

slack in the present system, for by now it is clear that the cost of accelerator physics is not so much the cost of building the machines but the cost of operating them. Where Britain is concerned, it would always be possible to arrange that the machines at Harwell and Daresbury should be shut down in phase with the start of operations at CERN some time in the late seventies.

In the circumstances, it will be no surprise if nuclear physicists take as their starting point for discussion of the project the opinion of the Swann report that "nuclear physics will wither away in the next 15 years" if Britain does not participate in the project. At the same time it is only proper to remember that nuclear physics is still very much the dominant partner in the pattern of expenditure of the Science Research Council. In 1966-67, for example, nuclear physics took 43 per cent of what there was to spend, compared with 25 per cent for astronomy, space and radio astronomy. The nuclear physicists may be threatened, but they are not yet the poor cousins. What has happened is worrying because it implies short commons for most people.

The decision also implies a strange relationship between the British Government and the supposedly independent bodies which are supposed to administer research spending. Nobody expects that the Science Research Council should be free to spend what is allocated to it entirely as it chooses, if only because current expenditure can imply larger commitments in the future. It is rare and even without precedent for its wishes to be overruled by fiat as on this occasion. (And has the Council for Scientific Policy on this occasion been properly consulted?) What has happened can only in the long run raise doubts about the respect which is accorded to the advisory committees which decide how funds like this should be spent.

No British at CERN

THE decision by the British Government not to take part in the project to build somewhere in Europe a 300 GeV proton accelerator seems to have come as a great shock not only to the European Organization for Nuclear Research (CERN) which is organizing the project, but also to nuclear physicists in Britain. At present, feelings about the decision are running high. One British nuclear physicist, who said the decision represented a lack of respect for pure science, said, "It is worse than a crime—it is a blunder".

Announcing the decision in Geneva at a council meeting of CERN, Professor Brian Flowers, who as chairman of the Science Research Council was the British representative at the meeting, mentioned the factors influencing the decision. The Government was particularly concerned at the effect which participation in the project might have on the balance of resources between high energy physics and other scientific activities and had also to review the implications of the devaluation of sterling. In the light of its other commitments, the Government decided that expenditure involved in this very large project would not be justified.

The other members of CERN have taken the decision well, and it seems to have been generally accepted at

Geneva that the British decision is not a criticism of the scientific concept of the project. On the whole, the general feeling of the council meeting was that the accelerator should nevertheless be built. The scientific representatives were, it seems, virtually unanimous in the recommendation that Europe should go ahead without Britain; other representatives were more guarded in their initial reactions. CERN had already—rather wisely as it has turned out—considered the implications on the project if a single large contribution from one of the four countries, Britain, France, Germany and Italy, who together contribute 76 per cent of the present CERN budget, was not forthcoming. Of the estimated cost, roughly half is for the machine itself and the rest for supporting facilities—experimental halls and so on. The British decision means the expected demand on the accelerator will be reduced, so that there is a possibility of achieving savings in the experimental facilities provided. If this is coupled with a modest reduction in the capabilities of the machine, something which no one wants to do but which may be necessary if the machine is to be built at all, European nuclear physicists are hoping the cost can still be kept within the price the countries remaining in the project are prepared to pay. Thought along these lines seems to present the best hope of saving the project.

What actually happens in the weeks to come depends of course on what France, Germany and Italy decide. All of them, before the announcement at Geneva, seem to have been favourably disposed towards the project. France has already formally declared its intention to join in, subject to certain safeguards (now of course it has a right to reconsider its decision), and Germany is on the point of making a decision, which it was widely suspected would be favourable. Italy has so far not made any formal announcement of its position.

Clerks Wanted

THE administration of the clerk's department of the House of Commons (the administrative assistants to the Select Committees of the House) desperately needs both internal and external revisions, but the outlook is not good for any immediate reforms. This view emerged from evidence given by Sir Barnett Cocks, Clerk of the House of Commons, before the Select Committee on Science and Technology, Sub-Committee on Coastal Pollution, on May 21, now published (HMSO, 2s. 3d.). Sir Barnett stated that this year the Treasury rejected a long overdue proposal—approved by the Services Committee of the House of Commons—to increase from thirty-six to forty-six the number of clerks and to add five higher executive officers at an annual cost of £40,000; the Treasury's compromise solution was half the number requested, thereby saving £10,000.

The present situation is, according to Sir Barnett, very near the breaking point. Until this year, only one new post had been established since 1961, yet the volume of work has more than doubled since that time—the number of questions increased from 12,200 to over 24,000 last year, the number of Bills being considered rose to eighty-one from twenty-seven in 1956-57, and the number of committees has grown from twenty-one in 1960-61 to seventy-six this session. This has meant that all the clerks must divide their time between at least two, and usually more, commit-

tees. For example, during the last session one clerk supervised the sub-committees dealing with Space Research and Development and the workings of the Industrial Training Act, as well as the Joint Committee on Censorship of the Theatre. It is impossible to expect one man to be an expert in three such diverse fields, but as long as the Treasury controls the purse-strings and can treat the House as "a subordinate Government department", to use Sir Barnett's phrase, the situation seems unlikely to change.

