

ESSAY

RE-EXAMINING OUR CONSTITUTIONAL HERITAGE: A DECLARATION OF FIRST PRINCIPLES FOR THE GOVERNANCE OF OUTER SPACE SOCIETIES[†]

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In order to contribute to the bicentennial celebration of the United States Constitution, the Director of the Smithsonian Institution's National Air and Space Museum decided in 1985 that a project should be undertaken to determine which of the values and principles of the Constitution could, or indeed must, be applied to American citizens in outer space communities. The Steering Committee for the Project was made up of distinguished jurists, such as United States Supreme Court Justice William J. Brennan, Jr., legislators, such as Senator John H. Glenn and Congressman Don Fuqua, and notable members of the private sector, such as Walter Cronkite and Richard Dreyfuss. Forty other individuals were then invited to participate in the effort.

Two conferences were held at the National Air and Space Museum, one in December 1986 and one in November 1987. The conferees decided at the outset not to attempt to frame an actual constitution, an undertaking which would normally be reserved for a sovereign. They would instead examine the values and principles underlying the American constitutional heritage and formulate a "Declaration of First Principles for the Governance of Outer Space Societies." Both the document and the process of formulating it were intended as significant teaching tools to help focus the attention of Americans on their Federal Constitution during the year of the bicentennial celebration.

The Declaration of First Principles that ultimately emerged from the debates is a three-part document. The first part is a ringing preamble

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[†] The views contained in this essay are those of the author who participated in the two conferences which developed the Declaration of First Principles for the Governance of Outer Space Societies.

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embracing the reasons for the Declaration; the second is a reaffirmation of faith in fundamental human freedoms and the inalienable rights of individuals who live in space; and the third is an assertion that governance of and by space societies should reflect the will of the inhabitants.

DECLARATION OF FIRST PRINCIPLES FOR THE GOVERNANCE OF OUTER SPACE SOCIETIES

PREAMBLE

On the occasion of the Bicentennial of the Constitution of the United States of America and in commemoration and furtherance of its values we, the undersigned petitioners,

Bearing witness to the exploration and inevitable settlement of outer space;

Recognizing the universal longing for life, liberty, equality, peace and security;

Expressing our unshakable belief in the dignity of the individual;

Placing our trust in societies that guarantee their members full protection of law, due process and equal protection under the law;

Reaffirming our faith in fundamental freedoms;

Mindful, as were our nation's founders, of the self-evident truth that we are endowed by our Creator with certain inalienable rights;

Recognizing the responsibility of a government to protect the rights of the governed to exist and to evolve;

Do assert and declare in this petition the intrinsic value of a set of First Principles for the Governance of Outer Space Societies and, at the beginning of this third century of nationhood under our Constitution, resolutely urge all people of the United States of America to acknowledge, accept and apply such First Principles as hereinafter set forth.

ARTICLE 1

A. *The rule of law and the fundamental values embodied in the United States Constitution shall apply to all individuals living in outer space societies under United States jurisdiction.*

B. *Appropriate constraints upon and limitations of authority shall be defined so as to protect the personal freedom of each individual,*

such as the right to reasonable privacy, freedom from self incrimination, freedom from unreasonable intrusion, search and seizure, and freedom from cruel and unusual punishment.

C. Toward this end, the imperatives of community safety and individual survival within the unique environment of outer space shall be guaranteed in harmony with the exercise of such fundamental individual rights as freedom of speech, religion, association, assembly, contract, travel to, in and from outer space, media and communications, as well as the rights of petition, informed consent and private ownership of property.

D. The principles set forth here should not be construed to exclude any other such rights possessed by individuals.

ARTICLE II

A. Authority in outer space societies, exercised under principles of representative government appropriate to the circumstances and degree of community development, shall reflect the will of the people of those societies.

B. All petitions to the United States Government from outer space societies under its jurisdiction shall be accepted and receive prompt consideration.

C. The United States shall provide for an orderly and peaceful transition to self-governance by outer space societies under its jurisdiction at such times as their inhabitants shall manifest clearly a belief that such a transition is both necessary and appropriate.

D. In response to aggression, threats of aggression or hostile actions, outer space societies may provide for their common defense and for the maintenance of essential public order.

