

Protests Mount Over U.S. Space Station Cuts

by Marsha Freeman

The Bush Administration's proposal to eliminate the U.S. contributions to the International Space Station (ISS), made initially last February—which would make it impossible to complete the project as designed—has angered America's international partners, and many in the U.S. Congress.

Europe, Japan, Russia, and Canada have already spent billions of dollars to design and produce their hardware for the station, and have trained their astronauts, in the expectation that they will be able to share in the scientific research resources of the station, as stated in international agreements. The Congress knows it faces the bleak prospect of having spent tens of billions to orbit the station, only to have it lack the capability to carry out the science research, which is its purpose.

The President has apparently delegated responsibility for America's space program, not to his Science Advisor, nor to the National Aeronautic and Space Administration, but to the Office of Management and Budget (OMB). The nominee to be the new NASA Administrator, Sean O'Keefe, comes to the space agency from OMB, and stated months before his nomination that the administration will accept no increases in NASA's budget to cover cost overruns in the space station. Instead, says O'Keefe, it will have to be "downsized."

By and large, America's international partners have no manned space program, other than their cooperation on the ISS. Therefore, the Bush Administration's policy for NASA will also determine whether or not 16 other nations will have explorers in space.

Breaking International Treaties

On Dec. 6, NASA's Advisory Council held a meeting, at which representatives of the international partners were invited to present remarks. Tomiji Sugawa, representing Japan's space program, told the Council that because the United States had unilaterally decided that the space station could only accommodate three crew members, rather than the full complement of seven, Japan's \$2.6 billion Kibo science laboratory module will be virtually useless. This new "U.S. core complete" configuration, protested Japan, leads to a "decrease in flight opportunities for Japanese astronauts" to use the laboratory, which "is not acceptable to Japan." Three Japanese astronauts are already participating in advanced training at the Johnson Space Center.

European Space Agency (ESA) director of manned spaceflight, Jorg Feustel-Buechl, was even more direct, reporting that at ESA's November Ministerial meeting to make programmatic and budgetary decisions, he had trouble persuading European leaders to stay in the station program. In response to the proposed NASA cut-backs, ESA decided to withhold 60% of the \$800 million projected for its space station utilization, pending a change in policy in Washington. A three-man crew would allow ESA only 100 minutes per week for its science experiments.

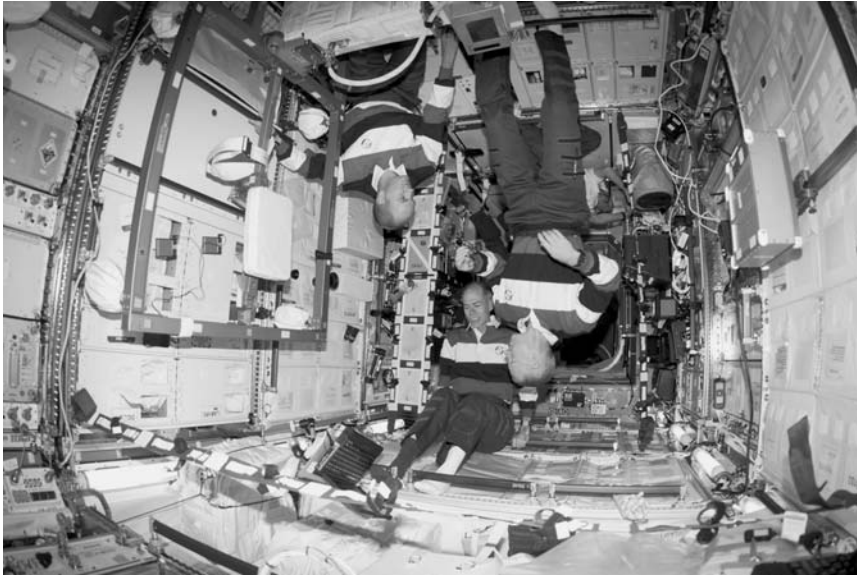
Feustel-Buechl reported that ESA itself had a cost overrun of \$300 million last year in its ISS budget, but did not try to scale back its commitment. He called the configuration the United States is presenting, "totally unacceptable, even as a threat," and said ESA would make "more dramatic decisions" if it did not know, by next October, that the United States will meet its commitment to accommodate a full crew.

The Canadian Space Agency has already contacted the State Department on U.S. violation of what is considered by Canadian law to be a treaty. Canada pointed out that its crew time for experiments will be "reduced to less than 30 minutes per week. Astronaut ISS flight opportunities are reduced to one Canadian every 11 years."

