industries should be referred to the National Board for Prices and Incomes, but the board has so far never dealt with air fares and thus has nothing yet to say.

BRITISH ASSOCIATION

Well Attended

from our Special Correspondent

Exeter, September 10

THE introduction of the £7 annual meeting fee by the British Association has evidently not kept devotees away from Exeter this year. Although some old faithfuls may have noted the expense with a little disgust, they have all paid up, and almost two thousand people arrived for the academic pomp and circumstance of the inaugural meeting on September 3—by all accounts the most impressive in living memory.

Of course, about twelve per cent of the two thousand were British Association Young Scientists, twelve to eighteen year olds able, for the first time, to attend the meeting as the equals of their elders. They have been very much in evidence at Exeter, apparently getting full value for their £1 15s, even if some of the science may have passed over their heads. At any rate, when Professor M. J. Lighthill gave the first Royal Society BAYS lecture, his spirited account of how fishes swim enthralled Lord Blackett and other notables, as well as the BAYS themselves.

Five lectures each year to be given by Fellows are the Royal Society's contribution to the inauguration of BAYS. Other, even more tangible, support has come in the form of £2,500 a year for three years from the International Publishing Corporation, £2,000 a year for seven years from Shell International Petroleum Co. and £1,000 a year for three years from ICI. Since its conception at Dundee, the BAYS organization has made rapid progress. There are now thirty branches throughout the United Kingdom, and the official estimate is that there are about three thousand BAYS altogether. They held their first national conference at Exeter, and after some heated argument agreed on twenty-five regions into which the branches will be grouped, and elected four representatives to sit on the headquarters BAYS committee under the chairmanship of Professor G. E. Fogg.

The success of BAYS is bound to be threatened by the BA's perennial financial problems. In 1969, costs ran to more than £5,000, and will increase in the future to the extent that a membership of 36,000 will be necessary if each member continues to pay 10s a year, with half of this going to headquarters to cover administrative costs. This will be a sure test of enthusiasm, and will provide plenty of headaches for Mr Terry Whodcoat, the BAYS officer, who seems to have established himself rapidly as a popular leader.

A meeting which inaugurates a whole new membership structure seems an appropriate time to stress the topical theme of innovation. After the exhortations of Sir Peter Medawar's presidential address, there was the much heralded symposium on inventiveness and innovation, intended to examine the problem of good British ideas that never bring any commercial return because the inventors are not backed up by the innovators. Many members of the large audience which gathered in the morning to hear case histories of several British inventions—float glass, polythene and

others—had found other things to do by the afternoon. This left a hard core of dissatisfied inventors, would-be innovators and silent observers to enliven the panel discussion, and no new ideas seemed to emerge. But a lot of people had been exposed to the needs and potentiality of British innovation, and this could be augmented by a visit to Inovex, a fairly unexciting exhibition showing the history of some successful British developments such as hovercraft and natural gas.

When the annual meeting has a technological theme it is good to know that during the past year the association has spent the whole of its grant from the Ministry of Technology. The £10,000 earmarked for a programme designed to encourage interest in technological careers was not all used in 1967–68. But in 1968–69, as the latest annual report relates, a determined and successful effort to allocate all the money to the branches resulted in a total expenditure of £11,499, all of which Mintech kindly produced.

The BA has once more ended the year without a deficit, but the situation is far from happy, and it has again been necessary to reduce the funds for the branches and area committees; these were £3,975, compared with £13,203 in 1965–66. This makes the branches much more reliant on money raised locally, and obviously makes their situation a little more precarious. The association naturally hopes that the new membership structure and annual meeting fee will increase revenue so that, in the words of the treasurer, the association can remain in a sound (if not prosperous) state. The next, anxious, year will be presided over by Lord Todd, who takes over from Sir Peter Medawar at the end of the Exeter meeting, and in 1970–71 his successor, Sir Alexander Cairncross, will no doubt hope to see some of the fruits of the recent changes.

SPACE RESEARCH

Zond-7 Comes Back Softly

THE latest in the Soviet series of "Zond" lunar probes, Zond-7, is distinguished not so much for the experimental work which it carried out, much of which was of a routine nature, but for the fact that it was the first lunar probe to be successfully soft-landed in Soviet territory. It came down to the south of the town of Kustanai (Kazakhstan), well within the scheduled zone. The experimental work included photography of the Earth and of both faces of the Moon, and the testing of what are described in the reports as "improved" on-board systems—the flight control computer, astro-orientation system, telemetry systems and means of radiation shielding and radiation dosage measurement.

The soft landing system is said to be based on the use of a complex astro-orientation system and special on-board computer. Shortly before re-entry, a time-programmed device triggered off the separation of the re-entry capsule from the remainder of the craft. A special stabilization system then quenched the angular misalignments set up during the separation process and positioned the capsule at the correct angle of attack for re-entry. The now standard "dipping" technique was twice repeated to reduce the velocity from 11 km s⁻¹ to 200 m s⁻¹ by means of aerodynamic lift and frictional braking. At an altitude of 7.5 km,