

## IMPLEMENTATION OF ARTICLE IV OF THE OUTER SPACE TREATY OF 1967 DURING THE 21st CENTURY

*"And he shall judge among the nations, and shall rebuke many people: and they shall beat their swords into plowshares, and their spears into pruninghooks: nation shall not lift up sword against nation, neither shall they learn war any more"*

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### Introduction

The second half of the 1990's has not only been a period of anniversaries but also of taking stock world events: In 1995, the 50th anniversary of the end of the Second World War and the birth of the United Nations (UN); the Halifax Summit of the Seven Industrialized Nations was held from 15 to 17 June. This year - 1997, we are participating in the 40th International Colloquium on the Law of Outer Space, in which we are commemorating the 30th Anniversary of the entering into force of the Outer Space Treaty, that is, **The Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies.**

In other words we are gathered here not only to celebrate but to re-evaluate the effectiveness and the efficacy of the provisions of the 1967 Outer Space Treaty (OST), since it's entering into force three decades ago. It is not my intention to make any detailed review of the law-making process of law of outer space or space law; but to reflect on some of the issues of the Outer Space Treaty of 1967 relevant to the topic of my paper.

It should be borne in mind that the space age began with the successful launching into orbit of **Sputnik-1** on 4 October 1957 by the former Soviet Union, and the

launching of the **Explorer-1** satellite on 31 January 1958 by the United States. At the time no state in the world protested the launching of these artificial earth satellites into the orbit around the earth had violated its territorial air sovereignty. Thus the freedom of all states to explore, use and carry out scientific investigations in outer space, including the moon and other celestial bodies, was instantly established as an international law custom, within short period of time.

Moreover, it should be borne in mind that the beginning of the space age coincided with the period of intensification of the Cold War, which was not only characterised by suspicion and mistrust, but also by the arms race and military build-up of the super powers - the former Soviet Union and the United States, including their military bloc members. Thus, it was imperative for the international community of States as represented in the United Nations (UN) to set into motion the process of formulating new principles and norms to regulate the activities of States in the new domain - outer space. This has been a continuous process, as experience has shown during the past 40 years. It will continue to be so as new advances and break-throughs are being made in space science and technology.

## **United Nations and the Codification of the Law of Outer Space**

The United Nations did not fold its hands to allow the super powers' military rivalries and arms race to be extended into the new domain. It had to carry out its obligations imposed upon it under the provisions of The Preamble and Article 1 of the Charter. Even the two super powers themselves, as permanent Members of the UN Security Council, had to acknowledge and recognize the danger of using outer space to foster their national military and strategic policies. In this context, it was objectively mandatory for them to co-operate in the law-making process in the UN General Assembly and other organs within the UN system. This was also demonstrated in the letter written by the US President, Dwight D. Eisenhower, on 13 January 1958 to the Chairman of the Council of Ministers of the former Soviet Union, Mr. Nikolai Bulganin. In the letter, the US President proposed the use of outer space for peaceful purposes.

From 1958 to 1966, before the conclusion of the 1967 Outer Space Treaty, resolutions and declarations adopted by the UN General Assembly had been the only legal instruments available in the process of codification and progressive development of this new branch of contemporary international law - the law of outer space or space law. Pursuant to the provisions of Article 13 of the UN Charter, the General Assembly, through the indefatigable efforts of its Committee on the Peaceful Uses of Outer Space (COPUOS) and its two Sub-Committees, has adopted five treaties and five other legal instruments on principles on outer space.<sup>2</sup>

### **Outer Space Treaty of 1967: Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (OST)**

The Outer Space Treaty of 1967 is the Basic Space Treaty or the **Magna Carta** of space law. It stipulates in its provisions nine (9) basic principles. For example, the principles of freedom of exploration and peaceful uses of outer space, non-appropriation of outer space, including the moon and other celestial bodies, application of international law, including the UN Charter, and non-military use of outer space, are the most important principles and the cornerstone of the law of outer space or space law.

These principles are embodied in Articles I, II, III and IV of the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies.

According to Article I:  
"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 their degree of economic or scientific development, and shall be the province of all mankind.

Outer space, including the Moon and other celestial bodies, shall be free for exploration and use by all States without discrimination of any kind, on a basis of equality and in accordance with international law, and there shall be free access to all areas of celestial bodies.

There shall be freedom of scientific investigation in outer space, including the Moon and other celestial bodies, and States shall facilitate and encourage international co-operation in such investigation."

Article II further declares that:

"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."

The two Articles of the 1967 Space Treaty quoted above are further elaborated in the provisions of Articles 4-6 and 11 of the 1979 Agreement Governing the Activities of States on the Moon and Other Celestial Bodies.<sup>3</sup>

Article 4(1) of the 1979 Moon Treaty, for example, stipulates:

"The exploration and use of the moon shall be the province of all mankind and shall be carried out for the benefit and in the interest of all countries, irrespective of their degree of economic or scientific development. Due regard shall be paid to the interests of present and future generations as well as to the need to promote higher standards of living and conditions of economic and social progress and development in accordance with the Charter of the United Nations."

