

Britain, Germany and Japan have each been launching on average two to three balloons per year. Australia started searching for alternative funds four years ago when Britain was the main foreign user apart from the United States. An attempt then to get Britain to pay one third of the running costs, about £50,000, failed with Britain's Science Research Council pleading poverty.

The current threat to close the facilities unless outside funds are found quickly seems likely to produce results. Britain and the United States have agreed to accept a proposal, put by Professor Vic Hopper of Melbourne University during recent visits to both countries, to share running costs between the five principal users and to update some of the out-dated equipment.

The new proposal appeals to Britain in particular because the cost would be shared by more countries, Germany and Japan having become regular users of the facilities over the past four years. The plan would also allow user countries to up-date equipment by providing their own. Hence the United States and Germany might consider providing a better launch truck for heavier balloons and Britain would be willing to provide an improved kilobit telemetry link from its now abandoned Skylark rocket programme. Professor Hopper left for Germany and Japan last week to discuss his ideas there.

Britain seems to have come round to the view that it can hardly refuse Professor Hopper's proposal, especially if the United States, Germany and Japan also agree to cooperate. Compared to the cost of other collaborative projects with Australia, such as the Anglo-Australian telescope, the cost would be almost insignificant. In the interests of international collaboration, at least, it would probably be worth it.

**Judy Redfearn**

## Nuclear reactors

### Czech closure

In a sudden policy about-face, the Czechoslovak Nuclear Energy Commission has admitted that the country's first nuclear power station at Jaslovské Bohunice had to be closed down permanently after a major incident a few years ago. Speaking on Prague Radio, Milos Drahný, a senior official of the Commission admitted that a serious defect had damaged the 440-MW No. 1 generating set at the country's first VVER-440 light-water nuclear power station.

This admission follows almost two years of semi-official denials backed up by glowing accounts in the media of the benefits which the station was bringing to the Czechoslovak national economy (a claimed 2 million MW generated in 1979). As recently as 17 July 1980, Prague TV carried a news item reporting the completion of "summer maintenance work" on the No. 1 set.

The closure of the station was first reported in November 1978 in Document 22 of the Charter 77 movement. This document reported two accidents. The first, on 5 January 1976, was due to an obstruction in the safety valve of a fuel cell (probably due to human error), leading to an escape of radioactive coolant (CO<sub>2</sub>) and the death of two workers who could not be evacuated in time, since one of the emergency exits had been locked as part of an anti-pilfering campaign. The second accident, on 24 February 1977, was due to human error in the loading of a fuel cell, producing a rupture in the primary circuit and extensive contamination in the primary and secondary circuits. Activated steam was voided into the atmosphere, and there was an escape of liquid into a nearby stream, which had to be fenced off temporarily.

The public discussion which the Chartists had hoped to evoke never materialized. The authorities took the stance that there was no accident. But the total absence of sound data (workers at the plant who had been at risk in the first accident were not even allowed to know the extra dosage they had absorbed) caused rumours to proliferate. By 1979, it was widely believed that the liquid spilled from the second accident had got as far as the Danube — an allegation which the Chartists themselves have never either supported or denied, and which on the face of it would be very difficult to substantiate since the Danube Commission deals only with pollution caused by ships and there is, to date, no overall monitoring system for the river.

Document 22 in its concluding paragraphs called for a moratorium in the Czechoslovak nuclear energy programme until the public had been informed of, and had had a chance to consider, the hazards involved. But with the authorities firmly committed, like all Comecon countries, to nuclear power, construction went on apace; the No. 2 set at Jaslovské Bohunice is now undergoing acceptance trials, the Dukovany station is under construction and work on the Mochovce station has been started.

Nevertheless, and without any reference to Document 22, the Czech and Slovak media have from time to time appeared to be answering the Chartists on specific issues. One of the main criticisms made in Document 22 was of the psychological and physical health of the staff at Jaslovské Bohunice. The majority of workers, said the Chartists, were willing to work dangerously long hours without proper safety precautions in return for high pay and consoling themselves with alcohol and petty pilfering. Official releases countered this with descriptions of health and safety regulations, and the careful psychological monitoring of prospective employees. Other articles stressed safety precautions and contingency plans for antipollution measures in the event of any serious

radiation leaks.

Drahný's belated announcement that such an accident has, in fact, already occurred, will come as no great surprise to the Czechs and Slovaks, accustomed as they are to the rewriting of the past. They may be intrigued, however, by the timing of the announcement, which came a few days before the anniversary of the 1968 Soviet intervention.

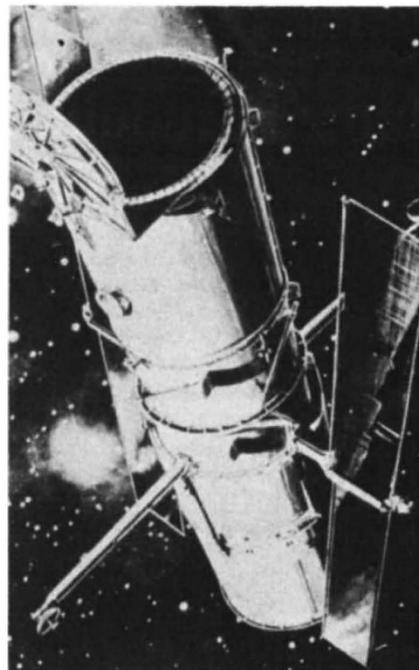
**Vera Rich**

## Space telescope

### Edinburgh's bid

Britain's Science Research Council (SRC) is to put in a bid to the European Space Agency (ESA) to house the European space telescope coordinating facility at the Royal Observatory, Edinburgh. Bids are also expected from the European Southern Observatory at Garching, West Germany, at least one astronomical institute in France and possibly one each in Spain and Italy. ESA plans to decide on a site early next year.

European scientists will receive at least 15 per cent of observing time on the space telescope — a joint ESA-US National Aeronautics and Space Administration (NASA) project — due for launch aboard the space shuttle in late 1983, roughly in proportion to ESA's contribution to its capital cost. The task of the European Coordinating Facility (ECF) will be to receive data from NASA's Space Telescope Science Institute, and to analyse and disseminate them to European users of the space telescope, within a matter of days of receipt of the data in the United States. But bigger plans are afoot for the ECF. It will be designed to handle all data produced by the space telescope; ESA is currently negotiating with NASA to receive data



*The space telescope — as it will look*