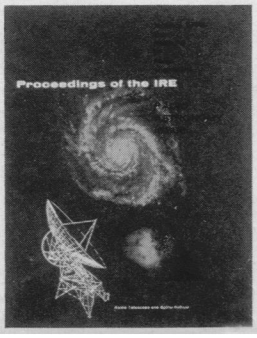
PROCEEDINGS OF THE IRE®

Published Monthly by

The Institute of Radio Engineers, Inc.

VOLUME 46 — *January, 1958* — NUMBER 1

CONTENTS



THE COVER—This view through a 200-inch optical telescope reveals a spiral nebula, containing about 100 billion stars, and a satellite nebula below it, six million light years from Earth. The seemingly solid center is in reality a vast collection of stars, while the curving arms consist of stars plus glowing clouds of hydrogen. Hydrogen clouds such as these are a major source of cosmic radiation at radio frequencies. The sketch below shows an 85-foot radio telescope now being built at the National Radio Astronomy Observatory, Green Bank, W. Va., to study microwave radiations from hydrogen clouds and other radio sources in our galaxy and other galaxies.

Spiral Nebula photo—*Mount Wilson and Palomar Observatories*
Radio Telescope sketch—*Blaw-Knox Co.*

Change of address (with 15 days advance notice) and letters regarding subscriptions and payments should be mailed to the Secretary of the IRE, 1 East 79 Street, New York 21, N. Y.

PROCEEDINGS OF THE IRE

Published Monthly by

The Institute of Radio Engineers, Inc.

(*Continued*)