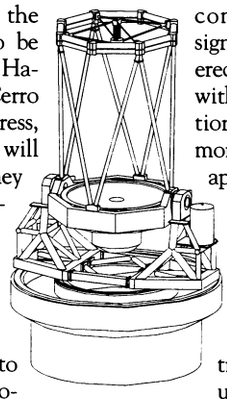
SCIENCESCOPE

edited by DAVID P. HAMILTON

NSF Scrambles for Telescope Funding

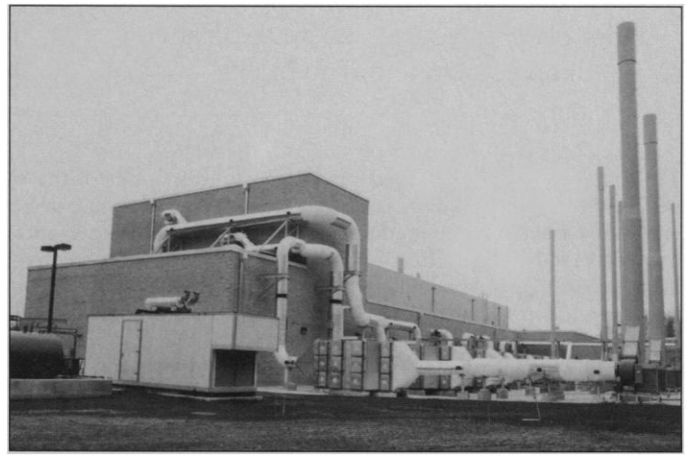
The Gemini project, an ambitious international effort to build two 8-meter telescopes, is facing an anxious summer. U.S. officials are racing to pull together a complex multinational funding package within the next few weeks, and their success or failure could determine whether Congress decides to chip in and pay its share of the bill.

Officials at the National Science Foundation (NSF) say they are counting on $17 million next year to begin work on the two telescopes, one to be built on Mauna Kea in Hawaii and the other on Cerro Pachon in Chile. Congress, however, has decreed it will not appropriate the money until NSF locks up contributions from international collaborators on the $176 million project. Together, the United Kingdom and Canada were supposed to come up with half the total cost, but Canadian officials recently announced they could come up with only 15% of the total. So NSF officials have had to go hunting for other donors.



They've met with some success. According to Sidney Wolff, director of the National Optical Astronomy Observatory (NOAO) in Tucson, an unspecified South American country has tentatively agreed to contribute 5% of the project's cost, or about $9 million. Some scientific organizations may be willing to supply the rest.

Wolff is confident that these commitments will be signed, sealed, and delivered before Congress is done with NSF's 1993 appropriation by the end of next month. In fact, NOAO just approved the final design for the two telescopes last week. But with the Superconducting Super Collider (SSC) facing a messy end, partly because foreign contributors failed to show up (p. 1752), officials are still anything but calm.



A new biotech pipeline? The Aberdeen chemical engineering facility.

Army Goes Gung-Ho for Biotech

Defense-oriented laboratories everywhere are seeking new justifications for their existence these days. Now the Army may soon jump on the bandwagon, if it accepts a recent recommendation to transform one of its prime research facilities for chemical weapons into a leading biotechnology laboratory.

While the Chemical Research, Development, and Engineering Center (CRDEC) in Aberdeen, Maryland, hasn't produced chemical weapons since World War II, according to a spokesman, it has long worked on defenses against them. For the past several years, part of that mission has included a program in biosensors, biomaterials, and bioremediation.

That partial mission should now become the laboratory's major focus, suggests an advisory report by a panel of experts from academia and industry. But to make the biotechnology program successful, the report notes, the Army must centralize its research efforts at CRDEC and encourage collaborations with academia and industry. Opening up the laboratory could allow CRDEC to recoup some of its operating costs and to increase the staff's technical experience in a way that might be applied to defense projects, the report states.

PHS To Scale Back Misconduct Alert

In response to the complaints of researchers, the Public Health Service (PHS) is slowly but surely changing the way it handles allegations of scientific misconduct. First it turned the much-maligned Office of Scientific Integrity into the Office of Research Integrity (ORI) and added a new layer of adjudicatory hearings (*Science*, 5 June, p. 1383); its next action will likely be to scale back the PHS Alert system.

Little more than a list of scientists who are under investigation for suspected misconduct, the Alert system has long been a target for critics who complain the system is susceptible to abuse. There are few complaints of leaks from the system itself, which ORI officials maintain is used only to inform NIH institute directors or their designates when a suspect scientist is nominated for a grant, a study section, or a review committee. But the system became highly controversial in 1990, when NIH cut off funding for Tufts immunologist Thereza Imanishi-Kari by deciding not to renew a 3-month grant part way through a lengthy NIH investigation of her laboratory work (*Science*, 29 June 1990, p. 1598).

To address scientists' concerns, ORI director of policy Lyle Bivens said 2 weeks ago that PHS likely will no longer enter the names of scientists who are merely under investigation, doing so instead only after ORI has made a proposed finding of misconduct. Bivens said the proposal offered a sensible "middle ground" between the needs to protect federal funds and to guard the rights of the accused.

Alaska "Bags" a 2000-Mile Water Pipeline

As the biggest state in the union, Alaska has always had a special fondness for large engineering projects. Last year, enthusiasm was running high for a 2000-mile undersea pipeline to carry fresh water from Alaskan lakes and rivers to Southern California (*Science*, 5 July 1991, p. 19), although the state later set that plan aside after the U.S. Office of Technology Assessment declared it unworkable. Instead, the Alaskan government now wants to accomplish the same job in a new way—by floating giant nylon bags of fresh water down the Pacific coast.

Recent legislation allows Alaska to export water for a fee if it can prove that the water is surplus. So Alaska's state water chief, Ric Davidge, is already preparing the way for a water bag deal by drawing up the necessary state regulations and says he hopes bags will begin moving south by the end of the year. With more than 40% of the nation's fresh water in Alaska, he says, there's plenty to share. "So let's bag it up and ship it south."

The Medusa Corp. of Calgary, Canada, has drawn up some preliminary bag designs, the smallest of which would be a 250-by-1000-foot nylon pouch, lined with polyvinyl chloride, capable of holding 72 million gallons of water. Some towing company executives are skeptical, however: They worry that the logs and snags commonly found in Alaskan waterways might rip the bags, and that rough ocean weather could tear the bags from their tow lines. There's a potential economic hitch, as well: Alaska has just begun to auction off its surplus water to the highest bidder, which could drive up prices substantially.