

Man-power in Aviation Research

IN a written answer in the House of Commons on February 16, the Minister of Aviation, Mr. F. Mulley, stated that on December 1, 1963, the employees in the scientific officer class in the research establishments controlled by the Ministry numbered 997. For 1964 and 1965 the corresponding figures were 1,022 and 1,037, respectively. The 1965-66 estimates provided £11.75 million for the European Launcher Development Organization.

Morecambe Bay Reservoir Scheme

AN alternative proposal to the Morecambe Bay Project is outlined by Prof. J. R. D. Francis and Mr. S. H. Wearne in a memorandum from the Faculty of Technology, University of Manchester. The scheme proposes a marsh-land reservoir, created by and completely surrounded by embankments on a higher part of the present estuary, the top water-level being about 30 ft. above marsh-level. The reservoir would have a system of aqueducts from rivers and streams and a road link allowing tidal movements into the upper estuary and would thus be permeable. It offers advantages over the barrage scheme in greater depth, outward pressure gradient, lower capital costs and marginally smaller running costs, easier avoidance of waterlogging of nearby land and freedom from obstruction to migrating fish. There are, however, no subsidiary benefits in amenity, cooling water provision or transport links.

Aid to Developing Countries

IN a short paper, "Developing Countries in Debt", in the *Westminster Bank Review* for February 1966, Mr. S. E. Mynott points out that besides their continuing need for development finance, the developing countries need measures to enable them to reduce their burden of debt. Taking as developing countries those of Latin America, Africa (except South Africa), non-Communist Asia (excluding Japan) and Oceania (except Australia and New Zealand) and the Mediterranean States of Turkey, Cyprus, Greece, Yugoslavia, Malta and Spain, the total aid given in 1964 is estimated at £2,360 million, net of capital repayments arising from previous aid, more than 80 per cent of which came from the United States (53.5 per cent), France (12.7 per cent), the United Kingdom (7.4 per cent) and West Germany (7 per cent). The total, however, is scarcely increasing even in monetary terms, partly due to difficulties experienced by several donors, such as the United Kingdom, with their balances of payment. Debt servicing is now the main problem for all recipients of aid, and Mr. Mynott discusses the various methods of assistance which could be used. One way is to provide aid on soft terms. Another of more immediate importance is to agree on how debt now maturing can be repaid without excessive strain and without resorting to *ad hoc* arrangements like The Hague and Paris re-finance clubs. Mr. Mynott suggests adoption of the United Nations Conference on Trade and Development experts' liquidity plan.

Employment of Graduates in Biological Subjects

DR. S. J. PIRT, head of the Department of Microbiology, Queen Elizabeth College, London, writes: "The abstract of information from the University Grants Committee on the numbers of graduates in biological subjects in 1962-63 and their employment (*Nature*, 209, 356; 1966) is a sad reflexion of the paucity of data about the demand and supply of different types of biologist. It does not show the rapid changes which have been occurring in the pattern of demand for biologists. There is no mention of microbiologists, whom it appears are now as much sought after as any other type of biologist. In the U.G.C. data on numbers of graduates for 1962 (*J. Inst. Biol.*, October 1963) we see that there were twenty-eight graduates in microbiology (including bacteriology). Since

that time, any increase in the total number would appear to be slight, yet information accumulated in this Department shows that in 1965 more than 140 posts for microbiologists in Britain were advertised. Compare, for example, the zoologists, of whom 170 were available for employment and 138 gained employment. Increasingly one hears complaints from universities and research laboratories that they are forced to work permanently below their establishment for microbiologists. Many of the vacancies in microbiology have to be filled by graduates in some other discipline and who, for many years, at great cost to the progress of their work, learn 'on the job'. This points to another feature veiled by the U.G.C. data, namely, that many biological graduates at the end of their training have to be re-trained in another biological discipline which they could have learned in the first place. Postgraduate training of microbiologists is in an equally parlous state, and this seriously restricts the possibility for growth of university teaching in microbiology. The average number of graduates per year in each school of microbiology is minute (about five). To use staff efficiently, this number should at least be quadrupled. From such a base a steady expansion in the number of graduates could be aimed at which in 10 years might catch up with the demand. Finally, it is interesting to ask, by what means does the U.G.C. propose to avoid a similar dearth of graduates from arising in other rapidly developing sciences?"

National Museum of Wales

FROM April 1, 1965, the National Museum of Wales came under the Welsh Office instead of being sponsored by the Treasury. The fifty-eighth annual report of the National Museum of Wales for 1964-65 also records that the great majority of the local authorities in Wales have agreed to contribute to the Council of Museums in Wales (Pp. 91+4 plates. Cardiff: National Museum of Wales, 1965). In the Department of Geology, the compilation of adequate biographies and source-books of Welsh geology (1897-1958) has been completed, while in the Department of Botany the construction of exhibits for the new cryptogamic gallery has continued throughout the year. Two exhibits showing photomicrographs of the anatomy and development of various invertebrates and wild-life conservation were shown in zoology, and in archaeology-work was concentrated on the preparation of exhibits for the new Prehistoric Gallery. The new Department of Industry was engaged in the occupation of the galleries and offices allocated, and the Department of Art showed several new exhibitions. In the Welsh Folk Museum work has continued on the re-erection of the tannery removed from Rhayader, Radnorshire. The report also records the usual extensive list of publications by members of the staff.

City Museums and Art Gallery, Leicester

FOR the year 1964-65, the Museums and Art Gallery of Leicester report a period of consolidation rather than spectacular achievement (Fifty-ninth Report, April 1, 1964-March 31, 1965. Pp. 48+4 plates. Leicester: City of Leicester Museums and Art Gallery, 1965). During the year, the archaeological collections have been removed from the Museum at New Walk to the new Jewry Wall Museum. This has involved transferring many thousands of specimens; some, the tessellated pavements and the Roman milestone, weighing several tons, and almost all, especially the fragile Roman glass, needing great care in handling. Excavations were undertaken north and south of Thornton Lane and a considerable area near the presumed forum was cleared. Labels have been found for the order beds at Belgrave Hall Gardens which promise to be permanent, legible and relatively vandal- and weather-proof. They consist of engraved plastic strips set in metal holders. A list of several hundred accessions