## Federal Science and Technology: Openings in Management

The new year will see a lot of new faces in the federal science hierarchy. A change in administrations means that Presidential appointees hand in their resignations, and in the cadre of science administrators and science advisers which has grown greatly in the decade since Sputnik, many will be leaving their executive suites.

The exodus of "supergraders" is unlikely to be as decimating in science and education offices as in other sectors. For one thing, many of the jobs are regarded as "nonpolitical." Party ideology doesn't really affect the Geological Survey much from administration to administration. In addition, some of the top science posts are term appointments and incumbents are expected to carry on through a change in occupancy at the White House.

National Science Foundation director Leland J. Haworth, for example, who was named to his post by President Kennedy in 1962, will complete a 6year term on 30 June and is expected to serve at least until then. Haworth, who will be 65 when his current appointment expires, has not said he would or wouldn't stay on if asked. There has so far been no public indication of Nixon's intentions on this or any other key science jobs. If precedent is followed there will be some holdovers. Nixon has indicated he will seek to run an "open" administration, which presumably means he will avoid an undeviating party line in his appointments.

The Atomic Energy Commission, run by five commissioners serving staggered 5-year terms, is headed by a chairman appointed by the President from among the commissioners. The present chairman, Glenn T. Seaborg, is expected to hand in his resignation as chairman, but would continue to serve as commissioner if he follows the precedent set by his predecessors. Last June Seaborg turned down reappointment for a full 5-year term but agreed to fill out an unexpired 2-year term. He said at the time that financial and other personal considerations made it impossible for him to accept a full-term appointment. Seaborg, a Nobel prizewinner in chemistry, has been mentioned in speculation on more than one nongovernmental opening, but to date he has not indicated any plans to quit government before his term ends on 30 June 1970.

The top post is already vacant in the agency with the biggest civil science budget, the National Aeronautics and Space Administration (NASA). The resignation of James E. Webb on 7 October (Science, 4 October) left his former deputy administrator, Thomas O. Paine, now acting administrator, to preside over NASA in the transition period. The choice of a new NASA chief should indicate in which direction the administration wants NASA to evolve. For NASA the question of its mission in the post-Apollo era is, because of the lead time involved in space projects, a very pressing one (and, because of the ambiguous attitude of Congress, a rather depressing one for the agency).

Like NASA, NSF and, to perhaps a lesser degree, AEC face identity crises. Recasting of the AEC is a perennial subject of discussion in Washington. Reformers usually suggest that the AEC's regulatory functions should be consolidated in a more standard regulatory agency and that its activities as designer, manufacturer, and procurer of nuclear weapons be hived off and bestowed on the Department of Defense. This would leave the agency as an operator of federal laboratories, patron of research in biomedical and physical sciences, and trailblazer in applications of nuclear energy. There are cogent arguments against splitting the agency, and the new administration could well be disinclined to push a reorganization of the AEC when this could mean tangling with a powerful Joint Committee on Atomic Energy which is congenitally jealous of its privileges and controlled by the opposition party.

NSF is still accustoming itself to organizational and procedural changes imposed on it by a reorganization law passed last spring. So far the agency hasn't really come to grips with major tasks assigned it, such as expansion of social sciences research and a more vigorous fostering of applied research. The deputy director's job that was vacated by John T. Wilson late this summer, when he returned to the University of Chicago, is still unfilled. And five new appointive posts created by the reorganization statute are unfilled, presumably awaiting the action of the new administration.

NSF officials, who have worked with a virtually inelastic budget since the Vietnam war escalated, face a new Congress which, if anything, is likely to be slightly less liberal than the last one. On top of this, the NSF summer retrenchment caused by the federal budget cut left a lot of NSF clients in the university community who are wounded and may be nasty. All in all, NSF management faces a test of diplomacy on all fronts.

What tack the new administration takes on science-agency policy should be significantly influenced by the scientist closest to the President—his science adviser, who also serves as director of the Office of Science and Technology (OST). The incumbent, Donald F. Hornig, who has served since 1963, is said to expect to leave government service, but hasn't indicated a destination.

OST deputy director Ivan Bennett plans to return to his position as chairman of the department of pathology at Johns Hopkins School of Medicine. Hornig's and Bennett's jobs are the only Presidential appointments in OST. The rest of the professional staff positions are "permanent" appointments but do not carry Civil Service tenure. These staff members could, in effect, be given 30 days' notice, but OST, like the Bureau of the Budget, is regarded as being made up of a continuing and essentially nonpolitical professional staff. A few of the staff members have served since the post of science adviser was established during the Eisenhower administration and some others arrived soon after OST was set up, shortly after Kennedy took office. Perhaps a majority of the staff, however, is made up of specialists in various branches of science and technology recruited from other government departments, universities, or industry, who serve in OST for a few years and then move on.

