

SPACE LAW: THE THIRD GENERATION

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Abstract

This paper analyses the development of space law in terms of three generations, each with its own characteristics. The first era of space law, 1957 to 1979, was truly the era of international space law in which the players were almost entirely nation - states and only the United States and the Soviet Union really mattered. The second transitional era, 1979 to 1991, was a period in which international space law atrophied and domestic space law emerged to fill the gap. This period was characterized by the increase in nations involved in space and the concomitant rise in private enterprises. This paper suggests the beginnings of a third era after 1991, characterized by the fall of Communism, removing the major condition for the general anti - private

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enterprise bias in much of space development that encourages a new public-private balance in space activities.

Introduction

In my 1988 book, American Space Law, I described and analyzed the development of space law in the context of a two-era paradigm. The Classic, first era (1957 - 1979) was characterized (1) by the nation - state as the sole actor in space, and (2) by the "Space Race," that momentous U.S. - Soviet competition for prestige and power. The great power compromises, reflected in the four U.N. treaties that the U.S. and the U.S.S.R. ratified in this period, created a legal regime that was intrinsically pro-state and, at least, implicitly anti-private enterprise.

The Modern, second era (1979 - 1991) reflected a softening or broadening of these two characteristics: (1) space development became much more multi-national; indeed, by 1980, nearly every country in the world benefited from space, whether from communications satellites, weather forecasting, or some other useful application. (2) Moreover, private enterprises were becoming major players in many space activities, especially in

the field of telecommunications.

Space law in this second era witnessed an atrophy of international space law. The failure of the fifth U.N. treaty, the 1979 Moon Treaty, which no major space power has ever ratified, marked the transition between the two eras. As increased national interest in space stalled the work of the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS), no new treaty became law during the entire second era. Meanwhile, increased private enterprise in space forced the individual nations to deal with and develop domestic space law to regulate and otherwise facilitate this new economic force. (1)

In this paper, I wish to argue that space law has entered a third era, beginning some time after 1990. The collapse of anti-capitalistic Communism is the most visible aspect of this new political - legal environment; however, the continuing maturation of space technology and its applications by nations and by private enterprises, identifying both potentials and limitations, is at least as important a characteristic of this third generation of space law, domestic and international.

I. The Classic Era -- 1957 - 1979

I have already written extensively about the first era of space law. (2) Briefly, the United Nations established itself early as a force in the diplomacy of space. Its Committee on the Peaceful Uses of Outer Space (UNCOPUOS), set up in 1958, grew in size from 15 to 53 nations during this period. Operating under a rule of consensus, it negotiated four treaties between 1957 and 1975 that were ratified by the major space faring nations. Indeed, the cornerstone 1967 Outer Space Treaty has been ratified or otherwise accepted by almost every nation in the world.

Consensus Mechanism

Torn between unanimous voting and majority voting, the UNCOPUOS hit up the idea of consensus -- a negative veto variation on unanimity. If a nation remained silent on a particular provision, the provision passed: The problem with this mechanism, however, was that it encouraged ambiguous language that would be unobjectionable and subject to conflicting interpretations by the nations.

As the advantages of space became more evident, more nations joined UNCOPUOS; moreover, national interests in space became more clearly defined. No longer could space be bartered away as an easy compromise for a more immediate earth-based

interest. Even consensus became unable to mask the disagreements.

Unresolved Issues

The early treaties include massive ambiguities that hide compromises and unresolved issues. Nations could not own or annex the Moon or other celestial bodies (Article II, Outer Space Treaty of 1967); yet, they retained jurisdiction and control over their nationals and objects in space. (Article 1, Outer Space Treaty of 1967).

Based on the global politics of the early 1960s, space law did permit private enterprise in space; however, because nations were held responsible for the actions of their nationals (Article VI, Outer Space Treaty of 1967), and strict liability was the measure for damages on earth caused by space activities (Article II, Convention on Liability of 1973), this private activity was highly regulated and impeded.

The 1968 Agreement on the Rescue and Return of Astronauts, based on the idea that capsules went up and came down and that very little could be done in space to actuate a true rescue, is a creature of its era and clearly out of date in the age of the shuttle and even the soyuz. As we shall see later, the 1973 Liability Convention, based on the idea that rockets are ultrahazardous

and thus should be held to the strictest standards for damages, also reflects the primitive state of space hardware and experience; some observers, including this author, suggest that this "ultrahazardous" status should at least be reconsidered.

By the late 1970s, more and more states and private industries were developing a nascent space commerce. The context of the debate of space activities and its regulation had begun to change. Yet, policy makers especially at the UNCOPUOS continued to focus on the great power, statist characteristics of the past. Indeed, the Moon Treaty's extreme anti-private development and pro-statist position contributed heavily to its failure in the 1980s. (3)

The Moon Treaty stated that space was the common heritage of mankind and that when celestial mining became a near-term reality, nations would set up an "international regime" to oversee its exploitation. Although the U.S. officials defended these provisions as permitting private enterprise (under the U.S. interpretation during the consensus process), congressional opponents and most Third World countries argued that the Law of the Sea's precedence suggested that the Moon Treaty did indeed impede private enterprise in space. The U.S. Senate blocked the Treaty. No major space

power has ever ratified the treaty, and it remains in a legal purgatory to this day.

II. THE TRANSITIONAL ERA - - 1979 - 1991

In this era, the international mechanisms lagged behind the technological advances in space. Although the UNCOPUOS continued to meet annually and to make progress on a number of proposals, the member states were unable to conclude their deliberations. Year after year, the UNCOPUOS committees debated and refined provisions, making some progress on issues such as remote sensing and nuclear power in space.

