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WORLD PEACE THROUGH SPACE LAW†

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WHY has this discussion been entitled "World Peace Through Space Law"? Why "Space Law"? It is because there is a general belief that space will be the avenue to peace or war, and that only international control of space will avoid war and enable us to have peace.

Space is the most vulnerable spot in the armor of every nation today, for the control of space would enable an aggressor to devastate the earth. The nation which controls space will control the world. If this control comes into the hands of a ruthless, dictatorial nation, it may mark the end of freedom for mankind. Thus, the importance of international space law as the means of establishing peace cannot be overestimated.

Outer Space is now being explored by individual nations and will soon be put to use. Shall we sit idly by or shall we do what we can to insure that the use of Outer Space be devoted for the common benefit of all mankind?

On October 4, 1957, Sputnik I was successfully launched by the Soviet Union. In January, 1959, Lunik I was launched, sent past the moon and into orbit around the sun. On September 13, 1959, they hit the moon with a rocket and allegedly dropped their flag on the moon. On October 3, 1959, they sent a rocket into orbit around the moon and directed it on a path to be returned into orbit around the earth. This is some indication of the tremendous progress made in the science of space by the Soviet Union. The United States has also sent rockets into space, although its satellites

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and rockets have been smaller, lighter, of lesser thrust and potentiality, carrying smaller payloads.

The ability of the Soviet Union to send a rocket directly to target on the moon indicates the excellence of their guidance system and their vast knowledge of this new science. This moon rocket was the same vehicle originally designed to carry a thermo-nuclear warhead 6,000 miles. It has a thrust of 800,000 pounds or more. The Russians say it will be operational in the hands of the military early in 1960.

A substantial part of the Soviet effort is now being directed toward a manned space ship and the eventual exploration of the moon and nearby planets by human crews. Both the United States and the Soviet Union have astronauts in training for such ventures. Undoubtedly the landing of a crew on the moon, supplementing the dropping of the flag thereon, will create problems of sovereignty and of conflicting claims.

Will planets be deemed "terra nullius," namely, subject to appropriation under certain conditions, or will they be deemed "res communis," that is, not subject to appropriation, but free for exploration or use by all, like the high seas?

What are the implications of these achievements? What do they foretell in the field of international politics? What economic and psychological problems will they create? What problems are now foreseeable? In what manner can we safeguard the survival of our individual nations and, in fact, the world of Man?

Service can be rendered towards the solution of some of these questions and the achievement of the goal of universal peace through the establishment of an International Code (even if it be merely in skeleton form) regulating the use of Outer Space for peaceful purposes.

Before we discuss what such a code should contain, we need a definition of terms; not only of new terms, but of old, fundamental terms, because various peoples have different concepts of their meanings. We must define "international law," "space law," "peaceful co-existence," "sovereignty," and even "peace."

What is meant by "international law?"

It has been defined in broad terms as "the body of general principles and specific rules which are binding upon the members of the international community in their mutual relations ..."[1]

It has been stated:

"International law consists of certain rules of conduct which modern civilized states regard as being binding on them in their relations with one another with a force comparable in nature and degree to that binding the conscientious person to obey the laws of his country and which they also regard as being enforceable by appropriate means in case of infringement."[2]

[1] FENWICK, INTERNATIONAL LAW, (3rd Ed. 1948) p. 27.
[2] HALL, INTERNATIONAL LAW, (8th Ed. 1924) p. 1.

It has also been said:

"We must expand our interpretation of the term 'international law'. We must cease to think of it as merely a set of principles to be applied by courts of law, and understand that it includes the whole legal organization of international life on the basis of peace and order. Such an organization must provide for peaceful and orderly use of **political**, as well as judicial, methods of adjustment."[3]

What is meant by "space law"?

There has been no agreement between any of the nations as to what constitutes Outer Space. For the purpose of this discussion, it is suggested that "space law" might be deemed that law which shall be applicable to the area above the stratosphere.

Now let us define another term which, while seemingly simple, is possessed of certain complexities and different interpretations in different parts of the world and in various social systems.

What is meant by "peace"?

