
West Germany Increases Space Research Funds

London. The government of West Germany last week approved a 4 year space program costing 3.9 billion DM (\$1.6 billion). Of this total, 11 percent, or just under \$150 million, will be spent on basic research, including funding for a new x-ray satellite—ROSAT (for Roentgen satellite)—to be developed jointly with the British Science and Engineering Research Council and the U.S. National Aeronautics and Space Administration (NASA). Overall, the approved budget allows for an annual increase in Germany's space budget of about 5 percent a year. This is roughly equivalent to the current West German inflation rate, so that in real terms spending is likely to remain constant. However, in commenting on the new budget, West German technology minister Andreas von Bülow, said the program still compared favorably to the space research and development efforts of both France and Japan.

The budget contains an increase in domestic spending on space science which, officials in Bonn said last week, is partly a reaction to reluctance on the part of the European Space Agency (ESA) to raise its own efforts in this direction. West Germany has for some time been trying to persuade the other members of ESA to make a substantial increase in its space science budget, which has remained virtually constant in real terms for the past 10 years.

Earlier this year, however, ESA agreed on a budget for the 5 years up to 1986 which included a rise of only 3 percent for space science. This was not enough to satisfy the Germans, who have now said that no more than 50 percent of their space research should be conducted through the international agency. Bonn officials point out that although their contribution to ESA will rise by about 5 percent next year, this is only about half the current European inflation rate, so that in real terms their contribution will be reduced.

Major projects within the German 4-year space program include the development of a retropropulsion system for NASA's Galileo mission to Jupiter, and research to be carried on

board the shuttle-launched Spacelab, including a mission dedicated to materials research in 1985.

—David Dickson

Still One Monkey to Go

Maryland psychologist Edward Taub, who was convicted last fall of animal cruelty for failing to provide adequate veterinary care to six of the monkeys in his care, was cleared of all but one charge in an appeal in early July. The jury sustained the conviction for one animal whose arm had to be amputated because of infection. At the end of the 3-week trial Taub, who has cast himself as a martyr in the cause of scientific freedom, said he would appeal the case further. Taub's 16 monkeys remain in the custody of the National Institutes of Health (NIH); he still has to make improvements in his lab before he can reapply for his NIH grant which is in suspension.—Constance Holden

PR for Nuclear Energy

The Committee for Energy Awareness, formed to give the nuclear industry's side of the energy story following the Three Mile Island episode, is gearing up to launch a \$40-million media campaign next year.

So far the committee has conducted a test run in Grand Rapids, Michigan, of four radio and television spots, on the subject of radioactivity and nuclear waste disposal. The ads were highly successful judging from the results of polls the committee took before and after the 10-week test. For example, says William Harris of the committee, the number of people who believe that less than 10 percent of radiation to which humans are exposed comes from nuclear power plants increased from 48 to 59 percent. Perhaps more significant, 41 percent of the respondents affirmed that "a procedure has been developed for the safe, permanent disposal of nuclear waste"—up from 21 percent before the announcements were aired. (The committee did not ask respondents whether they thought a permanent repository had been developed.)

The prospect of a nationwide nuclear energy information blitz has proponents of renewable energy sources scrambling for their lawbooks. The fairness doctrine requires stations to give time to the other side in controversial public matters. However various factors, such as total time allotted to a certain message, the frequency of airing, and the size of the audience have to be taken into account, which means getting alternative messages on the air will require a lot of tiresome negotiating with radio and TV stations.—Constance Holden

EPA Issues

Hazardous Waste Rules

After years of debate, the Environmental Protection Agency (EPA) announced on 13 July the final standards for the disposal of hazardous waste in land sites. The new rules constitute one of the most comprehensive regulatory actions taken by the Reagan Administration and were met with general acceptance by industry and environmental groups involved in the 6-year-old controversy.

The standards cover new and existing landfills, impoundments, and other facilities that treat, store, or dispose of hazardous waste. EPA administrator Anne M. Gorsuch stated that the rules "ensure that the health of the American people will not be compromised and that their drinking water will be fully protected."

David Lennett, a staff attorney for the Environmental Defense Fund, calls the rules covering new facilities a "sound approach." But he says the ones concerning existing sites are "fairly weak."

Lennett says, for instance, that the rules require only new facilities to install a liner to prevent leaching, but exempt existing sites. He argues that the existing facilities, which total more than 2000 sites, should put in liners unless doing so either would be technically unfeasible or would increase health or environmental hazards. He says that the burden of proof should be on the company and that each facility should be examined case by case. An EPA official said that the agency does not have the resources or personnel for such monitoring.