

## SCHEDULE A

## DESCRIPTION OF COMMUNICATION SYSTEM

The microwave Communication System owned by Citico Realty Company constructed and placed in service in two sections as hereinafter described and shown on "Microwave Communication System Diagram" attached hereto as Exhibit 1, which provides communication services to Lessees by means of circuits for telephone, VHF (Very High Frequency) radio control, hot box detection, centralized train control systems, computer input and output, and maintenance services, generally described as follows:

Section one of the Communication System between Washington and Atlanta, completed and placed in service in September, 1963, consists of fifty stations, thirty of which are on Southern's right of way and the remainder are off line. These are comprised of 24 heterodyne repeater stations, 3 baseband repeater stations, 21 spur terminal stations and 2 end terminal stations (Washington and Atlanta). All stations in this link, except for 7 R. F. heterodyne repeater locations are equipped with local multiplex equipment. The 3 baseband repeater stations are sectionalizing or regrouping points where multiplex channel allocations are regrouped as required for the traffic pattern.

Section two, connecting Atlanta, Birmingham, Chattanooga, Knoxville, Cincinnati and intermediate points, completed and placed in service in August, 1964, consists of seventy-one stations, forty-one of which are on railroad right of way (CNOTP—17, AGS—8, Southern—16) and the remainder are off line. These are comprised of 24 heterodyne repeater stations, 12 baseband repeater stations, 30 spur terminal stations, 2 passive repeater stations and 3 end terminal stations (Atlanta, Birmingham and Cincinnati). All stations except two are provided with local multiplex equipment. Nine of the 12 baseband repeater stations are main backbone stations with three providing relay facilities to stations located off the main line of the Communication System. Six of the 9 backbone baseband repeater stations are sectionalizing or regrouping points for the reassignment of traffic patterns as required.

General Electric TRS-660 microwave equipment is installed at each of the 121 stations in the two communication links of the Communication System. Terminal, heterodyne repeater and baseband repeater stations equipped with "Hot" standby equipment and service channel units are employed in various configurations throughout the Communication System. The TRS-660 microwave radio relay system employed in the Communication System is a frequency-modulated system designed for operation using a battery source of power. The system accepts frequency-division multiplexed signals (from the associated TCS-600 carrier multiplex equipment) with a composite baseband of from 1 to 300 voice frequency channels. The standby option provides additional transmitters, receivers, preregulator power supplies, a fault sensing and transfer system, as well as complete standby propane gas generators which take over the electrical load in the event of commercial power failure. The service channel unit provides a voice frequency channel for maintenance personnel which is independent of the associated multiplex equipment.

For terminal and baseband repeater stations, one watt transmitters and superheterodyne receivers with automatic frequency control are employed. For heterodyne repeaters, the same type of receivers are employed, but the transmitter employs a heterodyne unit consisting of a parametric mixer and a traveling wave tube, to provide upwards of 3.5 watts radio frequency output power. Built-in rectangular wave guide systems in the transmitters and receivers are interconnected with a common waveguide stack to provide the radio frequency path to and from the antenna. Additional items of equipment provide a service channel for maintenance personnel, simplified local station and maintenance procedures and station operation using site rectified commercial power for station battery operation. Microwave antennas and passive reflectors are employed in varying configurations depending upon the elevation, interference to radio paths and other physical considerations of particular stations.

General Electric TCS-600 multiplex equipment is used to translate voice-frequency channels to a composite transmit baseband frequency, and conversely, translate the received baseband frequency to voice-frequency channels. This basis system employs a frequency-division method of three levels