

Space Station Faces Debris Threat

The Russian components of the international space station may not adequately protect crews and equipment, says a new report from the U.S. National Research Council. The report casts further doubt on the viability of the Russian modules, which have already been delayed because of a funding shortage.

The NASA-funded study—Protecting the Space Station from Micrometeoroids and Orbital Debris—warns that the Russian portions of the station may lack adequate shielding from high-speed flotsam in orbit. The U.S., European, Japanese, and Russian station partners have agreed to design their respective pieces so that an aluminum sphere 1 centimeter across cannot penetrate the station's walls and cause damage. But budget and time pressures will make it hard for Russia to meet the specs. Instead, the Russian Space Agency (RSA) intends to add shielding once its modules are in orbit. RSA officials couldn't be reached for comment.

The report, chaired by retired TRW engineer George Gleghorn, urges NASA to work more closely with RSA to ensure that the results are acceptable. But its suggestion that partners consider using advanced shielding materials beyond what the U.S., Japan and Canada now plan to

minimize the threat of punctures could force governments to find more money for a project already short of cash.

Charge of Bias Clouds Laser Fusion Report

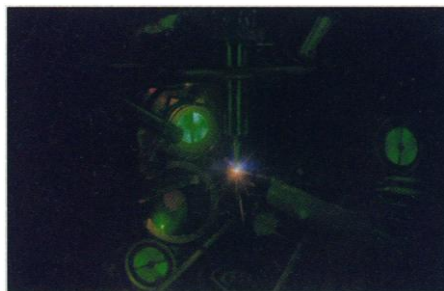
A National Academy of Sciences (NAS) review of a controversial \$1 billion laser facility to model nuclear explosions and study fusion as a power source has itself become a center of controversy. At issue is the impartiality of a panel asked to judge the scientific and technical merits of the National Ignition Facility (NIF) that the Department of Energy (DOE) hopes to build at Lawrence Livermore National Lab (LLNL).

The academy has already taken the unusual step of adding two members to the original 14-person panel, chaired by physicist Steve Koonin of Caltech. The move, taken last fall after the group's first meeting, will provide "additional perspectives," says NAS executive officer William Colglazier. The report will help DOE make a final decision on building NIF this spring.

But critics, notably Thomas Cochran of the Natural Resources Defense Council, say the

added members are not enough to erase the panel's apparent bias in favor of the project. Ten of the 16 panelists have "moderate to strong ties ... or predated views very supportive of [DOE's laser-fusion] program," he says. For example, several members served on earlier panels that endorsed NIF, and five others have done DOE-funded laser physics research. Last month, Cochran asked NAS President Bruce Alberts to form a new panel.

Koonin declined to comment, and Colglazier maintains that the panel is well equipped to



Line of fire. Panel reviewing next step in laser fusion program has been accused of bias.

answer the scientific questions that DOE has posed. He adds that the NAS's standard internal review of the report will ensure that the panel sticks to its charge. But he noted that the report, due out in March, will describe the panelists' connections to NIF so there won't be "any hidden messages."

ESA Staffers Call for Ouster of Leaders

The European Space Agency (ESA) is being roiled by a wave of discontent among staff unhappy with an ongoing reorganization. Tensions boiled over last month, when the agency's employee union called for a purge of the ESA directorate, headed by Director-General Jean-Marie Luton.

The trigger for the unrest is a "transformation" begun in 1995 to boost the agency's productivity. Implemented under pressure from ESA member states, the plan includes a 20% cut in the agency's 1850 staff positions and new requirements that ESA's divisions compete for projects with outside contractors. "We have to streamline ourselves," says the plan's architect, launch vehicle director Fredrik Engström.

But some employees charge that these changes aren't paying off, and that ESA's real problem is a half-dozen years of weak leadership. One result, says David Campbell, chair of the Staff Association Committee (SAC) at the ESA technical center in the Netherlands, is that member countries are increasingly choosing which projects to fund according to "which contracts they expect to get," not the advice of scientific and technical staff.

Last month, all SAC members across the agency resigned from reorganization working groups. They also presented a declaration to ESA's council stating that a majority of staff "have no confidence in the ability of the Executive to effectively improve the efficiency of ESA and secure its future," referring to Luton and his directors. "We are asking for our Council to take action to get rid of what we regard as being an incompetent upper executive," says Campbell.

Luton was unavailable for comment, but council chair Hugo Parr says the council "has full faith in the executive." He adds that the council will try to hash things out with SAC in a meeting later this year.

Moniz to Leave OSTP Science Post

The basic science community is losing one of its best friends in the White House—just as the Clinton Administration prepares to release its 1998 budget request. Ernie Moniz, the physicist who heads the science division at the Office of Science and Technology Policy (OSTP), is returning this month to the Massachusetts Institute of Technology (MIT). Moniz's departure will leave OSTP, under Jack Gibbons, without permanent heads of all four of its divisions.

"I thought it was time," says Moniz, on leave as chair of MIT's physics department. "I realized that I enjoy the academic life, although I hope that I have made a difference here, too." Moniz succeeded M.R.C. Greenwood as associate director of science in December 1995 after helping to write the Administration's major statement on basic research, *Science in the National Interest*, issued in August 1994.

Colleagues credit Moniz with working quietly to shore up the nation's research budget and for strengthening White House ties with federal science agencies. Now that he's leaving, science advocates worry that the holes in OSTP's lineup may weaken its clout. Jerry Melillo and Kerry-Ann Jones, who would replace Robert Watson and Jane Wales as associate directors for environment and for national security/international affairs, have been waiting since last summer for Senate approval. And in October, Skip Johns left as head of technology.

Moniz did "a great job," says Greenwood, now chancellor of the University of California, Santa Cruz. "I would be happier if he had decided to stay through the next budget cycle. ... But maybe it's better to have talented people who know the issues stay for a short time than get mediocre talent who lack initiative."