

eral Assembly are, of course, the obligations created by the agreement of the Members to abide by the general purposes and principles proclaimed in the Charter, such as the principle of the self-determination of peoples, respect for human rights and fundamental freedoms, and the duty to refrain from the use of force. Here we are dealing with such broad obligations as to make it difficult in many cases to pass upon the conduct of states which hesitate to take sides between the two contending Powers in the "cold war" that has been in progress for the past eight years or more. The term "moral obligation" might be used to describe the conduct called for in such cases where there is no judicial procedure established to give judgment with respect to the observance of the rule, so that the decision becomes a matter for the discretion of the individual state; and the claim of one party that there is a moral obligation to take sides may in good faith be rejected by the other party. The distinction between Communist imperialism and democratic self-government is clear enough to the Western world, but not so clear to many of the Middle and Far Eastern states. Communism, as the West sees it, is condemned not because of its economic and social objectives in themselves, but because of its denial of human liberty, because of its methods of terrorism and intimidation, because it seeks to attain its objectives by measures which destroy moral values of far greater importance than any economic gain could justify. Imperialist Communism denies the right of self-determination, the basic condition of the sovereign equality which is one of the first principles of membership in the United Nations.

To many of the peoples of the Middle and Far East, Communism appears in a somewhat different guise. To the masses who have never known free government the promise of a higher standard of living is sufficiently alluring to offset the methods by which it is brought about. The Western concept of individual initiative and of controlled capitalism does not fit in with their experience of colonial or semi-colonial government. In most cases their economic need is sufficiently great to risk their political future. When, therefore, the Western world asks them, "Are you with us or are you against us in this 'cold war'?", the reply might be that the line between Communism and democracy is not so clearly drawn as to make the choice a simple one between black and white.

The political situation within the United Nations appears to be changing rapidly, so that observations with respect to the political aspects of "neutrality" may be out of date before publication. But the legal aspects of the problem continue to be of importance, involving as they do questions of interpretation of the Charter, particularly in respect to the obligations created for the Members by recommendations of the General Assembly.

C. G. FENWICK

ARTIFICIAL SATELLITES: A MODEST PROPOSAL

Announcements in 1955 by officials of the United States and the Soviet Union of plans to launch artificial satellites into outer space for the purpose of scientific investigation during the International Geophysical

Year 1957-1958 have given added impetus to the already considerable discussion and speculation concerning the legal status of the outer space expanses.¹ More recently, a story in the *New York Times*² reports new scientific findings that it may now be possible to construct satellites which can safely survive the return trip through the earth's atmosphere. This development perhaps calls for some further consideration of some of the rather complex problems posed by man's new ventures into outer space. Until the appearance of the recently reported findings, it had been widely assumed that the International Geophysical Year satellites would never return intact to the earth. It was thought that a satellite, which sooner or later must begin to spiral toward the earth's surface, would heat up and burn like a meteor when encountering the denser atmosphere surrounding the earth. Now, however, it appears that the analogy to meteors was not wholly accurate and that satellites can be constructed which will withstand the heating effect of impact with the denser atmosphere closer to the earth's surface.

It hardly requires mention that the satellite program will most probably make highly significant contributions to the world's scientific knowledge. The major emphasis of the President's announcement of the satellite program as part of the United States' participation in the International Geophysical Year was upon the opportunities which would accrue to scientists of all nations throughout the world. Among the major contributions to science expected from the satellite programs are data relating to or derived from: solar radiation in the ultraviolet and X-ray regions; electron density measurements; pressure, density and composition of the atmosphere; cosmic ray measurements; observations of meteors; measurements of the variation of the earth's magnetic field; atmospheric drag measurements; geodetic measurements, etc.³

Prior to the recent development concerning the possibility of constructing a recoverable satellite, it had been assumed in most discussions that nothing in conventional or customary international law would be infringed by the satellite program.⁴ With respect to outer space it seems clear that there are no existing relevant conventional prescriptions.⁵ The principal conventions relating to airspace were not designed to regulate

¹ The U. S. announcement was made July 29, 1955. For text see 33 State Dept. Bulletin 218 (1955) and *New York Times*, July 30, 1955. First indication of the Soviets' intent to launch a satellite came on April 15, 1955, with the report that a committee of Soviet scientists had been established to pursue this objective. More recently, in September, 1956, the U.S.S.R. presented a brief report of its intent to the Special Committee for the International Geophysical Year at a meeting in Barcelona and announced that its detailed program of participation in the satellite phase of the International Geophysical Year would be presented later.

² *New York Times*, Dec. 2, 1956, Sec. E, p. 11, col. 7.

³ Some indication of the scientific purposes to be served can be gathered from the various reports in the *New York Times*, July 30, 1955. And see Van Allen (ed.), *Scientific Uses of Earth Satellites* (1956). ⁴ 1956 A.S.I.L. Proceedings 84-115.

