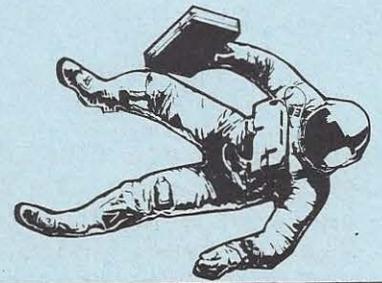


THE FOUNDATION  
**COMMERCIAL  
SPACE REPORT**



PUBLISHED MONTHLY

Gary C. Hudson, Editor

© FOUNDATION 1980

April

Dear Subscriber:

It is our pleasure to present in this issue of the Report a special guest commentary on the "Viking Fund" by the fund chairman, Stan Kent. Stan is a well known advocate of a strong space effort and his activities in this regard include writing widely on the topic of space for a variety of publications (including OMNI). The Viking Fund promises to be a successful first step to involving private interests directly in the business of space research and it's success will bode well for other attempts by individuals and organizations to participate themselves in the future industrialization and exploration of our greatest frontier.

Sincerely,

A handwritten signature in black ink, appearing to read "Gary C. Hudson". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Gary C. Hudson

The Viking Fund

Recent history has seen many space probe's useful life prematurely terminated not by some mysterious cosmic hazard, but by the more sinister antics of earthly bureaucracy. The prime example is, of course, the Apollo Lunar Scientific Experimental Packages (ALSEPs) which were turned off in 1977 for want of a few thousands of dollars per year from the NASA budget. It cost billions of dollars to put the equipment on the moon, but the reaping of such an investment's benefits meant nothing to penny counting politicians. Despite a scientific uproar, the moon fell silent.

Viking I & II are on Mars and current estimates place their useful lives at ten years. Viking's ten year lifespan will produce data about whose importance we can only speculate. One day we shall send more probes and eventually people to the Red Planet and when we do Viking's legacy will be invaluable. The survival of explorers (human or robot) will depend upon their ability to predict dust storms and accurate environmental data will be essential to the targeting of spacecraft.

Viking has strong support within NASA and the agency intends to fund receipt of the data by the Deep Space Network (DSN). Additional funds (\$100,000 - \$150,000/yr) are needed to finance investigation of the data by groups of principal investigators at universities throughout the country. Over the ten year period the total price tag will amount to

approximately \$1 million. In an era of fiscal restraint, the sharing of costs between the government and private enterprise is desirable as a means of expanding activities such as Viking; hence the creation of the Viking Fund. Mars must not fall silent and even though NASA has assured the Fund that the agency will keep listening to and analyzing Viking's data, NASA cannot guarantee continued operation of Viking over the next ten years. NASA has had a difficult enough time surviving from year to year. With the President's inflationary guidelines established, NASA's budget may be reduced by as much as \$760 million.

Space Science programs are especially vulnerable. Rumors already abound concerning possible cancellation of the Galileo Jupiter probe and it is a cruel fact that the Halley's Comet rendezvous has been indefinitely shelved. Members of NASA's Planetary Program Division are highly supportive of the Viking mission and if these dedicated individuals had the last say, planetary exploration would be a lot healthier. But there are forces at work more powerful than NASA and because NASA does not take an advocacy position, such forces could order budget cuts which NASA would be obliged to follow. NASA officials, from public affairs officers to the Administrator, always resort to "we are not allowed to promote the agency, we do not determine policy, policy comes from the President." Anyone in Washington D.C., from the FDA to the Pentagon, knows that this is not so. Advocacy is the name of the game and NASA is voluntarily not playing the game.

It is the Fund's position that Viking's data is too important to be left up to the whims of political expediency in Washington. The Fund is determined to privately raise \$1 million to provide insurance money for Viking operations and to expand the data analysis and future exploration of Mars. This assumes, of course, that NASA will be able to continue to operate the radio dishes of the DSN.

The private raising of \$1 million or more by interested individuals will be a huge demonstration of support for space activities. It could very easily put the "advocacy fire" into NASA, or at least the political process that oversees NASA resulting in a more favorable funding climate for the larger projects like Galileo, Halley's Comet, VOIR (Venus Orbiting Imaging Radar) and others. This favorable climate may evolve as the Viking Fund establishes a precedent which could lead to large scale, combined private/government or purely private space programs. Many contributors have urged the Fund not to stop with support of Viking, but to go on to a bigger and more ambitious program. If the Fund is successful (and if current response is any indication it certainly will be) expanding into other areas is a distinct and attractive possibility. But not only must the Fund raise its target goal of \$1 million, it must also construct and prove the feasibility of this first step towards privatizing space through public participation.

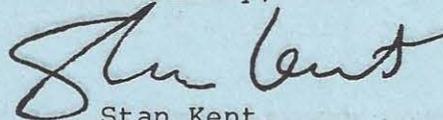
The Fund has gone to great lengths to cooperate with NASA. The experience has sometimes been a frustrating one, trying to help an agency that thinks it is legally bound not to encourage such efforts. NASA's charter allows the agency to accept only unconditional gifts. However, the appropriate individuals in the agency will do their best to assure that Viking Fund money is spent on Viking. The Fund will also endeavor

to work directly with principal investigators and private research institutions since they can guarantee that money supplied them will be spent on Viking.

