More Discord about Concord

THE Committee of Public Accounts of the House of Commons has added to the public criticism, in Britain and in France, of the Anglo-French project to develop the supersonic aircraft called Concord. In a report now published (*Second Report of the Committee of Public Accounts*, H.M.S.O., 3*s*.) the committee draws attention to the way in which the estimated cost of the Concord project has risen from between £150 millions and £170 millions in 1962 to £275 millions in May 1964 and has now reached the present approximation of £500 millions to the final cost. The total cost is to be shared equally by the two governments. Increases of cost in the past four years have been necessary because of substantial changes of design, primarily intended to increase the range of the aircraft, but the general upward drift of industrial costs has also played some part. It seems plain that the Public Accounts Committee, which is one of the most persistent of the public bodies empowered to inquire into the spending of public money in Britain, intends to press a reluctant Treasury to agree that there should now be a thorough review of the procedures for forward estimating in collaborative aircraft projects, chiefly because the committee has decided that "the Concord project provides a severe test of the Ministry's system for controlling research and development projects".

The committee's report has directed public attention to a number of important features of the Concord contract. In the first place, the sum of £500 millions now estimated as the final cost includes £80 millions for the development work which, it is expected, will continue after a certificate of airworthiness has been granted to the prototype machines two years from now. (There is also a sum of £50 millions labelled "contingencies".) It also appears that the contracts which are being negotiated between the governments and the aircraft manufacturers will make it possible for the governments to recover some of the initial outlay on research and development. Even on an "admittedly optimistic forecast of the number of aircraft to be sold", however, it is apparently considered improbable that as much as a third of the initial cost will be returned to the treasuries of Britain and France by means of levies.

In line with its reputation as a watchdog over public expenditure, the Public Accounts Committee is understandably anxious that there should be much better arrangements for negotiating contracts for the development of aircraft. One of the most worrying features of the present position is that so far only £90 millions of the total expenditure has been incurred. Obviously there is plenty of time yet for the cost to rise still further. It is small wonder that the Public Accounts Committee promises to return to this theme.

Laboratory Work Study

THE report of the Public Accounts Committee which drew attention to the financing of the Concord aircraft (see above) has also raised a more modest protest about the way in which the Ministry of Aviation—soon to be abolished—has apparently resisted for sixteen years the attempts of the British Treasury to see that research scientists in government laboratories are being used to the full. Arrangements were apparently made in 1949 to see that each department of government should be responsible for inspecting the use made of its own staff, and for seeing that it is employed efficiently. When the Treasury pointed out, in 1963, that the Ministry of Aviation had not sent its inspectors into the laboratories, the Ministry replied that it was short of inspectors. By 1965, however, research staff in some though not all of the Ministry's laboratories were inspected, and it was apparently decided that of 160 scientific posts at the Radio Department of the Royal Aircraft Establishment, Farnborough, 24 were in some way open to criticism and 7 could actually be abolished. (The same inspectors also approved the creation of three additional posts in the same department.) To judge from what the Public Accounts Committee has to say, the Ministry is hoping to decide, on the basis of inspections at several establishments, whether the game is worth the candle. Everyone seems to agree "that there are limitations on the value of inspection in the scientific field compared with its value in the clerical and office field", but here again the Public Accounts Committee promises—or threatens—that it will not let the matter drop.

Industrialized Building

ON-SITE battery production of the basic units of large buildings, such as blocks of flats, has been used extensively in Europe and especially in the Soviet Union. The system offers considerable savings in manpower and costs, but has not been widely used in Britain, where the building trade is still very much dominated by a traditional approach. In co-operation with the Building Research Station, the Edmonton Borough Council undertook in 1964 to build a 17-storey block of flats using the industrialized system and casting walls and floors on site. The results of the experiment are reported in *Building Research 1965* (H.M.S.O., London, 1966).

The internal structural units were produced by vertical casting between concrete panels, the moulds being in groups of up to sixteen units. The external cladding panels had to be produced by horizontal casting and needed far more labour. The total labour required for the erection of the shell of the building was 570 man-hours—it is hoped to reduce this substantially in the future when more experience with the technique has been gained. Among the problems to be overcome is the battery casting of the cladding panels, and simpler panels have now been designed which can be cast in this way.

The technique has aroused considerable interest and is now being used by a number of firms. The report expresses concern, however, that the relative ease with which the process can be adopted should not lead to a deterioration in the standards of design. If past experience is anything to go by, this fear is only too well founded.

Synchronized Training

THE Council of Engineering Institutions, comprising the twelve British engineering institutions and the Royal Aeronautical Society, has finally designed a single examination for all engineers to replace the individual examinations previously administered by each engineering institution separately. The new examination will be conducted at degree level and, like the previous individual exams, will provide another