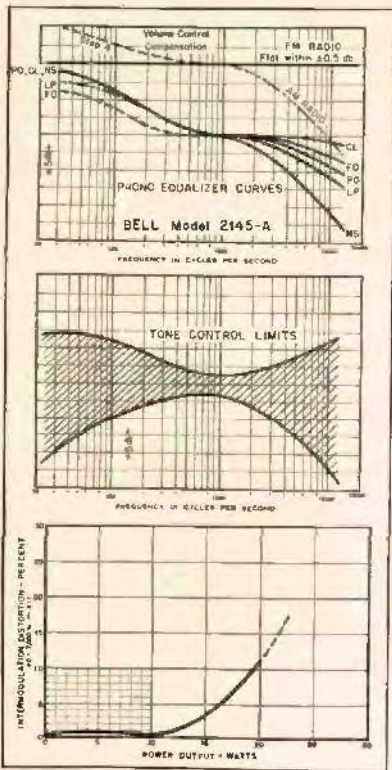


Equipment Report

BELL 2145-A Amplifier



WITHIN THE LAST TWO YEARS, equipment manufacturers have recognized the requirements of the hi-fi enthusiast, and have made a number of improvements on amplifiers and other units to provide the features most desirable for home use. An outstanding example of this forward-looking trend is the Bell Model 2145-A amplifier, which we have selected as the first of this series of amplifier equipment reports.

While a large number of amplifiers have been introduced with separate control units, none has yet been completely suitable for use at some location remote from the main amplifier. Some of the later models are equipped with cathode followers so the length of the connecting lead is relatively unlimited, yet in all except the Bell the input circuits must be connected to the control unit, thus making it difficult to locate the preamplifier-control section at the user's favorite armchair or on a side table some distance from the tuner and phonograph turntable.

With the 2145-A, all inputs are plugged into the main amplifier chassis, and sufficient preamplification is furnished that the signal fed to the control section is of a level high enough to minimize the effects of hum or crosstalk. Inputs from tuner and from phonograph are fed to the control unit by cathode followers at a relatively low impedance—approximately 300 ohms—and after being "selected," equalized, and ad-

justed for tone and volume, are fed back to the amplifier chassis by another cathode follower. Furthermore, the remote unit is fed with d.c. for the heaters of the two tubes employed, and no a.c. appears in the connecting cable, which may be as much as 25 feet long.

The 2145-A employs triodes throughout, with 6B4-G's in the output stage being driven by push-pull cathode followers as the driver stage. Power output was measured at 25 watts with a line voltage of 114, and was less than 3 db down at 20 and 20,000 cps. Distortion measurements are shown at the left, along with response curves for phono and radio inputs.

Equalization Controls

The selector switch performs the basic equalization for the phonograph connection, [Continued on page 46]

