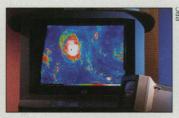
ScienceScope

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NWS Computer System Gets Chilly Review

A key \$525 million computer system that's meant to serve as the nerve center of the National Weather Service's (NWS's) modernization has run into a storm of controversy on Capitol Hill. A new report by Congress's General Accounting Office (GAO) suggests that the system won't yield the payoff in better forecasting that NWS has promised.

The \$4.5 billion NWS mod-



Forecasting dud? GAO report questions whether AWIPS will improve weather predictions.

ernization, due to be completed in 1999, is supposed to use radar and satellite data to provide earlier, more accurate forecasts and severe weather warnings (Science, 15 October 1993, p. 331). The Advanced Weather Interactive Processing System (AWIPS), a high-speed network of workstations, will analyze these data and produce images for forecasters. But according to the GAO report, discussed in a hearing before a House subcommittee last week, NWS has failed to demonstrate that AWIPS's special capabilities will improve weather prediction.

For example, AWIPS can

provide 3D displays, zoom in on storm images, and compose forecasts automatically. But GAO auditor Randy Hite says the office found "no objective evidence" that this gadgetry could help NWS make earlier forecasts and warnings. The GAO's Jack Brock also said AWIPS "runs the risk of spending more" than \$525 million.

NWS Deputy Director Lou Boezi responds that it's simply not possible to demonstrate AWIPS's full capabilities years before the system is completely installed. However, James Baker, chief of the National Oceanic and Atmospheric Administration, NWS's parent agency, conceded before the subcommittee that "there is risk whenever you're trying to make a new system work."

Lawmakers urged the NWS to comply with the report's recommendations to eliminate AWIPS requirements that are unnecessary. NWS officials claimed that AWIPS's price tag is still accurate, but Baker added that the agency plans to begin assessing the program more critically.

NSF Sets Due Dates For Physics

The physics division at the National Science Foundation (NSF) plans to begin setting deadlines for single-investigator proposals in the hope that the resulting review process will be faster and more equitable. The change ends a tradition of accepting submissions throughout the year and sending them out

individually for mail reviews. Under the new procedures, most of the proposals will be judged in batches by sitting panels.

"We hope the new system will be fairer and better," says the division's Rolf Sinclair. Details are available on the Web at http://www.nsf.gov:80/mps/phy/phy.htm>.

One reason for the change, which begins in October, is that "mail reviewers are slower to respond," notes Dave Schindell of the Office of Policy Studies, which is completing a study of NSF's review process. In addition, he says, "panels give you a chance to discuss the work with your peers." They may also help overcome another drawback of the current system, says Schindell's boss, Susan Cozzens: the inexperience of first-time program managers in judging the quality of isolated proposals.

The change is part of an NSFwide effort to handle a rising workload without adding staff. But the experience of a British funding agency suggests that the effort could backfire. The U.K.'s Engineering and Physical Sciences Research Council recently switched from deadlines to rolling submissions and saw the number of proposals plunge by a projected 40%. U.K. officials are puzzled by the drop, which could reflect a wait-and-see attitude by scientists after a general reorganization. But they also speculate that researchers may have felt more pressure to submit when there was a deadline.



Steven Hyman

New Chief for NIMH

Barring a technical hitch, Steven Hyman—a Harvard psychiatrist who has studied addiction and the molecular genetics of the brain—will soon become the new director of the National Institute of Mental Health (NIMH), filling a post vacant since 1994.

While Hyman's appointment isn't quite official, Harold Varmus, director of the National Institutes of Health, says "the secretary [of Health and Human Services] and I have both signed the paperwork." Varmus adds that Hyman "has a very deep commitment to the clinical problems of psychiatry and a profound understanding of neuroscience. I couldn't be more pleased." Hyman could be on board as early as April to help defend NIMH's funding request to Congress.

Already, Hyman seems to have made a good start with leaders of NIMH's diverse constituency. One senior intramural scientist who studied candidates' scientific credentials for his professional society found that Hyman's put him at the top of the list. Hyman, 44, has a bachelor's from Yale, a master's in the philosophy of science from Cambridge University, and an M.D. from Harvard Medical School. He served his residency in psychiatry at McLean Hospital near Boston.

Outside observers are also favorably impressed. Harold Pincus of the American Psychiatric Association applauds the selection, as does Alan Kraut of the American Psychological Society, who says "the psychologists I've talked to say Hyman takes a broad view of research." His biggest challenge, Kraut says, will be to provide "stable leadership" of NIMH in the wake of internal upheavals and harsh criticism from Congress (Science, 5 May 1995, p. 632).

Farm Bill to Boost Research?

Agricultural researchers are hoping that the pending Farm Bill will yield a windfall for science. Last month the Senate approved a version of the bill to phase out most Department of Agriculture (USDA) farmer subsidies that would set up a fund to support rural development. And one third of its 3-year, \$300 million pot could be spent on peer-reviewed grants for education and research.

The Senate's plan is more modest than a \$2 billion research proposal offered by House Democrats that was rejected before the overall bill passed the House last week. But it would be a bit of consolation for USDA's science, economics, and education division,

which saw its peer-reviewed National Research Initiative (NRI) grants program shrink this year from \$103 million to \$96.7 million. Because the new money couldn't be spent on existing programs, "we would try to do something new yet complementary," says NRI's Sally Rockey.

The Clinton Administration is also lobbying for the new fund, which agricultural lobbyists hope will grow when House and Senate conferees meet, perhaps early next week, to iron out differences in the two bills. One problem, however, is that the House may balk at increasing agricultural research until it has held hearings, scheduled for later this month, on the topic.