E. Outer space societies shall assume all rights and obligations set forth in treaties and international agreements, relevant to the activities of such societies, to which the United States is a party and which further freedom, peace and security.

F. The advancement of science and technology shall be encouraged in outer space societies for the benefit of all humanity.

G. Outer space societies shall protect from abuse the environment and natural resources of Earth and space.

Two basic issues were interwoven in the debates surrounding the production of the document: (1) what theories of natural law and their

attendant values are embraced by the United States Constitution, and to what extent they are applicable to human societies in space; and (2) how high technology necessary for human existence has either confirmed or compromised these theories and values.

The discussions included evaluations of the Virginia Declaration of Rights, adopted June 12, 1776, the July 4, 1776 Declaration of Independence of the United States, the 1789 French Declarations of the Rights of Man and of Citizens, President Roosevelt's Four Freedoms of speech, worship, and freedom from want and fear, and the United Nations Universal Declarations of Human Rights adopted by the General Assembly on December 10, 1948.

The conferees uniformly accepted natural law as the justification of every form of positive law, particularly the Bill of Rights of the United States Constitution. Inherent in the debate, particularly with regard to the existing role of governments in the human occupation of space, was the recognition that the natural law rights with which humans enter society, wherever it is located in the universe, cannot by any agreement be refused or otherwise denied. The conferees emphatically agreed that the natural worth and rights of an individual in a society must be premised upon the will of those who will live and work, and are responsible for formulating and implementing the institutions of social order within that society. This was considered particularly critical to space societies, whose members would be subjected, in their value-forming processes, to the modifying influences of total bio-technological integration for survival in a synthetic life-support environment alien to that in which values and cultural institutions have evolved over two hundred million years on the Earth's surface.

The two conferences raised infinitely more complex issues than they resolved and were intended only as templates for further study. Indeed, the document is as much a harsh and jarring dissonance of views as were the first drafts produced at the Constitutional Convention in Philadelphia. The strengths of the Declaration of First Principles derive in part from the provocative starting point it offers for new minds to develop a set of values and principles for outer space societies. Therein lies its educational and evolutionary potential.

With the passage of time and the accumulation of experience in all aspects of space existence, many of the premises and prejudices upon which discussions and decisions at the initial conferences were made will be modified or will vanish. The Constitution finally produced in Philadelphia had great potential for becoming irrelevant as American society and culture evolved, but it remains vital and organic two centuries later. We might anticipate that the initial efforts of a like nature for space societies undertaken at the National Air and Space Museum may survive

in some form to establish explicit, inalienable rights for our own sons and daughters living and working in space.

The following study is an attempt to frame briefly, section by section, the debate surrounding the formulation of the Declaration of First Principles for the Governance of Outer Space Societies, and to clarify the intent of the drafters. It makes no effort to critique the Declaration.

DECLARATION OF FIRST PRINCIPLES FOR THE GOVERNANCE OF OUTER SPACE SOCIETIES†

The title of the document was changed several times to reflect the intent of the drafters as accurately as possible. At first, the objective was to create a set of *demands* to present to the Executive branch of the United States Government. Gradually, the political and professional affiliation of some of the participants, as well as a deep concern about their legal status in formulating these *demands* for individual human rights and freedoms, caused the participants to temper their approach to one of submitting *recommendations* to the United States Government.

In order to emphasize the importance and sincerity of the undertaking, the conferees decided upon the word "declaration," not altogether consistent with a list of recommendations, to characterize the document. Further, the word "principles," rather than "rights," was used to imply mutually recognized values between space societies and the United States Government, values to be used to aid in structuring formal relationships between the two. Use of the word "first" to modify "principles" was to emphasize not only that these principles are fundamental to the governance of outer space societies, but that circumstances and increasing experience could well encourage recognition and adoption of additional principles.

Since the drafters were focusing primarily on the rights of individuals interacting socially in a long-duration or permanent habitat, the term "space societies," as opposed to "communities," was used to reflect the importance of people in a social context. The drafters were concerned mainly with people, and not the economic or engineering underpinnings of a space habitat community.

