Will the United States be first in space again?

by Carol White

The 20th anniversary of the historic Apollo Moon landing has come at an important turning point for the U.S. space program. Time is running out, after the decade of stalling which has afflicted the planning of the national space effort. For that reason, President Bush's commemorative speech of July 20 has been a focal point of international interest. Of the many options before him in planning this speech and the implied policy decisions which hung on it, President Bush definitely made the best choice.

Fortunately he did not take the direction being urged upon him by the appeasement grouping within the government and some sections of the space community—as represented by "nuclear winter" kook Carl Sagan—which is to collapse the U.S. space program into joint cooperative ventures with the Soviets. Nor did he opt for the manic approach: to Mars or bust, which calls for a one-shot Mars mission which would be a headline-catcher, but which would not seriously advance the long-term U.S. presence in space. Instead, he laid out a policy which is coherent with the 1986 Paine Commission proposal for the development of an infrastructure in space.

"Our goal," the President said, "is nothing less than to establish the U.S. as the preeminent space-faring nation. From the voyages of Columbus, the Oregon Trail, to the journey to the Moon itself, history proves that we have never lost by pressing the limits of our frontiers."

Bush outlined a three-stage program: completion of the space station, a return to the Moon, and then a manned mission to Mars. "First," he said, "for the coming decade, the 1990s Space Station *Freedom*, our critical next step in space endeavors. And next, for the new century, back to the Moon, back to the future, and this time, back to stay. And then, a journey into tomorrow, a journey to another planet, a manned mission to Mars."

A colony on Mars

In 1986, the National Commission on Space, led by former NASA Administrator Tom Paine, proposed a 40-year scenario to culminate in a manned outpost on Mars. Such a plan assumed the development of a space tug, as a follow-on to the Space Shuttle, and a series of space stations which would be staging grounds for the Mars project.

Lyndon LaRouche, in a 1988 presidential campaign broadcast expanding upon the idea of such a Mars project, pointed to the critical necessity to develop fusion-powered rocket flight to Mars. This is necessary for several reasons, not least to protect space travelers by minimizing the adverse effects of prolonged travel in a gravity-free environment, but also to provide the possibility of coming to the aid of Mars colonists in a timely fashion. With fusion power, a Mars colony could become as little as a week's space flight away.

Such a development would imply a fusion-based economy here on Earth as well as on Mars, with a two-to-three order of magnitude increase in energy availability per capita. Such an increase would vastly increase the carrying capacity of the Earth, banishing once and for all the nonsense that we have exceeded some natural limit on human population expansion beyond which both human and other species are threatened.

LaRouche proposed that within 40 years, a Mars colony could be established. Such a 100,000-person community—a veritable space city—would be primarily charged with the creation of a habitable environment for life on Mars, and the

vastly extended telescopic exploration of the universe.

While falling far short of the crash economic space program demanded by LaRouche, the President did emphasize in his speech the economic payback from the Moon landing, quoting a recent article, that this would be the best investment since Leonardo da Vinci bought himself a sketch pad. In fact, although this was not in the Bush speech, it has been calculated—conservatively—that there was a 10-to-1 dollar payback from R&D investment in the Apollo program. This figure was based upon obvious spinoffs such as the transistor radio and the development of computers and remote sensing. We are still benefiting from productivity gains, as space technologies continue to be adapted to new medical and other arenas.

The fact that President Bush has accepted the main goals of again making the United States "preeminent in space," is the most significant aspect of his speech. Since the FY 1990 budget for the National Aeronautics and Space Administration is now before the Congress, and the House of Representatives has already cut almost $1 billion from the NASA budget—and $400 million from the Space Station—the need for a change in policy is urgent. Rep. Robert Walker (R-Pa.), the ranking minority member of the House Committee on Science and Technology, normally extremely cautious on budget questions, recently pointed out that in the 1960s, NASA spent 4% of the federal budget, while today this has been reduced to approximately 1%.

Such a slow-death setback to the space program is intolerable.

Implementation

Vice President Dan Quayle has been asked by the President to lead the National Space Council in coming up with specific proposals for implementation of the policy. The Council will be deciding in the next few weeks, when and how they will be presenting a detailed package to the President. This is a significant step forward from President Reagan's general pro-space rhetoric, which unfortunately never received an impetus to concrete realization.

Bush requested from the Vice President a detailed specification of "what's needed for the next round of exploration: the necessary money, manpower, and material, the feasibility of international cooperation, and to develop realistic timetables, milestones along the way. The Space Council will report back to me as soon as possible, with concrete recommendations to chart a new and continuing course to the Moon, and Mars, and beyond. . . ."

The recently formed Space Council, directed by Mark Albrecht, has already taken a number of positive steps toward long-range goals. It has endorsed a return to the Moon as a first step toward a manned Mars landing.

In his speech, President Bush said, "In 1961 it took a crisis, the space race, to speed things up. Today we don't have a crisis, we have an opportunity. To seize this opportunity, I'm not proposing a 10-year plan like Apollo, I'm proposing a long-range continuing commitment."

The sanguine assertion that today there is "no crisis," merely an opportunity, runs counter to the reality of the many crises which afflict us today—not least, the global food shortage. This reality only underscores the appropriateness of this new presidential initiative. The only way to guarantee the future of civilization as we know it, is to guarantee an environment which supports technological progress.

Congressional candidate Lyndon H. LaRouche, Jr., in a statement issued on July 22 commenting on the President's address, underlined that "I can only agree with and applaud that policy commitment. For many years, I have been working toward precisely such a three-step space policy, and I have said so in many locations, both in published material and in my spring 1988 nationally televised campaign presentation 'The Woman on Mars.'

"Yet," said LaRouche, "I disagree on one fundamental point respecting the President's space policy. That point is, the United States needs a *crash* program for such a three-step space colonization strategy. NASA director Adm. Richard Truly, in a background briefing following the President's policy address, explicitly excluded the idea of a such a crash program; with this, I fundamentally disagree.

"Moreover, the United States needs not just a crash space program, but to be more precise, it needs a 'crash economic space program.' For many years I have been working on such a concept, and I have discussed it with many experts in the fields of economics, technology, and specifically space technology, both inside the United States and abroad. I know that only such a program is going to generate the necessary rate of scientific-technological progress in the breadth and depth which can enable our economy to reestablish itself as a genuine techological world leader, and to once again make the United States industrially competitive."

He added, "It may sound paradoxical, but I know that the best way to achieve that end, lies in cooperation with our allies, especially with our allies in Western Europe. I have personally carefully studied the Sänger Space Plane design currently being developed in West Germany, and I view that project as a crucial contribution toward a rapid implementation of a space station/lunar base/Mars colonization strategy. By pursuing that project as a crucial stepping-stone for this three-step program, I believe we will be saving costs for all participating parties, while simultaneously enjoying the maximum technological advancement and the quickest possible realization of the program."