

LaRouche's Record: The Moon-Mars Program

Lyndon LaRouche's emphasis on the scientific and economic necessity for a Moon-Mars colonization program dates back many decades. The following overview article appeared in "The LaRouche Program To Save the Nation," published for LaRouche's 1992 Congressional campaign (from prison, where he had been unjustly incarcerated) and republished in 1997. It has been abridged here.

...LaRouche's proposal that America assume the task of building a city on Mars within a timeframe of 40 years—and that that city be dedicated to the study of astronomy, and to the purpose of effecting an economic and cultural "paradigm shift" in the United States—epitomizes the optimistic vision which has made him the rallying point for those determined to resist fascism today.

LaRouche was one of the leading figures in, and a member of the board of directors of, the prestigious Fusion Energy Foundation (FEF), an association of scientists and entrepreneurs committed to the development of nuclear fusion energy and related technologies, all of which are crucial to the space colonization effort. In fact, it can be said that LaRouche was the one who inspired the founding of the group in 1975, by drawing together scientists eminent in their respective fields.

As a physical economist, LaRouche had intensively studied the work of Gottfried Leibniz. As with Leibniz, a fundamental tenet of LaRouche's thought is the connection between constant advances in scientific technology, and the application of those scientific technological advances to increasing industrial productivity, on the one hand, and the spiritual, moral, and therefore aesthetic health of a culture.

Conversely, LaRouche argued back then, as he does now, that an ecology movement which pretends to protect the environment by limiting the application of technology and strangling the advance of science, must be Malthusian. In fact, exactly opposite to what the Malthusians argue, the high-technology route for an econ-

omy allows it to support an increasing population at an improving standard of living, and at the same time, allows it to protect the environment more and more efficiently.

The least polluting energy source known to man is fusion power, with fission energy running a close second. Even high-temperature plasma reactions, which are not nuclear, are superior, less polluting forms of combustion. If we consider—as we should, and as LaRouche has urged—space to be our next frontier, then clearly our problem will be that we have too few people to do the job, rather than "too many people," as the Malthusians lie. Rather than overpopulation, the complaint will be: The world needs more people.

A City on Mars

What was the significance of LaRouche's Moon-Mars proposal?

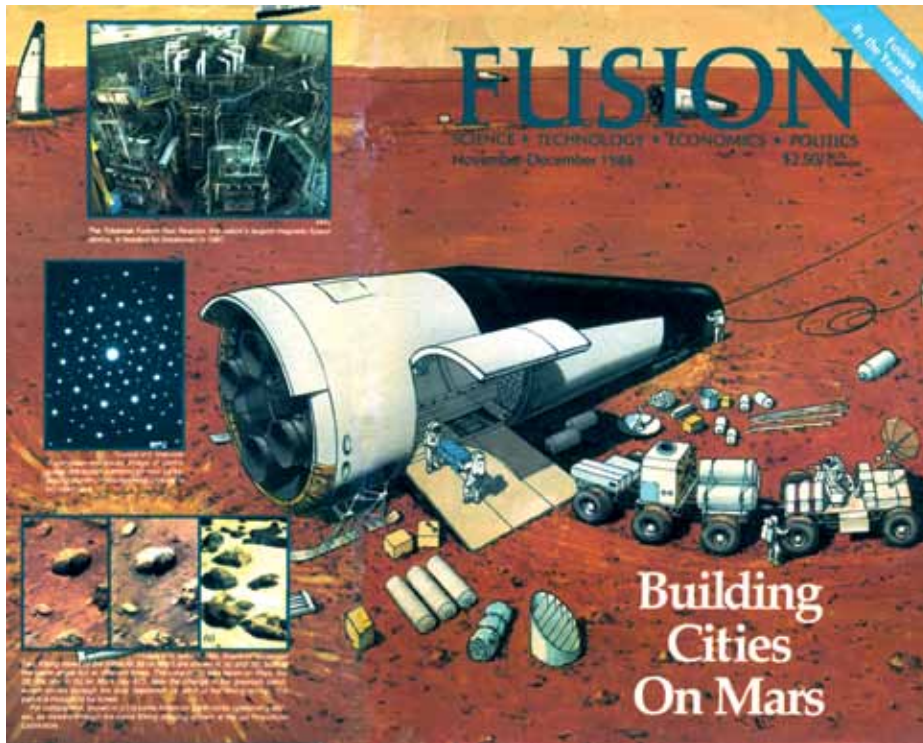
The political and anti-NASA upheaval created by the disaster when the Space Shuttle *Challenger* blew up in January 1986, was peaking just at the point at which President Reagan was prepared to endorse a proposal by the National Commission on Space, headed by former NASA Administrator Tom Paine, for a manned Moon-Mars mission, to establish a manned colony on the Moon which would act as the basis for developing an industrial base on Mars.

