

require that there should be about 630,000 places by 1976 and 780,000 by 1980. Such an expansion would put a very severe strain both on finances and on manpower, and the talks this week centred on how a variety of possible measures in the university sector could alleviate the situation. Most of the measures canvassed "in very general terms" have been bandied about before, and have caused alarm in various quarters. Four-term years, student loans, regionalization of intake, staff-student ratios and the extension of part-time and correspondence courses seem to have been predominant in the discussions. In particular, student loans and regionalization of intake have been consistently attacked by the National Union of Students, and the fact that the talks have begun without any formal student representation will no doubt cause resentment in the student body.

Although the DES statement said that "no conclusions were sought at this meeting", it also indicated that decisions will have to be made on many of these issues next year. Parliament could therefore be faced with a higher education bill during the coming session or the measures canvassed are likely to find expression in the UGC recommendations for the 1971-76 quinquennium.

PARTY CONFERENCES

Conservative Science

THE Conservative Party Conference in Brighton next week will follow hard on the heels of the Labour Conference. Like the previous occupants of the Top Rank Centre, the Conservatives are unlikely directly to have much to say about science and technology—the only motions of much concern are those on education and on the Common Market. Although these are largely restatements of accepted party policy, education will probably be a highly charged issue at the conference. The second "Black Paper" on education, which is due to be published on the eve of the education debate, could cause some embarrassment to Sir Edward Boyle, whose views are generally considered to be more liberal than those of most of his colleagues and of the first so-called Black Paper. That publication, which sold more than 25,000 copies, was primarily designed to draw attention to an alleged decline in educational standards in Britain and argued for maintaining a system of selective secondary education. The second paper is obviously intended to influence the conference when it votes on the motion proposed by the Workington Divisional Association, condemning the Government for talking of making local authorities introduce comprehensive education. Conservatives will be urged next week to take "any necessary action to remedy this proposal" when they next take up office.

A motion proposed by Mr Eldon Griffiths, on behalf of the Bury St Edmunds Conservative Association, merely restates the Conservative policy accepting the need to join the Common Market. "A major contribution to the security and prosperity of Britain" and the enhanced ability "to discharge more effectively its responsibilities for the maintenance of peace and for the improvement of conditions in the developing countries" are the chief arguments for joining the Common Market put forward in the motion. There are, however,

enough hostile motions submitted to the conference to suggest that this motion will not have an easy passage through the conference.

SPACE

Busy Weeks Ahead

from our Astronomy Correspondent

EVEN without the launch of Apollo 12 on November 14 for a landing site in the Ocean of Storms, the weeks ahead are going to be busy in space. By now, ESRO's fourth satellite should be in orbit, and launches are being prepared for the first Skynet satellite for British defence communications, the first German satellite and the third in the Italian series of "San Marco" satellites.

At the same time, the space agencies are going through an introspective phase. In the United States, people are wondering what sort of programme NASA should carry out within the framework laid down by the task force under Vice-President Agnew which reported last month. And Europeans are considering how best to set up a space organization which would combine the functions of ELDO and ESRO and yet have escape clauses for countries such as Britain which are not enamoured by part of the programme as it stands.

If the number of successful satellites produced is a fair barometer of ESRO's health, then the organization must be glad to have its fourth satellite on the stocks. The launch comes at a time when the always meagre finances of ESRO are being threatened by a proposed reduction in the French contribution. But it is difficult to see how ESRO can gain much confidence from the latest satellite, which is nothing more than the spare flight model of the ESRO 1 satellite launched a year ago. Approval for the launching came at an ESRO council meeting in March where it was the most modest of the projects which received the go-ahead. After ESRO 1b, as it is called, the next European satellite will not be until 1971.

Like its predecessor which was launched almost exactly a year ago, on October 3, 1968, ESRO 1b is to be placed in a polar orbit to study ionospheric and auroral phenomena, in particular over the northern polar regions in winter. The eight experiments which it carries are of course the same as in ESRO 1, but with minor improvements. Five of the experiments—from the Radio and Space Research Station (Slough), Kiruna Geophysical Observatory (Sweden), the Danish Space Research Institute, the University of Bergen and the Norwegian Defence Research Establishment—are to count electrons and protons of different energies and in different directions. Two experiments from University College, London, are Langmuir probes to measure positive ion composition and temperature and also electron density and temperature. The eighth experiment is from the Norwegian Institute of Cosmic Physics and consists of photometers to measure auroral luminosity.

The Skynet satellite, which was to have been launched by a Delta rocket early in October for the British Ministry of Defence, has been postponed until November, and an investigation of the series of Delta failures continues. Since September last year, four satellites have been lost because of Delta failures, including