lack of trust between the two states. However, some of the provisions of the treaty were nevertheless observed voluntarily by the 34 two states. 35 The Strategic Offensive Reduction (hereinafter START I) was latter signed by the two parties in 1991 but did not enter into force immediately due to the need to make arrangement for the nuclear inheritance as a result of the break-up of the USSR in late 1991. As a result of the break-up, four post-USSR states (Russia, Belarus, 36 Kazakhstan and Ukraine) and the US were parties to the treaty which made extensive provisions on the reduction and limitation of offensive arms on deployed ICBMs and their associated launchers, deployed SLBMs and their associated launchers and deployed heavy bombers and warheads attributed to deployed ICBMs on mobile launchers of ICBMs 37 to certain numbers Parties are further restrained from producing flight test or deploy heavy SLBMs, produce, test or deploy mobile launchers of 38 heavy ICBMs. 32 Strategic Arms Limitation Talks (SALT II), signed in June 1979 but never entered into force as a result of U.S refusal to ratify same. 33 The announcement on the refusal was made in 1981. 34 Lindsey M, 'SALT I AND II' The Cold War Museum-FCAC.ORG, available at: <http://www.coldwar.org/articles/70s/saltandii.asp> (last visited on June 12, 2017). 35 Treaty Between the United States of America and the Union of Soviet Socialist Republics On Strategic Offensive Reduction (START 1), available at: <http://www.nti.org/learn/treaties-and-regimes/treaties-between-the-united-states-of-america-and-the-union-of-soviet-socialist-republics-on-strategic-offensive-reductions-start-i-start-ii>, (last visited on June 12, 2017). 36 Except for Russia, the other three states were obligated to join the Non Proliferation Treaty (NPT) as non-nuclear states. 37 Supra note 26 at art. II-IV. 38 Supra note 26 at art. V. 56 | LEXIGENTIA-INTERNATIONAL LAW JOURNAL OF LLOYD LAW COLLEGE As a result of its exhaustive provision which maintained its value till it lasted, the treaty has been blamed for being too cumbersome, 39 40 complicated and expensive to maintain which led to its replacement in 41 2010 by the new START. The new START limits or reduced the number of deployed weapons as contained in the previous arms limitation treaties, though not limiting, it monitored non-deployed ICBMs and SLBMs with provision for continuous information on their locations 42 with on-site inspection for confirmation of compliance. Currently, there are no weapons of mass destruction or aggressive military activities in outer space. What is however imminent is the prospect with the rate at which the US, Russia and China are developing anti-satellite missiles capable of being programmed for more destructive purpose. Many of the military satellite present now are more for the purpose of

surveillance, communication, meteorology and reconnaissance. Russia and China have engaged in series of anti-satellite missile test in anticipation of US's secret plan to dominate outer space. In 2007, China launched an anti-satellite missile to destroy its weather satellite to which the US responded to in 2008 by destroying its 43 malfunctioning military satellite with an anti-ballistic missile. Since 44 2007 till date, China has engaged in a series of ground-based anti satellite kinetic weapon such as the one tested in July 2014 claimed to be for the purpose of peaceful missile defence and scientific experimentation to which the US is not buying as it believes that China is still 'testing to miss' for the period. 39 Supra note 40. 40 Ibid. 41 Strategic Offensive Reduction (SORT), available at: <http://www.armscontrol.org/factsheets/NewSTART> (last visited on June 12, 2017). 42 Supra note 27 at art II. 43 Lee Billings, "War in Space May Be Closer than Ever: China, Russia and the US, 2015", available at: <http://www.scientificamerican.com/article/war-in-space-may-be-closer-that-ever/> (last visited on June 12, 2017). 44 In 2013, China launched a missile as high as 30,000 kilometer above nearing strategic geosynchronous satellite. It also tested another missile on July 2015, available at: <http://www.scientificamerican.com/article/war-in-space-may-be-closer-that-ever/> (last visited on June 12, 2017). Freedom of Exploration and the Militarisation of Outer Space | 57 The same is applicable to the Government of Russia and India. Russia is engaged in advancing its ability to approach, inspect and destroy satellites in orbit. It has recently, included three unidentified payload in its commercial satellite launches such that small object is observed flying with much distance with its deployed commercial satellite and latter turned and fly back. The purpose of this accompanying object is still not clear, though stated to be programmed to service and refuel the satellite, the US still feels it may have a hidden and sinister purpose. The US stance towards militarization of outer space is more alarming. While Russia, China and India makes excuses for their development of space weapons as protective and defensive measures against US's anticipated offensive military prowess, the US is more focussed on dominating outer space to the exclusion of other countries. In 45 its 'US Space Command's Joint Vision for 2020, its principal intention is