

# Company for Comsat

from our New York Correspondent

THE communications satellite corporation (Comsat) and AT & T will soon face stiff competition from other companies anxious to break their monopoly in domestic long-distance communications. There are not yet any communications satellites covering the United States, and all companies in this field must lease lines from AT & T. Until recently, it was assumed that the Federal Communications Commission would automatically grant Comsat the right to launch domestic satellites. But on March 24 the FCC invited filings from all "financially qualified companies", and last Friday announced that all companies interested in launching a domestic satellite system must apply by August 19.

Western Union is the only company already to have submitted a proposal, but others, including Comsat, are expected to follow in quick succession to meet the August 19 deadline. At this time, the other competitors are expected to include a consortium of the three major broadcasting networks, (NBC, CBS and ABC), the TelePrompster Corporation (a cable television company), General Telephone and Electric Corporation and the Data Transmission Company, a subsidiary of the University Computing Company. All contemplate a working system within two to three years after FCC approval.

There are at present only a limited number of optimum orbital parking spaces in which geosynchronous satellites can efficiently cover the entire United States without interfering with each other, but the number may increase as technology improves and if a broader bandwidth is approved by the FCC. At present, however, the FCC is unlikely to authorize a number of simultaneous systems. A spokesman for the FCC stated last week that no decision will be made until all applications are in. The FCC must then decide, he said, if it will approve only one system, several competing systems or several complementary systems, including both the satellites themselves and the Earth stations which must receive and transmit signals.

Western Union filed a proposal early last week to put up three geosynchronous satellites, two working and one back-up, with a total capacity of 9,000 channels and ten video channels. (A video channel is the equivalent of 200 audio channels.) The system would also include six Earth stations to receive the signals and 31 microwave relay stations to link the ground system throughout the country. The initial cost would be in the range of \$95 million with a running cost of \$10 million, but Western Union estimates that once the entire system was in operation the yearly revenue would be \$28 million.

Most of the other plans under consideration will probably be more complex. Page Communications Engineers in Washington, DC, has just completed a feasibility study for the networks, and has concluded that either a satellite system or a ground microwave system to carry radio and television signals for NBC, CBS, ABC, and the Corporation for Public Broadcasting, the educational network, would cost from \$50 million to \$55 million a year, replacing AT & T facilities for which the networks will be charged approximately \$70 million this year. The satellite system proposed in this

study would comprise three geosynchronous satellites each with the capacity to handle 12 colour television programmes together with television and radio audio and other communications facilities. Approximately 160 Earth stations, 30 capable both of sending and receiving and 130 for receiving only, would be required. An alternative ground microwave system, requiring about 600 towers to cover in excess of 18,000 "system miles", would operate in the common carrier frequencies at a nearly identical annual cost.

While the networks have not yet decided which, if either, system they would go forward with, Alan Cooper, NBC vice-president for planning, stated last week that while the present estimated costs were nearly identical, the satellite system would probably be preferable since its costs are more likely to decrease in the next few years as technology improves.

TelePrompster is another company that in recent months has been studying the possibility of launching its own satellite system. Over a year ago, when it was assumed that Comsat would be putting up the only domestic satellites, the National Cable Television Association proposed that CATV lease six programming channels from Comsat. Comsat was agreeable and felt that 36 Earth stations would be required to link up the six channels to most of the CATV areas. TelePrompster's president, Irving B. Kahn, argued that Comsat's prices were too high and the proposed system too limiting. He later offered to go in with the networks on their consortium when it became apparent that Comsat might not automatically be granted the domestic satellite market. The networks, who still fear the competition of CATV, were unresponsive, leading TelePrompster to commission Hughes Aircraft Company, a major shareholder in TelePrompster, to undertake a feasibility study. The study is investigating both the establishment of ground stations to coincide with CATV headends throughout the country and the launching and operating of an independent satellite. Although not yet complete, Hughes has already concluded that the ground stations themselves could be built for a great deal less than Comsat had originally estimated. TelePrompster's decision to launch its own satellites as well must obviously wait until completion of the study, but there seems little doubt that it will be another strong contender in the satellite sweepstakes.

But what about Comsat itself? At present the corporation is lying low and is seemingly calm about the burgeoning competition, but it is not sitting still. A spokesman for Comsat said last week that it would probably have a filing in within a few weeks. Its past proposals have been similar to that put forward in the Page study; the satellites themselves would be similar to the fourth generation Intelsat satellites being launched early next year with a capacity of 3,000 to 9,000 channels, while past Comsat proposals have contemplated over 100 ground stations.

Where the FCC will go once all these proposals have been filed is still unclear, but now that it has opened the door to companies other than Comsat, it seems unlikely that Comsat will be allowed to continue its exclusive control of the skies.