

EUROPEAN SPACE PROGRAM

ESA Members Balk at Space Station Cost

BERLIN—The European Space Agency (ESA) is coming under increasing pressure from some of its cash-strapped member states to throttle back its future commitments to the U.S.-led international space station. In preparation for the next key meeting of representatives from ESA's 14 member states, scheduled for March, and a European space summit later this year, government officials in Germany, France, and Italy—the three biggest contributors to ESA's budget—have been discussing proposals to cap and stretch out Europe's spending on crewed spaceflight.

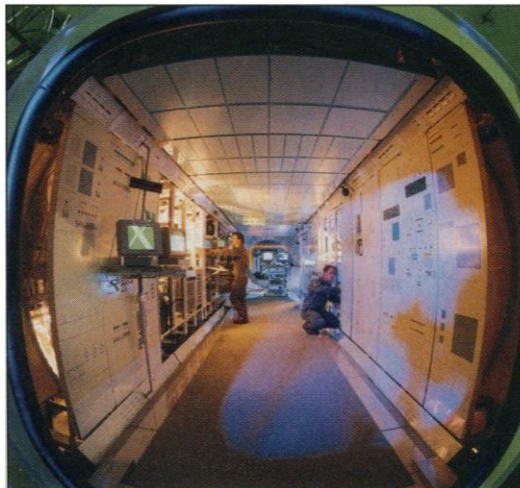
In a letter this month to ESA Director Jean-Marie Luton, Germany's Education, Science, and Research Minister, Jürgen Rüttgers, complained that the cost of implementing ESA's current space station plan is "well beyond the financial capabilities of ESA member states." Rüttgers said he and his French counterpart opposed ESA's most recent proposal to spend \$4.8 billion on its crewed-space efforts from 1995 to 2003, most of which would pay for Europe's share of the space station program.

Instead, Rüttgers suggested a "realistic framework" for reducing ESA's crewed spaceflight program to \$2.5 billion from 1996 to 2000. This figure includes Europe's "in-kind" contributions to the space station—hardware developed and built in Europe—rather than money paid directly to the international effort, together with a 20% pool of funds for unforeseen costs.

Europe's contribution to the space station was defined at the last meeting of European space ministers in Granada, Spain, in November 1992 and adjusted the following spring when U.S. budget cuts forced major modifications to the station plan. The agreement is up for review at the next ministerial meeting, toward the end of the year. Currently, ESA, which is participating in the station along with Russia, Japan, and Canada, is developing and building:

- The Columbus Orbiting Facility, a European laboratory module that would dock with the international space station;
- The Automatic Transfer Vehicle, a "space tug" that would transfer crews and help the Columbus orbiter dock with the space station; and
- The Crew Rescue Vehicle, a small craft to bring crew members to Earth in an emergency.

Not all ESA members are contributing to this effort; unlike the space science program, in which all ESA member countries participate, membership in the crewed spaceflight program is voluntary. Under the agreement reached in Granada, Germany was scheduled



Test bed. A mock-up of the Columbus Orbiting Facility, part of ESA's contribution to the space station.

to bear the lion's share of the costs (38%), Italy agreed to pay 31%, and France 10%, with other ESA members making up the difference. All three major contributors are now expressing reservations about the cost.

ESA staff members themselves recently made suggestions for modest reductions in

the crewed-flight budget, and these were discussed by Rüttgers at a meeting on 18 January with French Industry Minister José Rossi. In his recent letter to ESA, Rüttgers

said Germany and France feel strongly that ESA should remain a partner in the international space station project, so long as that partnership reflects strict cost ceilings and a "realistic concept." He also urged other European nations to contribute "substantially" to the crewed space effort.

Harald Müller, chief spokesperson for the German research ministry in Bonn, says Rüttgers's letter simply reflects current financial and political realities. "Germany and France cannot bear all the costs alone," says Müller, noting the Italians' shrinking commitment. "To be realistic, Europe's contribution must be reduced, and that contribution must be shared more among ESA member states," Müller insists.

Müller says the research ministry has not yet received an official response to Rüttgers's letter. The next few weeks leading up to the March meeting should see some intense negotiations.

—Robert Koenig

Robert Koenig is a journalist in Berlin.

U.S. TECHNOLOGY POLICY

House Panel Cuts Industry Programs

Eager to eliminate federal support for industry-led research—and cut the budget deficit while they're at it—House Republicans have taken their first bite out of the Administration's technology policy. Last week the House Appropriations Committee, on a party-line vote, approved taking back \$609 million that Congress had previously approved for two efforts—the Technology Reinvestment Program (TRP) and the Advanced Technology Program (ATP)—aimed at increasing collaboration between industry and university scientists. Although the full House is expected to approve the cuts, perhaps as early as next week, sources in Congress and industry predict the Senate will be less inclined to jump on the industry-bashing bandwagon.

The cuts would wipe out \$502 million in appropriations made during the last 2 years to the Department of Defense for TRP (*Science*, 25 March 1994, p. 1676), as well as \$107 million given this year to the National Institute of Standards and Technology (NIST) for ATP. The cuts would halt the TRP program, begun in 1993 as a way for the military to provide funds for joint industry-government research on dual-use technologies. They would also slow the growth of the

5-year-old ATP program, focused on improving economic competitiveness, with a 1995 budget that soared from \$199 million to \$431 million. Both programs provide significant funding for university researchers in a variety of fields, although the awards are typically made to industry-led teams.

The attack on the two programs was included in a \$2.9 billion package of rescissions proposed by the committee to offset most of an increase of \$3.2 billion in this year's Pentagon budget to pay for the military's global peacekeeping activities and to improve troop readiness. The timing surprised some program partisans, who anticipated that the battle over support for industrial technology would not be joined until spring, when Congress took up the president's 1996 budget request. That request contains \$500 million for TRP and \$491 million for ATP.

Those same partisans worry that industry may never really mount serious opposition. Although high-tech companies have formed a coalition to battle the cuts, some officials admit that corporate executives are divided on how hard to push. "Technology is only part of a larger mosaic that includes tax reform, regulatory relief, and product liability, and by and large, this Congress is doing the