The Communist view of peace is one of co-existence. They have popularized the term "peaceful co-existence." Lenin, Stalin and Krushchev all used the term, reflecting a certain degree of continuity in the Communist vocabulary. Stalin said that "there arose that temporary equilibrium of force that put an end to war against us, that ushered in the period of 'peaceful co-existence' between the Soviet States and the Capitalist States."[4]

The ingredients of the term "peaceful co-existence" are enunciated in a treaty between India and the Peoples Republic of China signed on April 29, 1954, which called for mutual respect for each other's territorial integrity and sovereignty, mutual non-aggression, mutual non-interference in others' internal affairs and equality and mutual benefit.

The Afro-Asian Conference of 29 countries in Bandung, Indonesia, from April 18 to April 24, 1955, used the phrase "live together in peace" in place of the controversial term "peaceful co-existence." It is reported that Chou-En-Lai proposed the substitution,[5] although he later told the Standing Committee of the International Peoples Congress in Peiping on May 13, 1955 that "In actual fact, for countries of different social systems to live together in peace is the same as peaceful co-existence."[6]

Khrushchev said on November 6, 1958, that "Socialism and Capitalism exist on one planet and, therefore, co-existence is a historic inevitability ... peaceful co-existence should be built on life without war on the basis of peaceful competition."[7]

[3] Brierly, "The Rule of Law in International Society" (1936) quoted in BISHOP, INTERNATIONAL LAW (1953) p. 2.
[4] J. V. STALIN WORKS 1925 (1954) Vol. 7, pp. 293-294.
[5] FIFIELD, "AMERICAN JOURNAL OF INTERNATIONAL LAW". Vol. 52 1958, p. 507.
[6] KAHIN, THE ASIAN-AFRICAN CONFERENCE (1936, p. 63).
[7] FIFIELD, **loc. cit.** p. 508.

The usual Western view of peace is expressed in the Teheran Declaration by the United States, England and Russia on December 1, 1943:

"We fully recognize the supreme responsibility resting upon us and all the United Nations to make a peace which will command the good will of the overwhelming masses of the people of the world and banish the scourge and terror of war for many generations."[8]

On the subject of peace, Charles Evans Hughes said:

"'War,' said Sir Henry Maine, 'appears to be as old as mankind, but peace is a modern invention'. It is hardly that; it would seem to be an occasional experience rather than an achievement. To one who reviews the history of strife from the 'universal belligerency of primitive mankind' peace appears merely the lull between inevitable storms always gathering in some quarter with the fateful recurrence of the operation of nature."

"Great powers, well armed and having the vivid sense of opportunity, supported by popular clamor for vindication of national interests, are disposed to seize what they believe to be within their grasp. Resistance by force means war. Fear of opposing forces may stay the hand, but this does not mean peace — rather renewed preparation and the waiting for the day. There is only one way to make peace secure and that is the difficult but necessary effort to translate particular controversies into voluntary reasonable agreements..."[9]

What do we really mean by "peace"? Does it involve the cessation of the cold war? We think so. Does it involve abstention from efforts at subversion? Does it involve the abandonment of propaganda? Does it mean that no one nation should attempt to impose its social system upon another nation living under another social system? Does not true peace mean that every nation shall be free to choose its own legal system, its own social system, and its own modus vivendi? Bear in mind that the realistic development in the practice of a theory often does not follow the theoretical statement. Within its Communist framework, "peaceful co-existence" by no means indicates the end of strife between the Communist States led by the Soviet Union and the Western alignment led by the United States. Sir Roger Makins, former British Ambassador in Washington, has aptly said that for the Russians peaceful co-existence signifies a temporary detente during which they can build up Communist strength and sap the will of the Free World, the state of what has been called provisional non-belligerency.

Now that we have stated briefly and perhaps over-simplified the meaning of "international law," "space law", and "peace, it is necessary to consider the ever present threat to peace, the problem of "sovereignty."

Bertrand Russell recently stated that the world must accept the doctrine of world authority or suffer the extinction of the species. In submitting to

[8] New York Post, December 6, 1943.