Appointments which should be carefully watched for clues to the new administration's attitude on sensitive policy issues are for posts in the Department of Defense and the education sector of the Department of Health, Education, and Welfare. During the campaign, Nixon argued that there was a "research gap," manifested most seriously in a lag in research and development on new weapons systems. Nixon was sharply critical of civilian officials in the Pentagon who, wielding new budget-control methods, had, he said, overreached themselves (*Science*, 18 October).

It will be particularly interesting, therefore, to see what changes are made in the office of the Assistant Secretary of Defense (Systems Analysis) on the departure of the incumbent, Alain C. Enthoven, who is a senior member of the generation of "whiz kids" who helped McNamara transform management at the Pentagon.

Enthoven and his operation have also drawn the fire of House Armed Services Committee chairman L. Mendel Rivers (D-S.C.), a dedicated Mc-Namara critic. In a somewhat less exposed position is John S. Foster, director of Defense Research and Engineering. Appointed by the President with the advice and consent of the Senate, the director is adviser to the Secretary of Defense on scientific and technical matters as well as on the development, testing, and evaluation of weapons. Foster and his appointive deputies will hand in their resignations, but the post, under Foster and his predecessors Herbert York and Harold Brown, has been fairly free of controversy, and Foster's relations with Congress seem reasonably good. Foster has indicated no post-inauguration plans and could be willing to stay on, at least for a while. Foster is in the midst of preparing next year's budget and, like many other federal officials so occupied, probably feels a responsibility to carry through, into next year, with presentation of the budget to the next Congress.

In HEW, some changes in the approach to administering welfare and education legislation are expected. HEW Secretary Wilbur J. Cohen, who made a reputation as a university authority on social security policy, has announced he will return to the University of Michigan, where he held a professorship. Commissioner of Education Harold Howe II will leave the Office of Education on 31 December to join the staff of the Ford Foundation. Howe, who has served in the post since 1965, has been responsible for administering an education budget that grew to \$4 billion a year under President Johnson. Howe also was a central figure in the development of federal guidelines which set forth the conditions under which federal aid funds should be withheld if school districts did not meet civil rights provisions in

education legislation. This made him a target for the hostility of hardliners in Congress and elsewhere, even after enforcement responsibility was moved out of OE. The Nixon appointment to the commissioner's job will serve as a strong hint of intentions in a sensitive area.

On the health side of HEW, the job of director of the National Institutes of Health has been viewed as nonpolitical, and the new director, Robert Marston, who succeeded James Shannon this summer, is expected to carry on. Assistant Secretary for Health and Scientific Affairs, Philip R. Lee, a physician, is expected to leave government. Observers say that the reorganization which changed the relationship of NIH and the Public Health Service has progressed satisfactorily because Lee and Surgeon General William Stewart and other officials worked very well together, and there is some question about the effects of new management.

In other line agencies, science advisers and science administrators have risen to sub-Cabinet level in the last decade. Professional competence is the main criterion for their choice, but they work closely with top departmental officials, and sympathy for the new administration's aims counts.

Some impending changes in the atmosphere of federal science in Washington are not necessarily tied to political changes. There is a constant twoway traffic of academics and industry scientists in and out of Washington. Federal fatigue takes its toll; leaves of absence expire and greener pastures beckon.

Next year the National Academy of

Sciences will get a new president as Frederick Seitz leaves to take up the presidency of the Rockefeller University.

The Institute for Defense Analyses, a nonprofit research organization with contractual ties to the Defense Department, is looking for technically qualified candidates for two top posts. Gordon J. F. MacDonald, who came to IDA from UCLA 2 years ago as executive vice president, has returned to California as vice chancellor of the University of California, Santa Barbara. Another IDA executive, Ali Bulent Cambel, has resigned a vice presidency to go to Wayne State University as dean of the school of engineering. IDA and other organizations which operate in the federal government's gravitational field can have such things as recruiting affected by the kinds of uncertainties that accompany a change in administration.

The Nixon talent hunt is only beginning, and many key federal science appointments could come after Inauguration Day. There seems to have been little ardor among academic scientists for the Nixon candidacy, and observers say that Nixon is likely to draw on industry for science advisers and administrators more heavily than his immediate predecessors did. There is no Kennedy Camelot atmosphere to attract talent; federal science, with luck, will be run with an approach which is, in the best sense, businesslike. If academic scientists sulk in their tents, what they could get in federal science is not an orderly transition but some rude shocks. -JOHN WALSH

## **CBW: Britain Holds Open House** at Its Biological Weapons Center

Porton Down, England. With an invitation list ranging from the Canine Defence League to the House of Lords, the Microbiological Research Establishment (MRE), Britain's center for biological weapons research, opened its doors last month in an effort to persuade the public that it is not the devil's workshop.

Whether it is or isn't turns out to be

a matter of taste and interpretation. MRE, which is operated by the Ministry of Defence some 80 miles southwest of London, persuasively argues that its military role is confined to protecting Britain against biological attack, and, furthermore, as the country's best equipped laboratory for large-scale production and handling of microorganisms, it does a great deal of work of