

Several department heads report that investigators are increasingly reluctant to submit proposals to NSF, and that some faculty members are resorting to a "shotgun" approach, applying to several different granting agencies simultaneously in hope that one will come through with support. Department heads also predict that the number of graduate students accepted next year will have to be reduced sharply, and they say they are having difficulty recruiting topnotch faculty members from other institutions, for such investigators are generally able to spend at least part of their NSF money where they are, but if they came to Massachusetts, the outlook would be uncertain.

Such widespread woe practically demands that a "villain" be found, and at Massachusetts the culprit is generally identified as NSF. The Foundation is criticized for (i) making the universities responsible for allocating cutbacks among grantees, in contrast to other agencies which negotiated cutbacks on a grant-by-grant basis; (ii) failing to warn universities of the ceilings in time for them to take effective action to curb spending; and (iii) failing to consider the "growth factor" in setting expenditure ceilings. On all but the last count, the criticism seems unfair.

Aaron Rosenthal, NSF comptroller, says other agencies were able to use the grant-by-grant approach because their money is awarded to grantees on a yearly basis and these agencies could thus cut their fiscal 1969 expenditures by simply negotiating a reduction when an investigator came due for his fiscal 1969 money. In contrast, NSF puts out money on a multi-year basis and could only curb its fiscal 1969 expenditures by reneging on money that had been allocated in previous years. Since the universities were in a better position to know what NSF money had already been spent or committed from previous grants, and since it was important to take swift action to curb spending, NSF dumped the problem on the universities. This procedure also had the advantage of letting the universities apportion cuts so as to protect their departments from irreparable damage.

As for the charge that NSF was slow in getting the word out, the evidence indicates that NSF acted reasonably quickly. The legislation which required the budget cuts cleared Congress on 21 June. On 26 June, 2 days before the President signed the legislation into law, NSF sent out a notice to university presidents warning them to

## Election: Morse an Apparent Casualty

The power structure of congressional committees with authority over science and education was virtually untouched by the election with the notable exception of the defeat of Senator Wayne Morse (D-Ore.). Morse lost by a minute margin of reported votes to attorney Robert Packwood and may ask for a recount.

Morse was in line to move into the chairmanship of the Senate Labor and Public Welfare Committee which has chief responsibility in the Senate for authorizing legislation for education and biomedical research.

Morse would have succeeded Senator Lister Hill (D-Ala.) who is retiring from the Senate this year. Hill, who devoted much of his attention to the fortunes of the National Institutes of Health in its period of great growth, in effect, delegated authority over education matters to Morse. As chairman of the education subcommittee, Morse has been a strong advocate of federal-aid-to-education legislation and has had a major hand in the enactment of a record number of education programs in recent years.

Heir apparent to the chairmanship now is Senator Ralph Yarborough (D-Texas) who ranked after Morse in seniority. Yarborough is expected to assume the chairmanship, but he is also eligible for the chairmanship of the Post Office and Civil Service Committee and must decide between the two posts. Yarborough is a leading figure in the liberal wing of the Texas Democratic Party and, like Morse, could be expected to take a "liberal" position on legislative proposals for education and biomedical research.—J.W.

"start planning for operating within an expenditure limitation." Subsequently, the Budget Bureau, after a series of negotiations with all federal agencies, set an expenditure ceiling for NSF. Even before this figure was completely firm, Rosenthal says, the Foundation, on 14 August, sent out ceilings to the various institutions.

Could the Budget Bureau and NSF have acted faster? An outsider can't tell, but it seems clear that NSF couldn't possibly have acted quickly enough to help Massachusetts much. Administrators at the university say most of their commitments to students and faculty were made in the first 3 or 4 months of the year, generally before the budget-cut legislation was even introduced, and long before it was clear that the legislation would pass.

Nevertheless, earlier warning would have been of some value for the university would then have been able to curb spending by NSF grantees during the summer, including, perhaps, summer salaries. But if blame is to be apportioned, the university's own administration deserves some criticism for a sluggish response. University officials acknowledge that they did "essentially nothing" between the time they got NSF's 26 June warning and the time they received NSF's 14 August spend-

ing ceiling, at which point they went into a panic and froze all spending. The Massachusetts administration seems to have been about average in its response to the situation. According to Rosenthal, some universities took action as soon as they got the first notice, while others, as late as October, had still not got around to braking NSF expenditures.

Massachusetts is taking two major steps to relieve its budget crisis. The university plans to seek a deficiency appropriation from the state legislature, and it has appealed to NSF for an increase of \$577,000 in its expenditure ceiling. Rosenthal acknowledges that NSF, in setting the institutional ceilings, "should have taken into account" the rapid-growth factor, and he hopes the Foundation will be able to "make some allowance for this." But almost 200 institutions have appealed to NSF for relief, and NSF has a relatively small reserve fund available.

Meanwhile, some investigators at Massachusetts are contemplating alternatives to government-supported research. Says Schuster, the botanist whose compendium project may be down the drain: "I bought myself a chain saw and said 'The hell with it.' I've got some land and I'll just go cut some trees."—PHILIP M. BOFFEY