The report was issued in the Spring of 1986, and President Reagan went on record as subscribing to the goals of the program, but still today, the project remains to be implemented.

LaRouche reviewed the perspective set out by Paine's commission and came to the conclusion that it was not sufficiently ambitious to accomplish the necessary job. He took exception to the extent to which the commission relied upon existing, off-the-shelf technology to accomplish the task.

LaRouche's objection was that a prerequisite for manned flight to Mars was the development of fusion-powered rockets. Only thus could we guarantee the safety of a crew, and colonists, who would otherwise be out of reach of help from Earth should they get into trouble, and who would have to suffer a nine-month-long journey from Earth to Mars, on a ballistic trajectory.

The fusion-powered space flight proposal was typical of LaRouche's approach to all questions of scientific research and development. If the U.S.A. decided to develop fusion rockets, then a byproduct would be de-



LaRouche's article "The Science and Technology Needed To Colonize Mars" appeared in this issue of the Fusion Energy Foundation's magazine (November-December 1986). The cover illustration, by Carter B. Emmart, shows a Mars lander unloading equipment for mankind's first Mars base.

velopment of a fusion-based economy here on Earth. This would mean an enormous increase in productivity on Earth, which would, in turn, transform the "costs of the space program" into gains in the civilian economy.

The example of the payback to the civilian economy—a ratio of more than 10:1 payback to investment—from investment in the Apollo program was a case in point. The fact that America succeeded in placing a man on the Moon, gave us an edge in semiconductor technology, the development of computers, and of course, of satellites as well—an edge that, unfortunately, we are in process of losing because of stupid decisions by the Presidents who succeeded Kennedy in office.

In the November-December 1986 issue of *Fusion* magazine, LaRouche's proposal, titled "The Science and Technology Needed to Colonize Mars," was the cover story. Here, he developed a timeline for the steps necessary to reach the Moon and Mars. This program became a featured part of LaRouche's 1988 campaign for President, which included a half-hour television broadcast, run nationally on prime time, on March 3, 1988.

The following quotations from the *Fusion* article touch upon the leading elements which LaRouche introduced into the debate on America's future in space. The extraordinary optimism which he evinced then, was in sharp contrast to the naysayers who used the tragedy of the *Challenger* accident to call for contraction of the program.

He wrote: "The Mars colonization mission is not only feasible, both technically and economically; it is urgent that we undertake this project, both for scientific reasons, and also for economic reasons. There are certain classes of technical and economic problems now developing on Earth, which we shall not solve on Earth without help from some of the scientific and economic byproducts of a Mars colonization project.

"Above all, it is time that we begin work on that project.

"For several reasons, the colonization of Mars cannot be accomplished with the technologies we had either developed, or were working to develop, at the beginning of the 1970s. Essentially, the difference boils down to the fact that Mars is a far greater distance from the Earth than the Moon is. We need more advanced technologies to overcome the several kinds of effects of that great distance.

