Sacramento Peak Observatory to Close?

In the face of chronically short budgets, the National Optical Astronomy Observatories (NOAO) may soon recommend to the National Science Foundation (NSF) that its Sacramento Peak solar observatory in New Mexico be closed. This would mean mothballing a unique instrument, the 100-meter vacuum tower telescope, which produces the highest resolution images of the sun now available.

In recent weeks a letter warning of this possibility has been circulated by NSF to Congress and to the observatory users. The astronomers are distressed, and so are New Mexico Governor Tony Anaya, Senator Pete Dominici (R–N.M.), and Representative Joseph Skeen (R–N.M.), all of whom have expressed support for Sacramento Peak.

NOAO director John T. Jefferies emphasizes that nothing has been decided yet. On 28–29 March he will present a series of recommendations to the board of directors of the Association of Universities for Research in Astronomy, the consortium that manages NOAO; any decision made there will then have to be ratified by NSF. "So I'm not looking for any resolution short of mid-May," says Jefferies. And even if Sacramento Peak is eventually closed, he adds, it will certainly continue to operate through the end of the current fiscal year in October.

NOAO is an umbrella organization created in late 1983 to manage Sacramento Peak, the Kitt Peak National Observatory in Arizona, and the Cerro Tololo International Observatory in Chile. In each of the last three federal budget submissions, NSF has requested that NOAO be funded in the $24-million to $25-million range. But twice now, Congress has lopped off some $2 million. "How bad it will be this year I don't know," says Jefferies. "The best case would be the President's budget [$24.05 million], but that seems unlikely."

The cutbacks have come for a variety of reasons, most notably Congress' mandate that money be diverted from NSF's research programs into a new series of supercomputer centers (*Science*, 15 March, p. 1318), and the insistence of Representative Edward P. Boland (D–Mass.), chairman of the appropriations subcommittee overseeing NSF, that money be diverted from astronomy into science education (*Science*, 18 January, p. 283). But the upshot is that Jefferies has felt compelled to plan for permanently lowered budgets—at a time when he also feels compelled to expand some of the observatories efforts.

"There are lots of frontier areas where I don't think the national observatories are doing the kind of job they need to do," he says, "areas such as instrumentation, detector development, or new telescope programs. So somehow we have to identify the funds to start doing those things too."

Jefferies and his colleagues have accordingly sought to rearrange some priorities. As it happens, the annual budget of Sacramento Peak is some $2.6 million, which is almost exactly equal to the shortfall in NOAO's overall budget; thus, he is considering two scenarios for the facility. One is to close down everything but the vacuum tower, which would continue to operate at a bare bones level. The other is to shut down everything and move the vacuum tower instrumentation to the McMath solar telescope on Kitt Peak. (Moving the tower itself would be impractical: it is essentially a vertical vacuum chamber extending 60 meters below ground and 40 meters into the air.) This would preserve some of the tower's capability. But high resolution solar imagery would not be available again until the National Aeronautics and Space Administration's Solar Optical Telescope flies on the space shuttle in the 1990's.

Of course, a cynic might wonder if all this were just a ploy by the astronomers to keep Congress from cutting their budget again. It has certainly gained them the support of Senator Dominici and Representative Skeen. However, they do appear to have real grounds for concern about Boland and his house appropriations subcommittee. Boland has made no secret of his opinion that astronomers are getting too much money from NSF and that science education is not getting enough; last year he threatened to cancel NSF's top-priority Very Long Baseline Array of radio telescopes unless the science education budget were increased—he did win a delay—and this year he is threatening to do it again.

"The worst thing I can imagine would be for Congress to direct that Sacramento Peak be closed and then put the money into science education," says John Teem, director of the Association of Universities for Research in Astronomy, "because then the attempt to manage the observatories effectively would be perverted."

—M. MITCHELL WALDROP

Britain Moves to Increase Technology Incentives

The British government has just announced a series of measures designed to boost the growth of the nation's technological capabilities. These include the allocation of an additional $48 million to higher education institutions, which will enable them to produce an extra 4000 technical and engineering graduates by the end of the decade, and the offer of new tax incentives for those investing risk capital in small research-based companies.

The increased funding for university and polytechnic degree courses was announced by the Secretary of State for Education and Science Keith Joseph. He told the House of Commons in a written statement that it had been agreed to by the government as a "substantial response to requests for industry" for graduates in areas such as engineering and computer sciences.

Discussions are currently taking place with the University Grants Committee on which institutions should receive the extra funding, which will be allocated over a period of 3 years. In the first year, support allowing for an increased student intake will be provided to a relatively small number of university courses which are already in a position to demonstrate a high academic standard and a guarantee of support from industry; in the second and third years, the money is intended to create a number of new courses meeting the same requirements in a wider range of institutions.

Areas to receive special emphasis under the government's plans include electronic and software engineering, as well as more conventional fields such as production engineering, applied physics, and materials science.