G-E Antennas . . .

→ **G-E TELEVISION RELAY ANTENNA.** This relay type of television antenna, developed exclusively by G.E., is in use at General Electric's television "workshop" station WRGB at Schenectady. It has had a remarkable record of performance and reliability since its installation.

This antenna is completely enclosed and contains four horizontal bays. It is highly directional and is especially designed to permit the wide band operation which is so necessary to successful television transmitting. This G-E antenna is so efficient that no relay link should be built without it!

↑ **G-E FM CIRCULAR ANTENNA.** Measurements to date on this horizontally polarized circular antenna show such decisive electrical and mechanical advantages that it has clearly outmoded the conventional types.

Simple, rugged, compact, and pleasing in appearance, the design of this antenna makes it easy to mount on a pole of any diameter. It is grounded to the pole for lightning protection . . . easily adapted for sleet-melting . . . *and easy to tune.* Its wide frequency range and its lower coupling between bays are two of its strongest features. The latter permits optimum power gain per bay, compared to existing designs as evidenced by these figures:

	One-bay	Two-bay	Four-bay
POWER GAIN	.602	1.66	3.47

G-E FM circular antennas are being operated with surpassing success in six of the nation's important stations.

TO RULE THE WAVES

G-E VERTICAL RADIATOR FOR AM. The WGY antenna illustrated is a 625-foot, all-steel, uniform cross-section tower. It is of the most modern and rugged type. Its installation improved the coverage . . . reduced fading . . . and provided generally more reliable performance for General Electric's Station WGY.

G-E S-T FM RELAY ANTENNA. A multiple-dipole antenna easily mounted on a single pole. Its housings (appearing as dipole tubes in the photograph) are completely sealed and pressurized to keep out moisture. One bank of enclosed dipoles is the antenna while the other acts as a reflector, and permits extremely sharp-focus directional beaming in a powerful, narrow, horizontal pattern. This gives a power gain of 10 at the studio transmitter and, if also used at the receiver, it provides an additional and second power gain of ten.

# of AM, FM, and TELEVISION

AMONG the important recent G-E contributions to broadcasting, broadcast and relay antennas are especially outstanding. Illustrated are four types of G-E antennas, for four distinct uses. All four are proving their high efficiency in present broadcast use . . . all four are unique in their performance . . . all four are rugged in construction and easy to install. G-E can supply all these types of antenna with the station equipment.

The operating characteristics of these antennas enable the broadcaster to put out *more radio frequency power*, and to radiate that increased power with more *effective coverage*. G-E antennas, properly co-ordinated with their transmitters, give greatly improved performance . . . profitably . . . by more efficient and economical distribution or radiation over broader areas.

G-E electronic engineers can provide the antenna best suited to your needs whether AM, FM or TELEVISION, or, indeed, can help you equip your station with any equipment you may need from microphone to antenna.

A PLAN THAT WILL SECURE YOUR PLACE IN RADIO BROADCASTING POST-WAR

General Electric offers you "The G-E Equipment Reservation Plan". . . a plan designed to enable you to complete *your* post-war plans *now*. It will enable you to establish a post-war priority on a broadcast transmitter and associated equipment. It will enable us to plan definitely for large-scale post-war production, thereby giving you the fastest possible post-war delivery and the savings of planned production. Investigate this plan today and assure your place in radio broadcasting post-war. *Electronics Department, General Electric, Schenectady, New York.*

• *Tune in General Electric's* "The World Today" *every evening except Sunday at 6:45 E.W.T. over CBS. On Sunday evening listen to the G-E* "All Girl Orchestra" *at 10 E.W.T. over NBC.*

BACK THE ATTACK — BUY WAR BONDS!

Complete Station Equipment • Studio Equipment • Transmitters • Antennas • Electronic Tubes • Receivers

GENERAL ELECTRIC FM • TELEVISION • AM

160-C2

See G.E. for all three!

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