If the Fund is to grow into a larger "Space Science Research Foundation" or if other foundations wish to directly fund a NASA activity, the obstacle of unconditionality of gifts must be removed. One way of overcoming this obstacle would be to change NASA's charter to allow the agency to accept, if it wishes, conditional gifts to do a specific project. This arrangement would open the door to substantial private funding of particular programs by specific interest groups, giving NASA the private backing it desperately needs to experience first hand. The private sector would also benefit by having the opportunity to become involved in space exploration for relatively minor investments. Changing NASA's charter requires a Congressional Resolution and in this era of fiscal restraint it is hard to imagine how the Congress could refuse. The Fund is exploring pathways to proceed and an announcement of intent should be shortly forthcoming.

The era of private funding of space activities is fast approaching and the Viking Fund is just the first step in involving the public and private enterprise in the exploration of space. The sooner the mechanisms and spirit of cooperation are established between all concerned groups, the faster the space age will mature. And after all, isn't that what we all want?

Sincerely,



Stan Kent,  
Viking Fund Chairman

Editor's Note: If you want to contribute to the Viking Fund, mail your tax-deductible contribution (minimum \$1) to: THE VIKING FUND, P.O. Box 7655, Menlo Park, CA 94025. All contributors receive acknowledgement of their gift and an invitation to the dedication ceremony of the fund in Washington, D.C.

## **NEWS NOTES:**

---

**TIME COVERS MOON TREATY FIGHT...** New York...The March 24th issue of Time magazine devoted a column and a half in its "Science" section to the fight against the moon treaty. Detailing the attempts by the L-5 Society to prevent United States ratification of the treaty, Time quotes Washington lobbyist Leigh Ratiner as saying the treaty amounts to a "wholesale giveaway of access to vital minerals." Time also gives space

to the NASA/State Department view that the treaty is in the country's best interests, quoting a State Dept. official: "You'll still be able to make a buck off the moon, if there's a buck to be made there." Houston attorney Art Dula (General Counsel to Foundation, Inc.) is also quoted: "Free enterprise institutions simply cannot make significant investments in space while they are under the threat of suit over treaty terms or ex post facto appropriation of their investments by a nebulous future international regime." According to Time, in the face of opposition to the treaty, the Carter Administration has ordered a task force to take a second hard look at the agreement.

**NASA BUDGET CUTS...**Washington...At the moment, uncertainty prevails over the real status of potential NASA budget cuts. The funding reductions, ordered by President Carter to reduce the Federal deficit and tame inflation, have been variously reported as being as high as three-quarters of a billion dollars or as low as a few hundred million. The most recent estimates tend towards the lower figure, but with increasing pressure on the Administration to do something about the size of the total Federal budget, the question is whether or not NASA, which does not have a powerful and vocal constituency, can continue to escape serious damage. It has also been suggested to the Report by insiders in the government that the lower figures have been proposed by the Administration for the moment to put the agency off its guard and prevent the marshaling of forces against deep cuts. Later, closer to the actual appropriations battle, deep cuts could be made when there is not enough time to counter them. In any case, one of the hardest hit areas will be space science activities and advanced technology development and planning.

**HEAVY USSR LAUNCH SCHEDULE...**The Soviet Union launched fifteen payloads into earth orbit during the last month, all but one of which had a direct military function, according to Aviation Week and Space Technology (March 24). This schedule of launches is nearly equal to the entire NASA launch schedule for all of 1980.

**ANTENNA DESIGN STUDIES...**Huntsville...The NASA Marshall Space Flight Center is starting a pair of industry studies of large space antennas which might be tested on a Space Shuttle flight. The antennas, up to one hundred meters in diameter, could be used for military and civilian missions.

THE FOUNDATION  
**COMMERCIAL  
SPACE REPORT**

The **Report** is published monthly, and has a subscription price of \$12 per year, \$20 per year for institutional and library subscriptions and \$20 per year for overseas airmail. Back issues are available at \$1 each from September, 1977. Xerographic copies may be substituted as stocks are depleted. Address all correspondence to Foundation, 85 East Geranium Avenue, St. Paul, MN 55117 or call (612) 370-0990. Editorial Direction: Gary C. Hudson;

Special Assistance: Resident Fellows E. Anne Roebke and T.A. Brosz. The **Commercial Space Report** accepts VISA/BankAmericard and Master Charge. Please give us your full credit card number, expiration date, and the four digit Interbank number (Master Charge only.) Your signature is also required on mail orders. Phone orders accepted at (612) 370-0990. No collect calls please. **Foundation, Inc.** was incorporated in 1971 as a non-profit 501(c)(3) Minnesota Corporation. The company is a diversified research and development organization formed to engage in advanced scientific and technology studies. Funds are provided by contract research for industry, as well as by donations, gifts and internal business profits. 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. **Foundation** 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.