⁵ Jenks, "International Law and Activities in Space," 5 *Int. and Comp. L. Q.* 99 (1956); Cooper, "Legal Problems of Upper Space," 1956 A.S.I.L. Proceedings 84; Schachter, "Who Owns the Universe?," *Collier's*, March 22, 1952, p. 36.

the problems of outer space. Neither the major purposes nor the detailed provisions of these existing agreements were, or can be, expected to deal with this new area of concern. As Mr. Wilfred Jenks has pointed out, the projection of territorial sovereignty upward, which is the basis of conventional law concerning airspace, has no reality when applied to outer space because basic astronomical facts are inconsistent with any such notion.⁶

With regard to outer space and customary international law, both Mr. Jenks, in a general way, and Professor Cooper, more specifically, have expressed the thought that the principle of the freedom of the seas appears to be the most relevant analogy. Accepting this, it would appear that entry of satellites into, and orbiting in, regions of outer space beyond the effective control of any state would not infringe upon any existing principle of customary international law and would positively be permitted under the principle most closely analogous.

Although the projection of satellites into outer space does not appear to create any real legal difficulties if launching sites are properly located, the new development regarding the return of the satellites into traditional airspace raises some problems which had not been thought to be of immediate concern. No detailed enumeration of the possible legal difficulties is necessary at this point. For a recoverable satellite it suffices to mention that there is, of course, the possibility of unauthorized entry into traditional airspace of underlying states as well as of damage, and apprehension of damage, to structures on the earth.⁷

Whatever the degree of threat descending satellites may actually pose, it would seem to be reasonably apparent that the state upon whose territory an object was about to fall would be authorized to take whatever measures thought necessary to protect itself from injury. This presumably would include destruction of a satellite at whatever height this might be possible. It would seem difficult to proscribe such action since, at the present stage of technology, the state could not know whether or not the descending object was harmless, and even normal prudence might suggest that the worst be assumed. The most obvious support for the action taken by the underlying state is in the doctrine of self-defense. It would seem equally clear that the non-consenting, underlying state would have ample grounds for protest against a violation of its territorial airspace. Further, in the

⁶ Jenks (note 5 *supra*) 103-104.

⁷ See Art. 8 of the International Civil Aviation Convention, regarding pilotless aircraft, and the Rome Convention of 1952 on Aircraft Damage to Persons and Property on the Surface. Some manifestation of the type of difficulty which may arise in the future occurred during the writing of this editorial when a guided missile, the Snark, launched by the U. S. Air Force in Florida, failed to respond to its electronic control and presumably crashed in the jungle in Brazil. This type of missile does not rise into outer space. The Snark resembles an un-manned "air-breathing" aircraft. See *New York Times*, Dec. 8, 1956, p. 1, col. 1. In a later report it was stated that the "runaway guided missile" created a "sensation" in Brazil. It was indicated that the episode might have effects on negotiations between the two countries. *New York Times*, Dec. 9, 1956, p. 18, col. 1.

event of surface damage the underlying state would have recourse to traditional legal principles designed to secure protection against direct or accidental injury by other states.

In this posture of probable developments and legal prescriptions, it might be appropriate for specialists in this area to devote some exploratory thought to measures which might be taken to allay fears that peaceful satellites might become harmful objects. An alternative which might be considered would be for each state about to launch such a satellite to register its intent to do so with an international agency, to file a flight plan with such agency, and to file a description of the satellite's load, weight, size, etc. It would of course be impractical and not necessary to the proposal to include details of the launching mechanism, but complete information about the load could be registered and this could be done with respect to both recoverable and non-recoverable satellites. Beyond registration it might even be desirable as a guarantee of good faith to suggest inspection by the international agency to assure that the load conforms to the description filed. A procedure of inspection need not, of course, include submission to prior approval.

It is suggested that the proposal so briefly indicated here is one that any country planning to launch a satellite might appropriately take into consideration.⁸ In determining whether to advance or to adhere to such a proposal, a country might of course reasonably take into account the willingness of other countries launching satellites to adopt the recommended measures of registration and inspection.

MYRES S. McDOUGAL

THE CHANGING LAW OF NATIONS

I

It has often been stated¹ that international law, although primitive as to structure and contents, has shown a remarkable stability, as compared with more advanced municipal legal orders. From its beginnings until

⁸ Such measures might allay apprehension of harm in a manner comparable to the design of the "open skies" proposal. See Note, "The Aerial Inspection Plan and Air Space Sovereignty," 24 *Geo. Wash. L. Rev.* 565 (1956).

Proposals have been made to ban testing of the intercontinental ballistic missile. Testimony of Senator Flanders in Hearings, Subcommittee on Disarmament, Committee on Foreign Relations, 84th Cong., 2d Sess., p. 81 (March 7, 1956); Leghorn, "Controlling the Nuclear Threat in the Second Atomic Decade," 12 *Bulletin of Atomic Scientists* 189, 195 (1956); Inglis, "National Security with the Arms Race Limited," *ibid.* 196. A news story in the *Washington Post*, Dec. 10, 1956, stated that "administration sources disclosed" that "the White House had approved a new international disarmament plan which proposes that the use of long-range guided missiles for war be outlawed."

For suggestions with respect to international control of satellites during the International Geophysical Year, see Leghorn, *loc. cit.* 195, and Romulo, "Alphabet of the Apocalypse," 39 *Saturday Review* 26, 51 (Dec. 8, 1956).

¹ Cf. Max Huber, "Die Wandlungen des Völkerrechts," 52 *Die Friedens-Warte* 297-310 (1955).