

of Commons, said that these issues are unfortunately not likely to catch the imagination of the public, but that he hoped to submit a short motion to the next conference which would be based on recommendations from a recent meeting on the proper use of scientific manpower. But, like the Liberals, delegates to the Labour Party Conference will not find themselves overburdened with science and technology issues. The major debates will almost certainly be concerned with economic policy and trade union legislation, but the motions on education and the National Health Service will affect some areas of science indirectly.

In contrast with the Liberal motion on education, those submitted to the Labour conference are surprisingly dull and are mainly concerned with speeding up the process of changing to comprehensive education. The Socialist Education Association is calling for a single public examination at sixteen, the abolition of all private education and the mandatory provision of nursery education by local education authorities. Other motions call for a review of the current concept of examinations as a means of assessment and four term years in higher and further education. Prescription charges will doubtless come under attack if a composite motion on the health service is debated, but more sweeping changes are likely to be proposed in motions calling for the nationalization of the drug industry.

#### TRADES UNIONS

### Science and the TUC

PREDICTABLY, the Trades Union Congress held in Portsmouth earlier this month was dominated by debates on government policy in the industrial sphere, and little time was spent on matters having a direct bearing on science and technology. But many matters discussed could influence the conduct of research and development indirectly. Thus there was a call for a policy for mergers laying down a "code of action" for industrial takeovers; acceptance of that part of the report of the General Council of the TUC concerned with Britain's technological progress, drug industry profits and the National Health Service, and the European Economic Community.

The TUC does concern itself quite extensively with matters bearing on science and technology, however; the report of the General Council to Congress included paragraphs on Britain's technological progress, European technological cooperation, pressure vessels, carbon fibres and the Social Sciences Research Council. The fact that these issues were not debated reflects popular indifference to science policy issues. But Mrs Muriel Turner of the Association of Scientific, Technological and Managerial Staffs drew attention during the congress to a paragraph in the report which was concerned with women in scientific careers. She pointed out that the number receiving scientific or technical training was negligible and urged that a campaign be started to help recruit more women into science. And this, after all, was the TUC which came out in favour of equal pay for men and women.

Mr Clive Jenkins, general secretary of ASSETT, proposing an amendment which called for the abandonment of Britain's efforts to join the EEC, did not concern himself with the paragraph in the General

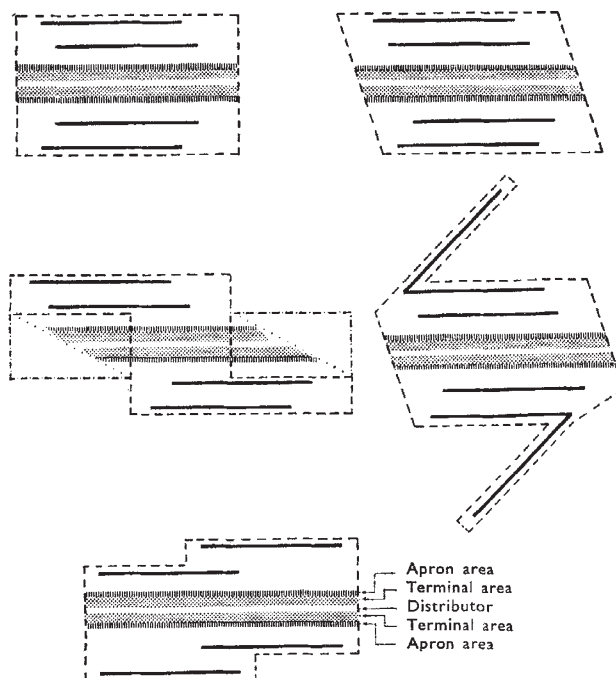
Council's report on European Technological Cooperation but voiced several doubts on agricultural grounds about the advisability of entering the EEC. He stated that the Treasury would have to find an extra £600 million a year, and that the majority of people in Britain were not in any case in favour of entering the EEC on existing terms. Before the amendment was put to a vote which would have resulted in ignominious defeat, Mr Jenkins withdrew it.

In a motion calling for the abolition of Health Service charges, Mr Bob Edwards of the chemical workers gave as the main reason for the financial plight of the NHS the vast profits being made by the drug industry. He suggested that if the Government carried out one recommendation of the Sainsbury Committee—the abolition of branded drugs—this would recover enough money from drug profits to pay for a free health service. This motion, which was passed overwhelmingly, also called for a new system for controlling hospitals and the health service, based on trade union, professional and local government representation.