The only legal document to be passed by UNCOPUOS in this era was the Principles on Remote Sensing. The compromise that permitted the remote sensing document to receive consensus required that the document be submitted to the U.N. General Assembly as a resolution rather than as a treaty. Thus, the remote sensing resolution is only a statement of international policy and is not a treaty with the status of international law. (4, at pp. 181-2)

With the atrophy of international law making and the concomitant need for regulation to deal with the expanding space applications, domestic and regional laws, regulations,

and contracts filed the legal void. A municipal space law developed in the United States, Europe, and, to a lesser extent, Japan. (5)

In the United States, the municipal law of outer space took the form of public and private law. Public law included the rules of the FCC (communications licensing), the Department of Transportation (launch licensing), Department of Commerce (remote sensing regulations), and NASA (rules for commercial and other payloads). The U.S. Congress also extended criminal jurisdiction to activities on board U.S. spacecrafts. (6)

Similarly, a private space law was developing to deal with the day to day needs of space entrepreneurs. It is an obvious but often overlooked fact that a domestic space company must abide by all the laws of its domicile: it is incorporated, subject to securities laws (if it sells stock), subject to labor laws, to contract laws, to tort laws, and to all of the laws that affect the operations of any company on earth as well as in space.

III. THE MODERN ERA -- After 1991

As the world entered the 1990s, more and more nations became involved in space directly and

indirectly. Israel began launching its own satellites; other nations continued to invest in space hardware and applications as individuals and in consortia. Meanwhile, private industry continued to explore new entries into space commerce.

Yet, it is the fall of Communism which may prove to be the defining feature of this third era of space law. The fall changes the basic debate that has informed international space law since its inception. To be exact, one of the major sources for the anti-private enterprise bias in traditional space law is gone. To be sure, other contributing factors remain; space continues to be expensive and dangerous.

Professor Gabrynowicz of the University of North Dakota has suggested a synthesis occurring in space law in the 1990s. Citing Feminist jurisprudence, she suggests that space law has long had and continues to balance elements of a "responsibility-based care" ethic versus the "rights-based" ethic dominant in Western adversarial systems. (7)

As an example of a surviving "responsibility-based ethic from the first era of space law, one can cite the ITU agreement on orbital slot allocation, now threatened by private and national evasions.

Frequency interference will degrade satellite use for all participants.

Even private industry -- through successes and failures -- is getting a better handle on the potentials and limitations of the business. This experience permits the policy makers to legislate better for the benefit of all concerned. In retrospect, some domestic space law in the second era was simply too optimistic about the pace and potential of space commerce.

Space Commerce in the U.S.

Yet, by 1993, space commerce was responsible directly for \$5 Billion a year in revenues. Space is now a visible sector in the national economy, even if not the gold-rush boom predicted in the early 1980s. (8)

Since the late 1980s, the launch industry has made real progress. The market for launches is segmenting; the big communications satellites are still the biggest segment; however, a market for small rockets, orbital and suborbital, has begun to emerge. In addition to the big three American rocket builders (McDonnell Douglas, Martin Marietta and General Dynamics), the foreign rocketeers (Arianespace and the Russian, Chinese, Japanese and others) as well as the little American tigers -- EER, OSC, and AmRoc -- are

competing for market share in a process that can only lead to cheaper space transportation in the long run.

Maturing Space Law

With the maturation of the launch industry, many observers point increasing to the obsolete nature of the Liability Convention and its ultrahazardous activities mindset. Although launching remains risky for the launching state or company, maturing technology, cautious safety regulations, and a superior track record on third-party damage, suggest that rocketry simply does not deserve the stigma and the high insurance rates that accompany the ultrahazardous, strict liability standard in a more than twenty-year old treaty. (9)

Similarly, in the U.S. Domestic Space Law, there is a growing sense of reality which in some cases can take the form of a realization that commercialization, at least, in its extreme form may have been premature. For instance, the 1990s has seen a partial retreat on the commercialization of U.S. remote sensing.

One can compare the Land Remote Sensing Act of 1984 in which both the Carter and the Reagan administrations committed the nation to the early commercialization of the LandSat program. The

1992 Land Remote Sensing Policy Act reversed this decision, but it did authorize easier licensing for other private remote sensing satellites. Indeed, World View Imaging Corporation received the first license from the Department of Commerce, and other companies were poised for similar efforts. (10, p. 16)

The new act provides Landsat data at cost to researchers in a nondiscriminatory manner. Yet, on the other hand, the drafters of the act also seek to promote the value-added industry and the development of new commercial markets. (11, p. 15)

Many other examples can be drawn to prove the theorem that the maturation of space applications and commerce is calling forth a new law in the 1990s, both in the international and domestic arenas, that balances the needs of the nations and of private enterprise with the reality of the new technologies.

IV. CONCLUSIONS

The chronological tripartite paradigm of space law is only a descriptive tool, albeit one that is useful. It is more heuristic than dialectical. Social scientists can bring many useful insights to the study of law in general and space law in particular,

because space lawyers and policy makers need to tie together social and technological conditions in each era with the law of that era in order to grasp better society's answer to the needs of that generation.

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FOOTNOTES:

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(4) N. Jasentuliyana, "Review of United Nations Work in the Field of Outer Space," Journal of Space Law 13 (1985): 179.

(5) Phillip Dann, "Law and Regulation of Satellite Communications in the United Kingdom," Journal of Space Law 20 (1992): 1.

(6) United States Code Sec. 7 (b), West Supp. 1982.

(7) Joanne Irene Gabrynowicz, "Space Law and