Finally, the word "outer" was inserted in the title to qualify "space societies," since the drafters did not wish to include in their deliberations the existing body of domestic and international aviation law relating to navigable airspace surrounding the planet. Nor did they wish to confront the numerous international proposals attempting to distinguish the

† The transcript of the proceedings of the two conferences is on file at the Smithsonian Institution in Washington, D.C.

transitional zone of airspace from near space and deep space.

PREAMBLE

On the occasion of the Bicentennial of the Constitution of the United States of America and in commemoration and furtherance of its values, we, the Undersigned Petitioners...

The preamble to the Declaration of First Principles for the Governance of Outer Space Societies was intended to be an introductory statement of the reasons for and purposes of the Declaration. The Declaration was partially intended to be in celebration of the bicentennial of the United States Constitution, but it was also to be a practical application and evolutionary furtherance of the basic values of the Natural Law theory underlying the Constitution for individuals and societies existing in a space environment.

The drafters engaged in much discussion and debate about how to identify themselves within the document. In the end, the drafters decided upon "we, the undersigned petitioners," as a reflection of the grass-roots petition format adopted in lieu of a stark list of confrontational demands: It was also hoped that the Declaration would be used as a pattern for further study and development in schools, universities, professional associations, and citizen groups throughout the country.

The non-specific identifier "we" also allows the document to be signed in its present form by any petitioner. At any given point, individuals and organizations, regardless of national origin or citizenship, could sign the petition, or some form of it, for presentation to any or all of the three branches of Government, or to the United Nations. The drafters believed that presentation to a private or public international organization such as the United Nations should be made by the United States government.

Bearing witness to the exploration and inevitable settlement of outer space.

The drafters agreed unanimously that an emphatic statement accepting the inevitability of space settlements and societies was critical in order to avoid any implication that the undertaking to formulate such a Declaration of First Principles rested on a doubtful foundation. As long as efforts are being pursued to establish long-duration and permanent settlements, then the First Principles, albeit with recognition that other principles may well be formulated with experience, must be an integral component of planning for those settlements.

Recognizing the universal longing for life, liberty, equality, peace and security.

The global perspective of the world's population has been increasing, partially through rapid communications due to advanced high technology and particularly through images of Earth sent back from space. The drafters believed that this global perspective necessitated an identification and strong recognition of basic requirements universally shared by all individuals, societies, and civilizations.

Use of the word "longing" was adopted to set the tone of driving hope shared by everyone amidst the suffocating mantle of fear of nuclear winters, massive starvation, and endless wars of repression. This phrase reflects the protracted anxiety and distress that finally forced the original thirteen colonies to declare, as a United States, their independence from Great Britain.

Expressing our unshakable belief in the dignity of the individual.

The word "dignity," ambiguous and not easily defined, was identified by the drafters as essential to characterizing the inherent worth of each individual as a human being. The human being was seen as an entity transcending his or her biological origins, who should be guaranteed as a birthright all the rights, freedoms, survival requirements, and reasonably fulfilled hopes that properly characterize that transcendence.

"Dignity" was recognized and firmly accepted by the drafters as a word used increasingly in the international community when formulating agreements and treaties embracing various aspects of universally shared individual human rights.

Placing our trust in societies that guarantee their members full protection of law, due process and equal protection under the law.

The drafters intensely debated the necessity for this principle. A few believed that it should be considered a well-established given, and that any reference to this "trust" might create a perception that there was a legitimate reason to doubt the emotional or legal efficacy of that trust. The majority of drafters, however, felt the need to revitalize society's faith in legal institutions which maintain universally shared values of individual rights and freedoms. They therefore decided to reaffirm the universality of this rule of law, reflected in the United States Constitution and subsequent case law, and the due process fairness by which it has been applied.

As much as for any other purpose, this provision was addressed to those societies that, despite having written constitutions or charters composed of truly democratic principles, fall short of the basis for that trust in law and its implementing due process.

Reaffirming our faith in fundamental freedoms.

The drafters wished to emphasize that certain fundamental freedoms belong to individuals simply as a birthright, and that they can neither be given nor taken away by individuals or by institutions. It was also a tacit recognition that not all fundamental freedoms finding their origins in natural law have yet been identified. The relative uniqueness of total biotechnological integration of humans for existence in space may necessitate the recognition of additional birthrights.