[9] Hughes, **Pathways of Peace**, 1925, address before the Canadian Bar Association, Montreal, Sept. 4, 1923.

international law and becoming a party to an international treaty a nation inevitably suffers some loss of sovereignty.

Will the leading powers submit to an international agreement which implies the creation of a "world state" and curtails some of the powers of sovereignty? Is such an international agreement a means of avoiding deviation by any nation from its expressed principles of mutual consideration and co-operation? In what manner can sovereignty be curtailed for the benefit of world peace without loss of individual status?

Fenwick in his *International Law* states:

"The extent to which the doctrine of the sovereignty of states operated as a standing obstacle to the development of an organized community of nations cannot be exaggerated. In its extreme form, the doctrine implied the complete freedom of the State from the control of any higher power claiming authority to regulate its acts. It was a doctrine of legal anarchy..."[10]

Story, in his famous work on the *Constitution*, calls sovereignty "the power to do everything in a state without accountability, — to make laws, to execute and apply them, to impose and collect taxes and to levy contributions, to make war or peace, to form treaties of alliances or of commerce with foreign nations, and the like."[11]

The claims of sovereignty, carrying with it claims of national ownership and control, have weighed heavily on the world. Today, more than ever, the question is acutely posed because of the dramatic accomplishment of the Soviet Union in dropping an encapsulated flag upon the moon. What are the legal and political implications of this event?

Krushchev, on his visit to the United States several days after the Russian rocket hit the moon, stated that no claim would be made of ownership of the moon. Nevertheless, a reversal of this attitude is conceivable, since on prior occasions there have been absolute reversals of Soviet positions from those expressed even in written agreements. Therefore, it is necessary to analyze the validity of such a claim and be prepared to meet it if it is asserted.

In days gone by, such an act as planting a flag on territory, so as to take symbolic possession, did constitute a basis for a claim of extension of sovereignty. Today, however, territorial sovereignty requires effective occupation, with the right to exclude other states from a region and the duty to display therein the activities of a state. This concept was stated by the eminent Swiss Jurist, Dr. Max Huber, acting as arbitrator in the case of the Island of Palmas, which is located 48 miles southeast of Mindanao in the Philippines. The Permanent Court of Arbitration of the Hague held:

"The growing insistence with which international law, ever since the middle of the 18th century, has demanded that the occupation shall be effec-

[10] FENWICK, INTERNATIONAL LAW, (3rd Ed. 1948) p. 29.

[11] STORY, CONSTITUTION, Section 207.

tive would be inconceivable, if effectiveness were required only for the act of acquisition and not equally for the maintenance of the right...

"The title of discovery, ... under the most favorable and most extensive interpretation, exists only as an inchoate title, as a claim to establish sovereignty by effective occupation."[12]

There remain on the earth only a few unexplored regions. These are principally the Arctic and Antarctic areas. The United States has consistently opposed all claims of sovereignty over any part of these regions by any nation as a result of discovery. The United States' stand against Norway's claims following Amundsen's explorations was expressed by Secretary of State Hughes writing to A. W. Prescott on May 13, 1924:

"It is the opinion of the Department that the discovery of lands unknown to civilization, even when coupled with a formal taking of possession, does not support a valid claim of sovereignty unless the discovery is followed by an actual settlement of the discovered country."[13]

To the Norwegian Minister, H. H. Bryn, Hughes wrote on April 2, 1924:

"In my opinion rights similar to those which in earlier centuries were based upon the acts of a discoverer followed by an occupation or settlement consummated at long and uncertain periods thereafter, are not capable of being acquired at the present time. Today, if an explorer is able to ascertain the existence of lands still unknown to civilization, his act of so-called discovery, coupled with a formal taking of possession, would have no significance, save as he might herald the advent of the settler; and where for climatic or other reason actual settlement would be an impossibility, as in the case of the Polar regions, such conduct on his part would afford frail support for a reasonable claim."[14]

The Soviet Union has indicated agreement with the United States that national territorial claims should not be recognized unless a nation can effectively occupy the area claimed. Nevertheless, seven nations have claimed sovereign territorial rights to slices of Antarctica. On December 1, 1959, a treaty was signed by 12 nations, including the United States and the Soviet Union, "freezing" the national territorial claims of Antarctica. This Antarctic Treaty (yet to be ratified) provides that the claims by the seven nations are not to be affected in any way by the Treaty, but that no new claims can be made while the Treaty is in force.[15]

This Treaty is a great historical event. It indicates the ability of nations to subordinate conflicting claims of national sovereignty to international co-operation for the benefit of all mankind. It is a splendid precedent for a similar treaty with regard to Outer Space.