Paragraph 2 of the Article stipulates that States are to be guided by the principle of co-operation and mutual assistance in all their activities concerning the explorations and use of the moon.

The legal status of the moon is further stipulated elaborately in the provisions of Article 11 of the Agreement. Paragraphs 1 and 2, for example, stipulate as follows:

- "1. The moon and its natural resources are common heritage of mankind
2. The moon is not subject to national appropriation by any claim of sovereignty, by means of use or occupation, or by any other means."

Furthermore, pursuant to the provisions of paragraph 3, neither the surface nor the subsurface of the moon, nor any part thereof or natural resources in place, shall become the property of any state, international intergovernmental or non-governmental entity or of any natural person. The placement of personnel, space vehicles, equipment, facilities, stations and installations on or below the surface of the moon, including structures connected with its surface or subsurface, shall not create a right of ownership over

the surface or the subsurface of the moon or any areas thereof.

In my candid opinion, the formulations of the legal status of the moon and its natural resources in Article 11, particularly in its three paragraphs quoted above, is a great revolution in the classical theory of international law, which recognized all uninhabited territories on earth as res nullius, and, therefore, subject to appropriation by any state. However, it should be noted that this theory of terra nullius has not always been upheld in our present time (e.g. the Antarctica).

The signing of the Agreement on the moon and its entering into legal force,<sup>4</sup> will assist in creating more uniformity and consistency in the interpretation of the legal status of the moon and other celestial bodies in particular as embodied in the provisions of the 1967 Space Treaty.<sup>5</sup>

All States Parties are granted the freedom to carry out scientific investigations on the moon without discrimination of any kind, on the basis of equality and in accordance with international law (Article 6, para 1).

As already mentioned above, the 1967 Space Treaty and the 1979 Moon Agreement provide and guarantee for all states parties equal opportunities and freedom to carry out scientific investigations and experiments in outer space, on the moon, and celestial bodies, without any interference whatsoever from any state or group of states. Moreover, it should be noted that this freedom of exploration and use of outer space, including the moon and other celestial bodies, as provided in these legal instruments, first and foremost, includes the right of every state to launch into the earth's orbit rockets, artificial earth satellites, space vehicles (manned and unmanned), and space objects over the air space of other states; and secondly, the right to carry out scientific investigations and experiments in those areas. This freedom can be analogously

compared with the provisions of Article 87 of the 1982 UN Convention on the Law of the Sea, which deal with the legal status of the High Seas and Article II of the 1959 Antarctic Treaty.

It is necessary to point out here that the principle of freedom of exploration and the use of outer space, including the moon and other celestial bodies, however, differs from the principle of territorial air sovereignty as embodied in the national legislation of each state and in bilateral and multilateral agreements, conventions, etc., on international air navigation.

The provisions of Articles 8 and 12 of the Chicago Convention, it should be borne in mind, cannot be analogously applied in regards to the flight of space vehicles and other objects launched into outer space, because the air sovereignty of any state, as we have already observed, does not extend ad infinitum into the universe.<sup>6</sup> It is necessary, at this juncture, to emphasise that the freedom of innocent passage by space vehicles launched from territory of one state through the air space of another state is an international legal right belonging to all states and recognized by states themselves.<sup>7</sup> Moreover, it should be remembered that the absence of a fixed frontier between air space and outer space has not caused any international conflict since the beginning of the space era forty years ago. However, this does not mean that there is no need to establish the border between the two spheres.

### **Limitation of the Freedom of Exploration**

This now brings us to the following question: Does the principle of freedom of exploration and use of outer space, including the moon and other celestial bodies, mean any state is absolutely free to carry out any kind of space activity or experiment which is a threat to international peace and security, or aimed at the intensification of the arms race in outer space? The answer is certainly "No".

Before I proceed further in examining the provisions of Article IV of the Outer Space Treaty, it should, however, be emphasised that the freedom of exploration and use of outer space, the moon and other celestial bodies, coupled with the right to transit of space vehicles, does not mean that that freedom is absolute. The Outer Space Treaty of 1967, besides granting rights, imposes specific obligations, which are imperative and mandatory to all the states actively engaged in the exploration and use of outer space, including the moon and other celestial bodies.<sup>8</sup>

For example, pursuant to the provisions of Article III of the Treaty, "States Parties to the Treaty shall carry on activities in the explorations and use of outer space, including the Moon and other celestial bodies, in accordance with international law, including the Charter of the United Nations, in the interest of maintaining international peace and security and in promoting international co-operations and understanding."

Article 2 of the 1979 Moon Agreement restates the provisions of the above Article of the Space Treaty with more additional provisions. It stipulates:

"All activities on the moon, including its exploration and use, shall be carried out in accordance with international law, in particular the Charter of the United Nations, and taking into account the Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations, adopted by the General Assembly on 24 October, 1970, in the interest of maintaining international peace and security and promoting international co-operations and mutual understanding, and with the due regard to the corresponding interests of all other States."

This means that any activities in the exploration and use of outer space, including the moon and other celestial

bodies, whose objectives are to further international confrontation - for example, the introduction of the arms race or other military activities in the new domain - is outlawed under the provisions of the Outer Space Treaties, including the UN Charter.

