

**TWO PROBLEMS** immediately face the person or firm desiring to enter the new field of FM (frequency modulation) or television broadcasting.

One is to satisfy the financial and technical requirements imposed by the Federal Communications Commission upon applicants for broadcasting licenses.

The other is to meet his own standards of broadcasting quality and service, and of station design and appearance—and this is often the more difficult of the two problems. The assistance of the best technical radio engineering skill and supervision available to him is needed to meet it effectively and economically.

A good attorney familiar with the rules and regulations of the Federal Communications Commission can prepare the application for an FM broadcasting license.

And a good consulting radio engineer can prepare the required technical statement describing the proposed equipment and estimating the cost of operation and service expected in accordance with the rules of the Federal Communications Commission.

*But the actual installation of an FM or television broadcasting station demands the services of a trained technical organization, capable of producing complete designs and supervising the entire installation of the electrical and sound systems.*

## THE WILMOTTE LABORATORY

The staff of The Wilmotte Laboratory consists of over forty persons, including ten engineers, seven assistant engineers, three draftsmen, and seventeen mechanics and assemblymen.

Available to clients of The Wilmotte Laboratory are engineers having years of experience in AM (amplitude modulation), and also there is available knowledge based on *actual experience in the comparatively new field of constructing and operating FM (frequency modulation) stations.*

The Wilmotte Laboratory has been engaged under service and consultant contracts by the Army, Navy, and Office of Scientific Research and Development.

The principal laboratory is situated at 1469 Church Street, N. W., and its machine and workshop at 1532 14th Street, N. W., Washington, D. C.

### RAYMOND M. WILMOTTE

Directing the broadcast engineering, construction and research activities is Raymond M. Wilmotte, a consulting radio engineer of more than ten years' experience.

Mr. Wilmotte has made many technical contributions to radio, including development of the first directional antenna successfully preventing one station from interfering with another on the same frequency. Since then, nearly all stations on the regular broadcast band have come to use directional antennas.

## SERVICES AVAILABLE

The Wilmotte Laboratory is one of the country's largest consulting radio engineering organizations specializing in broadcasting.

An advantage of retaining its services is that, under one directing head, are competent engineers and technicians who can plan and supervise the entire operation from preparing the technical statement in support of the application for license, to the moment the new station begins broadcasting.

The Wilmotte Laboratory offers the following services usual among radio consulting engineers:

- 1) Preparation of the engineering data for FCC license applications.
- 2) Providing expert witnesses at public hearings on applications which may be called.
- 3) Help in selection of the transmitter site for most effective service and coverage.
- 4) Making field surveys to check the service after the station is in operation.
- 5) Tuning the Antenna. (Not usually necessary for FM and television stations.)
- 6) Making proofs of performance and resistance measurements as required by the FCC.
- 7) Making studio measurements to eliminate undesirable studio noise, or distortion of voice and music by studio equipment.