"Therefore, setting the date for colonizing Mars had to wait, until we had begun to master four kinds of new physics breakthroughs: controlled thermonuclear fusion, as the primary source of energy used; lasers and other forms of coherent electromagnetic pulses as a basic tool; new developments in biological science of the kind now emerging around optical biophysics; and much more powerful, more compact computer systems to assist us in handling these new physics technologies.

"During the past dozen years, we have made some spectacularly promising breakthroughs in the four areas just listed. At an easily foreseeable rate of continued progress in these four areas of technology, all the condi-

tions for establishing the first permanent colony on Mars could be met approximately 40 years from now.

“For example: To bridge the long distances between Earth and Mars, we need continuous acceleration for about half the journey, and continuous deceleration for the second half.

“On the surface of Mars, we shall require a great deal of artificial energy. We shall consume much more energy per person than in the most developed industrial regions of Earth today, simply to maintain an agreeable artificial environment. The basic industries we develop on Mars, to produce essential materials from the natural resources available there, will operate at much higher temperatures than are used in any basic industries on Earth today.

“For these uses, we require energy generated at very high energy densities. This requires what we call today the second-generation level of controlled thermonuclear fusion, which should be on-line about 25 to 30 years from now.”

‘The Woman on Mars’

LaRouche’s conceptions have a special poetic beauty. He began his March 1988 television show with a simulation of the first broadcast from the new city on Mars. He called the show “The Woman on Mars,” referring to a famous movie (“The Woman in the Moon”) made in 1929 by Fritz Lang, working with German space scientist Hermann Oberth, which forecasts space travel.

In the LaRouche broadcast, an announcer’s voice is heard, saying, “Are you there, Dr. Gomez?”

From many million miles deep in space, a woman’s voice answers, “Yes, John. I have the announcement for which you have been waiting. As of five minutes ago, our environmental systems were fully stabilized. Man’s first permanent colony on Mars is now completely operational.”

As LaRouche said in that 1988 TV show, a child born today might be that woman on Mars.

Three Missions of the United States

From LaRouche’s 1984 Presidential campaign platform.

... It is the function of society, including the institutions of government, to assure to every person, especially the

young, the opportunity to live a life full of confidence in the fact that their living will be fruitful for present and future generations in some meaningful degree. We accomplish this, in part, by providing for the education and related circumstances of cultural development of the individual. We accomplish this, in part, by honoring and protecting the good which the individual contributes, to the advantage of present and future generations. We accomplish this by adopting national goals, missions in the sense of the Kennedy Moon-mission, which assure the young that the circumstances of adult lives over 40-odd years to come permit the young person’s choice of profession to be a secure choice....

There are three missions which may be selected as outstanding examples of policies to be adopted as commitments now.

1. Since we either possess, or can soon possess the technologies adequate to eradicate oppressive poverty from this planet, the contribution of the United States to that mission, at home, and in international affairs, ought to be a leading choice by the next administration.

2. We may hope that by approximately 40 years from now, we might have progressed beyond the immediate possibilities of mere war-avoidance, to the cultural preconditions among nations assuring durable peace on this planet. That must be the long-range mission of all aspects of the foreign policy of the United States.

3. New technologies in process of development now, afford mankind the possibility of establishing a city-sized permanent colony on Mars as early as 40 years from now. It is man’s clear destiny to undertake such exploration and colonization of space. In addition to those various and incalculable benefits obtained from space-exploration, the mobilization of technological progress to the purpose of accomplishing this mission assures the highest potential rate of growth of the economy, per capita, on Earth.

So, let it be ordered, that every child and youth of this nation, when asked whether his or her adult life will be important to mankind, might answer confidently, that that life will be a contribution to making the success of these three missions possible. Let each young person be given so the right to say with confidence, “My life will be important for present and future generations of mankind.” In a well-ordered state of affairs, every individual life will have such potential importance, and each individual will walk happily through life, in the confidence that this is so.