Before a crisis is reached with regard to the moon or any other planet, by possible adverse claims of sovereignty, immediate agreement should

[12] Permanent Court of Arbitration, 1928, Scott, Hague Court Reports 2nd ser., p. 83 (1932); 2 U.N. Reports Arb. Awards 829.
[13] I HACKWORTH, INTERNATIONAL LAW, 399.
[14] Ibid. 453.
[15] New York Times, December 2, 1959, p. 1, col. 5, p. 46, cols. 1-8.

be reached on an International Code prohibiting claims of sovereignty on the part of any one nation and establishing rules for internationalization of Outer Space and the Interplanetary System, and adopting principles analogous to that of freedom of the seas.

Lest it be thought that the possibility of adverse claims concerning the use or control of Outer Space is too remote to cause any present concern, let me call your attention to the switch of positions taken by the United States and Russia with regard to the extension of sovereignty into space.

In 1956 the United States, Great Britain, Turkey and West Germany were conducting meteorological studies necessitating the flights of unmanned balloons through the stratosphere at a level of 80,000 to 90,000 feet. Some of these balloons flew over Soviet territory and some even landed on Soviet and Soviet-satellite soil. The Soviet Union and most of its East European allies protested to the United States that it had trespassed on their sovereign territories. On February 7, 1956, John Foster Dulles, then Secretary of State of the United States, maintained that there was no rule of international law on the subject and that flight of one nation's balloons over another nation's territory at the height of 80,000 feet was legal and could not be objected to by the subjacent state, since the question of the ownership of such space was obscure and disputable.

Soviet policy on this point was in direct conflict. Article I of the Air Code of the U.S.S.R. of August 7, 1935 states that "to the U.S.S.R. belongs the complete and exclusive sovereignty in the air space above the U.S.S.R." This is the Ad Coelum theory. The Russian scientists, Koslov and Krylov, stated that this meant that the soviet sovereignty was *without limit*. Subsequently, however, in September, 1958, the Soviet legal expert, Galina, evidently speaking with the approval of the Soviet Government, contended that since there was no international law covering space any government might launch rockets or satellites into interplanetary space without the permission of any other government.

On the other hand in March, 1958, Loftus Becker, then legal advisor to the State Department of the United States had stated that the United States could still claim and defend all space above its territory. Thus it is clear that the two governments switched their positions, and it is foreseeable that at any future time, deepnding on circumstances, either may again change its position. This is an illustration of expediency dominating principle.

In the United States there was established, pursuant to a resolution presented by the United States and adopted by the General Assembly on December 13 1958, an Ad Hoc Committee on the Peaceful Uses of Outer Space. This Committee rendered its final report on June 12, 1959. Its own counsel described the results as: "The mountains labored and brought forth a mouse". First, it offered no solutions. Second, it merely posed certain questions, establishing priority for some and secondary position for

others. Third, it thought that a comprehensive code was not practicable or desirable at present.

In view of the inadequacy and ineffectiveness of this Ad Hoc Committee report and the terrible urgency of the situation, I propose that the nations of the world should without further delay convene and attempt to agree on an international code which would undertake to lay down some fundamental principles, to which additions, amendments or modifications could later be made, but which, though skeletal, would give us some assurance against the prospect of decision by combat. Such a code might do the following:

