

Law for space

The rapid growth of space activity leaves lawyers hard-pressed to anticipate tomorrow's legalities

by Jonathan Eberhart



NASA

Dembling: Whose treaties are they?



UPI

Objects such as this one, which fell in Colombia, could stretch the law.



Syracuse University

Alexander: Only trouble breeds law.

As Gemini 7 began its voyage Dec. 4, 1965, officials at the space agency's Corpus Christi, Tex., tracking station began to experience interference on their equipment. The interference was traced to electrical signals from, among other things, the spark plugs in some trucks belonging to a private company nearby.

The company was reluctant to shut down for the two-week Gemini flight, although it had cooperated during shorter missions in the past. By the second day of the flight, however, the Government had obtained a restraining order, prohibiting the operation of any interference-causing equipment, including the company's trucks. Shortly thereafter the order was converted to a temporary injunction.

The company sued, together with several other firms who were affected by a state Airport Zoning Act which lumps the tracking station with airports for purposes of radio interference control. The suit is still in the courts.

Under most circumstances, civil law would have enabled a fairly clear-cut interpretation and an end to the case. But in this case, the Government's injunction was issued, the court said at

the time, to protect the Gemini 7 astronauts (Frank Borman and James Lovell), who were more than 200 miles out in space.

Thus an otherwise straightforward case became a legal wrangle. Such complications are routine for the space lawyer, trying to bring order to a new frontier with almost no precedents to aid him.

"Legal constraints do not come into consideration while things run smoothly," says Prof. George J. Alexander of Syracuse University. "It is a sign of the good fortune of the space program that it has not been forced fully to explicate its legal obligations."

Alexander is a member of an organization called the Institute of Space Law, which has 314 members from 49 countries, including some in the Soviet bloc. Unlike most space-related societies, in which members usually discuss problems and developments as representatives of their own agencies or companies, ISL was formed specifically so that its members could pick one another's individual brains. Such discussion, the institute hopes, will offer some of the insight and perspective that the practice of space law is still largely too

young and undeveloped to provide.

One of the broadest problems facing space lawyers is keeping man's wars confined to the planet. The treaty on the peaceful uses of space has been in effect since October 1967, but it still contains a basic point of contention, which could be a major loophole.

When the United Nations General Assembly established its Committee for the Peaceful Uses of Outer Space in 1959, it failed to define the key word, "peaceful." Today, with the treaty more than a year old, its interpreters still argue over whether "peaceful" rules out all military participation, or allows "non-aggressive activity" by military personnel and equipment.

At a recent meeting of the Institute of Space Law, an entire session was devoted to post facto interpretation of the treaty. There, Alex Meyer, director of the Institute of Air and Space Law at the University of Cologne, Germany, pointed out that despite seemingly specific language, the loophole remains open.

Article 4 of the treaty says that "the establishment of military bases, installations and fortifications, the testing of any type of weapon, and the conduct

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of military maneuvers on celestial bodies shall be forbidden." but "the use of military personnel for scientific research or for other peaceful purposes shall not be prohibited."

What is prohibited on "celestial bodies," however, is not necessarily forbidden in the space between them. "Article 4," says Meyer, "does not clarify this question."

Two other major space treaties are just making their respective ways into use, and each has its problems.

The astronaut rescue treaty, which has been ratified and should go into effect shortly, is fairly clear on the return ("safely and promptly") of astronauts who have landed in foreign territory. "However," points out R. Cargill Hall, an ISL member from the California Institute of Technology's Jet Propulsion Laboratory, "the same cannot be said for rescue and return in space."

If one country develops a way of rescuing astronauts stranded in space, another country is free to request such aid if it is needed, and the treaty says that a petitioned country will provide "all possible assistance."

The interpretation of that phrase, however, is left up to each country, making it possible, under the treaty, to justify not honoring such a request. "And," says Hall, "as there are no guarantees of remuneration for the tremendous costs incurred in an earth-to-space rescue operation. For example, taken together with the vagaries of foreign policy at any given moment, it might not be judged in the national interest to furnish this kind of assistance."

The third major space treaty, still being drawn up, is the liability treaty, concerned with damages caused by space activity. Some countries that do not have space programs maintain that the astronaut treaty is for the space powers, whereas the liability treaty will be for the non-space powers, says Paul G. Dembling, general counsel for the National Aeronautics and Space Administration. The countries that feel this way, he says, refuse to sign the astronaut treaty without the other.

Some liability matters are straightforward. Damage caused by an object falling from space is generally agreed to be the responsibility of the country of origin. In addition, the treaty will probably follow the principle of "liability without fault," which means that the claimant does not have to prove negligence to collect damages.

However, damage that is caused indirectly, such as in the Corpus Christi tracking station incident, poses substantial legal problems. "Then there is the damage caused by vibrations set up by a rocket launching or impact," says Alexander, "and psychic damage which can be caused by either pure apprehen-



NASA

Legal aid for astronauts has begun.

sion or apprehension coupled with the physical impact or vibration."

While the theorists attempt to work out treaties covering mishaps to come, there are also plenty of legal space snarls in the present to be weeded out. By far the prime example is satellite communications.

The only organization even approaching a global system is Intelsat, the 63-nation consortium dominated by the U.S. through the 53 percent interest of the Comsat Corp. Intelsat aspires to become a worldwide network, and has some support. "We don't see that proliferation of satellite systems is in the best interests of anybody," says Stephen Doyle of the U.S. State Department.

But such hopes were largely shot down in April 1967, when Russia announced its plans for a multi-nation net called Intersputnik. Canada is considering a domestic network of its own, the Soviet Union already has a nine-satellite domestic net called Orbita; a joint Franco-German system may be in the works, and there is pressure building for Australian and British ones.

The arguments, however, are not only over global versus regional networks for the future, but over who controls what at present. In February, the temporary arrangements that have guided Intelsat for five years will run out, and a permanent set will be adopted. One major change suggested by the U.S. (in part, perhaps, to answer complaints about its dominance) is the addition of a governing body similar to the U.N. General Assembly. This would give each member nation one vote for the first time, in contrast to the present board, which represents only 47 of the members, most of them combined into blocs with a single vote each. The existing board would be retained for all but general policy questions, however, so the space lawyers will still have their work cut out for them. ◇