stated as to (a) dominate the space dimension of military operations to protect its interest and investment and (b) to integrate space power through military operations which would require its ability to control 46 47 outer space. According to Jonathan and Craig, ' the US is moving ahead with its plan to use outer space as the venue for missile defence as it is considering developing a constellation of orbiting kinetic kill micro vehicles designed to destroy enemy intercontinental ballistic missile in 48 their boost phase' The US is also held to be developing amongst other weapons the near-field infra red experiment satellite capable of tracking 45 The United states Space Command Advocacy 'Vision 2020' issued January 2002, available at: <http://www.spacecom.af.mil/usspace/> (last visited on June 12, 2017). 46 'Long Range Plan (LRP) of US Space Command Online <http://www.fas.org/spp/military/docops/usspac/irp/toc.htm> (last visited on June 12, 2017). 47 Craig Eisendrath, "Project for nuclear Awareness", available at: <http://www.thenewpress.com/authors/craig-eisendrath> (last visited on June 12, 2017). 48 Jonathan G. and Craig E, 'United states-Masters of Space? The US Space Command's "Vision For 2020", 2005 Global Security Institute", available at: <http://www.ginstitute.org> (last visited on June 12, 2017). 58 | LEXIGENTIA-INTERNATIONAL LAW JOURNAL OF LLOYD LAW COLLEGE 49 and destroying missiles and satellite, the long rod penetrator of high 50 speed into earth atmosphere to penetrate bunkers and large facilities, the Evolutionary Air and Space Global Laser Engagement (EAGLE) to 51 destroy missiles and the bombardment satellites capable of hitting 52 enemy target from low orbit. It is quite obvious that it is this same intention of the US to

dominate outer space that led to its vote against the 2004 resolution on arms race arguing that since arms race in outer space does not exist yet, it is unnecessary to take any action on prevention of arms race but rather prevention on placement of weapons in outer space, while many other countries see more reason to vote in favour of negotiating treaties on the 53 Prevention of Arms Race (PAROS). With all these acts of possible militarisation and weaponisation of outer space, the question to ask at this stage is, are the series of treaties and efforts of the United Nations Committee on Peaceful uses of Outer Space (UNCOPOUS) and member 54 states on prevention of arms race recognised and effective at all? Can the world community guarantee a non-response from other space actors to the US activities in its quest to dominate outer space and deny others of it? 49 David Barton, "Report of the APS Study Group on Boost-Phase Intercept systems for National Missile Defence" 76 Rev. Mod.Phys, 425, 2004. 50 Theresa Hitchens, "Weapons in Space: Silver Bullet or Russian Roulette' Centre for Defence Information, April 18, 2002. 51 Noah Schachtman, "Pentagon Preps for War in Space", available at: <http://www.wired.com/news/technology/0,1282,62358,00/html> (last visited on June 12, 2017). 52 Supra note 52. 53 Processes and Proposals so far include 'Prevention of Arms Race in Outer Space (PAROS)', Draft Treaty on the Placement of Weapons in Outer Space, the Threat or use of force against outer space objects (PPWT), a joint effort of China and Russia presented to the Committee on Disarmament in 2008, Transparency and Confidence building measures (TCBMs) A/62/114 and A/62/114/Add.1, Group of Governmental Experts (GGE) a result of TCBMs, International Code of Conduct for Outer Space Activities (ICoC) an initiation of the European union. See Outer Space, Online article on Reaching Critical Will, available at: <http://www.reachingcriticalwill.org/resources/fact-sheets/critical-issues/5448-outer-space> (last visited on June 7, 2017). 54 United Nations Committee on the Peaceful Uses of Outer Space (UNCOPOUS), available at: www.unoosa.org/oosa/en/ourwork/copous/index.htm (last visited on June 7, 2017). Freedom of Exploration and the Militarisation of Outer Space | 59 IV Conclusion Despite the series of space militarization and weaponisation regimes and bilateral agreements, act of eventual militarization in outer space is imminent. It is therefore, expedient to consider putting in place a strict provision in the outer space regime or a whole strict space militarization regimes (legally binding) with a complete ban on the military use of outer space and its celestial bodies and placement of whatever kind of weapons. Although, such strict provision has the tendency of not gaining much political support especially by the United states, it is nevertheless needful to sustain the environment for future use and allay the fear of space becoming domain of war. The use of anti-satellite weapons should also be discouraged particularly where it would destroy, damage or interfere with the peaceful use of outer space by other space users. This will, of course, reduce the numbers of space debris and prevent its subsequent creation. Efforts of the UNCOPOUS would be very much appreciated if a verification, control and monitoring system could be adopted. It is further recommended that a central monitoring system be adopted by UNCOPOUS for the purpose of overseeing activities in outer space irrespective of the state involvement.