1. Define what constitutes Outer Space.
2. Establish freedom of exploration and use of Outer Space and exploitation thereof for the benefit of all mankind, while prohibiting the appropriation of any part thereof or any celestial body to national sovereignty.
3. Prohibit nuclear experiments in Outer Space.
4. Provide for the identification and registration of space vehicles and coordination of launchings.
5. Make provision for re-entry and landing of space vehicles.
6. Provide for allocation and control of radio frequencies.
7. Provide for avoiding of interference with aircraft by space vehicles and also possibly by space vehicles with other space vehicles.
8. Establish principles of liability for personal injuries or death or property damage caused by space vehicles.
9. Provide for arbitration of all disputes by an agency, court or tribunal designated in the proposed code or by the United Nations.
10. Provide some method of insurance to compensate for damages due to injuries, death, and property damage.
11. Provide for policing of Outer Space.
12. Provide for the protection of the public health and safety of the peoples of the earth.

No. 1 — *Defining what constitutes Outer Space.*

The Ad Hoc Committe reported that the determination of precise limits for Air Space and Outer Space did not present a legal problem calling for priority consideration at this time. Yet, it seems to me that such a determination is immediately necessary as a basis for agreement on the use of Outer Space. Without such definition there may be conflict concerning what has been agreed to and conflict as to national rights to Air Space as distinguished from Outer Space. The divergent and shifting views of the United States and the Soviet Union as to a nation's complete and unlimited sovereignty over the space above its territory indicates the need for a definition of Outer Space and an agreement on where it begins. The problem of where Outer Space begins may be considered a sequel to the problem, where does the ocean end? This is not as preposterous as it sounds if one refers to recent actions of United States Courts in extending the jurisdiction of the Federal Death Act on the High Seas to wrongful

acts in the air over the ocean. In the important case of *D'Aleman v. Pan American World Airways, Inc.*[16] the court deliberately extended a law intended to apply to acts on the high seas to apply to acts occurring in air space over the high seas, for the purposes of providing some remedy for a claimant who otherwise would have had no remedy, because there was no law of air or space to govern such a situation.

How much more complicated will be the situation where a wrongful act or death occurs in Outer Space:

There has been no consensus among scholars concerning precise limits for Air Space and Outer Space. Nevertheless, up to the present, most of man's air navigation has taken place within the troposphere. Therefore, it might be advisable to establish arbitrary limits.

Accordingly, I suggest that the following definitions be considered for insertion in an International Code:

"Space is that area existing between the surface of the earth and the celestial bodies. It shall comprise two parts. The first part shall comprise the troposphere and the stratosphere. The second shall comprise the remainder of the area extending to the celestial bodies, which shall be termed 'Outer Space'.

"The troposphere shall be deemed to extend from zero to 10 kilometers above the earth's surface."

No. 2 — Establishing freedom of exploration and use of Outer Space and exploitation thereof for the benefit of all mankind, while prohibiting the appropriation of any part thereof or any celestrial body to national sovereignty.

The Ad Hoc committee mentions the question of freedom of Outer Space for exploration and use and merely states that the International Geophysical Year (1957—8 and subsequently) may have initiated the recognition or establishment of a generally accepted rule to the effect that, in principle, Outer Space is, on conditions of equality, freely available for exploration and use by all in accordance with existing or future international law or agreements. As to the problem of exploration, exploitation and settlement of celestial bodies the Ad Hoc Committee reported that these were not likely in the near future and did not require priority treatment.

However, it will only be through international law that the principle of freedom of exploration and use of Outer Space can be established as acceptable to all nations. Without agreement thereon conflict is inevitable. Moreover, exploitation of Outer Space and even of celestial bodies may not be as far off as the Ad Hoc Committee seems to think, and, therefore it is advisable that agreement be reached that celestial bodies be rendered incapable of appropriation to national sovereignty and that exploration and exploitation of Outer Space and of celestial bodies be carried out exclusively for the benefit of all nations and all mankind.

[16] 259 F.2d 493, Oct. 2, 1958.

No. 3 — *Prohibiting experiments in Outer Space.*

The Ad Hoc committee did not mention this problem, although as we all know the problem is so important to the future of mankind.

For several years there has been agitation among the leading powers to discontinue nuclear experiments because of the danger of fallout. What are the dangers that may be anticipated from experimentation in Outer Space? How will contamination come to the earth as a result of such activity in space? Shall we wait until a million people have been destroyed before undertaking to act on this question?

