

Earthlings at Odds over Moon Treaty

Space buffs say a pact now before the U.N. General Assembly would thwart their plans to leave the earth

Would-be space colonists and their armchair boosters are leading a fight against a "moon treaty" under negotiation at the United Nations. The treaty is meant to safeguard and develop the resources of space as the "common heritage of mankind." But space enthusiasts call it doom for free enterprise and America's future on the moon. Says Carolyn Henson, cofounder and current president of the 3500-member L-5 society: "For those of us who plan to go into space, it's a give-me-liberty-or-give-me-death kind of issue."

The conflict is remarkably similar to the decade-long struggle between technological haves and have-nots at the Law of the Sea negotiations, which in theory would pave the way for seabed mining. According to the plan, wealth extracted from the sea floor would be shared with less developed countries. But big business is said to have cooled to the idea of mining the sea for lack of financial incentive. Lest the same thing happen to fledgling space industries, L-5 is fighting the moon treaty. To do so, the society has hired a Washington lawyer who lobbied for a large corporation at the Law of the Sea negotiations.

The L is for libration, a point at which the gravitational pulls of Earth, moon, and sun are equalized. L-5 is the fifth libration point, where the society would park a space platform to manufacture all sorts of handy articles out of sunlight and moon dust, and where members in their off-hours would butter toast and watch TV.

But that hope will fade if the proposed treaty is passed, according to the society, whose board includes such notables as Princeton's Freeman Dyson, science fiction author Robert Heinlein, and Senator Barry Goldwater. The treaty was introduced in the United Nations Committee for the Peaceful Use of Outer Space by the Soviet Union in 1971 and is currently before the General Assembly. It would set up what one space booster called an "international socialist regime" to govern the exploitation of resources on celestial bodies. But no one from Rockwell International or Boeing is going to manufacture moon-mining equipment when they know that control and profit from such technology will be

shared with countries such as Sri Lanka. Says space lawyer Arthur Dula: "Resources that are owned by everybody are developed by nobody."

A de facto moratorium is what the Third World wants, according to some treaty opponents. Fueled by fear of asteroid mining and the like, the technological have-nots are trying to protect their hold on the world's mineral resources.

Nonsense, say treaty backers, who at this point include the Administration. Prospects for private enterprise in space will be enhanced by mutual cooperation under the proposed treaty. The "international regime" does not have to be a profit-eating dictatorship. It could work like Intelsat, in which nations and companies jointly own and operate the international system of telecommunication satellites. The regime, moreover, need be set up only "as exploitation is about to become feasible," according to U.N. Delegate Neil Hosenball, general council at NASA. He implies that such a development might be decades away. In the meantime, "this permits orderly attempts to establish that such exploitation

ons, and conduct of military maneuvers would be forbidden.

- Nations would be required to notify the Secretary-General, the public, and the international scientific community of any discovery on the moon or in outer space that could endanger human life.

- Nations would be asked to notify the Secretary-General in advance of placing radioactive materials on the moon.

- Nations would be required to offer shelter to persons in distress and, in an emergency involving a threat to human life, any nation would be allowed use of another nation's equipment, vehicles, installations, or supplies.

The L-5 people are anything but convinced. Lest the treaty pick up support, the society has taken some very down-to-earth actions. They have sent a contingent of 20 members to prowl the corridors of Capitol Hill. They have also hired a high-powered Washington lobbyist named Leigh S. Ratiner, who once worked for Kennecott Copper Corp. on the Law of the Sea negotiations. This is no small step for a society founded in 1975 at a Princeton conference on space manufacturing and which now has its

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is in fact feasible and practicable, by making possible experimental beginnings and, then, pilot operations. . . ." As a final hedge, Administration backers say the treaty pledges the United States only to work on the establishment of an "international regime," not necessarily to set one up.

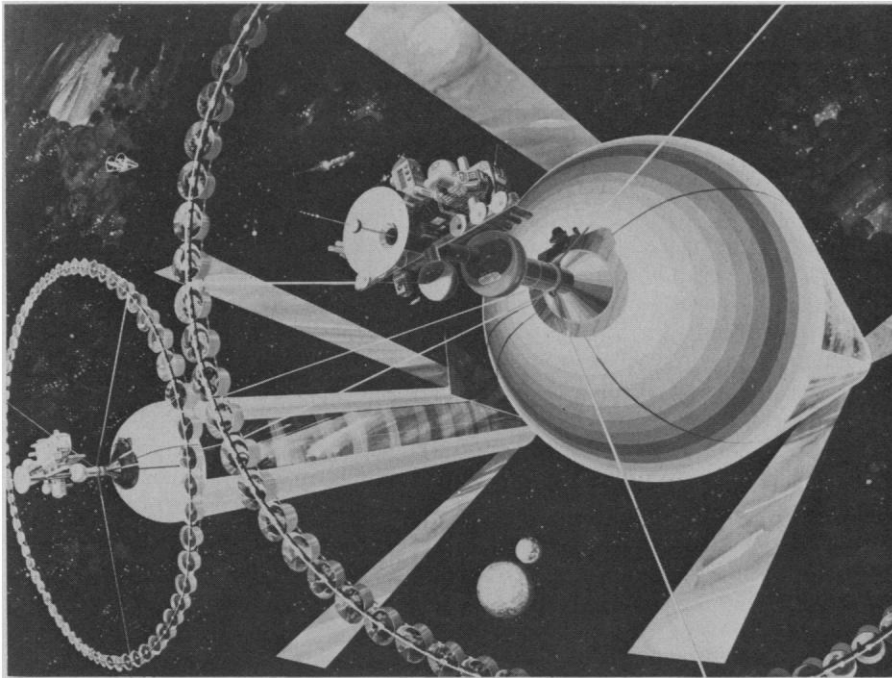
Looking at the big picture, proponents argue that the treaty's restrictions are minimal and fill a void that might otherwise attract "more hair-raising schemes," as one State Department official put it. The treaty, for example, contains provisions that ensure:

