

## OLD WORLD

### RESEARCH AND DEVELOPMENT

## Constructive Advice

THE Institution of Professional Civil Servants feels that the British government should provide increased support for its industrial establishments so that Britain can compete on equal terms with other European countries. This advice is given by the IPCS to the Department of Trade and Industry as a contribution to the DTI's review of industrial research establishments (*The Role of the Government's Industrial Research Establishments in the 1970s*, IPCS).

The IPCS stresses that the advantages of such reviews are nullified if they are held too often and the institution feels that this has been the case recently—several establishments are now being reviewed for the third time in ten years. This almost continuous series of reviews coupled with changes that have placed some establishments under the aegis of four different departments in the same period has, in the view of the IPCS, led to uncertainty about jobs and prospects and a loss of morale.

The establishments now under review are the Laboratory of the Government Chemist, the National Engineering Laboratory, the National Physical Laboratory, the Safety in Mines Research Establishment and the Warren Springs Laboratory together with the United Kingdom Atomic Energy Authority establishments at Harwell and Risley. The IPCS sees a scope for increasing the work of these establishments, in particular by an increase in their contract work for individual companies. For this to be achieved, however, it will be necessary to increase the powers of the directors of the establishments so that they can exercise commercial judgment and develop the work as they see fit.

In his introduction to the report, Mr William McCall, general secretary of the IPCS, is possibly previewing Lord Rothschild's review of civil science when he calls for public research and development establishments to contribute more to the industrial and economic well-being of Britain. He also re-states the institution's view that these establishments should not diversify but should continue their work in basic long-term research.

The report comes out strongly against the idea that these establishments should pay their own way and it criticizes modern innovation theory, which holds that all industrial research should be self-sufficient. To substantiate this position Bell Telephone Laboratories Inc. is cited as a large company that has failed to keep its

research and development self-sufficient. A plea is also made for more research and development resources to be made available to industry to supplement its own efforts and the IPCS points out that the industrial research establishments could well fit this bill.

The central theme of the report is that the present support of research and development by the government is biased towards defence, aerospace, electronics and nuclear power whereas industries that contribute most to the balance of payments—the mechanical and engineering industries for example—have been sadly neglected. The institution says that this imbalance should be corrected by providing more support for these industries at government establishments, provided however, that this is accompanied by a corresponding increase in research and development effort within the industry itself.

Perhaps the most important plea made by the IPCS is for increased support for industrial research and development so that Britain will not be handicapped in competition with other countries, in particular members of the European Economic Community. While emphasizing that support should not be increased merely because other countries are supporting both civil and military technology to a greater degree than Britain, the institution feels that British industry would be severely handicapped if there were no increase in support for industrial research and development.

### EDUCATION

## A-level Broadening

MORE schoolchildren are opting for A-level courses involving both science and other subjects, according to a report of the Department of Education and Science (*Statistics of Education*, 1, HMSO; £1.70). At the beginning of 1970 31.0 per cent of the 254,000 A-level pupils in schools in England and Wales were following courses comprising science subjects alone and a further 50.9 per cent were studying non-scientific courses; 18.1 per cent of the courses, however, contained both science and non-science subjects. In January 1969, the proportions were 31.0 per cent, 52.1 per cent and 16.9 per cent respectively.

During 1969 the total number of pupils of all ages rose by 2.4 per cent to 8.6 million, of which about 8 million were in maintained schools. The total teaching strength increased by 3.3 per cent and the pupil-teacher ratio dropped from 27.7 to 27.4 in maintained primary schools and from 17.9 to 17.8 in maintained secondary

schools while in direct grant schools the ratio is 15.5.

The proportion of 15-year-old children continuing their school careers still shows large regional variations, but the figure for the north region, 46.9 per cent on January 1, 1970, compared with 44.9 per cent a year before, reflects a larger increase than that for the south-east region (63.8 per cent compared with 62.5 per cent). In 1966, 53.2 per cent of 15-year-old pupils in the south-east region stayed on at school beyond the statutory leaving age.

## Reliving the Past

OVERHEARD at a reception at 21 Albemarle Street, London, last week: "I've not visited this place before; it's rather marvellous, isn't it?" Not such an extraordinary remark in the normal course of talk at a social gathering, but the speaker and the occasion gave it special meaning. With true British feeling for the past, the 172-year-old Royal Institution of Great Britain stepped back in history on October 20 and for three hours became once more the assembly rooms of London society. It had thought to ask to a party (no doubt with an eye, somewhat disguised, on some generous benefactions) as many descendants as could be traced of its founders, early proprietors and officers to meet some of the present members, to hear something of its history and functions today and to see its collection of archives and historic scientific apparatus.

Because so many distinguished and wealthy people directly associated themselves with the Royal Institution in its early days and supported it with subscriptions, it is not surprising that the list of descendants at the party read like an extract from *Debrett's Peerage* (although, of course, it is just these people who can most easily be traced). Few of the guests were practising scientists, although among them was the engineer Sir Richard Young, a descendant of Thomas Young who was one of the institution's first professors. The Percy family have long had an honourable connexion with the Royal Institution—the fourth, sixth, seventh and eighth Dukes of Northumberland were all presidents as was Lord Eustace Percy—and it was therefore fitting that the guest of honour was the tenth Duke of Northumberland, at present chairman of the Medical Research Council.