#### AIRPORTS

### Living without Stansted

THE British Airports Authority is still smarting from the decision of the British Government in February 1968 to throw the question of where to build a third London airport on the shoulders of a commission under Mr Justice Roskill. In its annual report for the year ending in March, the authority is at great pains to point out how the postponement of the plan for a third airport at Stansted has interfered with its forward planning. Close readers of the report may well, however, be disappointed by the authority's scant acknowledgment that the opponents of the plan to build at Stansted may have had a case. At one point, the authority suggests that this change of plan was "a result of



Possible alternatives for a multi-runway airport. Runway length, 14,000 feet.

local objections after the public inquiry at Chelmsford and pressures in Parliament and the Press, backed by the Hertfordshire County Council". The authority complains that Stansted should have been included in the list of Roskill sites "if only as a yardstick against which the merits of other sites may be judged". The authority finds some comfort in the way in which airport authorities in New York, Paris and Montreal have recently run into trouble in persuading local communities that they must make some sacrifice of amenity for the greater good, and says that "although there is a natural opposition by communities to the siting of a new major airport, many millions of people in the United Kingdom require the new London airport in the pursuit of their business and their future prosperity". The report has nothing to say in defence against technical criticisms of the choice of Stansted, especially the complaint that access would have been needlessly difficult.

According to a spokesman, the authority will now keep an open mind about the merits of the four Roskill sites at least until the commission has carried out its own detailed assessment of the alternatives, probably towards the end of 1970. The postponement of the authority's plan for Stansted seems, however, to have soured the authority's attitude towards the British Government on a number of other issues—it complains, for example, about continuing delay in providing a rail link between central London and Heathrow airport, a project on which progress has been "inordinately slow". One telling proof of the need of the link is the way in which the total travel time between London and Paris has decreased only from 4.25 hours in 1928 to 3.0 hours in 1968. The authority also "continued to await a decision from the government" on the redevelopment of the airport at Edinburgh.

With these complaints off its chest, the authority has a cheerful tale to tell about its commercial operations which goes a long way to justify the pre-Fulton decision that airports should be managed by an independent corporation and not by a part of the Board of Trade. The authority made an earned profit of £4.6 million during the year on a turnover of £23.5 million. The effect of this buoyant tendency is, however, modified to some extent by the way in which the rate of growth of traffic through the four British airports controlled by the authority has been slackening in the past few years. At Heathrow, which now handles 9.8 per cent by value of overseas trade from the United Kingdom (and which is the third largest trading port after London and Liverpool), aircraft movement and the flow of passengers increased by 4.6 per cent and 5.7 per cent respectively, compared with 8.1 per cent and 12.4 per cent respectively for the growth of aircraft movements and passenger traffic in the world as a whole. Although the slackening of growth is less marked than at Kennedy Airport, New York, the authority shares all the alarm of the new entrepreneur who fears that his business may eventually climb to a plateau of prosperity.

#### AQUATICS

### Outboard Motor for Humans

THE power-assisted life-saver seems to be on the way. This, at least, is one potential use that has been



suggested for the Aquazip, invented by Squadron Leader R. A. Harvey and described by the manufacturers, Turbojet, Ltd, as "the latest revolutionary British invention". Powered by petrol and weighing a total of 34 pounds including the propellor unit, it is said to transport the wearer through the water at twice the speed of a champion swimmer. Other applications proposed include secret military missions, police patrols, fishing, and simply learning to swim. It is not yet known whether any of the armed forces are interested, but one opinion proffered is that a final decision on its usefulness will have to await the establishment of an Olympic competition.

#### CONTROL ENGINEERING

### Gravity Defied

Two years ago, the engineering schools of the Universities of Sussex and Warwick and of the University College of North Wales at Bangor set up an Inter-University Institute of Engineering Control, and the institute now feels that it is enough of a success to justify a mild form of celebration. Some of the work of the institute on show at the University of Sussex earlier this week included a 1967 Singer Vogue car instrumented by the Warwick group to measure the behaviour of the engine while the car is being driven under a variety of conditions. Factors such as the load on the engine, the manifold vacuum and the fuel flow are recorded on seven-track magnetic tape ready for computer processing. Surprisingly, the claim was made that this is the first time an engine has been tested in any detail under running conditions.

The Bangor group brought some examples of the new techniques in instrumentation which it is developing, including a device for automatically measuring the surface area of irregularly shaped objects such as leaves.