Mindful, as were our nation's founders, of the self-evident truth that we are endowed by our Creator with certain inalienable rights.

This provision is a harkening back to the struggle by our nation's founding fathers as they worked with similar thoughts and language for the Constitution, tying together God and inalienable rights. The drafters of the Declaration of First Principles were infinitely more tenuous in their support of the reference to "God," drifting in their discussions between the temporal and the spiritual as they tried to assure as broad and as ecumenical an appeal for the Declaration as possible. The majority, however, believed it was necessary at least to imply some spiritual order and direction, and adopted the word "Creator" as more universally appealing and less confrontational than the word "God."

Use of the word "mindful" in an historical context seemed to satisfy the drafters that they had properly temporized by not asserting a belief in a self-evident *divine* Creator as the source of certain inalienable rights possessed by all humans. The drafters were struggling to define this concept as it applies to the alien and synthetic life-support environment of a space habitat.

Recognizing the responsibility of a government to protect the rights of the governed to exist and to evolve.

Much discussion and debate should have surrounded the formulation of this provision. It did not, primarily because of the complex and disparate views in the international community regarding the ideological, political, and economic justifications for implementing space activities. But the drafters agreed that, despite the need for earthbound support,

humans must be allowed to exist and to evolve culturally in a rather unique biotechnological context in space. This consensus among the drafters also emphasized the nonexpendability of humans in a high-risk biotechnologically integrated life-support system. The real problem for the government is, therefore, to safeguard both human lives and an unfolding biotechnological evolution despite the element of high risk in outer space societies.

Do assert and declare in this petition the intrinsic value of a set of First Principles for the Governance of Outer Space Societies and, at the beginning of this third century of nationhood under our Constitution, resolutely urge all people of the United States of America to acknowledge, accept and apply such First Principles as hereinafter set forth.

The conclusion to the preamble was intended to be a ringing presentation to governmental authorities and the public at large, urging that serious consideration be given to the petition setting forth the First Principles. More important, however, was the resolute urging of an awareness of the intrinsic values underlying these Principles. It was understood that the Declaration would be a first attempt only. Its real value would be found in the willingness of a greater segment of Earth's civilizations to re-evaluate these Principles and to cultivate their evolution as an integral part of planning and accomplishing the long-duration and permanent human occupation of near and deep space.

Reference to "the beginning of this third century of nationhood under our Constitution" was consciously intended to be the final tribute to the Bicentennial commemorative activities that served as the original motivation for the declaration. The two Articles, although referring for guidance to the fundamental values embodied in the United States Constitution, were to be viewed as having a broadly ecumenical complexion and application to humankind living and working in established space societies.

ARTICLE I

A. *The rule of law and the fundamental values embodied in the United States Constitution shall apply to all individuals living in outer space societies under United States jurisdiction.*

Article I was intended by the drafters to focus attention on individual rights and freedoms, as opposed to the more collective rights and responsibilities attaching to a society and its institutionalized political values and constructs. Article I.A emphasizes the United States Constitution as only the starting point for identifying and developing the fundamental values and consequent positive rule of law for outer space societies. From there, the drafters felt that the values ultimately adopted should be drawn from any source available, even though they were intended for application only to members of space societies established under United States jurisdiction. Reference to this jurisdictional limitation was a final apology for what otherwise might be viewed as unjustified political chauvinism.

B. *Appropriate constraints upon and limitations of authority shall be defined so as to protect the personal freedom of each individual, such as the right to personal freedom of each individual, such as the right to reasonable privacy, freedom from self-incrimination, freedom from unreasonable intrusion, search and seizure, and freedom from cruel and unusual punishment.*

This principle was largely intended to recall the basic individual freedoms and rights enumerated in the Bill of Rights of the Constitution. They were considered to be the most familiar, identifiable and inalienable rights, regardless of the environment and circumstances in which they would be applied or expressed.

However, the language of this principle recognized that non-Earth norms necessary for surviving in an alien and synthetic life-support environment may well require some compromise of the purity of these inalienable rights and freedoms. Emphasis was placed upon the need, both on Earth and in outer space societies, for governing bodies to constrain their governing activities so as to ensure these rights and freedoms to the extent reasonably practicable, given the unusual environmental factors in which these principles would find expression.

