Glomar Explorer: bound for seabed surveying?

Congress puts NSF deep sea drilling project in doubt

THE US House of Representatives, citing concern at the balance between 'big science' and 'little science' projects within the programme of the National Science Foundation, has rejected the foundation's proposals for a major start in a deep sea drilling project which is expected to cost between \$450 million and \$550 million over the next ten years.

In its budget proposals for 1979, the NSF wanted to spend \$4.2 million on design and feasibility studies for a major drilling programme to explore the geophysics of the continental margin. The project would include the conversion into a geophysical survey ship of the *Glomar Explorer*, originally built by the Howard Hughes Corporation for the Central Intelligence Agency at a cost of more than \$200 million, but used only once in an attempt to recover a Soviet submarine from the floor of the Pacific.

In its debate last week on authorisation of the NSF's budget for 1979, however, the House of Representatives accepted the recommendation of its Science and Technology Committee, under the chairmanship of Mr Olin Teague, that only \$1 million be authorised for expenditure on the project in 1979. In making this suggestion, the committee said that, although it was not opposed to the drilling project as such, it felt that the case had not been adequately made for including the full expenditure of the \$4.2 million in the 1979 budget. An amendment offered by Congressman Breaux of Louisiana which would have restored the extra \$3.2 million was rejected by the House by 291 votes to 111.

The committee's recommendation was made in the light of its concern about the relative balance of 'big science' and 'little science' in the NSF's programmes. It suggested the NSF should establish a formal procedure for deciding the priority of different 'big science' proposals before undertaking further large expenditure on any new ones.

The committee said the NSF's request for \$4.2 million for starting the deep sea drilling project "contained no indication that the total cost of the programme was estimated at \$450 million over 10 years", and there was no discussion of alternative big science projects which might also need support, such as the "next large telescope". It also suggests that Congress should consider requiring the foundation to request specific authorisation for each new 'big science' project, as is currently done by the National Aeronautics and Space Administration (NASA).

The total NSF authorisation for 1979 recommended by the committee and accepted by the House by 364 votes to 37, is \$934.4 million, almost exactly the figure requested by President Carter. This figure represents an increase of about 8% over this year's budget. Within this overall figure, the authorisation for science education has been increased from \$77.6 million to \$82 million, the committee claiming that it had, as in previous years, been disappointed by the low level of the NSF's request.

To compensate for this, the committee says that, while it applauds the president's decision to strengthen support for basic science in 1979, it "reluctantly" recommends a slight decrease in the amount requested by the NSF for basic research. Included in this category is a \$3.2 million decrease in funds authorised for mathematical and physical sciences and engineering.

Unlike previous years, the NSF's budget proposals have so far gone relatively smoothly through Congress. A resolution to reduce spending on social science research, a stumbling block in the past, was rejected by the House by 174 votes to 229. And in the Senate, Senator Kennedy's health and scientific research subcommittee of the human resources committee last week authorised the NSF's request virtually unchanged.

David Dickson

Lister Institute closes vaccine laboratories

THE Lister Institute of Preventive Medicine announced its plans to close its vaccine and sera laboratories at Elstree last week. The laboratories manufacture most of the diphtheria, tetanus and whooping cough vaccine used in the UK and are the only UK manufacturers of gas-gangrene serum and smallpox vaccine.

The reason for the laboratories closure is purely financial, according to their director, Professor L. H. Collier. The Lister Institute has always funded research from the income earned from its manufacturing activities. Until 1970 this was sufficient to maintain two research units, the one attached to Elstree and a laboratory devoted entirely to research at Chelsea. In addition, the Institute runs the Blood Products Laboratory, also at Elstree, which is wholly financed by the Department of Health and Social Security (DHSS).

Financial difficulty started during the period of high inflation in the early 1970s. In spite of the fact that the vaccine and sera laboratories stepped up their production of vaccines and antitoxins from 12.4 million to 25.4 million doses per year in four years, profits were still not large enough to pay for the research effort. Because the Institute felt that it could only be successful with a successful research programme, in 1975 it decided to close its Chelsea laboratories and concentrate on Elstree.

The plan had been to sell the Chelsea property and to use the proceeds to refurbish facilities and continue funding research at Elstree. After a year on the market, however, the building was not sold. In 1976, the Institute applied to the DHSS for a grant of £½ million to keep its Elstree research facilities running. Last year the grant was refused and the Institute subsequently decided to close the vaccine and sera laboratories.

Production is expected to stop within a few months. But according to Professor Collier it will be the middle of next year before existing stock is despatched and the laboratories can be finally closed. As an economy measure research at Elstree has been reduced since 1974. Since the Lister Institute was established in 1891 it has contributed to many advances in preventive medicine. It produced the first diphtheria antitoxin used in the UK, developed freeze-dried smallpox vaccine, widely used throughout the world, and worked on the transmission of plague, sleeping sickness and trachoma. Recently, however, research has concentrated on rabies and tetanus. Of the 105 employees at the vaccine