SCIENCESCOPE

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J. MARTY/NSF

End of the ride? Scientists who rely on LC-130 planes to reach Antarctica could lose the service.

Turbulence Over Antarctica

Researchers working in Antarctica come and go for the most part on specially equipped LC-130 airplanes, flown by the Navy and the New York Air National Guard. But an influential Alaskan senator wants to cut off that scientific lifeline, arguing that a shrunken military has no room for nondefense missions.

Senator Ted Stevens (R–AK), chair of the spending panel that oversees the Department of Defense, inserted language into the 1996 appropriations bill that would prohibit DOD from carrying out these duties. The committee's report orders the National Science Foundation (NSF), which oversees the $220 million U.S. polar research program, to find commercial sources for such logistical support, for which NSF now reimburses the military. Ironically, NSF is in the midst of transferring many similar tasks to private contractors, but NSF officials say there are no civilian alternatives for flying people and equipment to and from its Antarctic stations. In fact, a House-passed version of the defense spending bill endorses a new agreement between NSF and the Air Force to fly the planes, which can land on ice.

NSF officials hope to meet with Stevens' staff and come up with a compromise before a vote set for next month on the spending bill. Last week the National Science Board, NSF's governing body, passed a resolution supporting a continued logistical role for the military in Antarctica.

Malaria Vaccine Trials Move Ahead

Disappointing results from a trial in The Gambia have set back prospects for a controversial malaria vaccine. But World Health Organization (WHO) officials say it has shown enough promise in earlier tests that they are pushing ahead with further trials.

The vaccine, called SPf66 and developed by Colombian scientist Manuel Patarroyo in 1987, is the world's first to show some success against malaria in field trials. In a study in Tanzania reported last year, SPf66 provided 31% protection among children aged 1 to 5.

But the new study, published in last week's issue of *The Lancet*, found that the vaccine offered no significant protection in 547 Gambian infants who were injected with SPf66 and followed through the main malarial transmission season. The team, led by Brian Greenwood of the U.K.'s Medical Research Council Laboratories, continues to observe the children, however, because the vaccine could show longer term benefits. The children may also have had less exposure to malaria before vaccination than the older Tanzanians, which could have affected their response.

Peter Reeve of the Special Program for Research and Training in Tropical Diseases at WHO in Geneva says the Gambian results haven't dashed hopes for SPf66, as "one trial does not make or break a vaccine." Instead, Reeve says, "given the different epidemiological settings, the results highlight the need for many separate trials." Those trials will be formulated at a WHO meeting in September, where new data from three other studies will also be considered. The trials should get under way by the year's end.

Private Sector Parachute for OTA?

Barring a long-shot reprieve during final budget negotiations in Congress next month, funding will cease for the Congressional Office of Technology Assessment (OTA) on 1 October. Under a plan already set in motion, however, OTA researchers hope to keep their policy shop alive, albeit in diminished form, outside of government.

Earlier this month, about 20 of OTA's 100 core analytical staff incorporated themselves as the new Institute for Technology Assessment (ITA). If the private nonprofit can muster enough financial support from foundations and universities, says interim President Vary Coates, an OTA senior associate, it will continue to produce, free of charge, OTA-style science and technology studies to aid Congress—and perhaps state legislators and paying private-sector contractees. The group aims in part to "keep OTA's institutional culture going" in the hope that a future Congress might restore funding, Coates says.

OTA supporters welcome the move. "If [ITA] can get up and running and match the kind of integrity that OTA had, cheers to them," says Brian Fitzpatrick, chief of staff to Representative Amo Houghton (R–NY), an OTA defender.

But others question whether a private institute modeled after OTA will attract sponsorship or listeners. "Foundations don't have a history of caring about technology assessment," says Richard Sclove, author of the 1995 book *Technology and Democracy*. Nor do the Republicans now leading Congress, points out Todd R. LaPorte, a political scientist at the University of California, Berkeley. "The idea of long-term, nonpartisan analysis is not seen as very valuable by those people who ought to be the primary clients," LaPorte laments.

Coates admits the odds of ITA succeeding are "very long." The start-up date will depend on donors' response, she says.

Laying Out the Rules for AIDS Vaccine Trials

When the National Institutes of Health decided last year to cancel large-scale testing of two candidate AIDS vaccines because of doubts about their effectiveness, biotech companies were left wondering just what it will take to win government backing of costly and cumbersome efficacy trials. Some even drastically scaled back their AIDS vaccine development.

Now, Anthony Fauci, head of the National Institute of Allergy and Infectious Diseases (NIAID), has taken steps to repair the damage. He has directed staffers to put in writing the criteria that AIDS vaccines must meet before the institute will spend millions of dollars to determine whether they work in humans. And he says that NIAID will do whatever is necessary to find the money to test those that pass muster.

Fauci says that by establishing guidelines specific to each AIDS vaccine now under development—guidelines that likely will set the goal posts for everything from test-tube studies to small-scale human ones—he hopes NIAID can make its expectations "very, very clear" and consequently "get people more confident that we are proceeding rather than just floating around."

But Fauci stresses that he does not think NIAID, which funds the bulk of the country's AIDS vaccine research, should be faulted for moving the goal posts on Genentech Inc. and Biocine Co. when it decided not to fund their trials last year (*Science*, 24 June 1994, p. 1839). When those studies began, he contends, there were so many unknowns about the safety of and immune responses to AIDS vaccines in general that setting criteria would have had little currency. "The state of the art didn't allow it," Fauci says.

Fauci expects the new guidelines to be out by the end of the year. Getting vaccines into efficacy trials is "a very, very high priority on my part," says Fauci. "Let's get rocking and rolling here."