

Drifting in space: Values and a policy vacuum

By Neil T. Proto

American folklore conjures up the notion that the United States entered the competition for space exploration with enthusiasm. It did not.

When, in March, 1961, President John F. Kennedy called upon the nation "to take a clearly leading role in space achievement," it followed a period of uncertainty about the importance of space exploration—a period of drift in American resolve to grasp the culture and consequences of sophisticated space technology.

We are in a similar period now. The Challenger tragedy has diminished severely our confidence about mastering space technology and has raised fundamental questions about the public good to be gained from new or expanded space exploration.

The Reagan administration sought to master the drift by bringing back the controversial former administrator of the National Aeronautics and Space Administration, James C. Fletcher. It did not help. Fletcher tried to breathe life into the space program by setting a date for another space shuttle flight in 1988, but public and congressional response has been tepid.

"The U.S. has no space policy," says Sen. Donald Riegle Jr. of Michigan. "NASA is in shambles," according to astronomer Carl Sagan. "First-rate scientists are trickling away, and the brightest graduate students envision their future elsewhere."

Lurking in the shadow are those who would fill the vacuum with a strong military, rather than civilian, direction to the space program. Led by Edward Teller, proponents of the Strategic Defense Initiative and less worthy concepts long dormant on the drawing boards of the national laboratories now have an audience in the executive branch. And moving ahead boldly are the Soviets and Europeans, seemingly unconstrained by the fundamental questions confronting the U.S.

So the drift continues. America remains poised, like Robert Frost's paradigm of choice, at "two roads diverged in a wood." It is a dangerous time, a time of uncertainty that revolves around American values.

This has happened before. Dwight Eisenhower was not a man of the technological age. His military career began on horseback, and he commanded the great armies of the West when human qualities and frailties—not sophisticated technology—dominated the outcome of battles. However, he also witnessed the horror and growth of America's nuclear arsenal, and he glimpsed the implications of the fledgling commercial nuclear power industry.

As president, Eisenhower moved cautiously into the competition for space, spurred by the achievements of the Soviets [Sputnik] but also tempered by serious questions about the expense and effects of such sophisticated technology on American culture and human values. "Today," said Eisenhower just before Kennedy became president, "the solitary inventor . . . has been overshadowed by task forces of scientists in laboratories. . . . [A] government contract becomes virtually a substitute for intellectual curiosity."

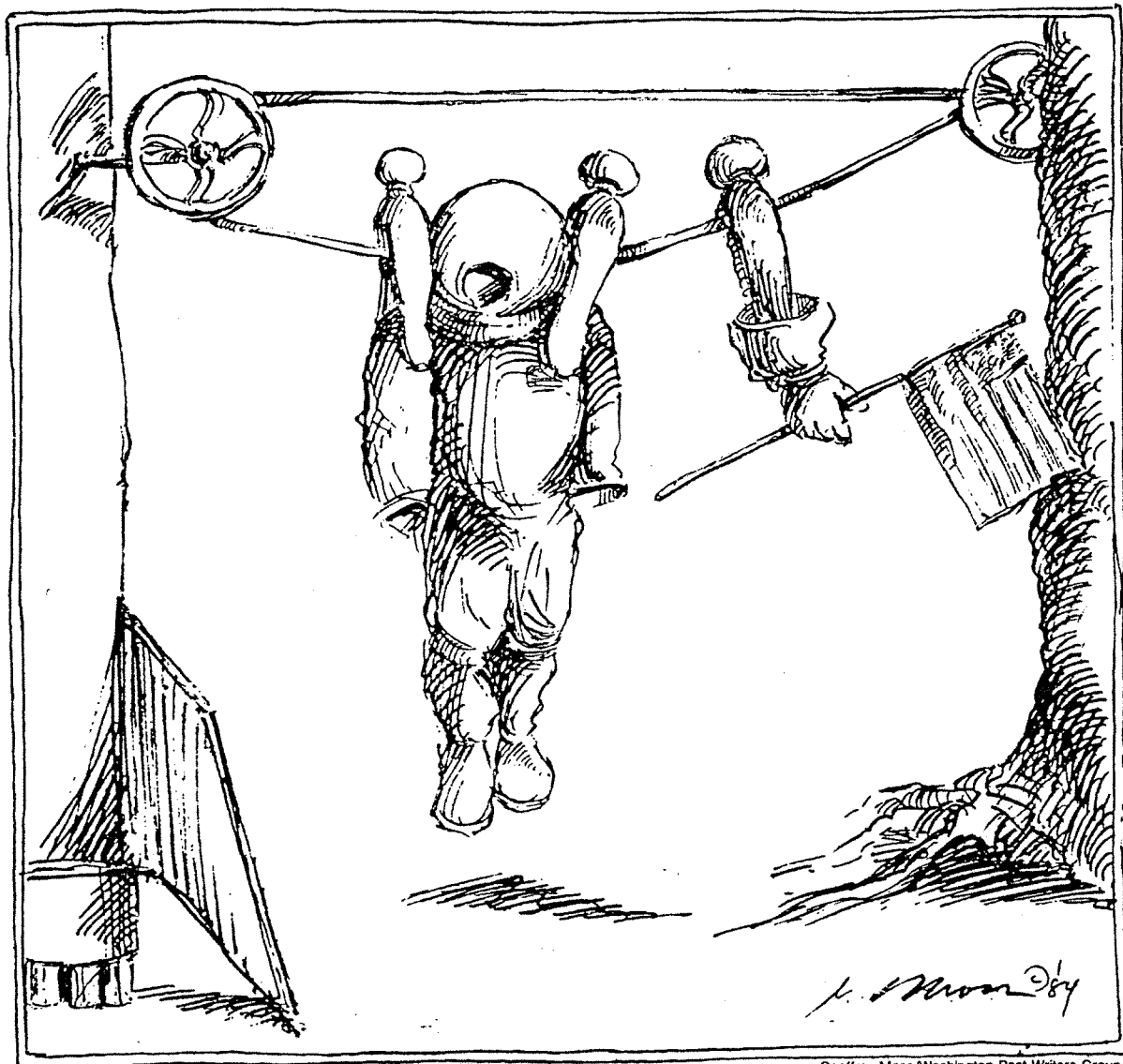
Eisenhower was concerned about the ability of "free government" to mobilize its resources to compete with the centrally controlled political economy of Russia without compromising its basic values of intellectual freedom and individual initiative. He feared that talent and resources would be diverted from pressing social problems by "the prospect of domination of the nation's scholars by federal . . . project allocations, and the power of money." Was the potential good to be gained from space exploration worth the risk to American values?

