

15 MILLION SQUARE MILES, EARTH VU

Would Europeans have settled America yet if no one could claim the land they settled on?

by Alan Wasser

The pro-space community has been searching for a clear economic justification for the enormous investment needed to settle space, but I think we've been fooled into overlooking what should have been the natural economic justification....the same goal which fired most of mankind's previous expansions....LANDI ...new land for both national expansion and private enrichment.

Land ownership, including all rights, mineral and otherwise. In perpetuity, and the right to sell part or all of the property for whatever the market will bear, is one of our most basic forms of wealth, and historically one of the most common roads to riches.

With land eliminated from our thinking as an economic justification for exploration and settlement, we are reduced to trying to find something that can be mined or manufactured in space (and only in space) and brought back to Earth, at great profit even after subtracting 100% of the tremendous shipping costs. Not surprisingly, that has been an impossible assignment.

On the other hand, a valid title to land on the moon, or to a mineral rich asteroid, costs nothing to transport home, not even travel time. An investor could recapture his outlay, and potentially make a tremendous profit, by selling part of his ownership rights the day his claim became a legally accepted fact.

Any space mining or manufacturing project would be risky, with little chance of profit for many more years than prudent investors are willing to wait. But investors in land are used to buying and holding barren real estate "in the path of progress" that will not reach its true profit potential for many years to come, because the deed can be sold several times during those years, making each owner a nice profit as the land's value slowly rises.

The only reason land is not a reward for space exploration is a treaty that by a grim irony, was signed January 27th, 1967, only hours before the Apollo 1 fire killed Grissom, White & Chaffee. It is called the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, Including the Moon and Other Celestial Bodies". Article 2 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."

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Not subject to appropriation by use or occupation presumably means if you empty your national treasury to build Luna City, you don't own even the land it stands on.

What if, for example, (and I'm sure we can come up with a still better rule than this) Article 2 said: Any nation, corporation or person that establishes a permanent manned settlement on the Moon or other celestial body can claim all the land for a 100 miles around (or 500 or 1000).

I believe there would never have been a slow down in the Space Race. There would probably already be several rapidly expanding settlements on the moon...and several competing scrambles underway to settle the best asteroids before they were all gone. Undignified, but that's how our species grows.

By the time the need for Space Activism became apparent, that awful rule had been part of the landscape so long we accepted it as a given that no one could claim land on the Moon. I think that was a bad mistake, and we should start fighting now.

Fortunately, the treaty has a very easy exit. Article 16 says. 'Any state...may give notice of its withdrawal' and "Such withdrawal shall take effect one year from the date of receipt of this notification." Amendments are also permitted, but harder to achieve. Any state can propose one, but a majority of the signatory nations must agree.

How did that treaty come to exist in the first place?

On February 3rd, 1966, the Soviet Union's Luna 9 made mankind's first "soft" landing on the moon. There was speculation in the U.S. about whether the Russians might attempt to claim the moon, but the general feeling was that no unmanned landing was enough for that. The U.S. could not manage its first soft landing until Surveyor 1 on June 2nd, four months later.

However, a month before Surveyor, on May 8, 1966, Lyndon Johnson proposed a treaty to prohibit weapons of mass destruction on the moon or weapons tests or military maneuvers

in space ...and (this is the kicker) he included a proposal to prohibit any claim of sovereignty to the moon and other celestial bodies.

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Johnson's motivation wasn't just fear that the Russians would beat us to it. The Viet Nam war was escalating, which meant he needed to cut other expenditures. He was also, as the New York Times put it at the time, "eager to find as many areas of agreement as possible with the Soviet Union...drawing a contrast with the bellicosity of the Chinese Communists. In the hope that Moscow will eventually help find a peaceful settlement of the war."

Johnson. "Invited the Soviet Union today to help end the waste of competitive spacemanship" and the Times added "recent statements by the Soviet Union's leading space scientist. Prof. Leonid Sedov indicate that the Russians too may be coming around to the conclusion that the costs of going it alone to the moon and beyond outweigh the dimming propaganda magic."

In hindsight, the effects of the treaty are horribly dear. Before the treaty, NASA's budget had been growing every year. In fiscal 1966 NASA's total budget, for example, was up 16.5% from 1965. After all, we were in a race. But then, things changed fast. 1967's budget was down 8.5% and 1968's was down 12.9% from that, the lowest it had been in 6 fiscal years. 1969's budget lost a further 10%, 1970's another 11.7%, etc.. etc. The effects of the treaty may have been even worse for the Soviet space program. Consider-

ing Lunas 9 and 10 vs. Surveyor 1, you could say that, up to then, the USSR was still ahead, although its lead had been cut down to four months. They never admitted it, of course, but it appears that the Kremlin may have wanted that treaty so they could safely drop out of the moon race. Whatever the cause. It was very shortly thereafter that the USSR went from leader to noncontender in that race.

I submit that the best thing NSS could do for mankind's future in Space would be to get Congress and the President to pass a resolution saying the U.S. proposes amending Article 2 to permit limited claims of land as a reward for space exploration and development, and will exercise its right to withdraw from the treaty if the amendment is not adopted.

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August in Space History.

Compiled by Minnesota L5

- 4 US launches 1st satellite into lunar orbit from manned spacecraft Apollo 15. (1971).
- 5 USSR launches Mars 6. (1973).
- 7 US launches Explorer 6 to take 1st satellite photo of Earth. (1959). Cosmonaut Gherman Titov circles Earth for a full day in Vostok 2 (1961).
- 8 US launches Pioneer Venus probe. (1978).
- 9 USSR launches Mars 7. (1973).
- 10 US launch of Discoverer 13 results in 1st recovery of ejected film capsule. (1960).
Launch of Lunar orbiter I. (1966).
- 11 USSR launches 1st dual manned spacecraft flight. (1962).
Asaph Hall discovers Deimos, moon of Mars. (1877).
- 12 Launch of Echo 1, 1st passive communications satellite. (1960).
- 13 Anders Jonas Angstrom born. (1814).
- 14 1st US lunar orbiter. (1966).
- 17 USSR launches Venera 7 to Venus. (1970).
Asaph Hall discovers Phobos, moon of Mars. (1877).
- 19 National Aviation day.
Orville Wright born. (1871).
Cosmonauts Lyakhov & Ryumin complete a record 175-day space flight. (1979).
John Flamsteed born. (1646).
- 20 Launch of Viking 1, 1st craft to send pictures from surface of Mars. (1975).
Launch of Voyager 2 to outer solar system. (1977).
- 22 NASA's X-15 attains altitude of 67 miles. (1963).
- 25 William Herschel dies. (1822). Voyager 2 flies past Saturn. (1981).
- 26 Voyager makes its closest approach to Saturn enroute to Uranus and Neptune. (1981).
- 27 Launch of Mariner 2 which makes 1st Venus flyby. (1962).
- 28 William Herschel discovers Enceladus, moon of Saturn. (1789).
- 29 Astronauts Cooper & Conrad complete 120 Earth orbit* in Gemini 5. (1965).
- 30 Guy Bluford becomes first Black American in space as Challenger make the first night liftoff of the shuttle program. (1983).
Maiden Voyage of Discovery carrying first non-astronaut Charlie Walker. (1984).