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## Truly ouster is latest blow to space program

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*White House grandstanding about returning man to the Moon and going on to Mars is cheaper than a serious effort, which means funding the Space Station. Marsha Freeman reports.*

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On February 12, the White House announced that National Aeronautics and Space Administration (NASA) Administrator Adm. Richard Truly had submitted his resignation as the head of the nation's space agency. The White House's phrasing of the announcement fooled no one into thinking that Admiral Truly hadn't been fired. The friction between the NASA administrator and the White House, represented by Vice President Dan Quayle's National Space Council, has been public knowledge since the first astronaut to head the civil space program became its administrator three years ago. Admiral Truly learned by experience what it means to "serve at the pleasure of the President."

Whatever political advantage the White House thought would be gained by flexing its political muscle to show the electorate that Vice President Quayle is in charge, won no support. Neither Congress nor most space commentators were amused by the ouster of the highly respected NASA administrator, just as the agency begins its fight with Congress on the NASA budget, and on the annual threat by Congress to cancel Space Station Freedom.

At a Feb. 19 hearing on the fiscal year 1993 NASA budget before the Space Science and Technology subcommittee of the House Committee on Science, Space, and Technology, Rep. Norm Mineta (D-Calif.) expressed the feelings of most members: "Admiral Truly has earned the gratitude of Congress and this committee. . . . I am deeply concerned about what appears to be an attempt to turn our nation's space program into a political poker chip. It angers me to think that NASA, which has inspired generations of Americans, is being turned into a public relations tool for the rehabilitation of Dan Quayle. . . . Whatever political or policy agendas the White House may have, neither NASA or Admiral Truly deserved this treatment. . . . Our space program is too impor-

tant to be left to White House political operatives."

As bad as it would be for any cabinet-level agency to lose its top management just as it is going into the congressional budget cycle, the consequences for NASA—and for the nation—are presently much more serious. As has been noted by agency insiders and astute reporters, the last time there was such a leadership vacuum at NASA, in 1986, the Space Shuttle Challenger was mistakenly launched, killing seven astronauts. Worse than the near-term effect is the fact that if this nation is ever going to go back to the Moon and then on to Mars, administrations will have to stop playing politics with the space program, and give it the resources and support it needs to get us there.

### Differences over space program's goals

The battle between the White House and NASA over who would control space policy was undoubtedly intensified by the recent refusal of the administration to allow Admiral Truly to appoint someone of his choice as the deputy administrator. *Aviation Week* magazine reported on Oct. 14 that "Vice President Dan Quayle is pressing for an outsider to step in as the agency's number-two official." Deputy Administrator J.R. Thompson had announced in September he would be leaving Nov. 8.

This fight is a replay of what happened to a previous administrator, James Beggs, who was denied the prerogative to choose his own deputy during the Reagan administration. An incompetent political appointee, William Graham, ended up in the number-two spot at NASA. When Beggs was forced to step down, thanks to a false Justice Department indictment, Graham was left as the acting administrator, when Challenger was unfortunately launched.

But aside from the power play by the White House to

override decisions by Truly and make a career for Dan Quayle, real differences developed over how best to proceed with the space program. One view was based on Truly's more than 30 years of experience as a Navy pilot, an astronaut, and as the man who managed the Space Shuttle program when it had to be rebuilt after the Challenger explosion. The other view was based on political expediency and the unreal economic policy of the Bush administration that what is best is cheapest, and is done by the private sector. And when it comes to accomplishments in space, of which the American people are rightfully proud, the White House also wanted the program to be "highly visible."

One clear statement of the problem was penned by former *Science* magazine writer Daniel Greenberg on Feb. 26 in the *Washington Post*: "It's time to break up the old-boy network at the space agency," Greenberg advised, because "NASA is still dominated by the romance of humans in space," and is resistant to "outside" ideas.

What did the White House want? "A JFK-like manned assault on the Moon, including the establishment of a permanent base there," according to the press in early July 1989—just two weeks before the 20th anniversary celebration of the first lunar landing. On the occasion of that anniversary, President Bush announced his plan to complete and deploy Space Station Freedom in the 1990s, to return to the Moon in the first decade of the next century, and to land on Mars in the following decade.

Sounded good.