In the Antarctic Treaty signed December 1, 1959, Article V prohibits any nuclear explosions in Antarctica and the disposal there of radioactive waste material. The fate of mankind may be dependent on a similar agreement with regards to Outer Space

No. 4 — *Providing for the identification and registration of space vehicles and coordination of launchings.*

The Ad Hoc Committee agreed that since the number of space vehicles will progressively increase and in course of time become very large, suitable means for identifying space vehicles must be provided. The procedures for doing this are technical but can be readily agreed upon.

Furthermore, agreement can be reached on coordination of launchings so as to obviate dangers of interference as a result of lack of coordination.

No. 5 — *Making provisions for re-entry and landing of space vehicles.*

The Ad Hoc Committee recognized that problems of re—entry and of landing of space vehicles will exist with respect to unmanned vehicles and later with respect to manned vehicles of exploration and that through accident or mistake such vehicles may land in places other than intended. The Committee, therefore, recommended the conclusion of multi — lateral agreements concerning re-entry and landing. This matter presents problems of direct and immediate concern to all humanity. The problem may seem more acute with the unmanned space vehicles than with manned vehicles of exploration, and later on of transportation. It is stated that at several airports in the United States there is a plane leaving or arriving practically every minute. How much more complicated will air transportation become if the problems of re—entry and landing of space vehicles are not brought into some international agreement which will attempt to afford maximum protection to the public. Morever, there must be agreement among the nations as to disposition or redelivery of space vehicles which may land on territory of a nation other than that of its origin.

No. 6 — *Providing for allocation and control of radio frequencies.*

The Ad Hoc Committee recognized that there are stringent technical limits on the availability of radio frequencies of communications and that the development of space vehicles will pose new demands so that international allocation of frequencies is imperative. The allocation of radio frequencies has been discussed at great length by numerous writers. It has been shown that satellites have already interfered with radio communications, instrument calibrations and aircraft navigation. Proper allocation is clearly another matter to be properly included in an International Code.

No. 7 — *Providing for avoiding of interference with aircraft by space vehicles and also possibly by space vehicles with other space vehicles.*

The Ad Hoc Committee recognized that problems will arise with regard to the prevention of physical interference between space vehicles, such as rockets, and conventional aircraft, and that governments should give early attention to this problem. Bearing in mind the great number of accidents occurring in aviation, the number of collisions, the greater number of near misses, how much greater will be the danger when missiles and satellites are launched in areas traversed by aircraft and returned to such congested areas. Suppose a jet airliner flying over an ocean is struck by a rocket which has gone out of control. Certainly, prevention of physical interference is a vital matter which should be included in an International Code regulating Outer Space.

No. 8 — *Establishing principles of liability for personal injuries or death or property damage caused by space vehicles.*

The Ad Hoc Committee included for future international agreement the matter of liability for injury or damage caused by space vehicles. Such agreement is needed now. There will be great danger to people and to property not only in the launching of space vehicles, but in the attempted return — a much more delicate operation. It is possible that hosts of people may be injured or killed and vast amounts of property damaged. Suppose a rocket went out of control and landed in New York or Moscow or any other place and destroyed thousands of lives and millions of dollars of property. A sovereign nation is immune from liability unless it has waived its immunity. There must be agreement in advance for such waiver or the injuries will go uncompensated. If agreement waiving immunity is made, there must also be agreement on how liability is to be predicted. The information concerning the structure, launching, operation and control of space aircraft is within the peculiar knowledge of those in a nation charged with that work. Such information is generally secret. The ordinary citizen or even a complaining nation would not be in a position to prove fault or

negligence on the part of the nation launching the space vehicle which caused the damage. This poses the question whether damage should be compensable without regard to fault or on the basis of proving negligence and, if the latter, whether there should be any presumption or inference of negligence. There are also questions as to what shall be the limits of liability, as to whether the injured person or his government shall make the claim, and what court or tribunal shall have jurisdiction. All these matters can readily be decided and should be determined by international agreement.

