

Satellite Consortium (INTELSAT) of which it is now temporary manager. When COMSAT will know whether it can be permanent owner of an American domestic network is anybody's guess.

President Johnson has agreed at last that the Federal Communications Commission has neither the will nor the ability to deal with these questions, so that there is to be a task force under Mr Eugene Rostow, Under Secretary of State for Political Affairs, to analyse current regulations and the agencies which administer them. It would not be surprising if the group recommended elevating communications to the status of a full department. It may also suggest that anti-trust laws should be changed to allow COMSAT and the big communication companies to split. Hitherto COMSAT has felt at a disadvantage at the international bargaining table. There is an impression, which would not be confirmed by a study of British policy on satellites, that men from the British General Post Office can make clear what they want as prices, for example, while COMSAT's negotiators must keep in mind not only the national interest but that of the Federal Communications Commission, the small shareholders and the giant communications carriers—particularly the American Telephone and Telegraph Company, which owns half its stock.

The establishment of the task force may mean that the Federal Communications Commission will feel free to let COMSAT go ahead with a domestic satellite system on an experimental basis. The commission is well known to hate making up its mind; now the difficult decision about permanent ownership can be postponed until the task force reports. COMSAT has kept its critics in mind in drawing up its plan. It has offered—quite needlessly—to relay telephone calls by sending one voice by satellite and the answering party by ground line in the hope that this might quieten the fears of AT & T, which is worried about its investment in ground lines. COMSAT also hopes to crush the Ford Foundation's proposal to have a non-profit corporation set up to do the same thing by offering free channels for educational television.

One of the principal motives in the appointment of a communications task force was undoubtedly the imminent expiration, in 1969, of the interim agreement on INTELSAT. A permanent agreement on the ownership and operation of a global commercial satellite network must then be thrashed out. President Johnson has pledged the United States to work for a continuation of the consortium, in which the representatives of 58 countries are now members. He has asked the Soviet Union to think again about joining (instead of forming a rival network of its own). And, as bait, he suggested that COMSAT might be allowed to drop down from its present 54 per cent share of the votes in the consortium. 40 per cent is being mentioned as a possible ceiling, but it is unlikely that this will satisfy foreign critics of COMSAT's dominance.

Japanese Space

THIS autumn may see the launching of the first Japanese preliminary satellite, which would be a small one. The launch vehicle Lambda 4S will have its fourth and fifth firings in the next two months, in the hope of overcoming difficulties which led to the failure of the first three launches. Since the failures, a violent

press attack has been directed at the Institute of Space and Aeronautical Science at Tokyo University, whose Professor of Engineering, Professor Itokawa, has been the inspiration behind the Japanese space effort. When a government inquiry into the affairs of the institute was begun in the spring, Professor Itokawa resigned, nominally to make way for a younger man, and, despite the support of his colleagues, has refused to be reinstated.

If all goes well, the first launching of a full scale satellite by the larger Mu rocket should take place in March 1968. The Science and Technology Agency recently admitted, however, that the programme has fallen behind schedule. One of the reasons for this seems to be the opposition of local fishermen, both to the erection of shore buildings and to the proposed orbital launchings at Uchinoura near Kagoshima. Already local opposition has caused the cancellation of a programme in which ten meteorological rockets were to have been launched. As a first step in resolving the muddle, greater integration of Japan's main space agencies was begun this summer. As a result, the Space Development Long Range Planning Office was set up, with representatives from the Science and Technology Agency, the Meteorological Agency, and the Ministries of Transport, Posts, Construction and Trade. The Institute of Space and Aeronautical Science at Tokyo is not represented, however, as "this might violate the autonomy of the university".

Canals for Pleasure

THE Ministry of Transport is to spend £340,000 to improve and maintain 1,400 miles of canals so that they can be used for fishing and boating. The canals, most of them in the Midlands, are of no commercial value and their upkeep would in any case cost £600,000, so that the comparatively small expense of keeping them open for pleasure craft is fully justified. A mere twenty-eight miles of the canal system is to close, either because the canal passes through unattractive countryside, as in the case of the final section of the Leeds-Liverpool Canal, or because there are too many locks over a section serving too little traffic, as with part of the Sheffield-South Yorkshire Canal. By encouraging the development of facilities for pleasure craft, there is hope that the Canal system will come to cost the taxpayer less. There is even a possibility that some of the 600 miles of unnavigable waterways owned by the British Waterways Board may be reopened to traffic. A new Inland Waterways Advisory Council is to be established to deal with suggestions from those interested in the development of the canals, though the Waterways Board itself has co-operated admirably in the past with voluntary organizations, as, for instance, in the recent development of the Stafford and Worcester Canal.

Profitable Airports

THE British Airports Authority was set up eighteen months ago to run the principal international airports in Britain on a profitable commercial basis. The first annual report of the authority shows that, within these terms of reference, the first year was successful. Finance is not the only consideration, however, as the authority also aims to provide good services, facilities