Before the public speech, the White House briefed a group of congressmen on options being considered for "a major space initiative," for the Moon and Mars. Robert Walker (R-Pa.) stated that any of the options would require "a substantial increase in resources available to NASA—it will require doubling the size of NASA and the NASA budget." There's the rub: If you want a Moon-Mars mission, you are going to have to pay for one.

Two months later, Dan Quayle admitted in an interview with *Space News*: "The Congress unfortunately has cut our space commitment and our space resources. This President's space budget is being challenged right now on Capitol Hill. . . . We hope that the Congress does not significantly change the President's space budget. If they do, and we cannot get the support, we'll have to regroup."

NASA Administrator Truly, who had flown twice on the Space Shuttle, had also participated in the first U.S. space station program—Skylab—and was now in the midst of returning the grounded Shuttle program to flight, was excited about the Moon-Mars initiative for NASA, but he also knew what was required.

### **The fight for Space Station Freedom**

Two months after President Bush announced his initiative, Truly stated in testimony on Sept. 28, 1989, that "future missions to the Moon and to Mars will continue the remarkable journey

of exploration begun over 25 years ago when human beings first rocketed into space. Exploration is a human imperative, one deeply rooted in American history. Our flag still flies on the Moon, and space exploration, both manned and unmanned, is an endeavor in which our country excels.

"This new commitment responds to that imperative. . . . [But] at present, NASA activities are tightly funded, [and] we cannot sacrifice current programs for future initiatives. The return to the Moon and journey to Mars represent an activity that builds upon the core program. . . . I would like to comment upon two programs that are vital to our space program today, yet are also essential to America's future in space. They are the Space Shuttle and Space Station Freedom. One is flying. The other is being built. Both are indispensable.

"The Space Shuttle is key to space exploration by men and women. It is the first step into space by human beings, the only way we can lift our astronauts into orbit. The presence of Americans in space depends upon the Shuttle. . . . Space Station Freedom is the critical next step for the voyages to the Moon and Mars. It is the transfer point, the staging area, and the point of departure. . . . Without Freedom, these future expeditions cannot take place." His view has been denounced by some as a Romantic fixation with the manned space program and near-term projects.

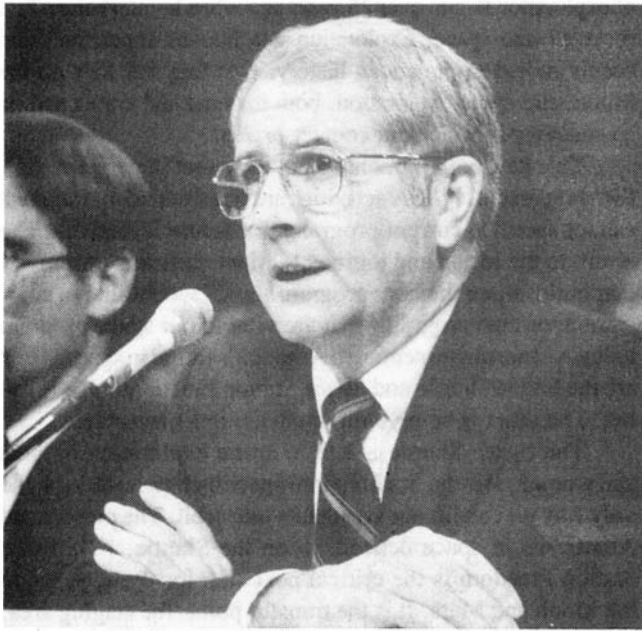
In November 1989, upon request, NASA presented its 90-day quick study of how to implement the President's Moon-Mars program. In order to carry out the effort, NASA asserted, Space Station Freedom would have to be accelerated to a 1997 completion date, two years earlier than planned, and a new heavy-lift launch vehicle would have to be developed. But Freedom was taking a budget beating.

In a June 1991 letter to Sen. Jim Sasser (D-Tenn.), who chaired the Committee on the Budget, Truly minced no words, stating, "NASA has reduced the size of Freedom by nearly one-third, has simplified the launch and assembly, and has reduced the cost by \$5.625 billion over the next six years. . . . to comply with congressional guidelines. Space Station Freedom has already made its contribution to the deficit reduction effort, and any further reductions will terminate the program."

