NASA's Space Station Approved by Congress

Work on the station will begin this year despite a decision to fund it at a level NASA once described as inadequate

BACKERS of the space station got their project into the budget for 1988, but not without taking a loss. Before leaving for Christmas, Congress gave the National Aeronautics and Space Administration (NASA) permission to start building the station this year. But at the same time, it cut $342 million from NASA's funding request, leaving $425 million, less than the minimum NASA administrator James Fletcher said was needed to make the project worthwhile.

NASA nevertheless declared the funds "acceptable" and planned to move ahead. The contractors have been chosen. Designs are being prepared. Canada has agreed tentatively in a memorandum of understanding to develop and build a mobile servicing system that will assist in construction of the station.

It remains to be seen whether this dose of activity and cash will dispel some nagging doubts about the station's purpose. Even in the space science community, there are many who question whether the present design is justified. There are also concerns about the reliability of congressional support and about the possibility that other NASA programs will be taxed to support the station. NASA may be betting too much on one project, some say, as it did with the shuttle. Congress may get bored with paying the bills in the "out-years" when the construction costs are steep and no glamorous missions are under way. NASA officials insist that this will not be a problem and that there will be no corner-cutting.

Fletcher and NASA's associate administrator for the space station, Andrew Stofan, have pushed this theme for months. And, with the help of key congressmen and aerospace companies, they have now put the station on the ledger. The path was arduous. They struggled through dozens of hearings and hostile budget meetings early in 1987, including a NASA review that almost doubled the estimated cost in January (from $8 billion to $14.6 billion) and an extramural review that doubled it again in September (from $14.6 billion to $30 billion). They attended numerous pep rallies. Also, in a revealing footnote, industry and NASA leaders had to testify in the perjury trial of former presidential aide Michael Deaver, who was paid $250,000 by Boeing Aerospace in 1985 to lobby for the station at the White House.

In the final weeks of 1987, congressional fans of the station redoubled their efforts. They chided their colleagues for wavering in support of the space program. They promised economic, scientific, and medical miracles if the station were built and even invoked the threat of Soviet competition as part of their campaign.

The campaign succeeded. According to a House-Senate agreement, NASA will be given $425 million in two installments next year to begin actual design and construction work. Congress has cleared a budget of about $200 million for the first half of 1988. After that, if Congress approves of a detailed spending plan to be submitted in June, NASA will receive another installment of $225 million. In addition, Congress is holding in reserve $80 million to $90 million that remains unspent from last year's appropriation.

While NASA won a victory in principle, it did not win the level of funding it wanted. NASA's original request of $767 million was reduced this fall in the Senate to $559 million. In October, the Senate considered an amendment that would have taken away another $118 million and given it to the Veterans Administration. Fletcher and Stofan began muttering about hara-kiri. Stofan warned that the program was becoming so anemic it might have to be put out of its misery. Fletcher wrote to NASA supporter Senator Jake Garn (R–UT) that a cutback to $441 million "would lead me to recommend termination of the present competition for the four major work projects."

The veterans amendment was defeated on the Senate floor. Then in the budget conference in December, the station ended up with even less than the life-endangering minimum of $441 million. A NASA spokesman says design work will go forward anyway with the funds that are available. Fletcher's letter "was obviously just a threat," says a retired NASA official. But he worries about the 1989 budget, which in NASA's original plan was supposed to provide $1.8 billion, a huge increase. Now, according to this observer, the program may be held to the 1988 level plus an increase of a few percent, creating "an impossible situation" that will restrict NASA's flexibility. The Administration's 1989 budget request for the space station has not been determined yet; it will not be known until January. But already some observers wonder whether the program is not slipping into fiscal quicksand.

Meanwhile, NASA forges ahead. Even before Congress reached an agreement on the station and 6 weeks after threatening to kill it, Fletcher announced the winners of the contract competition. The awards, announced on 1 December, will go to:

- Boeing Aerospace of Huntsville, Alabama, which will provide the pressurized modules and the life support systems that will enable astronauts to live and work in space. The value of its Phase I contract is $750 million.
- McDonnell Douglas Astronautics of Huntington Beach, California, which will provide the truss structure, the propulsion system, and several other support systems. Its contract is worth $1.9 billion.
- General Electric's Astro-Space Division of Valley Forge, Pennsylvania, which will build a separate polar orbiting platform and two "attach points" on the station for scientific payloads. Its contract is worth $800 million.
- Rockwell International's Rocketdyne Division of Canoga Park, California, which will be responsible for the solar and battery power systems. Also, with support from the Department of Energy, Rocketdyne will build and test a new dynamic solar engine. Its NASA contract is worth $1.6 billion.
- In addition to the major awards, NASA announced that it was giving small contracts to Grumman Space Systems of Bethpage, New York, and Martin Marietta Astronautics of Denver, Colorado, to compete in designing a robot to build and service the space station.

Each of the major winners also was approved for separate "Phase II" contracts, covering the period in the late 1990s when NASA expects to outfit the station with scientific equipment.

One surprise in the contract announcement, aside from its early delivery, was its technical integrity. In choosing Boeing for the first work project, NASA rejected a bid from Martin Marietta of New Orleans, Louisiana. This took some political nerve, for Senator Bennett Johnston (D), the Louisianian who chairs the energy and water appropriations subcommittee, helped save the station from budget cutters earlier in the fall. ■ **ELIOT MARSHALL**