For example, in the provisions of the 1970 UN Declaration on Principles of International Law concerning Friendly Relations and Co-operation among States in accordance with the Charter of the United Nations, Member States undertake to pursue, in good faith, negotiations for the early conclusion of a universal treaty on general and complete disarmament under effective international control and strive to adopt appropriate measures to reduce international tensions and strengthen confidence among States.<sup>9</sup>

How can the above lofty goal be achieved by the world community of peace-loving states in view of the intensification of the arms race in outer space by the super powers and their allies? It is, however, encouraging to note that this aspect had been foreseen during the earlier stages of the development of the international law of outer space.

For example, in the preambular part of the Outer Space Treaty, the States Parties express their desire to contribute to broad international co-operation in the scientific as well as legal aspect of the exploration and use of outer space for peaceful purposes. In the Preamble of the Agreement on the moon and other celestial bodies, the States Parties further express their "desire to prevent the moon from becoming an area of international conflict". The moon and other celestial bodies are declared to be used by all States Parties exclusively for peaceful purposes.<sup>10</sup>

This now brings us to the controversial concept or provision of "peaceful purposes" as it concerns the legal status of outer space, the moon and other celestial bodies. It would be recalled that

since the launching into orbit of the first man-made object "SPUTNIK" forty years ago, the attitudes and positions of states, international organizations including individual authorities (legal, political, scientific, etc.) have never been harmonious as regards to the meaning of "peaceful purposes".

It should, however, be borne in mind that the provisions of all the international legal instruments on the law of outer space which we have already reviewed above, do not give any comprehensive list of those activities, which are authorized to be carried out by states, international intergovernmental organizations, etc., in the course of the implementation and realization of the principle of freedom of exploration and use of outer space, including the moon and other celestial bodies.<sup>11</sup>

In the final analysis, I will like to point out that any military use of outer space is unlawful and contrary to the spirit of the UN Charter and the Outer Space Treaty of 1967, because peace and the military are contrary to one another. A civilian organization, however, can implement those measures, for example, the WMO, UNEP or ESA.<sup>12</sup>

#### **Article IV of the 1967 Outer Space Treaty (OST)**

This now brings me to the examination of the topic of my paper - "Implementation of Article IV of the Outer Space Treaty of 1967 during the 21st Century."

The strengthening and maintenance of international peace and security after the Second World War had been, and still is one of the most important purposes of the United Nations as stipulated in Article 1 (1) of the Charter. Thus, in the first resolution 1348 (XIII) of 13 December 1958, the General Assembly expressed the wish to avoid the extension of national rivalries into the new domain - outer space. Therefore, in the law-making process it had to employ the institution of

neutralization and demilitarization in creating a special legal regime for outer space.

According to Professor Vladimir Kopal, "Neutralization and demilitarization of outer space would prohibit the use of any preparation whose immediate or final goal would serve for waging war. These prohibitions would include (1) launching rockets with warheads through outer space; (2) orbital arms and military apparatus in outer space; (3) establishing military bases on the celestial bodies."<sup>13</sup> Professor G. P. Zhukov writes that "Demilitarization of outer space means the prohibition of activities pursuing military aims in peace time."<sup>14</sup>

It would be recalled that in resolution 1884 (XVIII) of 17 October 1963, the General Assembly welcomed the expressions by the Soviet Union and the United States of their intention not to station in outer space any object carrying nuclear weapons or other kinds of weapons of mass destruction. The provisions are embodied in Article I of the Moscow Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and under Water of October 1963 (NTBT).<sup>15</sup>

The principle of partial demilitarization of outer space and total demilitarization of the moon and other celestial bodies are embodied in Articles IV of the Space Treaty of 1967 and 3 of the Moon Agreement of 1979. Article IV 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. The moon and other celestial bodies shall be used by all States Parties to the Treaty exclusively for peaceful purposes. The establishment of military bases, installations and fortifications, the testing of any type of weapons and the conduct of military manoeuvres on celestial bodies

shall be forbidden. The use of military personnel for scientific research or for any other peaceful purposes shall not be prohibited. The use of any equipment or facility necessary for peaceful exploration of the moon and other celestial bodies shall also not be prohibited."

It is interesting to note that the interpretation of Article IV has been subject-matter of extensive discussions in various international forums by eminent experts and scholars in space law, during the past 30 years.<sup>16</sup> It is impossible for me to discuss in this paper all the views of the experts as expressed in those forums and books. Nevertheless, it would be useful to make some comments on the provisions of Article IV.

As could be seen in paragraph 1 of the Article, the States Parties undertake not "to place in orbit around the earth any objects carrying nuclear weapons or any kinds of weapons of mass destruction, install such weapons on celestial bodies, or station such weapons in outer space in any other manner." According to the BLACK'S LAW DICTIONARY, Fifth Edition (1979), the word "undertake" means: "to lay oneself under obligation or to enter into stipulation; to perform or to execute; to covenant to contract." "Any", on the other hand means: "Some; one out of many; an indefinite number. One indiscriminately of whatever kind or quantity."

