



NEW G. E. "PACER" TWO-WAY RADIO FEATURES SIMPLIFIED TUBE CIRCUITS, 15-WATT OUTPUT, LOW BATTERY DRAIN

GENERAL ELECTRIC has engineered a new line of low-priced, lightweight, compact, two-way radios using vacuum tubes and simplified circuits to achieve lower battery drain than previously attained in tube-type equipment. Radio amateurs will find the new "PACER" a veritable "gold mine" of features.

The new G. E. "PACER" line has models covering both the low band (25-50 Mc.) and high band (150-174 Mc.). Smallest in G. E.'s entire line of two-way radios, the 15-tube unit has a panel only $4\frac{1}{4}$ x $7\frac{3}{4}$ inches, and is $12\frac{1}{2}$ inches deep, a total of only 412 cubic inches. How-

"KING-SIZE" COMMENTS —

Yes, we've received considerable "fan mail" on our increasing the page size of *G-E HAM NEWS* up to $8\frac{1}{2}$ x 11 inches this year, and 99.9 percent of it has been favorable. Most readers like the larger size of diagrams and photos. I'm also sure you'll like the additional articles we have room for, such as the **LOW-COST RF WATTMETER** and **TWO-TUBE DIFFERENTIAL KEYS** articles in this issue. Either of these would have occupied nearly an entire issue in the smaller page size.

ever, the cabinet provides ample space for optional accessories — two-channel operation, and G. E.'s "Channel Guard" device to protect against interference.

The miniaturized unit was designed to fit under the dash of even new compact cars without cramping passengers. Lightweight aluminum construction has reduced weight to only 10 pounds, including a newly designed microphone and elliptical speaker built into front of the unit.

The G. E. "Pacer" is completely American made and features the new General Electric line of 13.6-volt heater communication tubes in the 7000 series. A power pentode-high gain triode tube serves as microphone preamplifier and limiter for the transmitter, and as noise amplifier and audio output in the receiver.

One-case construction and universal mounting brackets simplify installation. A drawer-type pull-out chassis eases servicing and routine maintenance. Only one relay is used in the entire unit. There are plug-in connections to circuit boards, and plug in 0-3 volt DC metering for all critical circuits.

Look over the new G. E. "Pacer" two-way radio. You'll find it a prime example of how your new mobile should be built.

OMNIVOX PATCH TRANSFORMERS

Again from the mail basket, readers have asked some questions about the transformers used in the phone patch section of the OMNIVOX (See *G-E HAM NEWS*, January-February, 1961, page 1). The winding on T_2 marked as 1,200 ohms in the schematic diagram, Fig. 1, page 3, actually has a 4,000-ohm impedance. However, this winding is loaded by R_{37} (1,000 ohms), in combination with the primary load through R_{25} (470 ohms) and R_{26} (1,000-ohm potentiometer), and thus provides a good impedance match to the average phone line.

This 4,000-ohm winding is terminals 1 and 3 on the T_2 transformer obtained from the Signal Corps RM-52 Remote Control Unit. Although the RM-52 has been advertised by a number of surplus outlets, I notice that it has been listed regularly in flyers from Fair Radio Sales Co., P. O. Box 1105, Lima, Ohio, both as "used" and "new."

The following is a bibliography of articles that author W4PFQ referred to in designing his OMNIVOX.

BIBLIOGRAPHY OF ARTICLES ON VOX AND PHONE PATCH CIRCUITS

"Audio Preamplifier/Limiter/Patch," by R. V. Kinney, *G-E HAM NEWS*, November-December, 1958, Page 6.

"The Patchmaster," by J. J. O'Brien, *CQ*, December, 1958, Page 32.

"Sure-Fire Voice Break-In," by James L. Tonne, *CQ*, June, 1958, Page 38.

"Hybrid Husbandry," by Sidney S. Rexford, *CQ*, November, 1957, Page 52.

"The Macy's Special Patch," by Will A. Connelly, *CQ*, October, 1958, Page 46.

"Audio Peak Limiting," by Howard S. Holzer, *CQ*, February, 1960, Page 48.



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