Hold That Meat Axe

Senator Mansfield has thrown the research community into a state of near panic with his demand that the Department of Defense "terminate immediately" projects that are not directly relevant to DOD missions. His attempt to reassure us by holding out the promise of an "orderly transfer to other agencies of projects that do not meet the criteria [of relevance]" fails in its goal because the timetable he has advanced for DOD terminations is so abrupt that it would preclude any realistic possibility for transfer of support funds.

The Senator has stated on the floor of the Senate that he feels a reasonable goal would be "to reduce DOD funding of academic research to no more than 25% of that funded by the National Science Foundation by the end of fiscal year 1971." According to his figures, DOD currently supports basic research at a level of \$311 million per year compared to \$277 million per year from the National Science Foundation. But at this point it looks as though NSF will be lucky if it can continue even its current level of support in the 1971 budget. If we are to take the Senator's words literally, then by July 1971-less than 18 months from now-DOD's support would have to be cut by \$240 million-from \$311 million down to $0.25 \times 277 million or \$70 million.

The Senator could hardly seriously propose that the government simply abandon a quarter billion dollars' worth of research contracts, and he knows much better than we how little chance there is that Congress can be persuaded in the coming year to reappropriate any meaningful fraction of that sum to other agencies. Merely on the basis of these gross considerations it seems that some sort of compromise will necessarily be worked out and that the financial props will not be pulled out from un-

der the bulk of the basic research that DOD is supporting.

The more realistic danger is that a compromise based on the large-scale figures might work in ways that are unintentionally selective, wiping out support for certain areas of research while leaving others untouched. Thus, even though cuts in DOD research may be limited to an overall 15% (see page 63), the application of the relevancy criteria could result in a disproportionate share of this cut coming from physics projects compared to engineering-research projects. And among the physics projects themselves, the more fundamental the research topic is the more vulnerable the project is likely to be. Unless there is some enlightened planning on the fine structure of whatever arrangements are made, most of the \$38 million of support provided by DOD in fundamental areas such as nuclear physics and solid-state physics could abruptly disappear, leading to termination or irreparable damage in important research programs.

Budget cuts are always painful at the time they occur, but their longrange effects depend on whether they are carried out with a meat axe or a scalpel. At this time, when support for physics research generally is already being gradually strangled by the budget crisis, a meat-axe treatment of DOD-supported research could trigger genuine disaster. The damage to morale and loss of resources invested in programs abruptly terminated could be great enough to topple US physics from its current position of international pre-eminence and leave it in a state of decline, recovery from which would require a much larger investment on the part of the taxpayer than any reductions in budget that might now be realized.

-Harold L. Davis