The heightened awareness of the need for survival in outer space societies will place certain constraints on the exercise of individual freedoms. Privacy cannot be absolute in the confines of a space habitat. Freedom from self-incrimination must be balanced against the communication of time-critical data and individual judgments necessary for

survival of a micro-society in a hostile environment. Severe restrictions on available space and volume, and the highly integrated biotechnological nature of a space society, drastically compromise the freedom from unreasonable intrusion, search and seizure.

In spite of these environmental constraints on outer space societies, the rights and freedoms in Article I.B should not be considered expendable for the sake of mission success or raw expediency of habitat survival. The drafters recognized that, even more than in Earth-indigenous societies, a constant balancing of these rights and freedoms against the unavoidable dictates of societal survival was essential to ensure that they not be ignored or cavalierly dismissed. This recognition, articulated in Article I.B, laid the foundation for Article I.C, which emphasizes the balance between birthrights and survival dictates.

C. Toward this end, the imperatives of community safety and individual survival within the unique environment of outer space shall be guaranteed in harmony with the exercise of such fundamental individual rights as freedom of speech, religion, association, assembly, contract, travel to, in and from outer space, media communications, as well as the rights of petition, informed consent and private ownership of property.

With a caveat in Article I.B regarding appropriate constraints and limitations of authority, the drafters worked at illuminating and agreeing upon those individual rights they believed to be essential for successful social interactions in space. All the drafters agreed that the guarantee of whatever rights ultimately were included in the Declaration must be tempered by the recognition of the inherent environmental and technological constraints of space habitats. The various compromises imposed on the guarantee of individual rights by the survival requirements in outer space societies must be accepted.

Further, the conferees recognized that the uniquely engineered habitat and its life-support system would have a significant impact on human physiology, value-forming processes, judgments, and ultimate behavior patterns, and that this fact would very likely alter Earth-normative values and behavior. The degree of biological and technological integration necessary for survival in space societies may well give rise to new, and perhaps alien, individual values underlying as yet unrecognized fundamental rights and freedoms.

The probability of unique health laws and nutritional requirements were considered in the context of new fundamental individual rights. For example, the constitutionality of existing quarantine protocols for astronauts that involve seizure, detention, and incarceration were evaluated. These kinds of concerns were considered sufficiently critical

to establishing realistic social order principles in space habitats that the drafters emphasized the possibility of such new values in a separate principle, Article I.D.

Of the fundamental individual rights specified in Article I.C, three in particular were deemed especially necessary. The first is the right to "travel to, in and from outer space." The drafters were persuaded that the fundamental right of private citizens, including corporate entities, to travel into and return from outer space was essential to counteract an otherwise perceived tyranny of sovereign governments over the accessibility to, and use of, outer space. The growing commercial and military exploitation of space by governments, frequently in competition with the private sector, was regarded as being an intolerable usurpation and denial of social contract, as well as having a negative impact on the natural law right to private ownership of property.

Extensive and heated debate surrounded the issue of the ownership of private property as a fundamental right. Although many of the supportive arguments seemed to flow from political as well as purely economic considerations, the majority concluded that the right was so deeply ingrained in natural law theory and the economics of capitalism that it could not be ignored or excluded in the Declaration.

Finally, the drafters agreed unanimously that the right to *informed* consent must be included in the Declaration. In the current environment of intelligence gathering and its controlled dissemination to the public, it was believed that individuals in outer space societies must have access to all available information relevant to a decision-making process before a fair and proper consent to an activity or commitment could be given. The fundamental guarantee of "media and communications" was also considered by the drafters to be the imperative nexus to "informed consent," and was specifically included as an individual right.

D. The principles set forth here should not be construed to exclude any other such rights possessed by individuals.

The drafters wanted to help mute any potential criticism of ideological chauvinism in the drafting of the principles embodied in the Declaration. They therefore wished to recognize specifically that the unique environment of long-duration or permanent outer space societies could give rise to unforeseen fundamental individual human rights and freedoms which might be embraced in the theory of natural law. An increasing understanding of the cultural origins of societies on Earth could also provide us with such unforeseen fundamental individual rights. Hence, the list of fundamental rights and freedoms delineated in the Declaration was to be considered open-ended.

