

# Bold steps demanded at AIAA

*Marsha Freeman and Robert Gallagher describe the American Institute of Aeronautics and Astronautics sessions on space and defense.*

Aerospace industry spokesmen, U.S. military personnel, and government officials met in Baltimore on May 25-27 to discuss the future of the United States' civilian space program and the military uses of space. This year's annual meeting of the American Institute of Aeronautics and Astronautics was particularly notable for the prevailing opinion that America is losing its leadership in technology through federal inaction, despite attempts by administration spokesmen to explain away the U.S. decline by the "Soviet technology theft" bugaboo.

Author James Michener, keynoting the conference, observed that though we "stand on a platform of unbelievable accomplishment" in the space program, we "see ourselves turning away from science, reverting to mythology and astrology." Michener stated that he is "worried that America is slipping into the status of an undeveloped country—we're supplying raw materials and other countries are applying the brainpower."

## The conscience of the space program

The strongest expressions of what is wrong with U.S. space and science policy was voiced by two previous NASA administrators, Dr. Robert Frosch and Dr. Tom Paine. The unusual combativeness of their speeches reflected the alarm over U.S. technology policy throughout the most advanced sector, aerospace.

Dr. Paine, who recently retired as the head of the Northrup Corporation, began by stating that those who try to perform a cost-benefit analysis of science programs "know the cost of everything but the value of nothing." The major point, he stated, "is the importance of science and technology to the strength of a nation. Those nations that use it survive, and those that don't, don't."

Addressing the paranoid military response to the declining lack of U.S. leadership in these fields, Paine stated that "we don't have to be so concerned about secrecy" and talk about censoring our technology. Our policy should be simply to "stay 10 years in front technologically in all science and technology."

"We need bolder programs," Paine asserted. "Today we are approaching a space program more appro-

priate for Luxembourg than the United States. . . . We have the technology for a space station, and it is a dreadful mistake to not move ahead with our planetary program. By the year 2000 we should have orbiters around every planet in the solar system and landers on every solid body," he insisted. "We should pay back our debt to Columbus partly by our movement into space."

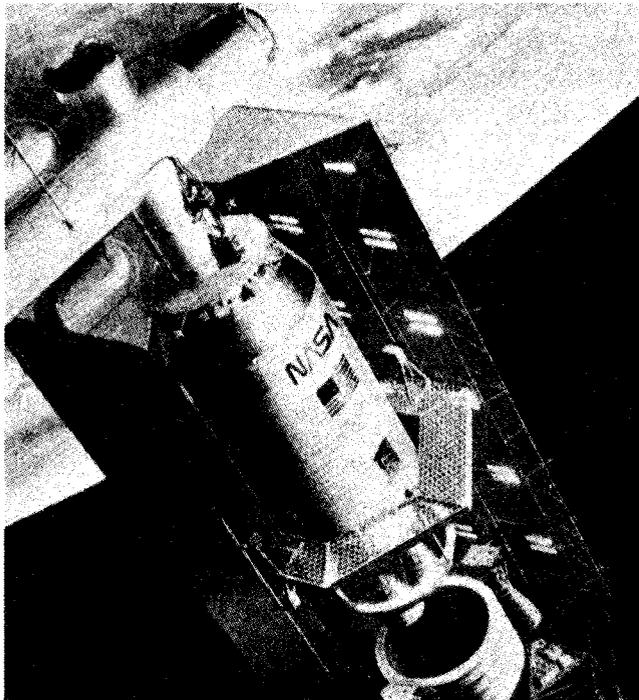
Dr. Frosch, NASA administrator under the Carter administration, expressed his frustration at the current situation. "The administration line now is the same as the last administration—the Office of Management and Budget has no belief in institutions. Some things must be done because they are public goods. The assumption is that if something isn't done in the market it isn't economical. But now short-term gain is driving out long-term gain. We are dealing with an ideological problem and need a voting opposition."