No. 9 — *Providing for arbitration of all disputes by an agency, court or tribunal designated in the proposed code or by the United Nations.*

In order that all disputes may be settled peaceably and in order to establish in advance the tribunal having jurisdiction, provision might be made in the proposed code for arbitration of all disputes by some agency, court or tribunal to be designated in such code or by the United Nations.

No. 10 — *Providing some method of insurance to compensate for damages for injuries, death and property damage.*

Since space exploration, exploitation and use involves the hazards of injury to large numbers of people and vast amounts of property it is my suggestion that some provision be made for proper indemnification by insurance. By this means funds can be supplied for the benefit of all. Insurance would eliminate unwillingness on the part of any particular nation to compensate the injured people of another nation and tend to eliminate strife between nations. There should be a national insurance program in each particular country coordinated with an international insurance program which would control either the direct international fund or the arrangements for contributing to national funds for payment of monetary damages of an agreed and stipulated amount to the victims of the hazards of Outer Space, missiles, rockets, satellites, fallouts, and the like. The method of payment, premium computation, actuarial data, computation of loss ratios, all could be set forth in such a program. Provision for this protection could be set forth in the use of Outer Space and bring to such a Code the moral support and public opinion of the world.

No. 11 — *Providing for policing of Outer Space.*

This matter has not been directly discussed by the Ad Hoc Committee. Yet it is felt that it is extremely important. Such policing could be accomplished through tracking devices, ground inspections, exchange of information, and systems set up by experts to prevent evasions. Were two vehicles to collide in Outer Space resulting in fragmentation going through the great barrier of irradiation and striking a crowded city, this would, according to the opinion of some experts, deal death to a greater degree than a concentrated attack by gunfire. The questions of what protection, warning and

system would provide the necessary security and safeguards, should also be decided in an International Code.

No. 12 — *Providing for the protection of the public health and safety of the peoples of the earth.*

The Ad Hoc Committee considered as secondary the matter of safeguards against contamination of Outer Space or from Outer Space, and agreed that further study of this matter should be encouraged. I believe that we should not wait until vast numbers of people have been destroyed before undertaking to act on this question. Just as nuclear experiments in space should be banned, so should measures be taken to prevent contamination of Outer Space and also contamination of the earth from Outer Space. International agreement and coordinated action on this last suggested matter is as important — and may be even more crucial — than any of the previously mentioned matters.

Although there will be difficulty in concluding an International Treaty on Outer Space the need for such a Treaty is so great that every effort should be made.

Sir Leslie Knox Munro, President of the Twelfth Session of the General Assembly of the United Nations, realizing that conflicting views existed and that the Soviet Union had abstained from the work of the Ad Hoc Committee on Space, characterized the Soviet boycott as lamentable, but refused to be unduly disturbed and commented that a middle way would be found, that some general principle would be enunciated and that an international agency for the use of Outer Space for peaceful purposes would eventually be established. It is hoped that this middle way will be found soon, and not too late. The Horse and Buggy Age would await the development of decisions based on actual cases without any harm to the community and so could the Automobile Age. The Airplane Age moved faster and protection was sought against the foreseeable damage resulting from the absence of law by the adoption of numerous international conventions for dealing with conventional aircraft.

The Age of Rocketry is moving ahead at such a speed, hardly comprehensible, that we must take steps now to guard against foreseeable dangers and disputes. We cannot wait any longer for slowly evolving case law to determine standards of conduct. We must anticipate and take steps to meet the anticipated crises before they develop.

Arguments are made against an International Code on Outer Space to the effect that such a code would be breached.

There are laws against murder. Murders are still being committed. Does this mean that the laws against murder should be repealed? There are many cases of breach of contract. The fact that tremendous litigation ensues, does not mean that the laws relating to contracts should be abolished. The trend in modern times has definitely been in the direction of inter-

national cooperation. This has been demanded by the peoples of the earth. Never before has fear seized the masses of humanity as it has today, since the manifestation of the technological and scientific skills demonstrated by the hitting of the moon by rocket and by the later achievement of the rocket that passed into orbit around the moon and then went into orbit around the earth. Moreover, the announcement by the Soviet Union that their rockets will be turned over to the military has not tended to allay any fears.

