

only just outside the machinery of government. Scientists working for the nationalized industries, for example, are not regarded as they should be as a body of men able to swell the ranks of the public servants. The result is frequently a thoroughly wasteful duplication of skill and expertise. When the greatest skill happens to be outside, it is also a fruitful source of dispute between the Civil Service and the rest of British society.

These administrative matters, important though they may be for the efficiency of the Civil Service as it exists at present, could be attended to without great upheavals of principle. That, at least, is what the optimists will think. The question of how best to make wise decisions is more tricky, involving as it does the relationship between the Civil Service, the Government and the House of Commons. Whatever the constitutional niceties, however, there must be something seriously wrong with the machinery of decision-making if the costs of certain guided missile systems turn out to be forty times the first estimates, if adherence to organizations such as ELDO is determined by political and not technical considerations, and if a country with a serious problem about balancing its foreign trade should find itself saddled with half of the *Concord*.

One obvious moral is that decisions on technical matters made by the Civil Service should be discussed more thoroughly in public. Technical difficulty is no reason for making decisions in private. If anything, the argument works the other way. Discussion within the technical community as a whole is probably much safer as a means of reaching accurate decisions than the civilized but isolated processes by which decisions are at present arrived at on matters as different as the development of transport systems, the running of hospitals and the equipment of armies. This line of argument can successfully be carried a stage further, for it is more than probable that the British Civil Service keeps too much work to do itself. It would frequently make much better sense if the formation of policy on important technical matters, and even the power to make decisions, were transferred from Whitehall to more independent organizations. Universities in Britain could probably contribute as much as they have done in the United States, especially in the analysis of policy. Commercial companies could often undertake the design as well as the manufacture of the goods the Government has to buy. It is entirely possible that whole sectors of government—the National Health Service, for example—could be managed more efficiently by semi-autonomous directors free to use the techniques of modern management and not by civil servants. All this is reminiscent of the Swedish practice of delegating executive responsibility outside the public service. Although the Fulton Commission is known to have been studying it, its precise advantages in Britain will be difficult to define. Especially in technical public service, however, the devolution of responsibility from the Civil Service could be a great benefit to everybody—not merely the taxpayers but the civil servants as well.

## NEWS AND VIEWS

### Technology without Controller

MR. J. B. ADAMS, Controller at the Ministry of Technology for almost a year, will not continue in that post when his present stint runs out. Instead, he has been appointed Member for Research at the U.K. Atomic Energy Authority in succession to Dr. F. A. Vick, who has become Vice-Chancellor of Queen's University, Belfast. Though this change will bring comfort to the Culham Laboratory of the AEA, which will calculate that it can only benefit from having its director sitting even closer to the centre of power, the Ministry of Technology must be more than a little downcast at the problem of keeping senior men. In the two years of its existence, the Ministry has lost two ministers (Lord Snow and Mr. Frank Cousins), its first Permanent Secretary (Sir Maurice Deane) and now its Controller, or the official with responsibility for technological policy at the Ministry, Mr. Adams.

Everybody seems to agree that the loss of Adams is serious. Without much formal education, he has won an international reputation as an exceedingly perceptive and yet efficient administrator. His outstanding achievement was the building of the 30 GeV proton synchrotron at CERN, Geneva. His management of the Culham Laboratory, at a time when work on thermonuclear fusion has been far from easy, is widely admired. To have combined this with being controller at the Ministry of Technology, as Adams has done, is such a considerable achievement that his colleagues have been able to forgive (as well as covet) the much publicized car—which is really an office as well—in which he travels between one job and another. It seems quite openly acknowledged that Adams would have stayed on at the Ministry if he had not been convinced, several months ago, that there was little prospect of a satisfying career there.

The question of what happens next is of absorbing interest, but is unlikely to be settled until more is known of how it will be decided to merge the Ministry with the bulk of the Ministry of Aviation. It has been natural to think of this reorganization as an access of power to the Ministry of Technology, and that will certainly be one of the immediate consequences. But the change is bound to bring more than a thousand of the permanent staff of the Ministry of Aviation into the headquarters of technology. If the existing hierarchy at the Ministry is not swamped, it is almost certain to be considerably shuffled about. The prospect of yet another series of administrative upheavals can hardly have seemed to Adams to be tempting.

### Starting Small

THE Centre for Curriculum Renewal Overseas, which rejoices in the acronym CREDO (see *Nature*, 210, 122; 1966), is now a going concern. In London last week the new Minister of Overseas Development, Mr. Arthur Bottomley, said how much he hoped the organization would accomplish. The director of CREDO is Mr. R. W. Morris, a British civil servant who has been one of the joint secretaries of the Schools Council since its formation two years ago, and who was before that