SWITCHED SERVICES NETWORKS
USING CENTRAL OFFICE SWITCHING MACHINES
GENERAL ELECTRIC NETWORK
SERVICE MAINTENANCE

1. GENERAL

1.01 Circuit order and routine test requirements for Switched Service Networks are provided in Section 310-200-300. These requirements apply to the General Electric Network except in certain respects.

1.02 This section provides the particular requirements for the G.E. SSN which are in addition to or supersede those stated in Section 310-200-300.

2. ATTENUATION-FREQUENCY REQUIREMENTS

2.01 The G.E. SSN is required to provide satisfactory data transmission at 1200 bits per second. The loss-frequency characteristics of all circuits must, therefore, be controlled to a greater degree than is done in the message network.

2.02 The loss in any network trunk, access line or PBX tie trunk should not exceed the requirements of Table I. When the facility consists of carrier facilities with only one pair of channel banks or of very short lengths of cable, the requirement may be met without equalization. In other cases, attenuation equalizers may be provided in order to meet the above requirements.

3. DELAY DISTORTION REQUIREMENTS

3.01 The envelope delay distortion in network trunks should not exceed 330 microseconds in the range 1000-2400 cps. This requirement will generally be met if the trunk consists of a carrier channel with not more than one pair of channel banks. In other cases, delay equalizers may be specified.

TABLE I

MULTIFREQUENCY TEST REQUIREMENTS		
FREQUENCY cps	RANGE OF MEASUREMENTS	REFERRED TO
300	+8 db to −3 db	1 kc loss
700	+2 db to −1 db	1 kc loss
1000	—	EML on Circuit Order
2300	+2 db to −1 db	1 kc loss
3000	+8 db to −3 db	1 kc loss
(+) is more loss; (−) is less loss		

3.02 The total envelope delay distortion from any 1200 bits/second data set to its serving class SS-2 or SS-3 office should not exceed 400 microseconds in the frequency range 1000-2400 cps. Not more than 200 microseconds of the total delay should be found in the access line portion of the connection. In some cases, when the access line consists of a carrier channel with only one pair of channel banks, it may meet the requirement of 200 microseconds without a delay equalizer, and the associated tie trunk or station loop may be equalized to meet the over-all requirement. In other cases, it may be more convenient to equalize the access line than the associated facilities. Whatever the arrangement may be, the over-all requirement above must be met.