

Alan Wasser

Open Lunar Era with Land Grants

It is vital for the future of the human species to expand its habitat beyond the Earth. The technology exists to establish a permanently manned lunar base, but so far no proposed scenario would justify the expense for any government or corporation. Therefore, neither Congress nor the Soviet legislature is about to appropriate enough of the taxpayers' money to establish a base on the moon.

No physical product could possibly be worth so much that making or mining it could provide economic justification for the establishment of a lunar base. Even for beamed power, the full cost of the equipment to generate and transmit it from space would have to be paid before the first dollar of return could be expected, and that would scare off any rational investor.

But there is another possibility which has yet to receive serious consideration, even though it was a major impetus for the settlement of America: land ownership.

Land grants inspired much of the English colonization of the East Coast of North America. Later, land grants compensated the railroads for the tremendous expense of crossing the continent and persuaded the homesteaders to settle the West.

Land grants could start the settlement of the moon without costing taxpayers a cent.

Suppose that the moment a permanently inhabited lunar base was founded on the moon, those who established it were granted full legal title to a substantial area of land around the base, title

which would remain valid as long as the base was inhabited. Those who paid for the base could start recouping part of their expenses that very day, by selling outlying parcels of their land. The purchasers would, of course, be speculating that the land they bought, and the resources under it, might someday be worth a great deal more. Meanwhile, they would be acquiring a vested interest in helping to keep the base inhabited, since their title would depend on it.

Of course, those living at the base would contribute to its upkeep by engaging in whatever profitable activities presented themselves — activities that alone could not possibly justify the initial cost of the base.

A land rush would develop, as competing entities attempted to establish their own bases before all of the moon was claimed. Some would attempt to claim convenient asteroids as well.

The main problem is establishing a recognized legal basis for private ownership of land in space. That, in turn, depends on interpretations of the 1967 Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space. Including the Moon and Other Celestial Bodies. The key phrase appears in Article 2. It says, "Outer space, including the moon and other celestial bodies, is not subject to national appropriation by claim of sovereignty, by means of use or occupation, or by any other means."

Opinions differ on whether the ban on "national appropriation" implies a prohibition of private ownership. Some authorities, in-

cluding Glenn Reynolds, chairman of the National Space Society's legislative committee, say it may not. Wayne N. White Jr., in a very careful analysis of "Real Property Rights in Outer Space" in the September 1984 *L-5 News*, said a system of functional private property rights can exist without national sovereignty, especially under Roman-derived civil law rather than English-based common law. White also proposes basing governmental grants of property rights on an extension of the same treaty's Article 7. That article says the State under whose registry an object is launched retains jurisdiction over it when it is on a celestial body.

If the U.S. Congress officially adopted that interpretation and established the size of private land claims to be recognized in U.S. courts, it would presumably lead other countries to adopt similar positions, and the land rush would start.

Other experts say the treaty would have to be amended specifically to establish such a private property regime. If Congress decides to take this route, it should not be too hard to get the treaty amended since the treaty included a very easy exit. Article 16 says any state "may give notice of its withdrawal [which] shall take effect one year from the date of the receipt of this notification." It should not, of course, be necessary actually to exercise the exit provision. If the United States asked for an amendment to establish a reasonable regime for private property in space, it could presumably gain the agreement of most other industrialized nations. Private property is a lot

more popular, worldwide, in 1991 than it was in 1967.

One vital point of the land grant idea that would need extensive discussion is the establishment of the proper amount of property to grant with the establishment of each base. It should provide just enough incentive to get the moon bases established. Should it be 50,000 square miles around each permanently inhabited moon base? Or 10,000 square miles, or 100,000? More? Less? Should early settlements be rewarded by granting more property for the first base established, and less for subsequent ones? If so, how much should the difference be?

If the grants are too little, they would not be worth the expense. Too much and there would not be enough land area to keep new bases coming.

In the 1860s, the United States granted a total of more than 200,000 square miles to the various companies that built the transcontinental railroads, more than 60,000 of which went to the Northern Pacific alone. The railroads' efforts to resell parts of that land contributed to the flood of settlement in the 1870s and 1880s. The total surface area of the moon, front and back, is about 15 million square miles.

A similar system of land grants, this time on the moon, could generate a new flood of settlement, expanding humanity's horizons in a vital and exciting direction ... for free.

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