New Lightweight Telephone Receiver

News of Customer Equipment Development

By trimming a mere ounce and a half from its standard telephone receiver, the Bell System expects to save more

than two hundred tons of strategic raw materials per year.

Smaller and lighter than the current standard unit, the "LB Receiver" will be introduced in limited quantities next year and will eventually become the standard for nearly all Bell System telephone sets.

The new receiver was developed jointly by engineers from Bell Laboratories and the Western Electric Co., manufacturing and supply unit of the Bell System. It is a thinner, improved version of an earlier receiver unit which was designed for exclusive use in the TRIMLINE[®] telephone.

The smaller new unit was achieved by redesigning the magnet and most of the structural parts of the present receiver unit used in the TRIMLINE set. When Western Electric's anticipated 10 million units per year production rate is reached, the new design will result in an annual savings of some 85 tons of molybdenum, 49 tons of cobalt, 43 tons of nickel, and 30 tons of copper.

An assembly method devised especially for the new receiver will allow acoustical output to be measured via computer during adjustment of the unit, assuring both a precise product and few rejections.

The new receiver will be used in the electronic phone of the future, which requires a smaller and lighter unit than is currently available.



Bell Labs' Diane Johnathan holds a standard telephone receiver (right), and a smaller, improved unit (left) which will eventually reap a savings of more than two hundred tons of strategic raw materials per year. The estimated savings in materials is based on an anticipated annual production rate of 10 million units. The new receiver will eventually be used in most Bell System telephone sets.