ARTICLE II

A. Authority in outer space societies, exercised under principles of representative government appropriate to the circumstances and degree of community development, shall reflect the will of the people of those societies.

This Article was intended to address the rights and responsibilities more appropriate to individuals functioning as a distinct, collective society. The emphasis in Article II.A is on the need for space societies to be allowed to formulate their own social order principles. These principles would express the will of individuals through a representative form of internal government, reflecting the degree of community development and capability for independent economic, political, and physical functioning.

B. All petitions to the United States Government from outer space societies under its jurisdiction shall be accepted and receive prompt consideration.

The drafters believed that, no matter how self-evident this principle may seem to those citizens who actively exercise the constitutional right to petition their Government, it bore repeating in this context. It was necessary to ensure that the United States government, its responsible departments and agencies, as well as influential political interests, not ignore the genuine needs of space societies, particularly when such needs are likely to be perceived accurately, if at all, only by those who are actually living in an outer space society. The conferees intended this principle to be a first step in attempting to avoid relationships of economic and military imperialism, colonialism, and revolutionary confrontation, and in recognizing the uniqueness, if not transcendence, of outer space society existence and culture.

C. The United States shall provide for an orderly and peaceful transition to self-governance by outer space societies under its jurisdiction at such time as their inhabitants shall manifest clearly a belief that such a transition is both necessary and appropriate.

It was hoped that this principle would set a cooperative tone for the relationship between space societies established under United States jurisdiction and their political, economic, and governmental underwriters. This ideal relationship would both recognize and encourage a natural evolution of pioneering societies toward varying degrees of self-sufficiency and independent governance with minimum conflict. The principle was also intended to emphasize the responsibility and

cooperative nature of underwriters, and their space societies as those societies evolve toward independent and full partnership, particularly in the international or transnational economic community.

Self-governance of space society was a theme frequently debated. The importance of this principle as a tool for avoiding economic imperialism and culturally destructive colonialism found its way into several of the principles relating to individual rights and freedoms, as well as societal rights and responsibilities. The language in Article II.C clearly implies the establishment of a formal structure that would facilitate a peaceful and orderly monitoring of evolving conditions in a space society. That structure would also sensitize both the governmental authorities and the society to genuine indicia of the need for transition, most likely in stages, to self-governance.

D. In response to aggression, threats of aggression, or hostile actions, outer space societies may provide for their common defense and for the maintenance of essential public order.

A long-standing sense, supported by language in the various space treaties, that somehow space was to be a transcendent refuge from the pervasive political-military activities of Earth's civilizations was missing in the debates of the drafters. In spite of current public debate about the Strategic Defense Initiative, discussion by the drafters of the concepts of common defense and essential public order with sanctioning power was surprisingly timid and lacking in advocacy for either side of the issue.

In the end, a pragmatic consensus was reached that humankind and their societies, regardless of their location, needed to rely on some form of sanctions to uphold the principles of social order and to maintain survivability. Emphasis in this principle was upon the temporizing and perhaps self-evident phrases "in response to," "common defense," and "essential public order."

E. Outer space societies shall assume all rights and obligations set forth in treaties and international agreements, relevant to the activities of such societies, to which the United States is a party and which further freedom, peace, and security.

The drafters of the Declaration were concerned about whether outer space societies established and functioning under broad or exclusive United States jurisdiction must abide by all relevant treaties and international agreements to which the United States is, or may become, a party. A certain ambivalence seemed to exist as to precisely what

elements of United States jurisdiction should be extended to outer space societies and to their inhabitants with differing national origins. The issue briefly arose as to whether the United States Constitution applied to all United States citizens for varying purposes wherever they are located, including circumstances in which multiple concurrent national jurisdictions apply. If so, then it might well be supposed that the Constitution applies automatically to all individuals in space existing under United States jurisdiction by virtue of direct supervision and relative physical control. If this is true, one can question the need for a separate Declaration of First Principles.

The answer to the drafters' query seemed to lie in part in the relative ambivalence of existing treaty law regarding national jurisdictional rights in space. Further, the Declaration was intended as a forceful petition to remind governmental authorities they were not free to disfranchise citizens of their constitutional rights for the simple objective of engineering and operational expediency.