Eisenhower's uncertainty created an opportunity. Based on his own understanding of American values and the need to project them around the world and into space, John Kennedy seized the opportunity and sought the moon. He drew heavily on the frontier tradition in the American character. He recognized that it was the value we placed on risk-taking and the competition of ideas that should motivate America's entrance into space.

"We choose to go to the moon in this decade . . . not because [it is] easy, but because it is hard," President Kennedy said. If "we are to win the battle that is now going on around the world between freedom and tyranny, the dramatic achievements in space . . . should have made clear to us all . . . the impact of this adventure on the minds of men everywhere. . . ."

Kennedy rested his decision solidly on American values. With a renewed commitment, borne of a dialogue about what was in the public good, America moved aggressively into space.

It is too late for the Reagan administration to engage the nation in a thoughtful dialogue about America's values and a renewed commitment to space



exploration. The administration is mired in its own uncertainty. Leadership must come from elsewhere.

As we move toward 1988 and the certain ascendancy of a new president, we can hope that the candidates will think long and hard about the future of a program that has reflected some of our finest intellectual and political achievements and has resulted in one of our most troublesome and enduring tragedies. The future of space exploration was an issue in the 1960 presidential campaign. It should be an issue again. The presidential candidate who can grasp and articulate the technological, foreign policy, beneficial, value-laden issues of space may find himself leading the nation into the next millennium.

But the fate of the nation's space program cannot await the happenstance of the Iowa caucuses or the New Hampshire primary. We must look largely to Congress, not for a new legislative initiative but for a sustained dialogue: a series of public hearings, perhaps chaired by Sen. John Glenn or Sen. Riegle, who has taken a leadership position on the future of space exploration.

Hearings should be held throughout the nation, at the great centers of learning—Caltech, Harvard, Yale, MIT, Chicago, Princeton, Raleigh-Durham—and

should look to scholars, humanists and scientists to elevate the dialogue and inform the public.

We need to hear more about Carl Sagan's proposal to explore the planet Mars. The report last May by the National Commission on Space, which described scientific prospecting and lunar settlements, needs renewed public scrutiny and cost-benefit analysis.

We need to discuss the effect on our future as a nation of young engineers and physicians finding that serious career opportunities lie primarily in the military uses of space, not in imaginative exploration of climate, new life forms and technological byproducts of practical benefit to all mankind. And we need to learn whether European and Japanese reticence concerning their commitment to construction of a multinational space station is a reticence of will or a concern about undertaking a venture of such moment with a weakened American administration.

It is hard to tell what a sustained dialogue would yield. Hopefully, it would be a clearer sense of direction based solidly on what we believe is good about ourselves. But it is certain that the absence of such a dialogue will assure at least one result. "The exploration of space," President Kennedy admonished the nation, "will go ahead whether we join it or not."

Neil T. Proto, a lawyer who practices in Washington, D.C., and Connecticut, writes on issues that relate to technology and public policy.