



Prospero, Britain's first technology satellite, now passing over the whole of the Earth's surface twice every 24 hours.

tribution they could make. Talks between NASA and the European nations, however, have so far produced no firm plans, and British withdrawal from the talks because the areas of co-operation were not sufficiently defined and because of the assumption behind the talks of a link-up between the post-Apollo programme and ELDO's Europa 3, in which Britain has declined to participate, will not have helped speed results.

HISTORY OF SCIENCE

Rutherford Remembered

THE life and work of Ernest Rutherford were recalled last week during the British celebrations to mark the centenary of his birth in New Zealand. A visit to the Cavendish Laboratory and lectures in Cambridge were included in the programme, as well as three lectures at the Royal Society and a Friday Evening Discourse at the Royal Institution that was principally devoted to some of the elegant experiments which Rutherford himself performed.

Sir Mark Oliphant, one of Rutherford's co-workers at the Cavendish Laboratory, spoke at the Royal Society about Ernest Rutherford the man. But before delivering his own address, Sir Mark read some of the notes prepared by Sir James Chadwick who was to have lectured but was prevented from so doing by ill-health. Sir James had been planning to describe his first contacts with Rutherford while attending his undergraduate course on electricity and magnetism at the University of Manchester in 1909. During this time, Sir James recalls that he began "to realize what physics was all about".

Sir Mark Oliphant's own recollections

of Rutherford were of a man who "looked more like a businessman or a Dominion farmer" and who seemed incapable of speaking in anything but loud tones "tinged with an Antipodean flavour". Many of Rutherford's habits were evidently trying for those who worked with him; he apparently possessed no fountain pen and would often perform rapid arithmetical calculations in an illegible fashion or attempt to mark film taken during an experimental run before it was properly fixed or dried. It seems that even Rutherford was criticized in the 1930s by the council of the then Department of Scientific and Industrial Research for not adapting his research to the needs of industry and for producing the wrong type of research worker; the concern about such matters shown by the research councils nowadays is evidently nothing new.

In the afternoon, Sir Harrie Massey sketched the developments during the twentieth century that had been a natural consequence of Rutherford's own work—including the identification of many elementary particles in cosmic radiation and of an even larger number at particle accelerators. Professor N. Feather said of Rutherford, Newton and Faraday that "each was in his own way unique, each in some ways unsurpassed, each a giant in our society's history".

In the best traditions, Dr T. E. Allibone, who also worked under Rutherford at the Cavendish Laboratory, lectured with a liberal sprinkling of experiments based on those performed by Rutherford himself. These included a demonstration of the magnetic deflexion of α -particles, using apparatus that was characteristically Rutherfordian in its compactness. The famous α -particle scattering experiment was shown off to particular advantage with the help of an image-intensifier



Lord Rutherford 1871–1957.

which allowed the scintillations to be displayed on a closed-circuit television screen.

RESEARCH COUNCILS

Riding the Storm

THE Social Science Research Council was particularly concerned with finance during the past year and its plans for increasing support for research and training students received a severe setback when government support for the research councils was cut in the autumn of 1970. Mr Andrew Shonfield, then chairman of the council, says in the annual report that the cuts affected the SSRC more than the other research councils because a greater proportion of the SSRC's money is spent on student support, whereas the other councils could cut long-term projects without affecting postgraduate awards. (*Report of the Social Science Research Council April 1970–March 1971*, HMSO, £1.50.)

The theme of the report is the effect on social science research of the reduced rate of expansion imposed by the government. After the curbs placed on spending in 1970, the council had to restrict the number of studentships awarded in September 1971 to the number allocated a year previously. This reversal of the trend that had seen the number of new studentships increase from 903 in 1968–69 to 1,521 in 1970–71 was implemented by the council in the novel way of requiring third-year research students, who in previous years had their grants renewed automatically if their supervisors' reports were satisfactory, to compete with new research students for the limited number of awards. This approach, predictably, had its opponents in university departments who felt that a person of proven research ability should not have to compete with aspiring research workers, but the council felt that in this way it was being fair to the new graduates and such an approach ensures, of course, that the holders of awards apply themselves during the second year of their research work.

One of the pleasing aspects of the report is that the SSRC has been increasingly absorbed into the scientific community of the other four research councils and the Council for Scientific Policy. The council welcomes the challenge of having to compete with the other research councils for resources and Mr Shonfield looks forward to the day when the SSRC will be an organization that is comparable to the other research councils.

Nearly £2 million was committed by the council during 1970–71 for research in eleven major disciplines. These range from £390,942 allocated to management and industrial relations, to £30,362 allocated to human geography.