**NEWS FOCUS**

**JEWELS IN THE CROWN |**

**Astrophysical Observatory**

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CAMBRIDGE, MASSACHUSETTS—With its formidable staff of 240 scientists, a bevy of cutting-edge instruments, and a long-standing partnership with one of the world's great universities, the Harvard-Smithsonian Center for Astrophysics is one of the Smithsonian's—and one of the world's—premier research facilities. But the 111-year-old center is embroiled in a quiet institutional crisis.

Cost overruns are straining a tightening budget, while rising salaries and a severe lack of office space limit new hires and new programs. At the same time, researchers are up in arms about director Irwin Shapiro's plan to increase Harvard's influence at the center. "This is a pivotal time for us," says Andrea Dupree, a longtime center researcher and past president of the American Astronomical Society. "We need to make decisions about our future, and there's a sense we are going to be left out."

The center is the result of a 1973 merger of Harvard's and the Smithsonian's observatory programs. Since 1985, shortly after Shapiro became chief, it has doubled its staff and more than tripled its budget. Facilities range from the Multiple Mirror Telescope (MMT) on Mount Hopkins in Arizona—currently being upgraded—to the Submillimeter Array (SMA) now under construction on Mauna Kea in Hawaii. A committee of outside scholars who reviewed the center in 2000 was "uniformly impressed" by the state of its operations and science, according to a copy obtained by *Science*.

But there are signs of strain. In 1984, the SMA was to cost $25 million and take 6 years to build; the most recent estimate is $70 million in current dollars, and a series of technical troubles has delayed the effort by several years. The MMT conversion to a more powerful set of telescopes also has encountered technical troubles and is short-staffed. Other projects, such as NASA's Chandra X-ray Observatory which is operated by the center, are running smoothly. But a stagnant budget in recent years has left Shapiro with little flexibility. "Such a pattern cannot continue indefinitely, as it will eventually strangle the institution," warns the committee, which urged Shapiro to come up with a long-term plan—and hinted that it is time for new leadership.

Shapiro, who says the plan will be ready by December, insists that he has no plans to retire. The tight budget is not Shapiro's only difficulty. He wants to increase the number of center scientists who have joint appointments at Harvard and give the university a greater say in appointing them. He contends that reviving the tradition of appointing joint researchers—the last of whom was hired 13 years ago—is essential to maintain Smithsonian representation on the Harvard faculty. Many center astronomers say it will make second-class citizens of those paid purely by the Smithsonian.

Smithsonian Secretary Lawrence M. Small likely will have to wade into the center's issues in the coming months. Although he has other fish to fry as he revamps the institution, he will have plenty of work to do to keep one of the Smithsonian's jewels well polished.