In response to a question about the cost of doing anything bold in space, Frosch stated that cost-benefit for science programs was "the incompetent pursuing the impossible" and termed any estimate of what a future space system or piece of hardware would cost "a lie."

The mentality under attack was given fullest reign in the presentation by Fred Khedouri, former legislative assistant to David Stockman, and currently director at the OMB for Natural Resources, Energy, and Science. Though the FY83 budget for NASA as submitted by the administration contained no new starts, gutted the nation's aerospace research and cut back key areas in planetary programs and technology utilization, the 31-year-old anti-nuclear environmentalist said that the NASA budget was in good shape—compared to other programs. "Someone has to say no," was his summary statement.

## NASA's 'bold step'

For the past few months, and in a March interview with *EIR*, NASA administrator James Beggs has stated that the next step in the space program would be a manned space station. Until now NASA has been unwilling to pin down a date for its operation, and



*Drawing of an Orbital Transfer Vehicle being serviced at a Space Operations Center.*

many hoped they would try to deploy a space station by 1992, the 500th anniversary of Columbus's discovery of America.

During a session at the conference on "The Course for Space Transportation," Dr. Ivan Bekey, who directs NASA's advanced programs office, announced that the space agency was planning to orbit a manned space station in low Earth orbit by 1990. By the year 2000 the plan would include another station at geosynchronous orbit, 22,300 miles above the Earth. This second station, which would be at the same altitude as U.S. communications satellites, would require the development of an auxiliary transport system to the Space Shuttle, such as an orbital transfer vehicle.

NASA has answered the challenge to plan for a "bold" step for the space program. When the Shuttle lands in California on July 4 President Reagan will be there to meet it. It is the perfect opportunity, as the Shuttle is declared operational, to take the kind of leadership needed and make the space station the goal for the next decade in space.

On the subject of Military R & D, retired U.S. Air Force Gen. Bernard Schriever took that kind of approach, attacking the Reagan administration Department of Defense May 26 for "not doing enough" to develop high-energy laser weapons for deployment in space as an anti-ballistic missile system. Schriever, who led the development of the intercontinental ballistic missile (ICBM) in the 1950s, emphasized that space-

based laser weapons would be "a breakthrough in military technology of the magnitude of nuclear weapons."

The general stated that "we urgently need a national policy decision" on development of these weapons. He called for the formation of a blue-ribbon panel of scientists to determine their feasibility, and the establishment of a "Manhattan Project"-scale effort to develop the weapons if the panel confirms their feasibility. "We have the people to do this job," said Schriever. "This is so important to our future that we ought to just get on with it."

As *EIR* has emphasized, laser weapons placed in orbit as part of an anti-ballistic missile system could disarm or destroy ballistic missiles on the boost phase of their trajectory. Space-based lasers are one type of beam weapon that if deployed would constitute defense against nuclear attack and transform military doctrine and strategy in the West.

General Schriever, an aeronautical engineer, was virtually alone in advocating ICBM development in the early 1950s. As a colonel in Air Force RD&A, he commissioned a study from John von Neumann on H-bomb weights and yields that he knew would confirm the feasibility of an ICBM system. Following this, Air Force Special Assistant for R&D Trevor Gardner established the "Teapot Committee" headed by von Neumann that concluded that rapid ICBM development was practical. Schriever then led the Ballistic Missile Division in development of the Thor, Titan, and Atlas missiles that have been essential not only to defense but also the civilian space program.

The proponents of a Manhattan Project for space-based laser weapons are primarily retired military officers like Schriever, as well as Lyndon LaRouche's political action committee, the National Democratic Policy Committee, and several U.S. Senators and Representatives. LaRouche has recently issued an NDPC Discussion Memorandum on military policy titled "Only Beam Weapons Could Bring to an End the Kissingerian Age of Mutual Thermonuclear Terror," which calls for such a program. The U.S. Senate voted unanimously April 29 to commit the United States to deployment of a prototype laser-weapon system in space by 1990-92.

