

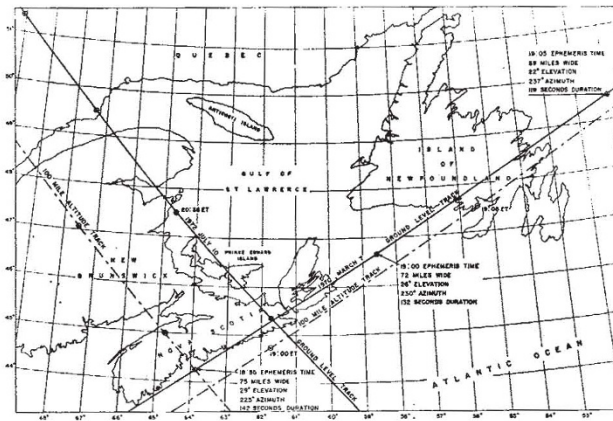
The well-defined pencil of radiation emitted by a helium-neon laser provides a convenient line of reference for alignment and surveying, and IRD reports that it has recently aligned an automatic transfer assembly line 450 feet long to within 0.05 inches. The laser is portable and easily set up, but, in such operations, personnel will have to be trained carefully to avoid looking along the beam.

ECLIPSES

Planning for Mexico

from our Astronomy Correspondent

ALTHOUGH it was once doubtful whether the Olympic Games would be held in Mexico City, it is certain that Mexico will be one of the favourable locations for viewing the next total eclipse of the Sun on March 7, 1970. As the map prepared by the US Naval Observatory shows, much of the path of the eclipse is unfortunately over sea, starting near the equator in the Pacific Ocean. The eclipse does cross Central America, however, near the narrowest part of Mexico, and grazes the Atlantic coast of North America before ending in the North Atlantic Ocean. Astronomers are already planning for the eclipse, and the working group on eclipses of the International Astronomical Union is setting up an information clearing centre for the Mexico eclipse under Professor Rigutti of the University of Florence, who is chairman of the working group. Information on



the British effort is being collected on behalf of Professor Rigutti by Dr Gordon Henderson, of the Department of Physics, Heriot-Watt University, Chambers Street, Edinburgh 1, who would like to know of interested British astronomers.

Canada is in a fortunate position just now as far as eclipses are concerned, which must give Canadian astronomers some small reason for satisfaction now that work has stopped on the 3.8 m telescope in British Columbia. There was an eclipse in Canada in 1963, and there will be others in 1972 and 1979. Plans for the 1970 eclipse, which will pass over Nova Scotia and Newfoundland, include the launching of a series of four rockets to study the effect on the ionosphere when the solar radiation is abruptly cut off. The rockets are the Canadian built Black Brant, and are to be launched for the National Research Council and the Defence Research Telecommunications Establishment. The first rocket will measure the undisturbed daytime

ionosphere just before the start of the eclipse; the other rockets will be launched an hour later at six minute intervals to cover the period when the Moon obscures more than 80 per cent of the face of the Sun. This includes the time of the total eclipse itself which will last 140 seconds. The launch site the Canadians are to use is near Port Dufferin on the Nova Scotia coast, chosen because it is at more or less the same latitude as Ottawa, so that simultaneous radio wave propagation measurements at the Defence Research Telecommunications Establishment in Ottawa can be readily compared with the rocket measurements.

Parliament in Britain

by our Parliamentary Correspondent

Queen's Speech

THE Government's programme for the new session of Parliament contained little of direct scientific interest. But the Queen did announce that the Government intends to ratify the Non-Proliferation Treaty, and continue to work for disarmament, both in the nuclear and non-nuclear fields. Legislation will be introduced to convert the Post Office from a department of state to a public corporation. A Bill will be introduced to effect the change to decimal currency.

Heart Transplants

MR NORMAN ST JOHN STEVAS asked Mr Richard Crossman if he intended to introduce legislation to control heart transplant operations. When Mr Crossman replied that he was not yet ready to make a statement, Mr Stevas warned that he himself might have to seek leave to introduce a private member's Bill on the subject. That, Mr Crossman said, was a prospect which he could contemplate with equanimity. He thought a little caution would be advisable—it was a complicated and difficult matter. To legislate for just one kind of organ would be wasteful; the problem was one that should be dealt with as part of modern surgery. (Oral answers, November 4.)

Social Science Research

MR KENNETH BAKER asked Mr Crossman what was to happen to the research departments of the Ministry of Health and the Ministry of Social Security now that the two ministries were merged. Mr Crossman said that the two research departments would be merged, and coordination with the Government Social Survey would continue as before. Mr Baker suggested that the scale of research had been inadequate, and Mr Crossman agreed that there was a crying need for better intelligence right across the field. One difficulty, he thought, was the shortage of statisticians—everybody wanted them, and some people paid more. (Oral answers, November 4.)

Foot and Mouth

VISCOUNT LAMBTON urged the Secretary of State for Social Services to include foot and mouth disease, when caught by humans, as a disease under the Industrial Injuries Act. During the recent outbreak, Mr Robert Brewis caught foot and mouth disease, and deserved compensation for suffering and loss of earnings. Mr Loughlin said that a survey of Mr Brewis's case was being made, and he promised to write to Lord Lambton when it was complete. (Written answers, November 4.)