The White House refused to believe that if it could not win support for the Space Station, there was no point in telling the American people we were going back to the Moon, much less on to Mars. Instead of trying to work with Truly to build support for the Shuttle, the Space Station, and the Moon-Mars program, the administration decided to try to bypass NASA and find a "quick, cheap, and dirty" way to implement the Space Exploration Initiative. This required mobilizing the National Space Council as a ready-made counterpole to the space agency.

### **National Space Council: a bad idea**

A National Space Council had not existed since the Nixon administration. On March 1, 1989, the Bush administration



Adm. Richard Truly, during Feb. 21 testimony before a Senate Appropriations subcommittee. There is no question about Truly's "resignation" as NASA administrator: The Bush administration fired him.

announced that it would be chaired by the vice president, and include the secretaries of the Department of Defense, Transportation, State, Commerce, Treasury, the Office of Management and Budget, the budget director, national security adviser, director of the CIA, the head of NASA, the President's science adviser, and the White House chief of staff. Quite a mélange of forces arrayed against the only agency that has the authority, and which takes the responsibility, for operating the nation's civilian space program.

Longtime observers of the space program have made clear that space policy developed by a space council would be inherently unstable, and especially so given the particular characteristics of this one.

In the February 1989 issue of *Ad Astra* magazine, two months before the council was formally constituted, space historian John Logsdon asked, "Do we really need a Space Council?" His answer: "History provides a negative answer. . . . Space will only get special attention at the presidential level if the President wants to give it that attention. Creating a space policy mechanism cannot substitute for presidential commitment. . . . It is no substitute for a strong NASA administrator who has the confidence of the President."

A year after George Bush's Moon-Mars speech, an editorial appeared by Joseph Trento in the July 25, 1990 issue of the *Sun Gazette*, a paper in the suburban Washington area of Loudoun County, Virginia. Joseph Trento had earlier written a book on the Challenger accident, which had laid the blame squarely at the door of the White House. Trento stated, "The truth is that the Bush administration has no real commitment

to a civilian space program. George Bush as vice president once tried to turn the entire shuttle fleet over to a group of Princeton investors for private profit.

"Dan Quayle chairs the same NASA oversight body that Lyndon Johnson ran. Johnson used it to round up political clout for the space program as JFK's VP to help give the push to the Moon. All of us understand that Dan Quayle is no rocket scientist and no LBJ. We also know he is better at playing golf than just about anything else. Considering those qualifications, you would think George Bush would show enough concern for America's technological future to give Quayle a job that was a little less taxing on his limited mental resources.

"We would urge President Bush to fire Quayle as head of the Space Council and appoint someone who has a clue as to what NASA's mission is, except it is more than clear that no one in this administration knows.

"Cheap political stunts like proposing Mars trips that will take off long after George Bush has made it to the heavens have been the death knell of NASA for a generation. . . . What ails NASA is that it has no real mission. Running dilapidated spaceships on an unsafe budget isn't what NASA was created to do. . . . A lack of presidential leadership is what ails NASA and has since 1969."

When NASA submitted its quick-look report on how to accomplish the Moon-Mars mission to the White House in November 1989, the space moguls at the National Space Council decided it lacked "bold new ideas." After all, NASA had been planning Moon-Mars missions for nearly 30 years. Surely, there must be innovative concepts lurking in corners that the agency had never come across before.

At the same time, cuts in the defense budget threatened to leave thousands of scientists and engineers from the national weapons laboratories unemployed. An ill omen appeared with a Dec. 4, 1989 article in *Aviation Week* that the Space Council was moving toward a consensus that the Moon-Mars mission would be paced by a technology effort similar to that used in the Strategic Defense Initiative (SDI). What this means is that the Defense Department's cost-containment approach to technology development, which had badly infected SDI, was being applied to the Moon-Mars mission. By contrast, NASA's approach was to use updated versions of the already-proven technology that had been under development when the last Moon-Mars program had existed in the early 1970s, and couple that with an aggressive mission schedule.

Determined to pull the rug out from under Truly and take command, Vice President Quayle sent a letter to the Aerospace Industries Association in December, requesting its input on "innovative ways of doing business" to accomplish the Moon-Mars mission.

