PRIVATE LINE TELEPHONE SYSTEMS
FOUR-WIRE CHANNELS FOR POLLING TELEVISION RECEIVERS
TROUBLE AND OVER-ALL TRANSMISSION TESTS

1. GENERAL

1.00 This addendum is issued to advise that the 3A Noise Measuring Set may be used in place of the 2B Noise Measuring Set for the measurements outlined in this practice. It also discusses the relationship between dbrn and dba and shows how to express in terms of dbrn (3A NMS readings), the noise requirements given in this practice.

1.01 Noise measured with a 2B NMS, using F1A Weighting, is expressed in dba. Noise measured with the 3A NMS is expressed in dbrn. The numerical values of the readings on the two sets will not be the same because of the differences in the frequency response of the two weighting networks. Hence, there is no fixed conversion from dba to dbrn. Where readings on both sets are available, those taken on the 3A set give a more accurate indication of the circuit noise.

1.02 In general terms, the numerical value of metallic circuit noise rated in dbrn, as measured on the 3A NMS with C-Message Weighting, will be about 6 db higher than the numerical value of the same noise in dba, when measured with a 2B NMS F1A Weighting. Expressed in terms of ***meter readings***, the 3A NMS (C-Mess.) will read about 13 db higher than the 2B NMS, F1A Weighting. Table I indicates how the noise requirements, objectives, meter readings, or dba (associated with the 2B NMS) as given in the practice may be adjusted to obtain the equivalent in dbrn associated with the 3A NMS.

TABLE I

Equivalent Noise Requirements and Network Weightings Using the 3A NMS in Place of the 2B NMS

EQUIVALENT WEIGHTING		TO CHANGE NOISE REQUIREMENT, ETC., STATED IN THE PRACTICE, FROM:	
2B NMS	3A NMS	DBA (F1A) TO DBRN	METER READING* (2B NMS) TO DBRN
F1A	C-Message	Add 6	Add 13
Flat	3 KC Flat	—	Subtract 16
Prog	Prog	—	—

* Uncorrected

Note: Where the requirement in the Practice is stated in db above Reference Noise, no change is necessary.