Thus, taking into consideration these definitions, it is submitted that "any other kinds of weapons of mass destruction" should be construed, in the context of total disarmament, to mean all existing weapons and their delivery systems (e.g. ASAT, etc.), including future ones which may be developed for military purposes. The States Parties to the Space Treaty of 1967, had an international duty to ensure that all military activities are not carried out in outer space, on the moon and other celestial bodies. However, it should be noted that the use of military personnel, any equipment and facilities for scientific

research and for purposes is permitted (para. 2).

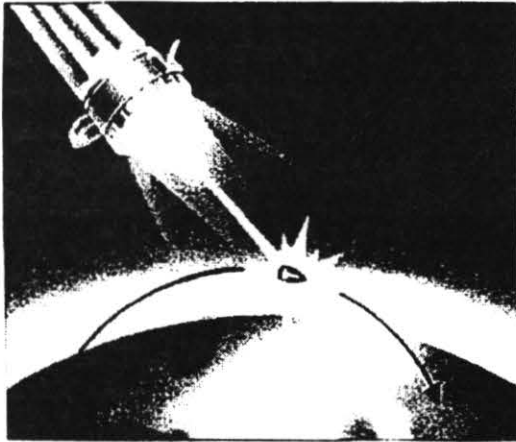
Therefore, the testing of any weapons and their delivery systems by the super powers is a gross violation of the provisions of the Space Treaty and constitutes a threat to international peace and security (Art. III and IV). The 1982 Second UN Conference on the Exploration and peaceful Uses of Outer Space expressed grave concern on the extension of arms race into outer space. All nations, particularly those with major space capabilities, were urged to contribute actively to the prevention of the arms race into outer space and to refrain from any action contrary to that aim.<sup>17</sup>

For example, the weapon systems developed under the U.S. SDI Programme are contrary to the spirit of the Space Treaty and the Charter of the United Nations. In this respect it will be useful to refer to the second stanza of the Preamble of the UN Charter, which reads as follows: **AND FOR THESE ENDS to practice tolerance and live together in peace with one another as good neighbours, and to unite our strength to maintain international peace and security, and to ensure, by the acceptance of principles and institutions of methods, that armed force shall not be used, save in the common interest, and to employ international machinery for the promotion of the economic and social advancement of all peoples.**

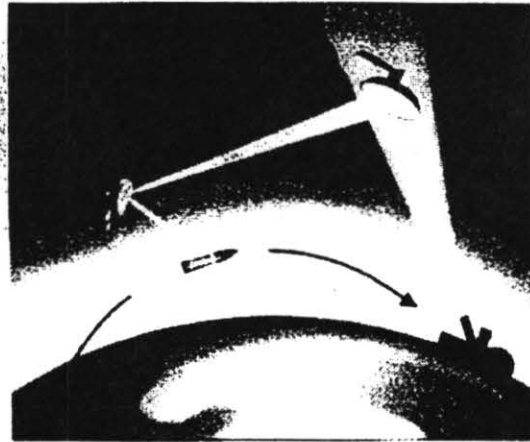
It seems to me that we tend to forget or ignore the importance of the above stanza of the Preamble in all problems relating to disarmament, including those relating to the demilitarisation neutralisation of outer space. It should be pointed out that good neighbours, through peaceful means, will always strive to establish friendly and peaceful relations among themselves. The interdependence of states and peoples of the world today demands that maintenace of international peace and security, as **the common interest of**

**humanity** as a whole. From time immemorial, armaments have always created fear, suspicion, mistrust and hatred among nations. Is this what humanity should continue to pursue with space science and technology during the 21st Century?

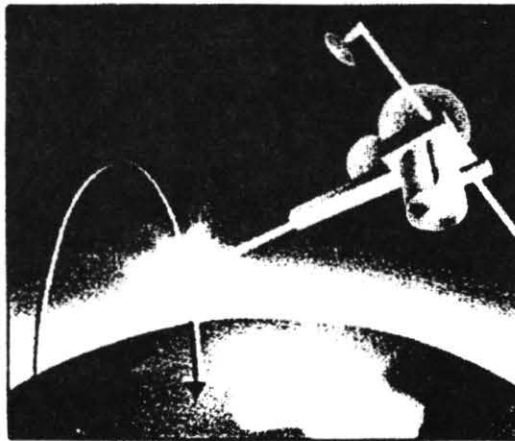
Therefore the latest laser satellite tests carried by the U.S. Army this year<sup>18</sup> were contrary to the provisions of that Treaty and various arms control agreements between the former Soviet Union (Russia) and the USA. The pictures below show the various types of space weapons developed under the SDI Programme, which in my candid opinion, should be classified as weapons of mass destruction.



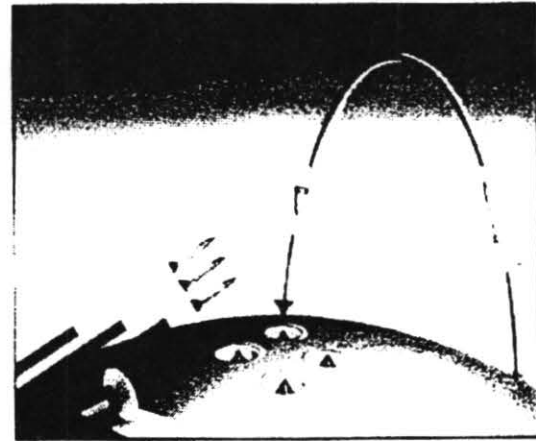
**SPACE-BASED LASERS:** In theory, these would combine chemicals in the manner of rocket engines to fire beams of concentrated laser energy through space. Lately, they have lost luster because of fears about the vulnerability of space-based objects.



