control by the military. These, according to the GAO, for the most part will be large mainframes from International Business Machines (IBM) known as 3033's, which were developed around 1977. These already are two generations old, having been superseded by IBM model 3081 and the recently announced IBM 3083.

What is to be gained by the use of obsolete equipment? For one thing it is cheap. The 3033's are no longer selling well, and IBM recently announced a price cut on some models of up to 17 percent. Perhaps more important is that the old computers will allow the military to use software that already runs on computers at Johnson, a great savings since developing software is often more expensive than buying the computers themselves. The problem is that the software, too, is far from state of the art. Many of the astrophysical algorithms go back to the days of Project Mercury.

"At some point," says Charles F. Rey, a GAO auditor who worked on the report, "you've got to upgrade. You've got to optimize your software."

What the military gains most in this approach is speed—not efficiency, accuracy, or low cost, but speed. And, taking the headlong approach one step further, the Air Force has signed a contract with IBM so that the antiquated setup at the Controlled Mode can be exactly duplicated in Colorado, so the military can further save steps in its mushrooming space program.

Using the Controlled Mode layout is only part of the replication strategy. In order to speed the space effort, the military is also building in Colorado a near

Security Checks on USDA Peer Reviewers

The U.S. Department of Agriculture (USDA), according to a well-informed Administration official, has been screening scientists for security risks and political compatibility before inviting them to sit on peer review panels. These panels, composed of people supposedly chosen for their expertise alone, will decide which research proposals deserve to be funded by the USDA's competitive and special grants offices. Spokesmen for the National Science Foundation and the National Institutes of Health say these procedures are unusual; their agencies do not subject peer reviewers to Federal Bureau of Investigation (FBI) or political checks.

The practice of screening scientists for their political views is irregular in itself. But, according to several observers, it has also caused severe problems in scheduling basic research awards this year. Background checks are time consuming. At present, nominations are moving slowly through the bureaucratic maze, and the review system seems threatened with delay.

In the case of the 4-year-old competitive grants program, names of 140 potential reviewers were submitted for approval early this year. As of 23 April, only 15 of the 72 needed to conduct business had been cleared by the Secretary of Agriculture. These reviewers are supposed to meet and give their final decisions on grant applications on 3 May. Many have been reading applications for weeks in preparation.

The person responsible most directly for screening the nominations, Charles Grizzle, confidential assistant to Secretary of Agriculture John Block, says there has been no impropriety in selecting members of peer review committees this year. It is true that nominees for policy or advisory committees are checked for their political coloration. "If two names are submitted to us and one is a Democrat and one is a Republican, we will choose the Republican," he says. Candidates for the scientific panels are not scrutinized as carefully as those for the policy committees, but they are screened.

Grizzle says that nominations to the peer panels are sent to the FBI for a routine name check. Then they undergo a "very cursory check" at the Agriculture Department "to make sure that we've got people in the right slot and that they haven't gotten mixed up somewhere along the line," Grizzle says. "Our principal criterion is scientific qualification." However, if there is a choice between two people and one is "more philosophically aligned with this Administration, we are going to choose that person." But Grizzle insists that "there is no effort to politicize those panels." Anyone who suggests otherwise, he adds, "must be trying to embarrass the secretary, and we're not too pleased about that."

There are two reasons for the delay in setting up the peer panels for the research programs, according to Grizzle. One is that the department has been required to operate according to the rules of the Federal Advisory Committee Act this year for the first time. The procedures are unfamiliar. Second, the nominations came in late, arriving at the end of February. Grizzle says the FBI clearances came through 6 to 8 weeks later, and that he hopes to complete the department's in-house "cursory check" within 4 days. Of the 270 nominations for the various peer review panels, 80 had been cleared by 23 April, according to Grizzle. (A spokesman for the FBI says it takes 10 to 14 days to process a routine name check.) Grizzle says he has been working "rather feverishly" to review all the lists sent over by the FBI. He hopes to have all the names cleared by the night of 26 April.

There was, however, no clear explanation for the delay in hiring the man who was recruited to direct the competitive grants program, David Krogmann, professor of biochemistry at Purdue University. He ran the same program while taking a year's leave from Purdue in 1980. This year he has been asked to run it again, splitting his time between Purdue and the USDA. He recruited his own administrative staff early this year at the USDA's behest. But as of 23 April, he and his recruits still had not been given formal approval to take control of the program. This delay of 5 months in getting started, Krogmann says, "may set a new record for the department."

The first director of the competitive grants program, Joe Key, now a professor in the botany department at the University of Georgia, fears that some USDA officials may be practicing a form of malign neglect. The competitive grants program has never been liked by traditionalists at USDA. Key says, "If the department is not mature enough to handle an open basic research program, perhaps we should consider moving it somewhere else."

—ELIOT MARSHALL

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