The *Washington Post* reported this move on Dec. 11 under the headline: "Friction Between NASA and Quayle's National Council Erupts in 'Mars Wars.'" The crux of the

issue was that the White House objected to NASA's "business as usual" (that is, the way NASA landed man on the Moon and sent satellites to visit all of the planets), because it would mean a \$400 billion program. Truly and others cautioned, however, that there is no technological "silver bullet" to cut the costs of space exploration substantially. "We think we are very well plugged into both classified and unclassified technologies and how to apply them to this problem," Truly stated. "Are there pressures to do things cheaper? Sure. Are we willing to sign up when we don't get the resources we really need to achieve it? I'm not."

Two weeks later, *Nature* magazine observed that the call for outside ideas was the "first sign of a growing power struggle between the space agency, the vice president-led National Space Council, the aerospace industry, and government research laboratories over who shall take part in and plan the massive two-decade project. . . . The decision indicates a diminishing White House confidence in NASA."

Following the Space Council's great leap forward to solicit "new ideas," NASA set up the Synthesis Group in September 1990, to review and integrate concepts the White House insisted be solicited for a return to the Moon. We will return to the "new ideas" this search came up with.

At the very same moment that top-flight technical people were now deployed to read and listen to more than 1,000 "ideas" for a program from which *all* funding had been removed from its budget by the Congress, the White House decided that there was not only an idea crisis at NASA, but also a management crisis.

On July 26, 1990, the *Los Angeles Times* reported there had been a "close call" in Washington. Congressional NASA critics and the Space Council staff had privately urged a "sweeping investigation" of alleged mismanagement at the space agency. President Bush "forcefully" rejected the calls to investigate NASA's current problems with the Shuttle, the Hubble Telescope and the Space Station, the paper reported, and instead asked Truly to appoint a panel to review the agency's long-term goals.

Two television networks reported Truly was considering resigning over the apparent vote of no confidence by the White House. "Quayle himself met with Truly last week and declared afterward that the administration has 'complete confidence' in the NASA administrator and dismissed rampant speculation that the White House would launch a major probe of the space agency," wrote the *Times*. On July 25 Quayle announced that Martin Marietta chief Norm Augustine would head an independent committee that would review the space agency.

On Sept. 13, 1990, Admiral Truly testified before that Augustine Committee. "All is not well" at the space agency, he warned. The real problem, however, was not Hubble Telescope flaws, or Shuttle hydrogen leaks. From his perspective, he said, the problems included the need for the administrator to have more authority and flexibility to run the



Vice President Dan Quayle, who heads the National Space Council, speaking at a GOP fundraiser in Virginia's exclusive hunt country. Truly's ouster was designed to submit NASA and the country's space policy to the short-term political considerations of the White House.

program, and a "better match" between NASA's programs and its resources.

When the Augustine Committee released its report, the score was, not surprisingly: Space Council—one; NASA—zero. Dan Quayle stated, "The Augustine report clearly points out the need for fundamental changes in our civil space program." "By endorsing the changes," *Aviation Week* wrote, "the Bush administration has acknowledged that much of the post-Apollo U.S. manned flight planning by the Nixon, Ford, Carter, and Reagan administrations was too ambitious for NASA to undertake with the resources provided.

"The most controversial aspects of the report," *Aviation Week* summarized, "are phase-down of Shuttle operations and procurement of a new heavy-lift booster in place of buying a fifth operational Shuttle orbiter beyond Endeavour." NASA has planned procurement of a fifth orbiter during the early 1990s to keep the fleet of reusable spacecraft robust enough to build Space Station Freedom.

In an article for the Dec. 28, 1990 issue of *New Federalist* newspaper, this author was a little less diplomatic. "Panel Urges End to Manned Space" was the headline. The panel recommended no more Shuttle orbiters be built, that Space Station Freedom be down-sized (again), and that the Moon-Mars mission be done on a "pay as you go" basis, meaning realistically, not at all.

### Quayle and the 'flying condom'

According to a Jan. 22, 1990 article in *Aviation Week*, Lawrence Livermore weapons laboratory "founder Edward

Teller and his protégé Lowell Wood have both spent time talking to the Space Council about proposals for Mars. Quayle is said to have been impressed by one idea of Wood's for inflatable Kevlar-covered balloons for space travel. . . . The double-walled 5 meter by 15 meter structures could be stowed compactly until needed, Wood says, greatly simplifying the process of establishing living quarters or storage space. Although Wood acknowledges that the technique carries some risk—the balloons might pop—he claims the technique could cut the project's cost by an order of magnitude."