**GROUND-BASED LASERS:** These devices, especially free-electron lasers, would bounce beams off orbiting "battle mirrors" toward enemy missiles. Such systems, which are cheaper because heavy lasers need not be lifted into space, are viewed as less vulnerable to attack.



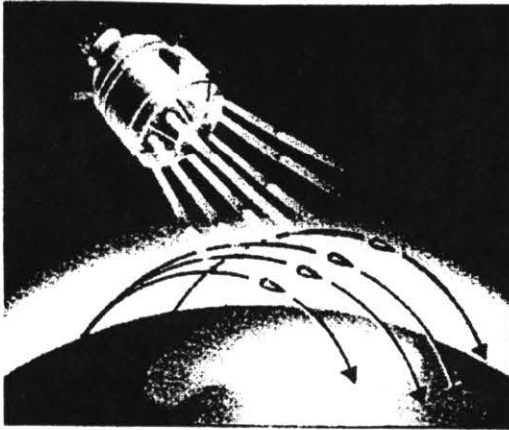
**RAILGUNS:** These devices, based in space, would use electromagnetic fields to accelerate and launch "smart" projectiles to home in on enemy boosters. The small projectiles are envisioned as something similar to those recently tested in American antisatellite weapons.



**GROUND-BASED INTERCEPTORS:** Using conventional rocket technology, these would be used to destroy enemy warheads during final phase of their flight, just before they hit targets. Such interceptors are often viewed as ideal for defending fields of American missiles.

Source: Boffey, Philip M. and co, Claiming the Heavens, The New York Times Complete guide to the Star Wars Debate, p. 98.

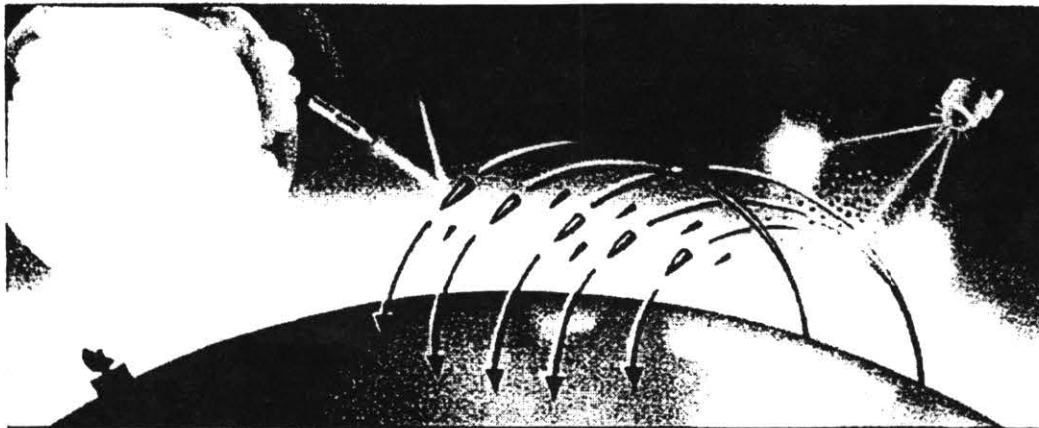




**X-RAY LASERS:** Powered by nuclear bombs, these would fire beams of X-rays at targets before consuming themselves in fireballs. Small and light, they could be "popped up" into space as needed. But problems in their testing have cooled enthusiasm.



**SPACE SENSORS:** These "eyes" would be critical for coordinating battles and knowing which missiles and warheads had slipped through the defensive shield. An emerging hurdle is seen as quick digestion of sensor data and its relay to military commanders.



**COUNTERMEASURES:** An enemy could try to outwit a shield by attacking it or by complicating its job. Chaff dropped from missiles could confuse space-based radars and sensors. Decoys could complicate targeting. Missiles and warheads with mirror-like coatings could reflect laser beams.

Most challenging of all, an exploding nuclear warhead, set off accidentally by defender or intentionally by enemy, would send out electromagnetic pulses that would wreak havoc on electrical systems in space and on earth.

Source: Boffey, Philip M. and co, Claiming the Heavens, The New York Times Complete guide to the Star Wars Debate, p. 99.

It is my conviction that the maintenance of international peace and security will never be achieved by using space science and technology in building strategic weapons systems in the new domain; but by using the wonderful achievement of human genius for the progress and development of the human race.

It is interesting, moreover, to point out that the Treaty on the Prohibition of the Emplacement of Nuclear Weapons and Other Weapons of Mass Destruction on the Ocean Floor and in the Subsoil Thereof (adopted by the General Assembly in resolution 2660 (XXV) of 7 December 1970) embodies similar provisions of Article IV of the Space Treaty of 1967.

