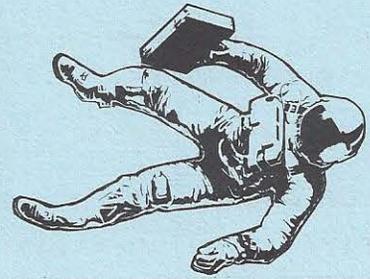


THE
**COMMERCIAL
SPACE REPORT**



PUBLISHED MONTHLY

Gary C. Hudson, Editor

©G.C.H., INC.

Dear Subscriber:

February, 1982

For this issue and the one following it, I have turned over the pages to Gary C. Hudson, president of G.C.H. Inc., Editorial director of the Report, and until recently, its major contributor. Here he will present G.C.H.'s policy on private enterprise and government, and recommend a national Space Policy to the U.S. Government.

- Tom Brosz

In the coming months the Reagan administration will be attempting to develop a new policy regarding use of the space environment by both private and governmental entities. This policy will have far reaching effects on both civilian and military sectors and set the parameters of many organizations for some time to come.

Previous Reports have dealt with the technological and economic potentials of space. The current impact of the space-based communications industry on the gross national product is well documented. Only fifteen years ago there was no communications satellite industry; by the end of the 1970's that industry was a multi-billion dollar provider of goods, services, jobs and tax revenue. The growth potential for other new products and services in this private sector, such as data transmission, electronic banking and mail, home computer service and direct broadcast of multichannel television has been discussed for some time by industry advocates. In the immediate future the growth of space industries in the communications field will be joined by other equally promising adventures involving energy and raw materials.

The aggressive activities of other nations in this field is well known. The Europeans and Japanese are rapidly overtaking U.S. industries in a variety of markets such as launch vehicle services and development of communications systems. Clearly, these nations understand the importance of developing new space-based technologies and services to compete in new world markets.

The stimulation of Research and Development in strategically important areas such as communications, electronics and transportation is of vital importance if the U.S. is to successfully compete in these world markets and maintain the level of technology available to support our national security. It is therefore imperative that the U.S. government develop a Space Policy which supports the growth of private industry activities in space and establishes and maintains the security of such peaceful space operations.

Such a policy, reliably and consistently executed, would establish an investment environment in which the private sector can risk the funds needed to expand its activities in the space environment and produce useful services and products for the benefit of all humanity. This would be consistent with a general policy of reducing the Federal

budget by phasing out those government activities which can be performed by private industry.

It is imperative that a new U.S. Space Policy:

- 1) Address existing situations.
- 2) Direct Agency flexibility and responsiveness toward new activities.
- 3) Actively encourage investment in new industries.
- 4) Back up industrial investment with the intent and the capability to protect the lives and property of U.S. citizens in space.

1) Existing Laws and Treaties

It is a classic statement of a free society that what is not prohibited is permitted. Unfortunately, in the modern world where the socialist view has gained influence, the idea that all activities must be directed by and for the state has gained ascendancy. Because no activities may be directed toward purely private ends, there is no need for activity which has not been sanctioned or commanded by the state.

This concept of man and his relationship to government is repugnant to the American philosophy of limited government and the individual as the fundamental political unit.

Space is a new frontier. Like the new world, it will be developed and occupied by men and women looking for freedom and economic opportunity. Such freedom and opportunity is a threat to some states and the ideology which supports them: states built and maintained by denying liberty to their citizens and the prosperity liberty creates.

In order to combat the threat that space represents to them, they endeavor to block the development of private enterprise by the prospective enactment of treaties and agreements whose end is to control the development of space resources to such an extent that private individuals and companies will derive no benefit from their efforts to exploit this new frontier. Specific examples of statements which make the exploitation of space unrewarding are declarations that there can be no private ownership of space resources, no activity in space but that sanctioned and supervised by the government, no profit from extraterrestrial resources without an accounting to those who claim to represent the benefit of all mankind.

In the last two decades, the United States has become party to a number of treaties which severely limit the freedom of action of individuals and companies in space. While the original supporters and signers of these treaties may have observed little or no conflict of interest with U.S. philosophical principles at those earlier times, it is now obvious that they simply did not adequately envision the potential of new technologies and the progression of American industry. What may have seemed like a small and unimportant concession then will have serious impact on the future of space industrialization. For example, in 1967 the compromise between the U.S. and Soviet Union on the "Treaty on Principles" placed two limitations on private companies.

First, "activities of non-governmental entities in outer space, including the Moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate state party to the treaty."

Second, "each state party to the treaty that launches or procures the launching of an object into outer space, including the Moon and other celestial bodies, and each state party from whose territory or facility an object is launched is internationally liable for damages to another state party to the treaty or to its natural or juridical persons by such object or its component parts on the earth, in air space or in outer space including the Moon and other celestial bodies."

