

SCIENCE POLICY

McElroy for Expansion

A PLEA that the scientific community should define their research projects in more tangible terms than the mere pursuit of knowledge was the chief theme of a speech by Dr William D. McElroy, director of the National Science Foundation, at the annual dinner of the American Physical Society on April 29. He argued that "science can be, and is, concerned about human survival. Without such science, I suspect that the numerous justifications for science marshalled to date will fall on progressively unfriendly ears".

Dr McElroy said that the postwar growth of American science made it possible for the scientific community to maintain the sense of being an invisible college but that the relationship between the scientific community and the rest of the world was not as rich and diverse as those within the scientific community. The ways in which scientists served on public advisory bodies such as the President's Science Advisory Committee are useful both to science and the outside world but "too few, too spasmodic and too superficial . . . there was no real sustained attempt to create a sense of understanding, participation or commitment". Dr McElroy was not surprised that the relationship between the scientific community and the rest of society was beginning to break down partly because of the reduction in the funds available for scientific research and the "emerging conflict between traditional scientific values" and the general concern of the community with "specific aspects of our technological society".

In these circumstances, Dr McElroy says, it is not sufficient for scientists to ask for a continuation of existing patterns of support—there must also be "changes in the way we do business, what we do and why we do it". On the role of the National Science Foundation in the financing of scientific research, he emphasized the importance of carrying politicians along with forward planning. He thought that the foundation itself should have a larger share of the cake but did not welcome the way in which this seemed likely in the immediate future to come about, as a result of the deprivations of the Mansfield amendment. So, he said, the question is that of defining objectives that would assure more and more stable budgets for the National Science Foundation. Although the chief objective would remain the fostering of scientific research, he asked that the traditional goals of the scientific community should be "supplemented by research oriented to the problems of society", and quoted with obvious pride some of the ways in which the National Science Foundation has recently gone into ventures such as the International Biological Programme and the International Decade of Ocean Exploration.

In Dr McElroy's view, it will be an advantage that under the new statute of the National Science Foundation, there will be a deputy director and four assistant directors appointed by the president (see *Nature*, 226, 105; 1970). This group, he said, would make it easier for the foundation to change with the times. He thought that there was also scope for planning national centres to channel the energies of academic scientists towards basic problems. Dr McElroy commended this policy to the physicists not merely for its own sake, but because in his view it is a good

prescription for continued public support. "Even if science were lavishly funded and a basic schism existed between science and society so that science were isolated, it would not be viable. Conversely, if the resources available to science are less than desirable, but if society identifies its values with those of science, the outlook for science's viability will be good."

RESEARCH

How to Place Contracts

IN 1968, the federal government spent \$16,700 million on research and development, and between 1965 and 1967 about 88 per cent of federal funds for research of all types went on programmes initiated by the Department of Defense, NASA and the Atomic Energy Corporation. Because the major proportion of this vast expenditure goes on projects undertaken by private industry under contract, there are grave problems involved in choosing contractors without grossly modifying the industrial structure. The full extent of the problem has, however, been clearly revealed in evidence submitted to the Industry Committee of the Organization for Economic Cooperation and Development (*United States Industrial Policies*, HMSO, £1 7s 6d). Pure research, the report points out, is usually performed at universities which have reputations in the field concerned. New centres of excellence are therefore unlikely to be formed as a result of government contracting.

In the industrial sphere, the report suggests that big companies get bigger on government contracts simply because "the projects grow in size; it is often difficult for new firms to enter the field, and the managerial skill necessary to handle large projects is in fairly limited supply". The alternative solution—for the government to develop a very large managerial skill of its own, thus making it possible to fragment the work and distribute it over a larger number of companies—is impracticable, the report suggests, if for no other reason than that it usually results in more costly administration. In effect, the committee could see little way out of the situation where the economy of a whole area is influenced by a large government project. The only factor which it says is likely to help solve the problem of "single activity towns" is the guarantee given by contractors that they will channel private investment into other fields.

SPACE TRACKING

Antigua Shuts Down

AFTER three years of being a part of the tracking system for the manned space flight network, the NASA station on Antigua is to be shut down at the end of June. This was recently announced in Washington, where it was explained that the station on Antigua has been playing a subsidiary part since the flight of Apollo 11 a year ago, since when the detailed care required of the stations in the tracking network has been simplified. The National Aeronautics and Space Administration says that the government of the United Kingdom has been informed of the decision to close the station, which once employed 92 people, but which is now occupied by 17 Americans and 11 people from the island.