Lowell Wood is one of the whiz kids from the Livermore SDI effort who gave this country "Brilliant Pebbles," when Congress ditched the concept of strategic defense. (See *EIR*, April 13, 1990, "'Brilliant Pebbles' Are Not that Smart"; and March 22, 1991, "SDI Revisited: Lessons We Must Draw from the Gulf War" and "Bush's GPALS Limits More than Defense").

*Final Frontier* reported nearly a year later, in December 1990: "In the end, the National Research Council [of the National Academy of Science] determined that while a few of the Livermore team's ideas should be pursued further, they generally underestimated the mission's engineering challenges. This finding didn't matter to the National Space Council, however. Its members were convinced that alternatives existed. . . . Some longtime space reporters believed it was a public relations gimmick to generate support for a seriously ailing program. . . . Congress had refused to make the multibillion-dollar commitment to the Space Exploration Initiative."

Robert Park, in the Feb. 21 newsletter of the American Physical Society, described Lowell Wood's proposal: "Then there was the inflatable Kevlar spacecraft, or 'flying condom,' that could be wadded up and shot into space for peanuts. . . . He is the guy to see for quick, cheap solutions. Now Wood has the ear of Dan Quayle."

In addition to the "flying condom" approach to the Moon-Mars mission, *Aviation Week* reported in an editorial last month, that "physicist and gadfly Lowell Wood . . . has been briefing senior administration officials on his notion of a sweeping reform of space programs, beginning with acquisition practices. The reform's premise: The civil space program is a captive of NASA's old guard. The reform's objective: Wrest control from the old guard and shift it to the White House. Unfortunately, the consequence could easily be the wholesale politicization of NASA."

When George Bush announced Adm. Richard Truly's appointment as head of NASA on April 12, 1989, Bush said, "This marks the first time in its distinguished history that NASA will be led by a hero of its own making, an astronaut who has been to space, a man who has uniquely experienced NASA's tremendous teamwork and achievement." Now, for the sake of politics, the President has foolishly thrown that experience out the window, and perhaps the future of the space program with it.

## Truly discusses his years with NASA

*The following is from an address that Richard Truly delivered to a luncheon of the National Space Club on Feb. 26, 1992. Subheads have been added.*

I joined NASA on a blistering hot August day in 1969, at Manned Spacecraft Center in Houston, Texas. I was 31 years old at the time, but I did come with some experience—almost five years as a military astronaut, test pilot trained by Chuck Yeager, a Navy carrier fighter tour under my belt and, as a matter of fact, the youngest and only remaining member of the first selected [Defense Department] Manned Orbiting Laboratory group of astronauts.

Imagine how I felt as I joined an organization like NASA. I actually arrived between Apollo 11 and Apollo 12. Only a month before, Neil Armstrong and Buzz Aldrin had set foot on the Moon, the event that the 20th century—probably this 1,000 years—will be remembered for. The first brilliant steps of the dreams of humans, since the ancients looked up at the star canopy above, had been achieved!

It was the very epitome of opportunities in a dreary decade of an unpopular war, presidential assassinations and racial violence on the streets of our beloved land.

Yet, even then, the Apollo that I remember was not easy, was not quick, was not free of risk, and was very much criticized until the final glory was achieved. Frankly, it was like the space program of today—a tough, risky job, filled with ambitions and political realities; successes and failures; blood and kisses; and wonderful, smart, gutsy people!

### First space station

A few years later, in 1973, NASA placed America's first space station in orbit. It was Skylab, and at liftoff I had the best job in the astronaut office—that is, other than Pete Conrad, Joe Kerwin, and Paul Weitz—I was "Houston" for all three Skylab ascents, rendezvous, and dockings, and also for the first reentry.

Of course, though, NASA was already developing the world's first reusable spacecraft—a space shuttle—to take large crews and heavy cargoes to orbit. . . . I became pilot of one of the two test crews to fly the 747 Enterprise flight tests in 1977. . . . I drew a lucky straw to fly those flights with the great Joe Henry Engle. It was the best test pilot job in the country that year.

Shortly after that, the first crew of the Space Shuttle program, John Young and Bob Crippen, were named. Joe Henry