Recruitment is also a problem. There have for the past few years always been one or two vacancies for clerks and at present there are four. Clerks are only recruited by the Civil Service Commission's administrative grade examination; candidates must designate the House of Commons as their first choice and are expected to serve the House for the whole of their professional working life—forty years before they are eligible for a pension. At present, the House of Commons is at a grave disadvantage for, on average, promotion prospects lag ten years behind those of the Civil Service proper. Sir Barnett said "this is the greatest single factor in discouraging recruitment".

In the decision on May 20, Dr David Owen brought up a problem relating specifically to the Science and Technology Committee—the need for a clerk with a scientific background. Without casting aspersions on the hard work of the committee's present clerk, he felt that a trained scientist who was able to build up an expertise in the field would be of invaluable help to the committee. Sir Barnett rejected any possibility of recruiting a trained scientist from outside the Civil Service Commission on the grounds that it would be "destructive of morale" to other clerks who had risen through the ranks over the years. He added that "in theory I could recruit anyone at all on my own initiative, but in practice I would always refuse to recruit from any other source [than the Civil Service]".

Defending Defence

SIR WILLIAM COOK, Chief Adviser (Projects and Research) for the Ministry of Defence, defended himself and his ministry quite ably before the Select Committee on Science and Technology on June 20. Referring to joint projects with other countries, he admitted that there were many drawbacks; administrative machinery was increased and the total cost was usually about 10 to 15 per cent higher. None the less, because each country's share was much lower than if it was working independently, the Government believed the advantages outweighed the disadvantages.

Sir William said that he could not comment on the many cancelled projects of the ministry—such as the TSR2—because these decisions had been made before he took up his post, but he did suggest that the ministry's machinery for assessing projects was steadily improving. As they become more sure of the viability of projects before starting them, the risk of cancellation is decreased. Many of the ministries, the Ministry of Technology especially, are trying to encourage a system in which managers take control of particular projects. This will take time, however, for, as Sir William said, "The Civil Service is not used to individuals making decisions". There has been a great increase in the past few years in courses for project managers, but the present method of training managers, Sir William said,

is to start them on small projects and move them gradually to big ones, a slow and not entirely satisfactory arrangement.

Sir William bemoaned the fact that it was still impossible for scientists to move freely between industry and government research establishments. He himself wanted to see a completely free market between the two with complete interchange of pension schemes, but saw little hope of this happening in the near future.

Costly Airbus

THE European airbus project, which only a month ago seemed well set, has now run into more trouble. For one thing, Mr John Stonehouse, Minister of State at the Ministry of Technology, has got around to admitting to the House of Commons that the cost of the project has increased sharply, from £190 million to £285 million. This should have come as no surprise, for the Federal German Government admitted as much some weeks ago. It turns out that the engines, which were to cost £60 million, will in fact run to £70 million and the airframe, originally priced at £130 million, will now cost £215 million. Connoisseurs of aircraft costing will no doubt regard this as no more than a foretaste of what is to come, because Mr Stonehouse said that the figures were subject to further negotiation. Aircraft costs rarely go down with negotiation.

As usual on occasions like this, the increased costs can be attributed, in part at least, to changes in specification. The airlines asked for more powerful Rolls-Royce RB 207 engines and heavier internal equipment. But devaluation has also played a part, according to Mr Stonehouse. The increase in costs, together with a distinctly lukewarm attitude on the part of some airlines—notably Lufthansa—must now put the project in jeopardy. The ministers concerned from France, UK and Germany will be meeting next month for further discussion, and the future of the project will depend on the airlines ordering at least 75 airbuses. With coolness from Germany, economic trouble in France, and the distinct danger of further financial travail for Britain, it cannot be said to be a very cheerful prospect. Meanwhile Boeing has begun work on an airbus design which bears some striking resemblances to the European airbus.

Matrons Scorned

THE resignation of two matrons within a short space of time suggests that discontent among hospital staff is on the increase. It was announced last week that Miss Marian Smith, matron of Stepping Hill Hospital, Stockport, had resigned because of lack of confidence in the administration of the hospital. This follows the resignation of Miss A. Johnson, matron of Guy's Hospital, nearly three weeks ago.

These two events seem to stem from the same cause—matrons simply do not wield today the power they used to. Together with senior nurses they are assuming more and more responsibility, but their opinions are not being taken into account. It would not be a gross exaggeration to say that the concept of an all-powerful, dictatorial matron is fast disappearing, and this is perhaps no bad thing, because no individual can successfully carry the burden of running a hospital.