

NASA Grilled on Space Station "Flaw"

The usually balmy air of the House science committee turned frigid for the National Aeronautics and Space Administration (NASA) last week as committee members checked out reports of a "fatal flaw" in the design of the U.S. space station. Republicans and Democrats alike showered the NASA chiefs with questions and finger-wagging admonitions at a special hearing on 29 March—the third display of this kind in different committees in 4 days.

Florida congressman Tom Lewis (R) suggested that "maybe we should just put everything on hold" and reexamine the space station, because "we don't really know where the hell we're going at this point." Committee chairman Robert Roe (D-NJ) said: "If a redesign happens again, you will lose [the support of] this entire committee, as far as I'm concerned."

What upset them—and members of the Senate as well—was a story in the *New York Times* about an internal NASA report that thousands of hours of outdoor maintenance work on the space station may be required each year to keep the system running. This maintenance would have to begin even before the station's assembly has been finished and would eat up valuable working hours and operational funds.

William Lenoir, NASA's associate administrator for space flight, insisted in the hearings that there was "nothing new" in the report on these problems. He claimed that the *Times* made too much of what he called an interim planning document.

But the authors, William Fisher and Charles Price, staffers at the Johnson Space Center, clearly took the report's implications more seriously. They had been asked to estimate how much EVA time (extra-vehicular activity hours) would be needed to service the 6000 parts on the station, projecting from what is known already about airplane parts. In a February interim report, they calculated that the total outdoor work would come to more than 2200 hours a year. If correct, this means the astronauts would have to make nearly four trips into the vacuum of space each week, just for maintenance. This would be enormously time-consuming and risky, for the dangers of exposure to radiation and flying debris are much greater outside the station than inside. The Fisher-Price report ended by saying that the findings "appear ominous."

Fisher and Price looked uncomfortable defending their report as they sat next to their NASA bosses at the witness table, but they held firm. One congressman asked

Fisher why he had discussed this subject with the press rather than keep it within the agency. He replied: "I recall the Challenger disaster and the findings of the Rogers Commission," which held NASA responsible for failing to transmit bad news from the technical staff to the chiefs. "I made a personal pledge at that time that if I ever felt I was in a similar position, I would not hesitate to take my concerns forward." Fisher said that after Lenoir briefed NASA's management council on his data in March, NASA headquarters released a statement that seemed designed to make the data appear "non-credible." For this reason, Fisher said, "I felt I could no longer remain silent."

Lenoir agreed that a 2200-hour require-

ment for EVA would be "untenable," if it were right, but he said it was merely an interim number and should be taken with a grain of salt. The assumptions that went into the estimate will be thoroughly "scrubbed" this spring, Lenoir said, and the total number of maintenance hours will change, probably increasing further before they decline. The revision will end with a new estimate for EVA maintenance—presumably much lower—in July.

Lenoir assured the members of Congress that if the high estimate persists, design changes will be made, if necessary, to bring the EVA maintenance demands down from four excursions per week to one every 4 weeks. NASA may want to increase the use of robots for maintenance, an expensive option. But some solution will be found, for otherwise the astronauts may have to spend all their free time doing risky chores.

■ ELIOT MARSHALL

Will Protests Derail AIDS Meeting?

A condemnation of U.S. immigration policies by one of the groups that sponsor the yearly international AIDS meetings may jeopardize the future of those meetings—particularly the one scheduled for Boston in 1992. U.S. policy requires people infected with the AIDS virus to secure a visa for travel to this country. And that, according to the International AIDS Society, is a form of discrimination.

In a statement released last week, the society said that it would "continue to consider" its participation in the sixth International AIDS Conference, scheduled to be held in San Francisco in June. And it will not hold future conferences in countries that "restrict entry of HIV-infected travelers," meaning the Boston conference "cannot be held as planned unless the present travel restrictions are changed."

Actually, U.S. policy toward those infected with HIV has softened. Until the fifth conference, held in Montreal last June, seropositives were prevented from entering the United States. Now people infected with HIV who can prove they are going to the San Francisco meeting can obtain a waiver. The visa can be removed from the passport, so there is no record. But the fact that they applied for a waiver (although not the reason) remains in Immigration Service computer files.

"That's still discrimination," says Lars O. Kallings of the Swedish Ministry of Health, president of the International AIDS Society (IAS). Kallings' concern was echoed by Luc Montagnier of the Institut Pasteur, co-discoverer of HIV. Travel restrictions are "a form of discrimination . . . a bad example given by the largest democracy in the world," said Montagnier, who is a member of the IAS board. He added that the travel ban "cannot be based on medical grounds," because AIDS is "only transmitted through blood and sex. A person who is seropositive does not present any danger to the public."

A spokesperson for the State Department said that the restriction stems from the Immigration and Nationality Act, which bans entry by any alien with a "dangerous contagious disease." As in all such cases, waivers may be authorized by the Immigration and Naturalization Service.

Some organizations have decided to boycott the San Francisco meeting because of the travel restrictions. It seems unlikely, however, that the San Francisco meeting will be derailed. None of the IAS board members *Science* spoke to was willing to commit himself to missing San Francisco, although all said they were considering it. Kallings said his attendance "will be a problem if there is no further change [in U.S. policy]." What action would he like? "I understand the President can suggest a change in the law to Congress. I would like to see a definite signal from the President."

■ JEREMY CHERFAS