This further leads me to reflect on the meaning of the statue of the horseman standing in front of the United Nations Headquarters in New York, which symbolises the wordings of **ISAIAH 2:4** as follows:

*".....: and they shall beat their swords into plowshares, and their spears into pruninghooks: nation shall not lift up sword against nation, neither shall they learn war any more".*

Furthermore, the above quotation is very important in the interpretation of the provisions of the outer space instruments relating to the peaceful exploration and uses of outer space, the moon and other celestial bodies. I am very convinced that the founding fathers of the United Nations had the wordings of that verse at the bottom of their hearts in the formulation of the Preamble, Principles and the Purposes of the UN Charter. This has been reiterated in UNGA resolution 50/6, entitled **Declaration on the Occasion of the Fiftieth Anniversary of the United Nations**, of 24 October 1996. In the Declaration, the Member States and observers of the United Nations, representing the world:

*"Solemnly reaffirm the Purposes and Principles of the Charter of the United Nations and their commitments to them;*

*Express their gratitude to all men and women who have made the United Nations possible, done its work and served its ideals, particularly those who have given their lives during service to the United Nations;*

*Are determined that the United Nations of the future will work with renewed vigour and effectiveness in promoting, peace, development, equality and justice and understanding among peoples of the world;*

*Will give the twenty-first century a United Nations equipped, financed and structured to serve effectively the peoples in whose name it was established."*

It is interesting to note that this vision as depicted in the above quoted verse of **ISAIAH 2:4** is gradually being realised in the Russian Federation by the industrial conversion of military rockets to launch vehicles for space business operations (**Spaceflight, Vol. 38 No. 8 (August 1996), page 256**). It is submitted that this should be a permanent and mandatory practice in the 21st Century, if genuine world peace and security are to be achieved.

## **Conclusion**

The development of the international law of outer space, it should be borne in mind, is a progressive and dynamic process, which is also directly linked with further development and advancement in space science and technology and their practical application in solving various complex political and socio-economic problems facing mankind on earth. Consequently, the development of the operational rules and principles to regulate the various activities of states in outer space should be part and parcel of this process, as it was in the development of rules in fields of aerial and maritime navigation.

Moreover, it should be reiterated here that contemporary international law, which

evolved after the Second World War, is a law of peace, disarmament, mutual and broad international co-operation, as could be seen in the provisions of UN Charter. Thus, space law as a branch of the contemporary law of nations or international law, should be based on the principles embodied in the UN Charter and not on those classical principles of international law, which only promoted individual national interests of powerful states. In fact, outer space has turned the modern world into a global village.

It is, therefore, submitted that the interpretation of the fundamental principles of international law of outer space, as embodied in the provisions of the 1967 Space Treaty, must and should be given in the light and spirit of the provisions of the Preamble and Articles 1 and 2 of the UN Charter. Furthermore, it should be emphasised that the lack of juridical precision, or different omissions in that document (i.e. the 1967 Space Treaty), as Professor Markov correctly pointed out earlier, cannot afford to neglect the fundamental changes and the new patterns it introduces into the law of nations.<sup>19</sup> The existing Post-Cold War Political World Order provides the international community with a better opportunity to strengthen the implementation of the provisions of the Outer Space Treaty of 1967. In this regards, it should be pointed out that the Report of the former UN Secretary-General, Dr. Boutros Boutros-Ghali, on **International Cooperation in Space Activities For Enhancing Security in the Post-Cold War Era**, has provided the framework or guidelines on international cooperation for the 21st Century.

Thus, in the present stage of international development in the nuclear-space era, taking into consideration what has already been discussed above, it should be borne in mind that, the question concerning the definition and determination of the frontiers between airspace and outer space is of great significance in

safeguarding the sovereignty and security of all states and at the same time strengthening mutual respect, understanding, mutual trust and international co-operation in the exploration and peaceful use of outer space, including the moon and other celestial bodies. The use of outer space in some forms, as we have already noticed earlier, in one way or the other, infringes on the interests of all states in general.

Thus, in order to carry on with various activities in outer space for the benefit of mankind in general, I will like to stress that international co-operation, through the conclusion of international treaties and agreements concerning the legal regulation of such activities, is indispensable and it is the only method of finding solutions to most of the outstanding legal problems in space law.<sup>20</sup> It should, moreover, be borne in mind that international co-operation is one of the fundamental and mandatory principles of international law of outer space and it is embodied in Article IX of the 1967 Space Treaty and Article 9 of the 1979 Moon Treaty. The importance of international co-operation in the exploration and use of outer space was further emphasised in the 1982 UN Conference on Outer Space.<sup>21</sup>

Furthermore, this principle has been elaborated in the provisions of the **Declaration on the legal aspects related to the application of the principle that the exploration and utilization of outer space should be carried out for the benefit and in the interest of all States, taking into particular account the needs of developing countries**, adopted by the UN General Assembly under Resolution 51/122 of 13 December 1996.