- The moon will be used exclusively for peaceful purposes. No nuclear weapons or other weapons of mass destruction would be allowed. Establishment of military installations, testing of weap-

headquarters in Tucson, Arizona. It is especially remarkable since many of the group's supporters are "Timothy Leary and Whole Earth Catalogue people who are more interested in social experimentation than the technological side," as Henson put it.

Ratiner's mission is nothing less than to swing the Administration and Congress over to the group's vision. Coloring the cause in red, white, and blue, he recently told a House science subcommittee that "the American people will not want to give up the hopes and aspirations for America's future in space—their sense of national achievement and accomplishment."

Ratiner has also succeeded in raising fears of a communist plot, at least in the minds of a few congressmen. Frank



NASA Photo

A double space colony, each unit 19 miles long and 4 miles in diameter, seen as it would appear from an approaching space ship some 20 miles away. The habitats would each hold a population of up to several million.

Church, chairman of the Senate Foreign Relations Committee and up for reelection in Idaho, recently sent a letter to Secretary of State Cyrus Vance, saying a de facto moratorium on space development would damage American security. "The Soviets," Church wrote, "can move forward at their own pace under the guise of scientific investigations with no fear of competition from the West, which must rely on its industry to provide commercial development."

Yet the "guise of scientific investigation" can work for almost anyone, and some U.S. aerospace analysts see it as one of the treaty's lifesaving loopholes. According to the treaty, any nation can remove material from the moon for scientific purposes. Said one aerospace official: "We will just declare that all those tons of lunar or asteroid materials going into our powersats and other devices are nothing but scientific samples."

That the Soviets would overlook such a breach is unlikely, however, and most space enthusiasts would rather see the whole treaty renegotiated into a form that better "suits the American spirit of doing things," as one put it. Some would also change the title, which they claim is deceptive and downplays its significance. Though often called a "moon treaty," the proposal would in fact govern the use of every nonterrestrial body in the solar system—a resource base that some scientists estimate to be the practical equivalent of a thousand earths.

The future use of this space bonanza seems just about as fertile as one's imagination. In Ratinier's case it includes "major industrial activities which could produce substantial portions of the world's energy requirement," including sun-collecting satellites that would beam their energy to earth within the next 15 to 20 years.

Though the space boosters all regard NASA's shuttle as the first step to these feats, the current spate of difficulties with the vehicle has not cooled their enthusiasm.

Nor has the thought of spending thousands of dollars to defeat the moon treaty. L-5'ers have already sunk \$20,000 into lobbying. If that keeps Carter from signing the treaty, "it would be a real bargain," writes Keith Henson, the society's fund-raising chairman, in an "emergency" letter to members. "Failing here, we must fight ratification of the treaty in the Senate. That gets expensive, \$75,000 to kill it in committee, \$500,000 if we have to fight it on the floor. Opponents of the Panama Canal Treaty spent millions on their fight."

A treaty section that particularly riles space adventurers is a provision that allows any government to search a space station on or in orbit around any celestial body (except Earth). Says Henson: "It is a major step in eliminating the civil liberties for those who go into space. No warrants are needed. Considering what our own police sometimes do, I doubt a

KGB search would leave any air in a habitat."

In drafting arguments to counter the treaty, the society has drawn heavily on lessons gleaned from the Law of the Sea conferences. A decade of increasing pressure by Third World countries has put the United States on the defensive, and the Administration may yet swallow articles at the ongoing conference that make seabed resources the "common heritage" of mankind. This, says Ratinier, has caused four international consortia to scrap their plans for mining the sea floor. "Private enterprise," he told the House subcommittee, "shudders at the thought of investing \$1 billion for a single seabed mining operation under the politico-economic philosophy which has been elaborated under the common heritage banner." The United States has accepted the restricting language in an attempt to ensure that other nations agree to articles of American interest—in particular, freedom of navigation.

But should outer-space resources, in which the United States has such a commanding advantage, fall under the same rubric? Is there anything to be gained? Obviously not, says Ratinier. "The principle of common heritage is a vital component of Third World demands for massive redistribution of wealth and has been applied to deep-sea resources, high technology, the electromagnetic spectrum, and now outer space . . . it is ultimately aimed at equating the economic positions of North and South."

This bleak view of the common heritage clause is obviously calculated to bolster the bargaining position of industrial interests. But the Administration says common heritage is not really an issue. The international regime to govern the moon's resources is at least a decade away, and may in fact never materialize. In the meantime, attention should be turned to what "common heritage" means when applied to seabed resources—an issue that has been hotly debated but not yet tested.

But the bleak view may also reflect a realistic situation. What if the L-5'ers are right? What if "common heritage" actually chills man's quest for the stars? "This treaty," says Eric Drexler, an L-5 board member and associate of the MIT Space Systems Laboratory, "was drafted by lawyers behind closed doors and clearly deserves close scrutiny. The fate of the 'common province of all mankind'—the practical equivalent of a thousand new earths—should be the subject not of a quick vote but of a great debate."—WILLIAM J. BROAD