M.J. Hiscocks.
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New Television Distribution Network for Channel 4

BRITISH TELECOM PRESS NOTICE

In August last year, British Telecom (BT) completed on schedule a new nationwide distribution network worth more than £7·5M for Britain's new TV service—Channel 4, and Sianel 4 Cymru, in Wales. The planning and installation of the new network was Britain's single largest TV project and was completed in just under 3 years from when the Independent Broadcasting Authority (IBA) and the programme companies placed the order. This achievement gave the new services a unique start—when the new channels started broadcasting programmes in early November they were available to about 87% of the UK's population. The new services were not available in certain areas because some of the IBA's planned relay TV stations had not been installed. In contrast, the earlier networks for BBC1, BBC2 and ITV were first installed in London and then extended to the rest of the country over several years.

At a ceremony held at the London Telecom Tower in September to mark the formal handover of the network to the IBA, Sir George Jefferson, Chairman of BT, said: "BT's engineers had just under 3 years to plan, specify, install and commission the new network. It is a tribute to their efforts, and to our contractors, that we completed the network, on schedule, this August. It was done by good management and by demanding much shorter than usual delivery times."

In addition to the expected problems presented by a major engineering project, BT had to contend with extra difficulties created by the atrocious weather experienced during winter 1981. Heavy snowfalls cut off some of BT's microwave stations for weeks and delayed cable laying. Despite this, the project was still completed on time.

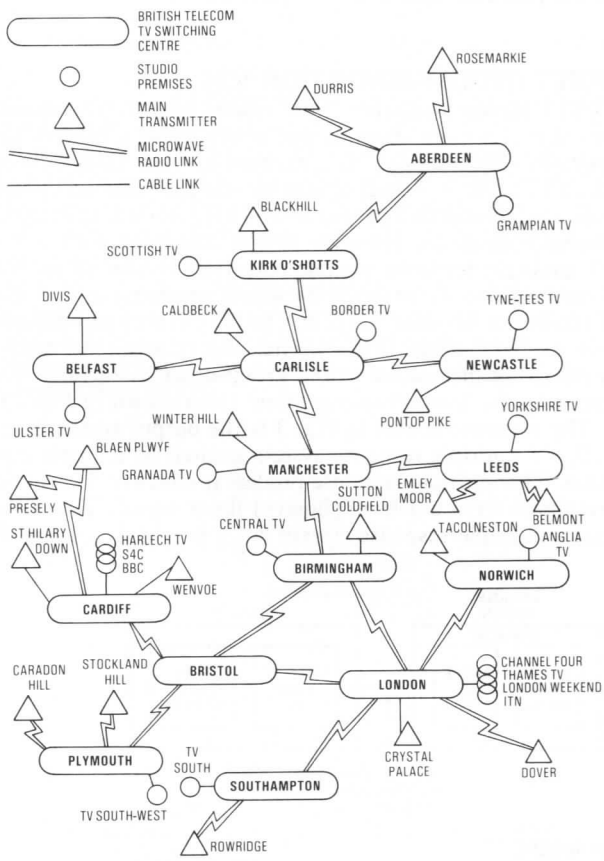

FIG. 1—Distribution network for Channel 4

FIG. 2—Adjustments being made to one of the new dish aerials mounted on the London Telecom Tower

The new distribution network (see Fig. 1) links the 2 new companies' studios with 15 of Independent Television's existing studios and with 19 of the IBA's main transmitters. The main part of the network consists of new long-haul microwave links on 23 routes spanning the country between 56 of BT's microwave stations. These links were provided by the General Electric Company (GEC), Coventry, at a cost of £5M, and involved the installation by BT of new dish aerials at the radio stations (see Fig. 2). Most of the links operate in the upper 6 GHz band and use GEC's new slimline equipment practice systems.

The local lines between microwave stations, studios and the IBA's transmitters are provided on high-grade 2·6/9·5 mm coaxial cable. A total of 130 km of the new cable, supplied by Pirelli General in Southampton and Telephone Cables in Dagenham at a cost of £2·5M, was used to provide 40 separate links in the system.

In addition, numerous smaller contracts were placed for specialised video transmission equipment designed by BT.

The success of this project clearly demonstrates the huge reservoir of highly professional expertise in all aspects of TV distribution that BT has now built up, and underlines the close link that has long existed between BT and the country's television broadcasting organisations.