

scope network, containment of recombinant DNA, development of a heavy ion facility, and others.

- **Science Education.** Increased support of science education at 2- and 4-year colleges, often through funds to purchase modern equipment, is planned, as is new support of programs to get women, minorities, and handicapped persons into careers in science.

At the same time, NSF anticipates decreasing by almost 27 percent its support of programs in curriculum development, such as the controversial MACOS program that got the agency in such hot water with conservative congressmen because it included lessons on cultures whose values were said to be un-American.

- **Research Applied to National Needs**

(RANN). The major projected change in RANN derives from increased funds to study earthquake engineering, as mentioned above.

- **Biological, Behavioral, and Social Sciences.** Increases in these areas are, in particular, slated for research on cognitive development, as well as the nature of language, studies in economic theory, in which this country is said to be lagging, and research in plant science, to coordinate with the new basic research program in USDA.

NASA

Under the Ford proposal, the NASA budget would show real growth of 4 percent, with much of the increase—\$152 million or 51 percent—going for the Space Shuttle program. Other new funds

would be allocated to new satellite projects including the Space Telescope, for studies of space without the obscuring effects of the earth's atmosphere (\$435–470 million over 7 years); the Jupiter/Orbiter Probe to conduct the first comprehensive study of Jupiter and its 12 moons (\$280 million over 5 years); and the LANDSAT-D advanced technology earth resources survey satellite (\$182 million over 6 years). Mars follow-on studies would also be funded (at \$5 million in FY 1978) as a potential follow-up to the Viking missions.

In order to achieve these increases without pushing the total NASA increases above 4 percent, certain budget cuts and deferrals would have to be made. Among those proposed are these: deferral of the Lunar Polar Orbiter to map the moon; deferral of engineering and design studies of a future manned earth-orbiting space station with an eye to possibly not developing it at all; and reduction of general support for R & D in contract studies at NASA field installations.

DOD

DOD, which accounts for about 47 percent of all federal R & D, is marked for a 15 percent increase in budget, with emphasis on such controversial items as the M-X intercontinental ballistic missile, the Trident submarine, and the B-1 bomber. Inasmuch as these projects involve as much politics, if not more, as they do science, and in light of the fact that Carter is known to disagree with Ford on some of these matters, it is most likely that the new President will single out the DOD budget for changes.

ERDA

As is the case with defense, Carter is known to have a great interest in energy and probably will want to put his own stamp on an energy proposal to the Congress. Therefore, he may not go along with Ford's budget proposals which place the emphasis on developing new technologies for using coal and uranium as "the only cheap and abundant alternatives in the next several decades to high-priced imported coal and gas."

Carter has said he will submit budget measures to Congress sometime in mid-February. His transition staffers were in contact with OMB officials and agency people during the final stages of preparation of the Ford budget, and were, reportedly, in agreement on some items—agricultural research and earthquake studies stand out as examples. Within a month or so, scientists should know where the new President stands across the board on research and development questions.—BARBARA J. CULLITON

Briefing

Carter Says No to Cooper; Fredrickson's Future Unsure

Theodore Cooper, the highly popular assistant secretary for health in the Department of Health, Education, and Welfare (HEW), has submitted his resignation, effective at noon on Inauguration Day, after learning that President-elect Jimmy Carter could not be persuaded to keep him on in the new Administration. There would be nothing noteworthy about the departure of a major political appointee were it not for the fact that Cooper's supporters, who are numerous in the biomedical community, made a concerted effort to get Carter and his transition people to make an exception to the rule of bringing in their own.

There also has been pressure to get Carter to retain Donald S. Fredrickson as director of the National Institutes of Health (NIH), a position he has held only for about a year and a half. As this is written, 3 days before the Inauguration, there is no word on whether Carter will agree.

After the November election, Cooper, a Democrat and former director of the National Heart Institute,* let it be known that he would stay on as assistant secretary if asked. Many individuals and even the Association of American Medical Colleges as an institution proceeded to speak on Cooper's behalf. Cooper was no patsy for academic interests, but he

clearly was a friend of biomedical research. Shortly after New Year's Day it became apparent that the lobbying of Cooper's friends was not going to work. It is reported that HEW Secretary-designate Joseph A. Califano, Jr., at one point expressed willingness to retain Cooper as assistant secretary for health, an area in which Califano himself has little direct experience; but the President-elect said no, he wanted his own appointee, an attitude even Cooper finds readily understandable. (It is speculated that Cooper's association with the controversial swine flu program led to his undoing, but there is little evidence to support the idea that this is the primary reason he lost his bid to stay.)

Rumors in Washington about who will be Cooper's successor are just that—rumors. Cooper, who resisted making other plans until it was certain he would be asked to leave, has not yet decided what he will do.

Cooper's job clearly is a political one. Fredrickson's, at least in theory, is less so, even though it became a Presidential appointment 5 years ago when the Congress made the director of the cancer institute a Presidential appointee. When Fredrickson, a Republican, took the NIH job, Senate and House leaders assured him he could look forward to a long tenure. They have no authority to make that promise, however, and now must rely on their powers of persuasion with Carter in order to keep it. Fredrickson met recently with Califano but got no reassurances there—being told to "hang loose" for a couple of weeks until a decision is made in the Carter White House.—B.J.C.

*Now the National Heart, Lung, and Blood Institute.