Among the other recommendations made in the report were that Intelsat should develop new suppliers in as many countries as possible, but that if their prices were higher than the American, the government concerned and not the satellite users should pay the difference. Non-members (Russia and others) should be encouraged to use the Intelsat system. The developed countries should try to help the poorer countries to plan their total communication networks and the International Telecommunications Union at Geneva, an under-appreciated agency of the United Nations, should be strengthened in order that it should be possible to supervise more effective use of the radio frequency spectrum.

Most of the members of the Twentieth Century Fund's task force were American. They will be joined by communications experts from other countries, including Russia, at a conference near Geneva later this month. Under the joint sponsorship of the fund and the Carnegie Endowment for International Peace, the conference will discuss how international organizations should handle the regulation of communications in outer space. All this flurry of thought on satellite communications is in anticipation not only of Intelsat's negotiations but of the ITU's World Radio and Space Communications Conference in 1971, and also of the advent of the next generation of satellites (Intelsat 4) which, early in the 1970s, are each going to make available 6,000 circuits, 18,000 telephone circuits or 36 international television channels to a relatively unprepared world.

TELESCOPES

Dim Seeing in Saudi Arabia

from our Astronomy Correspondent

A CRITICAL stage has been reached in the negotiations to set up an observatory with a 200 inch optical telescope near Riyadh in Saudi Arabia, according to Professor Robert Seeds of the University of Riyadh, who has been in London this week making an informal approach to the Export Credits Guarantee Department of the Board of Trade. The hope is that the ECGD will be able to guarantee credit to pay for the telescope and the observatory buildings, but according to the ECGD no firm proposal has yet been put to it.

If the project goes ahead, the telescope will be the largest outside the Soviet Union, where a 236 inch instrument is being built in the Caucasus. To bolster Saudi pride the diameter of the Riyadh mirror is planned to be fractionally larger than the 200 inch of the Hale telescope on Palomar Mountain. Unlike the Soviet instrument, which is believed to be running into problems stemming from the choice of an altazimuth mounting, the mounting of the Riyadh telescope would be on conventional lines.

But the outlook for the project is less optimistic than when it was first mooted early in 1967. The war with Israel, a subsidy of £80 million to Egypt while the Suez Canal is closed, and a series of civil engineering works have all conspired to make the Saudi Government less inclined to put forward the money than it was originally. But, like the British Government talking about the CERN 300 GeV machine, the Saudi Arabian Government apparently likes to say what a

splendid idea the project is if only it could put off the spending of money.

Professor Seeds hopes the ECGD will be able to help it do just that, and still make a start on the construction as soon as possible. Since early this year, the indications have been that the government does not want to put down any money on the project for the next four years, and the role of the ECGD would be to tide the project over until then. The observatory would then, of course, be British built, as the job of the ECGD is to guarantee credit for the purchase of British exports.

According to Professor Seeds, there is a good chance that the ECGD will regard the project sympathetically, but one of the conditions is likely to be a large down payment from Saudi Arabia in the third year of the project, earlier than the government wants. Professor Seeds therefore hopes he can persuade the ECGD to modify its demands.

Before the position changed earlier this year, the Government of Saudi Arabia was to allocate £11 million to the project, the rest coming from the University at Riyadh. At present, plans for the observatory are being drawn up using the funds of the university to finance the low level of work currently going on. The telescope is of more than passing interest to British astronomy because the intention is for it to be in the hands of the Science Research Council for the first five years of its operational life. The final draft of an agreement between the SRC and the University of Riyadh is already in existence, and the arrangement is that the SRC pays for the running costs and supplies maintenance staff and that the telescope is used by astronomers from Britain. When this bargain for the SRC ends, the hope is that the University of Riyadh will be experienced enough to take over the running of the observatory.

As the firm responsible for the Isaac Newton telescope, Grubb Parsons seems a likely contender for the job of building the 200 inch, but there seems little hope of the company being able to provide the finance itself. An alternative is financial support from the United States, which would presumably put the part to be played by British astronomy in jeopardy.

Sir Bernard Lovell plays an almost legendary part in the genesis of the project. Late in 1966, his comments in a BBC World Service broadcast that what astronomy needed was more optical telescopes in the 150-200 inch range were picked up in Riyadh, and the 200 inch telescope proposal was put forward shortly after. The site has already been fixed by an advisory committee within a hundred metres or so, and the seeing conditions have been tested by the Astronomer-Royal.

PARTY CONFERENCES

Liberals without Science

THE annual extravaganza of the party political conferences has come round again. This year, the Liberal Party is the first to go into action. Its conference will take place in Brighton from September 17 to 20, and the final agenda covers the whole political spectrum—except for matters concerned with science policy. This is rather surprising because a conference which took place in Nottingham in March produced some