

OLD WORLD

SPACE POLICY

Black Arrow under Fire

THE demise of Rolls-Royce last week has left the Black Arrow project with engines for only the next two launches. But, according to Mr J. Lewis, of the R&D Branch of the Ministry of Aviation Supply, the project should not be too severely affected because it has enough slack in it to survive a delay in the engine contracts of two or three months. Mr Lewis was giving evidence to Subcommittee B of the Select Committee on Science and Technology, whose members were again interviewing representatives from the Ministry of Aviation Supply about Britain's space policy, and it was clear that the engine contracts are not the committee's only cause for concern over the Black Arrow launcher.

The conversation during the meeting first concentrated on policy towards international cooperation in space research, but the best formulation of the policy of the Ministry of Aviation Supply was provided by the witnesses in their written evidence. "Unless the financial resources made available to national space activities are increased by a very considerable, and arguably disproportionate extent, there is really no option so far as major projects are concerned as between a national effort and an international one. The choices are rather in terms of what international projects should be supported, and what is the extent of the national programme required as a back-up to such projects."

When members of the select committee asked about Britain's role in INTELSAT, however, they were told that the Ministry of Posts and Telecommunications is responsible for that aspect of international cooperation, and the Ministry of Aviation Supply therefore cannot take an overall view of the situation. As far as ELDO is concerned, however, Mr A. Goodson, Head of the Space Division at the Ministry of Aviation Supply, explained that British policy is that while

launchers can be obtained cheaply from the United States, the advantages in building up a viable European launcher programme are more than offset by the costs. Although the government still retains an option to participate in the development of the Europa 3, he therefore believes that such an option will not be taken up.

Sir Harry Legge-Bourke then asked whether similar considerations apply to participation in the post-Apollo programme, and he was told by Mr Goodson that the underlying argument is broadly the same—the number of launchers required in the programme would still not be sufficient to justify the expenditure on their development, and the present thinking in the Ministry of Aviation Supply is that it would be better to buy launchers from the United States for European or UK satellites. Mr Goodson also told the subcommittee that no fresh information about the post-Apollo programme has emerged since the European Space Conference last November. The cost estimates made by NASA have decreased slightly, he said, but there is still no clear definition of the overall nature of the project.

If British space policy is geared so as not to duplicate expensive developments in the United States, Mr Ronald Brown wondered why the Ministry of Aviation Supply is developing the Black Arrow launcher instead of buying Scout launchers from the United States. But Mr Goodson replied that the Black Arrow is a research tool which will be used for launching a series of technological satellites, and that the expertise gained from both launcher development and from satellite development is likely to offset the costs of research and development. The project is, however, under review, he said, and the relative costs of developing Black Arrow as an independent launcher and buying a similar launcher from the United States will be taken into account. When asked by Mr Arthur Palmer, chairman of the subcommittee, whether the ministry would have bothered with development of Black Arrow if it had been able to foresee some of the difficulties that have arisen both on the technical and on the economic side, Mr Goodson was unable to provide a clear answer.

COMPUTERS

Picking Up the Threads

THE subcommittee of the House of Commons Select Committee on Science and Technology which is investigating the British computer industry met last week under new circumstances. There are several new faces on the committee because some members failed to be re-elected in the general election last June, or have moved on into the government, and there has been a restructuring of the government departments which

the subcommittee painstakingly investigated last year to disentangle the mechanism of support for the computer industry. With the subcommittee happily re-established, the investigation is again under way. A series of meetings with representatives from government departments and with Sir John Eden, Minister of Industry, has been lined up for the coming weeks to acquaint the subcommittee with the present arrangements for looking after computing interests. Under the circumstances, the chairman of the subcommittee, Mr Airey Neave, must be thinking that the investigation has much in common with the painting of the Forth Bridge. Last week the subcommittee received an updating of a memorandum presented by the National Computing Centre Limited a year ago.

The chairman of the centre, Sir Robert Cockburn, pointed out that the idea of the National Computing Centre as a centre of excellence in computing has now disappeared, and the present aim is to be an organization which provides services to computer users, including government departments. The representatives of the centre, which included the director, Dr A. A. Robinson, and two heads of groups, made great play of the critical position in which they find themselves. Some called it a dilemma and others likened it to tight-rope-walking: the position is essentially that a non-profit-making centre might just as well become a government department, losing its independence, whereas if the centre were to make money it would frighten the computer industry into asking for the centre to be closed down. As it is, the centre is not self-supporting, although the representatives agreed that when it was set up in 1965 the intention of the then Minister of Technology, Mr Frank Cousins, was that the centre break even. But Dr Robinson and his colleagues argued that the pioneering work which the centre carries out and the services which it provides are not compatible with the aim of self-support. To the dissatisfaction of the subcommittee, however, none of the representatives of the centre could throw any light on when the apparent change of policy since Mr Frank Cousins's assurances took place. The director, Dr Robinson, agreed that the position of the centre with regard to self-support had not been properly thought out when it was established in 1965. For the financial year 1970-71 the budget of the centre is £975,000, of which £589,000 is the grant-in-aid, and membership fees and earned income are only £116,000 and £270,000 respectively.

The centre is expecting a reduced grant-in-aid next year of £550,000, but is hoping for a larger income from membership fees of £125-£135,000 and

Editorial Cooperation

THE French scientific journal *La Recherche* and *Nature* have come to an agreement on editorial collaboration in the years ahead. In future, *Nature* will rely on the staff of *La Recherche* for a continuing record of news of scientific developments in France. *Nature* will provide *La Recherche* with information about scientific developments in Britain and abroad.