Space Station, NSF Funds Approved

THE SPACE STATION SURVIVED A MUGGING in Congress earlier this year, when a key House appropriations subcommittee voted to strip funds from the project. And now it's back on its feet with a new design and a fresh bundle of cash for 1992—about $2 billion approved by Congress last week. In the end, some areas of space science and the space shuttle were mugged instead.

Congress gave the space station the full amount the Administration requested in a funding bill that cleared both houses on 2 October. The bill, which includes money for NASA, the National Science Foundation (NSF), and the Department of Housing and Urban Development, is expected to win the president's approval, though there have been hints he might object at the last minute to financing gimmicks in a section on public housing.

Overall, NASA will get $14.3 billion, which is $1.4 billion less than the White House wanted and only about 3% above this year's level—really no growth at all, if inflation is taken into account. Congress was more generous to the National Science Foundation, providing a new budget of $2.6 billion. This includes an 11% increase for basic science and more than 40% for programs involving science education and human resources.

Several projects in NASA's science program will be dropped, and others will be delayed. Work was supposed to begin next year on the advanced orbiting infrared telescope known as SIRTF; that will not happen now. Congress also scrubbed a plan to start work on an orbiting solar observatory. Representative Bill Green (R–NY) said it is "highly unlikely that we will see that anywhere in the immediate future." A proposed biomedical research program on small satellites, called Lifesat, was killed. A plan to send a robot observer past a comet and another to Saturn (CRAF/Cassini) was saved from drastic surgery, but Congress imposed a new condition: NASA must persuade Germany to help finance the launch. The project will be delayed in any case. So will the advanced x-ray telescope, known as AXAF, which will get $60 million less than the Administration requested. The Earth Observing System will continue, but at a reduced rate: It must stay within an $11-billion cap through 2000.

A surprise loser at NASA is the shuttle, which was hit with a last-minute $330-million cutback in its budget for ongoing operations. The cut was necessary because the White House refused to go along with a plan by the Senate to charge the Pentagon $375 million for the military's use of civilian data relay satellites. As a result, NASA had to absorb the loss, and Congress decided the easiest choice was to avoid buying shuttle spare parts and a new fuel turbopump. Rep. Green warned that "we may one day pay very heavily" for trimming safety margins.

Congress also virtually ended NASA's contribution to the national aerospace plane, cutting it from a proposed $95 million to $5 million. This converts what was a joint NASA-Defense program to a purely military one. NASA's contribution to developing a new rocket technology, called the advanced launch system, would also essentially end, although low-cost studies will continue.

One item the budget trimmers never touched is a plant in Yellow Creek, Mississippi, that will build more powerful solid rockets for the shuttle. The bill increases funding at Yellow Creek $115 million above the president's request, for a total of $465 million. Representative Jamie Whitten (D–MS), chairman of the appropriations committee, in whose district this project resides, rose during debate to say he thought the bill was "excellent."

While Congress was curbing NASA's ambitions, it was relatively generous toward NSF, approving almost the entire $2.7 billion requested by the Administration. It did, however, shift funds from research to education, as it has in previous years. The final budget provides $85 million less than the Administration requested for research, and $75 million more than it wanted to spend on education, including an additional $27 million for "teacher preparation enhancement," an extra $10 million for "systematic statewide initiatives," and $23 million more than budgeted for graduate traineeships. Congress singled out several other areas for increases above the funding requested by NSF: astronomy and advanced optics ($12.5 million more), Arctic research ($7.5 million more), and the EPSCoR program to help less competitive states win NSF grants ($4 million more). Finally, Congress combined a variety of proposals under the heading "academic research facilities and instrumentation" and gave them $33 million.

NSF congressional liaison Joel Widder says there's still a $75-million hole in the agency's budget, however, because Congress and the White House have not resolved an uncertainty over who will pay for the Antarctic research program. Congress wants the military to pick up $105 million of the tab, but so far the White House has agreed to charge them only $30 million. It could be settled in the Defense bill next week.

During the House debate, leaders of the science committee—Representatives George Brown (D–CA) and Robert Walker (R–PA)—criticized their colleagues for the number of "earmarked" (pork barrel) projects in the bill. In a quick tally, Brown listed 18 items worth a total of around $115 million. Although none came out of NSF's budget, Brown said, "I worry that we are moving dangerously close to earmarking within the NSF funding, a threshold which we have not crossed to date." He was concerned about an amendment earmarking $2 million at NSF to "initiate planning for two national/state demonstration test beds for shared supercomputer use, including teleconferencing capability, by facilities of higher education." The congressman warned, "I will be watching this development carefully." ■ ELIOT MARSHALL

How They Fared (selected programs, $m)	1991 budget	1992 request	1992 approved	1991-1992 change
NASA total.....	13868	15721	14329	+ 3%
space station	1900	2029	2029	+ 7%
aerospace plane	95	72	5	- 94%
shuttle operations	2752	3024	2694	- 2%
shuttle rockets (ASRM)	401	350	465	+ 16%
Earth Observing System	151	253	188	+ 25%
x-ray telescope (AXAF)	101	211	151	+ 50%
IR telescope (SIRTF)	7	16	0	- 100%
CRAF/Cassini	143	328	211	+ 48%
Mars Observer	86	54	77	- 10%
Lifesat	0	15	0	—
NSF total.....	2316	2722	2578	+ 11%
research and related	1694	1964	1879	+ 11%
education, resources	322	390	465	+ 44%
academic facils, etc	20	50	33	+ 65%
astronomy	97	107	120	+ 25%
EPSCoR	11	15	19	+ 73%