The thoughts and opinions expressed are those of the authors and not necessarily of the U.S. government, the U.S. Department of the Navy or the Naval War College.
CHAPTER VII

CONCLUSIONS

The emergence of the international law of outer space brought with it a flurry of doctrinal excitement. Now, however, despite the novelty of law and legal institutions for outer space, it is rapidly becoming evident that space relationships are subject to the traditional principles, standards, and rules generally available to international law.

For the moment, the physical conquest of outer space has outstripped man's views of his relations with others in and affecting space. It is as if the human race, for an eon of time, instead of inhabiting the surface of the earth, had lain like the fish at the bottom of a vast sea. But now, owing to the changes produced by tempestuous science and technology, man has moved into an area even beyond the atmosphere. He has extended his reach into the uncharted limits of a space ocean containing celestial bodies in the form of planetary islands. The resulting complexities rival such concepts as the light-year, with its problems of figuration, comparison, and human appreciation. One is struck by the awesomeness of these heterogeneous factors, which, while apparently verifiable, nonetheless do not seem quite real.

The seemingly unfathomable facts of the reality of space have in no wise inhibited the emergence of an international law of outer space. It is a fact that the international law of outer space began to develop from the very moment the first artificial satellite was placed in orbit. Between that date and this, man has not been at a loss to explain his relationship to outer space and his interrelationships with men of other nationalities, states, and international organizations. The flood of literature has pointed to substantial configurations of consensus—a commonality of legal viewpoint which appears to be as amazing as it was unanticipated.

Yet, one should not forget the all-abiding permanence of change. Mankind is still in the "Model T" phase of his use and exploitation of outer space. With the ever-changing and ever-enlarging spiral of scientific and technological achievement, it may well be that when one looks back from the vantage point of the future, the present state of the law will be seen as singularly provisional.
For example, the space vehicles of today’s world have limitations resulting from their common characteristics. Their maneuverability is restricted because of the desirability to lock them onto a pathway employing the kinetic energy of their own motion. One result is that they are presently unable to avoid overflying national boundaries. However, it is entirely within the range of probability that within the proximate future, space vehicles will be given much greater maneuverability in order to complete rendezvous missions, engage in station keeping, and participate in the transfer of men and materials in outer space and on celestial bodies. Even then it is unlikely that they will be able to avoid transiting in close proximity above scores of subjacent states. From all indications it appears to be exceedingly probable that space vehicles will soon be capable of moving for thousands of miles at an altitude of approximately fifty statute miles above the surface of the earth.

However, one should not suggest that the substance of international space law is influenced only by scientific and technological considerations. Important as the creative tempo of the times may be, outer space is essentially a man-oriented area. Consequently, all of the elements of the social complex (which are, by definition, man-oriented) will have their impact upon the law of outer space—just as they have had and will continue to have their undeniable influence upon all relational situations.

The methodology of the international law of outer space has not substantially departed from traditional guidelines. Such basic sources as general customary international law, treaties, and general principles of law have been relied upon in the development of space law. Also, of very substantial importance have been the unanimously adopted Resolutions, sometimes in the form of a Declaration, of the General Assembly of the United Nations. They constitute a “soft law,” in contrast to the “hard law” of duly ratified and promulgated international conventions. Resource states, as well as other major states, have acknowledged that the terms of such United Nations Resolutions must be “respected” and this view has been generally upheld by all states. Further, and of considerable importance, it is now quite possible to maintain that much of the contents of such Resolutions are no longer to be considered as creative of international space law principles, but instead merely declaratory of operative principles based upon existing custom. One difficulty in this connection, but not an insuperable one, is that customary international law is most readily evidenced by the presence of a claim of right to perform an affirmative act. The existence of such affirmative acts is readily measured by empirical processes. It is more
difficult to determine the presence of customary rights where the conduct to be measured is negative in context, that is, where no positive and affirmatively ongoing action is observable. Customary international law has generally sanctioned affirmative conduct, but has had a limited utility as a source of law where there has been a lack of observable conduct. In such a situation, one can debate whether the international practice of inaction has resulted in a customary rule of law prohibiting the institution of the refrained action. There does not appear to be any substantial reason why the practice of inaction or nonaction in the case of wilfully refraining from placing weapons of mass-destruction capability into outer space should not be regarded as subject to the processes of customary law. Obviously, express, and therefore more tangible, forms of law are to be preferred, such as U.N. Resolutions or Declarations and written international agreements.

International law, and with it the international law of outer space, employs creative processes somewhat different from those observed in municipal systems. The principal difference is that a nation-state possesses centralized control over the law-creating processes as reflected in its legislative, executive, judicial, and administrative institutions. Principles, standards, and rules of municipal law are, however, in the main, little different from those characteristic of international law.

Any legal principle is a starting point for legal reasoning; it is properly broad and understandably vague. Any legal rule delineates specific consequences which will follow either a breach of the rule or compliance with it. In its most typical situation, a rule—as in a criminal law context—provides that if one murders another, specific sanctions will result. Any standard, on the other hand, is the occupant of a middle ground—not overly broad nor vague; neither severely precise nor widely ranging.

The international law of outer space already consists of a number of substantial and valid principles. It is in search of rules, which it will surely receive, especially through the process of express international agreements. It is also endeavoring to prove its entitlement to its own international legal standards. In these areas, it has been able to borrow substantially from the corpus of existing international law.

International legal principles, like other legal principles when seen from the point of view of their creative qualities and forward-looking responsibilities, need not draw unnecessarily fine distinction between political and legal content. Indeed, the singular quality of undifferentiated vagueness of outline and blurring of characteristics
is absolutely essential to the utility of this concept. Thus, in the forum of principles, policy makers may rely upon what in their considered judgment is regarded as a good, or reasonable, or acceptable outcome. They may, as in fact they do, embark upon the process of decision through deduction. This process is of substantial, although not of exclusive, significance in an area as new as that of outer space activities. It is of importance because the demands for law are somewhat broader than man's actual experiences with the situations which he wishes to render subject to legal control.