It was determined that potential dissimilarities and inconsistencies in applying treaties and other forms of international agreements to outer space societies needed to be recognized. The qualifying phrase "relevant to the activities of such societies" was inserted to limit the applicability of "all rights and obligations set forth in international treaties and agreements ... to which the United States is a party." If any conflict or doubt were to arise as to their applicability, reasonable interpretations would require that these international treaties and agreements "further freedom, peace, and security."

F. The advancement of science and technology shall be encouraged in outer space societies for the benefit of all humanity.

This principle was a tacit recognition of the political, if not legal, efficacy of the "common heritage of mankind" theory that finds its recent origins in the Law of the Sea and which has been embraced in some of the major space treaties relating to exploration and exploitation. It was an acceptance, in a political sense at least, that the human movement into space is a truly international undertaking and, within a reasonable application of internationally recognized intellectual property rights, the benefits are to be shared among the members of the planetary community. One of the basic motivations for dealing with this issue in the Declaration of First Principles was to ensure that any new scientific or technological benefits of space research, whether cures for diseases or data relating to the common defense of the planet against

natural and man-made environmental disasters, were in fact a birthright of all humankind and were not to be withheld for economic, political, or military reasons.

G. Outer space societies shall protect from abuse the environment and natural resources of Earth and space.

There is a growing concern, both domestically and internationally, about the significant number of satellites and space debris in Earth's orbit. Such debris create extreme hazards to manned and unmanned space vehicles and platforms exiting Earth's atmosphere for near and deep space. Many highly desirable but limited orbital locations are no longer available for use because they are occupied by drifting artifacts. Article II.G was intended to recognize the seriousness of this problem, and also to note that military as well as industrial use of space could seriously compromise many legitimate peaceful activities that derive from having access to space. Further, without proper planning and care, the as yet unforeseen uses of space might well harm the environment and natural resources of Earth.

It was the strong conviction of all the drafters that the very special and delicate connection between the Earth and the human occupiers of outer space gave them a critical responsibility to protect and maintain, if not enhance, the physical continuum stretching from Earth to space. Unlike the seemingly limitless natural resources of the American continent relied upon by the framers of the Constitution, and despite the theoretically unlimited resources of outer space, civilizations have now realized that Earth is a global commons whose resources are finite and must be carefully managed. It is also being recognized, rather belatedly, that even space is part of the global commons, and exploitation of its resources is not without limits. An assertion *in vacuo* of individual rights flowing from the natural law theory embraced by the Constitution can prove to be a harsh reminder that those rights must be shared responsibly by all. This is particularly apparent in the confined and resource-limited environments of space habitat societies.

CONCLUSION

Considerable thought and the debate went into the formulation of the Declaration of First Principles for the Governance of Outer Space Societies. Although some of the provisions and principles may appear redundant and even inconsistent in certain respects, they rest on well-considered reasoning and intentions offered by individuals representing broadly disparate, and frequently parochial, interests. The Declaration even reflects compromises agreed upon by the participants regarding

traditional constitutional rights of privacy, private ownership of property, and the like. It should be kept in mind, however, that as experience in the subject of space societies accumulates, there must be a sensitive evolutionary response by the First Principles. Toward this end, the wisdom and knowledge of an infinitely greater and more disparate group of individuals and organizations must be called upon.

The Smithsonian Institution is continuing to seek ways to use the Declaration and the process of creating the Declaration as teaching tools at all levels of interest. The American Law Institute-American Bar Association Joint Committee on Continuing Professional Education is considering holding a conference of legal scholars to study in depth some of the issues raised in the Declaration of First Principles. The National Constitution Center in Philadelphia has adopted the dissemination of the Declaration as one of its four official programs. The Center is also working with the United Nations Association of the United States of America to conduct a proposed Model United Nations Conference for college students, in 1990 or 1991, based on the concept of the Declaration of First Principles.

The Declaration was designed to encourage its own modification and evolution, and it is the obligation of all interested citizens and organizations to assume responsibility for the growth and acceptance of these or similar First Principles as the United States, independently and in cooperation with the international community, develops outer space settlements and societies.