Schriever's view, however, represented the minority outlook at the conference, which was dominated by administration and Air Force opposition to accelerated development of space-based and strategic defense technology, such as space-based lasers. Speaking about the Air Force space program, Maj.-Gen. Jasper Welch, Assistant Deputy Chief of Staff for Research, Development and Acquisition, asserted, "The bottom line of all this is that we must pay very careful attention to the costs of our space operations. . . . It is important that

the risks and uncertainties [in development of space-based lasers] be identified and resolved before making a national commitment.”

Welch and his colleagues are victims of the accountant's mentality that has dominated military thinking since the tyranny of Robert McNamara and the Rand Corporation at the DOD in the 1960s. Under the sway of the doctrine of deterrence, that the role of our military forces is to prevent nuclear conflict by maintaining a secure retaliatory nuclear arsenal, officers like Welch have abandoned the historic role of the military as nation-builders who recognize that development of the most advanced science and technology is, in the words of General Schriever, “the first line of our defense.”

McNamara and Rand imposed on DOD the absurd notion that the ultimate criterion for development of weapons systems was their “cost-effectiveness.” As USAF Col. Earl Van Inwegen, Deputy Director for Space on the Air Force Staff, told *Aviation Week*, funding the space program is difficult because “you don't drop bombs from space, and that's the bottom line in the Defense Department.”

This is the origin of the Air Force rationalizations for the state of the U.S. beam-weapon program, although it is agreed that the Soviets are about to deploy a space-based laser in the next few years. USAF Lt.-Gen. Kelly Burke, who is Deputy Chief of Staff for RD&A and Welch's boss, told reporters at a late May luncheon meeting that the expected Soviet deployment will have “marginal” effectiveness, and that “such a weapon would have much greater political than military value.” The Air Force, on the other hand, plans to not even make a decision on development of a deployable space-based laser weapon prototype until 1987, as Welch confirmed at the conference.

Secretary of Defense Caspar W. Weinberger attributed the erosion of the “U.S. lead in basic military technology” to the literal “theft” of technology from the West by the Soviet Union, at the AIAA annual awards dinner which closed the conference. Weinberger called upon industry representatives to “protect the information gained in the development” of new technologies, such as high speed integrated circuits, by applying “appropriate security measures” and “sharply reducing public discussions” of the technology. Industry representatives, though propitiatory of those holding the budget purse strings, were slow to swallow this line whole hog. In introducing Weinberger, AIAA General Chairman John McLucas described the just-concluded conference as dominated by “an uncasiness over the erosion of the U.S. lead in advanced technology.”

In the corridors, representatives of such firms as Lockheed, Martin-Marietta Aerospace, Rockwell Inter-

national, and other firms that developed the Space Shuttle, summed up the conference as confirmation that the United States was accepting strategic inferiority.

Robert Cooper, director of the Defense Advanced Research Projects Agency (DARPA), asserted at the first conference plenary session that his agency was producing a “quiet revolution in national-security technology.” To make sure that no one misunderstood him, Cooper added that he was “not referring to space-based lasers or X-ray weapons” (another type of anti-ballistic missile beam weapon) but to the development of computerized “stand-off” weapons with conventional warheads that could be fired at great distances but hone in on a target with infallible precision. These weapons, such as DARPA's “advanced cruise missile” now under development, are the Air Force's conventional alternative to truly advanced weaponry. Responding to questions later, Cooper admitted that the guidance system of the current generation of cruise missiles still does not function properly and that the missiles in tests continue to crash in mountainous terrain which their guidance systems were designed to follow.

Secretary of Defense Weinberger, who is among those sabotaging space-based beam weaponry, whined that the Soviets lead the United States in development of “directed energy weapons such as high-powered lasers” because they save money in other fields by “stealing” Western technologies. Weinberger, in refusing to promote beam-weapon programs, is ensuring that the situation will only worsen. Before the McNamara days, the United States could always afford to export technology—because America was so far ahead in R&D.

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