The treaties requirements are without parallel in the private sector. For example, if a Pan American Airways 747 crashes in a foreign country, Pan American and its insurers are liable for the damages, not the United States Government. However, if a space object owned by a U.S. corporation does exactly the same damage, the U.S. government is internationally liable to the government of the state in whose territory the damage occurred. The result has been government control where none is needed and extensive regulation where none is required.

After the Treaty on Principles was ratified in 1967, three later treaties passed the U.N. including a Convention on Rescue and Return of Astronauts, a Convention on International Liability for Damages Caused by Space Objects, and a Moon Treaty. Like the 1967 Treaty on Principles, each of these treaties is an academic exercise in international law made far in advance of the reality it purports to control. These treaties do not and cannot take into account the rapidly changing nature of space technology. They cannot be amended to reflect a nation's changing economy. They fail to address the legitimate needs of private corporations to own space resources and exploit them for profit. They are really more political statements by the Third World and the U.S.S.R. than a workable set of legal rules for the initial development of space.

The new Space Policy must state explicitly that the U.S. will immediately act to withdraw from the 1967 Treaty on Principles and the 1972 International Liability Convention and will begin review of the desirability of remaining in the Registration Convention and the Rescue Convention. In addition, the policy should reverse the recent weakness in international U.S. space policy by:

- a) Requesting that the United Nations Committee on the Peaceful Uses of Outer Space return the "Moon Treaty" for renegotiation to safeguard private enterprise and human freedoms in space.
- b) Instructing the U.S. delegation to the U.N. to maintain constant vigilance over space activities at the U.N.
- c) Preparing a National Position Paper for submission to the United Nations at the 1982 Second Conference on the Exploration and Peaceful Uses of Outer Space that reflects the U.S. commitment to democracy and free enterprise.
- d) Resisting the territorial claims of nations over the geosynchronous orbit at the 1983 Region 2 (Americas) International Telecommunications Union Administrative Radio Conference: Space Broadcasting. Standing up for U.S. rights to have direct broadcasting over any area of the Americas and insisting that solar power satellites be allowed to beam power back to earth to supplement energy resources.

To ease the transition during the lengthy withdrawal process from the treaties, the U.S. Space Policy should authorize private organizations and individuals who launch into space with a general grant to all U.S. citizens and legal persons to engage in any activity in space

which is otherwise lawful.

2) Directions to U.S. Government Agencies and Regulatory Authorities

The new Space Policy must direct that the law be gradually allowed to develop so as to encourage the growth of industry in space and development of a body of law which is consistent with the traditional American view of economic and political freedom. The legal problems which will arise that are unique to space should be resolved by a reference to developing industry practices in this new environment. The law of space should be generated using actual experience and cases rather than by prospective regulation and treaties. Those agencies such as the FAA and FCC with interest in this area should be directed to work in cooperation with the new industries to identify areas in which existing regulation is arcane or out of date with respect to the new space technologies and modify and eliminate such regulations. For example, manned space vehicles could be registered with the FAA just as aircraft presently are, and standards of certification, if any, should be worked out with the industries currently in the process of developing private manned space vehicles.

The policy should realize and explicitly state that space is not a closed system and not part of the earth's biosphere and that therefore the current environmental health and work regulations are not appropriate. U.S. patent, copyright, and trademark law should be extended to cover space-related hardware, software and products. The U.S. criminal code of justice should be extended to cover space vehicles of U.S. registry flying in free space in the same way it has been extended to cover aircraft of U.S. registry flying over the high seas.

(To be concluded next month)

Next month Gary Hudson will focus on the final two points of the recommended U.S. Space Policy: Encouragement of New Industrial Investment, and Defense of the Lives and Property of U.S. Citizens in Space.

Until next time,

Sincerely,

Tom Broz

THE **COMMERCIAL SPACE REPORT**

The **Report** is published monthly, and has a subscription price of \$12 per year. Back issues are available at \$1 each from September, 1977. Xerographic copies may be substituted as stocks are depleted. Address all correspondence to G.C.H., Inc., 85 East Geranium Avenue, St. Paul, MN 55117 or call (612) 489-4466. Editorial Direction: Gary C. Hudson. Phone orders accepted at (612) 489-4466. No collect calls please. **G.C.H., Inc.** is a diversified research and development organization formed to engage in advanced scientific and technology business. Capabilities include theoretical research and study, systems research and development of services and products. A high level of effort is presently being expended in astronautics, especially the commercial utilization of outer space and the need for economical space transportation. **G.C.H., Inc.** has a permanent and consulting staff of professionals to call upon including engineers, designers, scientists, communications experts, management specialists and the like. The **Commercial Space Report** is a concentrated effort to report all areas of private and industrial initiatives in the development of space. We hope it will stimulate ideas by raising questions and offering innovative concepts contributed by acknowledged leaders in the field. If you have any comments, ideas or requests for information we encourage you to contact us.