Thus, in view of the existing divergences in the interpretation of the provisions of the basic principles of international law of outer space, particularly the one embodied in Article IV, it is submitted that the International Court of Justice (ICJ)

should be involved by the UN General Assembly, pursuant to the provisions of Article 36, paragraphs 1 and 2(a) and (b) of the Statute of the ICJ, in the interpretation of the controversial terms of the space treaties. This, it is believed, would create uniformity in the application and realisation of these principles by states in the course of their individual and co-operative efforts in the exploration and use of outer space, including the moon and other celestial bodies, for peaceful purposes only.

Furthermore, in order to promote the peaceful exploration and use of outer space, it is proposed that the major space powers should encourage the participation of other states, including their nationals, in their future space programmes and flight missions. It is, moreover, encouraging to note that the on-going international co-operation between the Russian Federation and the United States, including other member states of the European Space Agency (ESA), Canada, China, Japan, India, etc., is gathering more momentum each year. The United Nations, as the centre for the co-ordination of international co-operation in the exploration and peaceful uses of outer space, has done a lot in creating the legal principles and norms applicable to outer space activities.

Therefore, it is necessary for all states, including their nationals, to unite and work together in finding the right solution to this problem, in order to ensure that this new area of humankind's activities will not be a domain of conflicting political/legal theories and ideologies, but a zone of genuine peace, security, mutual understanding, friendship and effective international co-operation.

However, this will further require the preparedness of all states to exercise their political will. As we are approaching the end of the 20th Century and the beginning of the 21st Century, the political will, it should be emphasised, will demand that the world policy-makers and their advisers should always search their conscience first, before making decisions

concerning international peace and security, bearing in mind the following quotation of the 34th President of the US, General Dwight D. Eisenhower: *"Every gun that is made, every warship launched, every rocket fired signifies, in the final sense, a theft from those who hunger and are not fed, those who are cold and are not clothed. This world in arms is not spending money alone. It is spending the sweat of its labourers, the genius of its scientists, the hopes of its children (Speech in Washington 16 April, 1953)".*

## References

<sup>1</sup>Isaiah 2:4. This same idea is being expressed in Psalm 46:9. Psalm 46:9 reads "He maketh wars to cease unto the end of the earth; he breaketh the bow, and cutteth the spear in sunder; he burneth the chariot in fire".

<sup>2</sup>For details, see, **UNITED NATIONS TREATIES AND PRINCIPLES ON OUTER SPACE**, UNITED NATIONS, New York (1996).

<sup>3</sup> For more details, see United Nations Treaties and Principles on Outer Space, (1994), op. cit., pp. 28-36.

<sup>4</sup> It entered into force on 11 July 1984.

<sup>5</sup> See, e.g., Wassenbergh, H.A., Reality and Value in Air and Space Law, op. cit., pp. 33-36; Zhukov, G.P., "The Problem of Legal Status of Scientific Research Stations on the Moon", in Proceedings, 10th Colloquium on the Law of Outer Space, Belgrade, Yugoslavia (1967), pp. 60-62. Ibid., pp. 21-25, for the "Summary of Discussions on the Moon"; Gorove, S., "Interpreting Article II of the Outer Space Treaty", in Proceedings, 11th Colloquium on the Law of Outer Space, New York, U.S.A. (1968), pp. 42-44; by same author Studies in Space Law: Its Challenges and Prospects, Sijthoff, Leyden (1977), pp. 79-84; Goedhuis, D. "Some Legal Problems Arising from the utilization of Outer Space", in ILA: Report of the 54th Conference, The Hague (1970), pp. 422-434 esp., pp. 405-421, for the view of other participants of the conference.

<sup>6</sup>According to the statement of the Chairman of COPUOS, there is now an average of nearly 1,000 objects actively engaged in orbiting the earth. No state has yet raised any objection against the orbiting of those objects in outer space above its territorial air space. See for details GAOR: 32nd Sess. Supp. No. 20 (A/32/20), p. 22. See also Goedhuis, D., "General Questions on the Legal Regime of Space", in ILA: Report of the 50th Conference, Brussels (1962), op. cit., pp. 76-77.

<sup>7</sup> For detail, see, e.g., Lachs, M. (1972), pp. 59-61.

<sup>8</sup> See Articles IV-XIII of the Treaty. The provisions of these articles are also embodied in the 1979 Agreement on the Moon and other celestial bodies.

<sup>9</sup>For more details, see UN Office of Public Information [OPI/424-00253](#) - Jan. 1971 - 33M, p. 7. See also Art. 1 and (4) of the UN Charter.

<sup>10</sup>See Paragraph 2, Article IV of the Space Treaty; Article 3 of the Moon Agreement of 1979.