The convention to outlaw Genocide involved a surrender of some rights of sovereignty by the nations which became parties thereto. Approximately 66 nations have outlawed this international crime. Since the Soviet Union signed this convention, despite the failure of two of the leading western powers to do so, and since the Soviet Union also has signed the Antarctic Treaty, it is reasonable to hope that the Soviet Union would enter into an agreement relating to the international regulation of use of Outer Space, and would abide by such an agreement. No one can give assurance against a breach. However, the massing of public opinion behind those nations seeking to avoid conflict through international law would be a great factor working against any breach. In recent years it has been shown that the Soviet Union has placed great reliance on public opinion and given much time and effort to get public opinion to support its views and conduct in connection with the alleged purpose of achieving peace.

The trend toward international co-operation has also been demonstrated by the co-operation of the nations in the International Geophysical Year. The importance of this is recognized by all. Scientists of 66 nations devoted themselves to a coordinated observation and study of problems, ranging from Outer Space down to the unfathomed depths of the oceans. Revelations were made by both the United States and the Soviet Union concerning the launching of satellites. There was coordinated effort concerning studies of fallout and nuclear radiation. The IGY program in its proposed study of Outer Space devoted itself to the development of regulations concerning the launching of satellites which would require every launching country to submit to the World Data Centers information concerning launching sites, firing schedules, announcements of launchings and tracking information. During these activities, the Soviet Union on October 4, 1957 announced the launching of Sputnik I. Thus, practically at the very commencement of the space age, at least minimum essential rules and regulations were in existence to furnish some degree of co-operation and coordination.

Furthermore, an advance towards co-operation has been indicated by the Soviet Union's proposal in the United Nations on October 6, 1959 that a conference of scientists be held next year to discuss the problems of space, and be modeled on the conferences on peaceful uses of atomic energy held at Geneva in 1955 and 1958.

Thus, there has been co-operation and it appears that the nations of the world are impressed with the necessity of further co-operation, even

though it means the surrender of some rights of sovereignty.

The situation is now acute. Manned space ships will soon take off. Planets will be visited by man, and may even be settled. Bitter disputes may ensue if one nation or another should claim sovereignty over the moon or any other celestial body because of flag planting or landing of man thereon.

The matters of agreement suggested in this speech are matters that can be very readily encompassed in a preliminary, skeletal international code, free from rigidity and flexible enough to meet future events, without impairing to too great an extent the individual sovereignty of nation-states and at the same time affording to such nations the added strength and advantages of world-states.

Unfortunately, man has always sought to destroy his fellowman and has visited upon his fellowman the most horrible suffering and tortures. Nations have done the same to other nations. Whole races of people have been destroyed for no reason other than that they belonged to races other than those of the conquering madmen. The explanation may be over-simplified, but it is found in the fact that reason is not always the master of emotion, and that too often emotion is the master of reason. The result has been world crime and chaos for suffering humanity.

Of course, there will be difficulties in solving the procedural and substantive problems involved in the creation of an International Code on Outer Space. There will be conflicting questions of sovereignty. There will be individuals in a position to influence opinion and events who may consider the problems solely from nationalistic viewpoints. Nevertheless, we must realize that we must pass from the era of the nation-state to the era of the world-state. As members of the community of world-state we must settle our differences peaceably and without resort to combat.

In this regard I believe it is most fitting to quote what was said by former President Harry S. Truman in Kansas City, after he had come east from San Francisco following the birth of the United Nations. He said:

> "It would be just as easy for nations to get along in a republic of the world as it is for you to get along in the republic of the United States. Now when Kansas and Colorado have a quarrel over the water in the Arkansas River, they don't call out the National Guard in each state and go to war over it. They bring a suit in the Supreme Court of the United States and abide by the decision. There isn't a reason in the world why we cannot do that internationally."

There is no perfect solution, because no system invented by imperfect man can ever be perfect. However, the creation of an International Space Law will provide the surest means of achieving the goal of all reasonable human beings — world peace.

In chaos there is injustice! In law and order there is justice! In justice there is peace!