

**GENERAL
ELECTRIC**

Review

EVERETT S. LEE • EDITOR

PAUL R. HEINMILLER • MANAGING EDITOR

RESEARCH AND ENGINEERING PROGRESS • 1954

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COVER—GE's \$1½-million Transformer Sound Laboratory, believed to be the largest of its kind in the world, was dedicated in Pittsfield, Mass., during October, 1954. The 58x48-foot room measures 43 feet from track level to ceiling. Each wall consists of 12 inches of concrete, a 2-inch layer of fiber glass, 8-inch concrete blocks, a layer of copper sheathing, dead air space, and more than 12,000 fiber-glass wedges. (For further details about the new laboratory, see page 21.)

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COVER—General Electric's diesel-electric test locomotive operates in fast freight service on the Erie Railroad. Built for evaluating components used in locomotives for export service and improving existing apparatus and locomotive design and performance, this 4-unit locomotive weighs 490 tons, is 212 feet long, and develops 6000 hp. For the diesel-electric's past, present, and future, see page 13.

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COVER—Clean water, often obtained from remote valleys and distant streams, is harnessed for use in modern urban life and industrial activity by the reliable operation of electric motors and controls. The availability of this essential commodity is but one of the many contributions of electrification in industry as presented on pages 26-31.

CREDITS—Photograph page 8, Paul Berg, *Sunday Pictures*, St. Louis *Post Dispatch*; photographs on pages 10, 11, and 12, U. S. Navy.

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COVER—Full production of on-the-wall refrigerators began in March 1955 at General Electric's Appliance Park, Louisville, Ky. Available in six mix-or-match colors—white, petal pink, canary yellow, turquoise green, wood tone brown, and cadet blue—this new concept of refrigeration is helping to revolutionize the kitchen. For more details about this appliance, see page 18.

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COVER—The New Haven Railroad's crack Senator glides out of the dusk at New Rochelle, NY, on its daily Washington-to-Boston run. Its new high-speed electric locomotive, one of 10 furnished the New Haven by General Electric's Locomotive and Car Equipment Department, Erie, is helping to set new standards in train performance. For more details, see pages 56-60.

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COVER—An artist visualizes Commonwealth Edison's proposed nuclear power plant—largest of its type yet announced—that by 1960 will become a reality. The new plant, to be known as the Dresden Generating Station, will be built 47 miles southwest of Chicago at an estimated cost of \$45 million and will contain GE's 180,000-kw dual-cycle reactor. For further details, see page 19.

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