The other side of the coin is the inductive process. Here man is able to gather together many instances of good, reasonable, or acceptable conduct and to draw broad generalizations from a myriad of individual experiences. In practice, this process is more readily available to municipal law, through reference to the specific decisions of municipal courts, than to international law with its relatively infrequent use of the judicial process. International law has been able to compensate through the development of its own key processes.

Reference by the decision maker to both the deductive and inductive processes is valid, and neither has preemptive appeal to the exclusion of the other. However, with the development of operational space situations, an apparent need for adequate legal guidance has arisen. This has resulted in close attention to clearly observable customary practices and to contributions of the United Nations. In each there have been joined national and international claims to engage in unrestricted space transit, provided the activities and the uses of space vehicles were for peaceful purposes.

One of the themes of this treatise has been that a customary international law of outer space has been developing concurrently with the expression of principles by the United Nations. However, until this point is carefully weighed and fully accepted by informed international lawyers—and the procedures for working customary international law into the fabric of that law are often slow and laborious—it may be easier, but by no means more correct, to rely upon the authority of principles and deductive processes.

Resolutions 1721 (XVI) and 1962 (XVIII) of the General Assembly of the United Nations were adopted unanimously in 1961 and 1963. They proclaimed that certain general principles apply to outer space and to celestial bodies. Resolution 1721, recognizing the common interest of mankind in furthering the peaceful uses of outer space and believing that the exploration and use of outer space should be only for the betterment of mankind and to the benefit of
states, irrespective of the stage of their economic and scientific development, commended the following principles to states:

(1) international law is applicable to outer space and celestial bodies;

(2) the Charter of the United Nations is applicable to outer space and celestial bodies;

(3) such areas are free for exploration and use by all states in conformity with international law; and

(4) such areas are not subject to national appropriation.

Resolution 1962 also recognized the common interest of mankind in the exploration and use of outer space for peaceful purposes. This Resolution restated, with somewhat more particularity, the foregoing principles. In assessing the significance of these unanimously adopted principles, it should be borne in mind that they were the product of difficult and discerning international negotiations extending over a five-year period. Their legislative history does not permit them to be disregarded.

Resolution 1962 also contains additional principles for outer space. These principles, which relate to subjects which more readily partake of the quality of legal rules, will unquestionably assume, before too long, the legal form of express international agreements and conventions. Included in this category of legal subjects were the provisions that:

(1) states bear international responsibility for national activities in outer space;

(2) such activities may be conducted by international organizations and by nongovernmental entities;

(3) the peaceful exploration and use of outer space by a state shall be guided by the principles of cooperation and mutual assistance so that due regard will be taken for the corresponding interests of other states, particularly when related to space activities or experiments which would cause potentially harmful interference with the peaceful exploration and use of outer space by other states;

(4) the state on whose registry an object launched into outer space is carried shall retain jurisdiction and control over such object and personnel thereon while in outer space, and when such object is found in another state, it is to be returned upon the submission of identifying data by the launching state;

(5) international liability exists on the part of each state which launches or procures the launching of an object into outer
space, and on the part of each state from whose territory or facility an object is launched, under certain conditions when harm results; and

(6) states have a duty to render assistance to astronauts in the event of accident, distress, or emergency landing, with the provision that such persons shall be safely and promptly returned to the state of registry of the space vehicle.

Moving from these fundamental principles to legal standards, it must be noted that this concept envisages the application of practical experience and suitable logic to the principles and rules of the law. By reference to legal standards, the international law of outer space takes into account a process for assuring the security needs of nations and of the international community. Further, reference to standards makes possible the development of a regime in outer space in which there may be a systematic and, at least, a minimal amount of public order.

The means to effect national security in this environment will naturally involve several operational procedures and policy determinations. Defensive techniques, employed in the following sequence and in the appropriate context, being not prohibited by the international law of outer space are, consequently, permitted: the employment of an early warning system, including the process of detection, tracking, monitoring, and inspection. Additionally, there may be employed detailed classification procedures leading ultimately perhaps to interception, neutralization, interdiction, or destruction of specifically undesirable and objectionable space objects.

It is the function of the legal standard to assist in determining what constitutes the specifically undesirable and objectionable vehicle or event. This in turn requires a timely factual determination of the existence of a real or significant threat to a nation's security. Such a threat may also be directed toward international peace and security. In measuring the nature of such threats, through the application of human judgment to any actual or anticipated situation, the decision maker is obliged to take into account the express or verbally communicated position of the actual or probable adversary. The decision maker is also obliged to consider the implicit or contextual facts which are equally subject to empirical observation and rational analysis. In such a process, all reasonable implications, both express and inferred, must be taken into account.

Finally, there is now, and it may be predicted that there will continue to be, a legal order for outer space and celestial bodies. This treatise has demonstrated that there is a firm expectation on the
part of mankind, as reflected in valid decisions reached in impres-
sive national and international forums, that present and future space
relations must give due consideration to the fundamental needs of
the members of the community of nations. Decision makers in this
emerging area of international law, as in other areas of interna-
tional law, need to be guided by two major considerations: (1) They
must build into the corpus of such law the readily perceived ad-
vantages of mutual benefit flowing from common compliance, and
(2) They must also be equally aware of the detriments flowing from
noncompliance with reasonably held expectations. Through under-
standing these fundamental concepts, and by conforming to them,
there can be an acceptable international legal order for outer space.