<sup>11</sup>Article IV of the 1967 Space Treaty and III of the 1979 Moon Treaty contain specific prohibitions which pertain to demilitarization and neutralization of outer space, including the moon and other celestial bodies. For the opinions of other experts, for example, see Zhukov, G.P., "Freedom of Space and its Limits" in [Space Law Perspective](#) (1976), p. 118, Seara Vázquez, M., [Cosmic International Law](#), translated by Malley Elaine, Wayne State University Press, Detroit (1965), p. 174, Cheng, B., "The United Nations and Outer Space" in [Current Legal Problems](#), Vol. 14 (1961), p. 262 et seq.; See also his comments in the [ILA: Report of the 50th Conference](#), Brussels (1962), p. 52 et seq... Goedhuis, D., [ILA:Report of the 50th Conference](#) (1962), op. cit., p. 81 et seq.. Meyer, A., "Comment", *Ibid.*, p. 42, Meyer, A., "Interpreting the term 'Peaceful' in the Light of Space Treaty", [Proceedings, 11th Colloquium on the Law of Outer Space](#), pp. 24-29, Fawcett, J.E.S., [International Law and the Uses of Outer Space](#) (1968), pp. 32-33, Kish, J., op. cit., p. 188, and [Current Legal Problems](#) (1961), op. cit., pp. 262-272, Goedhuis, D., [ILA: Report of the 50th Conference](#) (1962), op. cit., pp. 81-82. For instance the Cosmos type of satellites, e.g., Cosmos 390, 396, 597, 603, 674, 1010, 1012, 1537 etc. [ILA:Report of the 50th Conference](#) (1962), op. cit., p. 52. Fawcett (1968), op. cit., p. 33. See also for comparison by the same author [Outer Space, New Challenges to Law and Policy](#), Clarendon Press, Oxford (1984), pp. 106-114. See for more details [Table of Artificial Satellites Launched between 1957-1976; Table of Artificial Satellites Launched between 1977-1984](#), published by ITU. See for details [International Co-operation and Organization for Outer Space](#): Staff Report for the Committee on Aeronautical and Space Sciences, United States Senate, U.S. Government Printing Office, Washington D.C. (1965), p. 459. It should be noted that the establishment of a permanent space platform - SALYUT and MIR systems - have given the Soviet Union (Russia) the capacity to carry out various experiments and activities - including reconnaissance and surveillance of any part of the earth, without necessarily launching reconnaissance satellites. The US space shuttles are carrying out remote sensing activities, which are the same with these military activities. For more details, see, Tim Brown, "International Peace through the free market. The effect of commercial remote sensing satellites on international peace", in [Proceedings, IISL 37th Colloquium on the Law of Outer Space, October 9-14, 1994](#), pp. 201-212.

<sup>12</sup> For more details, see, for example, [Outer Space -Battlefield of the Future?](#), published by Taylor and Francis Ltd., London (1978), p. 12 et seq.; [SIPRI Yearbook](#) (1983), pp. 30-31.

<sup>13</sup>See Kopal, Vladimir, "The Problem of Neutralization and Demilitarization of Outer Space", in [Proceedings, 4th Colloquium on the Law of Outer Space](#) (1961), pp. 337 and 339.

<sup>14</sup> See Zhukov, G. P., "Fundamental Principles of Space Law", in [Contemporary International Law](#), Tunkin, G., ed. (1969), p. 276 and Zhukov, G. P. and Kolosov, Yuri, [International Space Law](#), Translated from Russian by Boris Belitzky, Praeger Publishers, New York (1984), pp. 53-54.

<sup>15</sup>Article I stipulates as follows: " 1. Each of the Party to this Treaty undertakes to prohibit, to prevent, and not to carry out nuclear weapon test explosion, or any other nuclear explosion, at any place under its jurisdiction or control:

(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 causes 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 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 furthermore 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."

<sup>16</sup> For more details, see, for example, [Maintaining Outer Space for Peaceful Purposes](#), Proceedings of a Symposium Held in the Hague, March 1984, edited by Jasentuliyana, Nandasiri, United Nations University (1984); [ILA: Report of the 62nd Conference](#), Seoul (1986), pp. 385-408; [Report of the 63rd Conference](#), Warsaw (1988), pp. 282-380.

<sup>17</sup>[Doc. A/CONF.101/10](#), op. cit., p.paras 13-14. the prevention of an arms race in outer space is an agenda item of the UN General Assembly. In

resolution 48/74 of december 1993, for example, the General Assembly reaffirmed the importance and urgency of preventing an arms race in outer space and readiness of all States to contribute to that common objective, in conformity with the provisions of the treaty on principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial bodies (para. 1) and Boffey, Philip M. and co, Claiming the Heavens, The New York Times Complete guide to the Star Wars Debate.

<sup>18</sup> **International Herald Tribune**, Frankfurt, Friday, October 3, 1997, pp. 1 and 8 and **USA Today**, October 3-5, 1997, p. 1.

<sup>19</sup>For more details, see Markov, M.G., "Against the so-called 'Broader' Interpretation of the term 'Peaceful' in International Space Law", in Proceedings, 11th Colloquium on the Law of Outer Space (1968), p. 81. It should also be borne in mind that any interpretation that conflicts with the purposes and principles of the UN Charter is ultra vires (see Art. 103, UN Charter).

<sup>20</sup> See also Lachs, M. (1972), op. cit., p. 61, for more comments on this points. See also Boutros Boutros-Ghali, International Co-operation in Space Activities for Enhancing Security in the Post-Cold War Era: Report of the Secretary-General, UN Doc.A/48/221.

<sup>21</sup>For details, see UN Doc. A/CONF. 101/10, op cit., pp. 5, 78-106. The various UN General Assembly resolutions adopted on the peaceful uses of outer space do stress the importance of international co-operation.