No Russian Space Agency representative could attend the Council meeting, but on Nov. 22, M. Sinelshikov, head of the manned space department of the Russian Aviation and Space Agency, forwarded its comments to the Advisory Council. Russia reminded the United States that, according to the 1996 agreement on the station, Russia's commitments to the ISS assembly phase "are limited . . . to the end of 2004." After 2004, a seven-person Crew Return Vehicle was supposed to be deployed—this is eliminated under the new U.S. plan. Therefore, from 2005 on, the Russians would not be obliged to provide transportation or logistics for more than their own cosmonauts, commensurate with their substantial contributions to the station.

"The Russian party would like to state unequivocally that extending the ISS assembly time with a respective extension of the Russian commitments for the ISS assembly period until 2007, is unacceptable," the statement reads. "The Russian side intends to do its best to implement its effective ISS obligations. In this matter, we are guided by the fact that starting from 2005, it will allow us to have a permanent crew consisting of three Russian nationals aboard the station." If there is no solution found to accommodate a larger crew, the Russians will then have the International Space Station all to themselves!

After years of attacks on Russian delays in deployment of space station hardware, and on any NASA dependence upon the Russians for critical capabilities, now it is suggested to buy Soyuz vehicles, so a second one can be parked at the station to evacuate up to six crew members in an emergency. It would seem inconceivable that Congress would approve a plan that would make station operations totally dependent



The United States' NASA budget cuts have turned the international space station program on its head, threatening the station's completion and drawing protests from America's international space partners. Here, astronauts Sturckow, Barry and Forrester in the station.

upon the Russians. It is highly unlikely that Congress, or the international partners, will accept the rank stupidity of placing funding constraints on the space station, and downgrading its capability.

Where's The Vision?

The day following the Advisory Council meeting, OMB bean-counter O'Keefe, had his confirmation hearing before the Senate Committee on Commerce, Science, and Transportation. Some of the most vocal opposition to his policies came from President Bush's home state of Texas. The Johnson Space Center in Houston is the home of NASA's manned space program. "The leader of NASA cannot just be a budget cutter," warned Sen. Kay Bailey Hutchison (R-Tex.) in her opening statement. She questioned OMB's actions, so far, in putting a budgetary straitjacket on NASA, and in insisting on projecting how much something like a space station will cost. "I don't think you can precisely budget a war, and I don't think you can precisely budget innovative research. When you are pushing the envelope, you're going to have mistakes, miscalculations. . . . I want you to show me more than an OMB mentality," she said.

Hutchison's concern was echoed by fellow Republican Conrad Burns (R-Mt.), who dramatically warned O'Keefe, that if we do not "continue to reach and explore the unknown," we will be a "shrinking society that will fade from the face of the Earth."

Sen. Bill Nelson (D-Fla.), who flew on the Space Shuttle in 1985, read aloud a hard-hitting open letter from former mission control flight director and Johnson Space Center head Chris Kraft, who charged: "The overruns, or more poignantly,

the [increase in the] total cost of the ISS, resulted from a continuous change of direction of the program, which was beyond the control of those who were required to build the space station." With each space station program design change—usually made to try to *lower* the annual budget outlay—the schedule was stretched out, *increasing* the total cost. Now, under the OMB control, cost—not needed space capability—will determine how much of a space station we have.

In his responses to the largely hostile questions by the senators, O'Keefe could only repeat the refrain, that before any decision could be made on "expanding" the station, (i.e., meeting U.S. stated objectives and international obligations), NASA would have to bite the bullet. "The immediate challenges confronting NASA today," O'Keefe stated, "are not scientific, technological, or en-

gineering in origin. They are more aptly described in management terms—financial, contractual, and personnel focused." What NASA needs, he claimed, is a "firm management framework." NASA must "focus on performance." This seemed to imply to the senators that launching the Shuttle safely, and building and supporting a crew living on the station, were somehow not a measure of NASA's performance.

O'Keefe was repeatedly asked when he will consider putting the funding back into NASA to build the crew habitation module and return vehicle, allowing seven crew members on the station, He said only that NASA first had to "get its house in order." But he was finally forced to agree with Senator Hutchison, that "to maintain what we have right now is an absolute bare minimum, and calls into question what the point [of the station] is."

Although O'Keefe tried to convince the senators that he is qualified, because his father came out of Adm. Hyman Rickover's nuclear Navy, Senator Hutchison summed up the feeling of many stating, "NASA is the premier success story for America. And if you are successful, you will be my hero. And if not, I will be all over you."

Each senator asked the nominee what his vision was for the space program. Sound financial management was always O'Keefe's answer. As was pointed out in an article about the hearing in the *Washington Post*, in three hours of testimony, Sean O'Keefe never once mentioned the word, "space."

If enough political pressure is applied, the President may drop this bean-counting approach to mankind's great exploration initiative: It would produce a true "economic stimulus," and restore international confidence and technological credibility for the United States.