

# TV Ghosts? Fuzzy Pictures? Forget All That...

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MADISON — Bringing better television pictures to millions of people is the achievement of Blonder-Tongue Laboratories, now celebrating its 20th anniversary in its new plant here.

Whether it's for a family living in a remote spot, or the tenants of a modern 1,000-unit

urban living complex — hotel, motel or apartment — Blonder-Tongue makes the equipment necessary to provide the best possible reception of television stations within range — in any direction and on any channel.

It all started in 1950 when Isaac S. Blonder and Ben H. Tongue saw the need for a

converter that would enable possessors of conventional VHF TV receivers — those covering Channels 2 to 13 — to view programs in the new UHF range.

Both men with an electronic engineering background—Blonder had been quality control director for a TV set maker, while Tongue was chief engineer for an electronics firm — they developed and marketed a converter which was enthusiastically received.

The new firm, with Blonder as board chairman and director of marketing, and Tongue as president and chief engineer, was launched. It has been developing new and important products ever since. They range from simple connectors and outlets to sophisticated amplifier systems and complex distribution panel-rack assemblies.

### Shortcomings

Aware of the shortcomings of early TV sets, they next turned their attention to development of a tuner that would improve reception when used between the antenna and the set.

This led to the development of a series of signal amplifiers — at first tunable and subsequently produced with broadband capabilities covering the entire TV spectrum, which could be used to improve reception of video programs. Some were developed that were small enough and light enough to be used at the antenna; others are designed to be used at the set itself.

Through it all, according to Blonder, they were aware that the ideal combination would also include an antenna-rotating device that would point the antenna to the station being received for even better reception, especially when used in conjunction with an amplifier

that would boost the incoming signal.

Nearly 10 years of experimentation and development work have gone into the newest Blonder-Tongue product: its Prismatic antenna rotator introduced at the National Electronics Week trade show in Chicago earlier this year.

Housed in a light but sturdy aluminum casting with stainless bearing tested for a 350-pound load, it employs indestructible nylon gears to convey power from the motor to the naval bronze worm gear that turns the antenna assembly in conjunction with a sintered steel main bearing.

The rotating device is fully synchronized with the control unit at the set's side, whose electronic circuitry provides on-the-nose direction of the antenna to the station wanted.

In support of its various systems and types of equipment, the plant here produces a variety of testing and measuring equipment to make sure that the right system has been picked—and that it's doing its job.

### Multiple TV

Even more far-reaching is the variety of equipment made for use in multiple installations, such as in hotels, motels, or high-rise or garden apartments to supply TV signals to hundreds of dwelling units from a centrally located master antenna.

Such systems are used to provide maximum reception of TV programs, also to eliminate unsightly individual antennas. As a result, typical Blonder

Tongue MATV systems are found in such prestigious places as the new Gateway Motel, in Newark; the Americana Hotel, in Manhattan, or the International Hotel, in Las Vegas.

These systems are also expected to play an important part in distributing the programs due to be produced and transmitted in the not-too-distant future by the New Jersey Public Broadcasting Authority's educational TV system, according to Blonder. He, incidentally, is a director of UHF Channel 47, in Newark.

But Blonder and Tongue have gone even farther in the equipment they produce for community antenna TV systems, where in remote areas specially designed and situated master antennas pick up signals that would otherwise be unreceivable and distribute them through special equipment and line circuits to individual sets throughout the community. Such CATV systems also may distribute studio-produced or filmed programs to subscribers.

All of this activity adds up to a new and modern office-research-production facility of 130,000 square feet on a five-acre site at 1 Jake Brown Road, where upwards of 300 are presently employed.

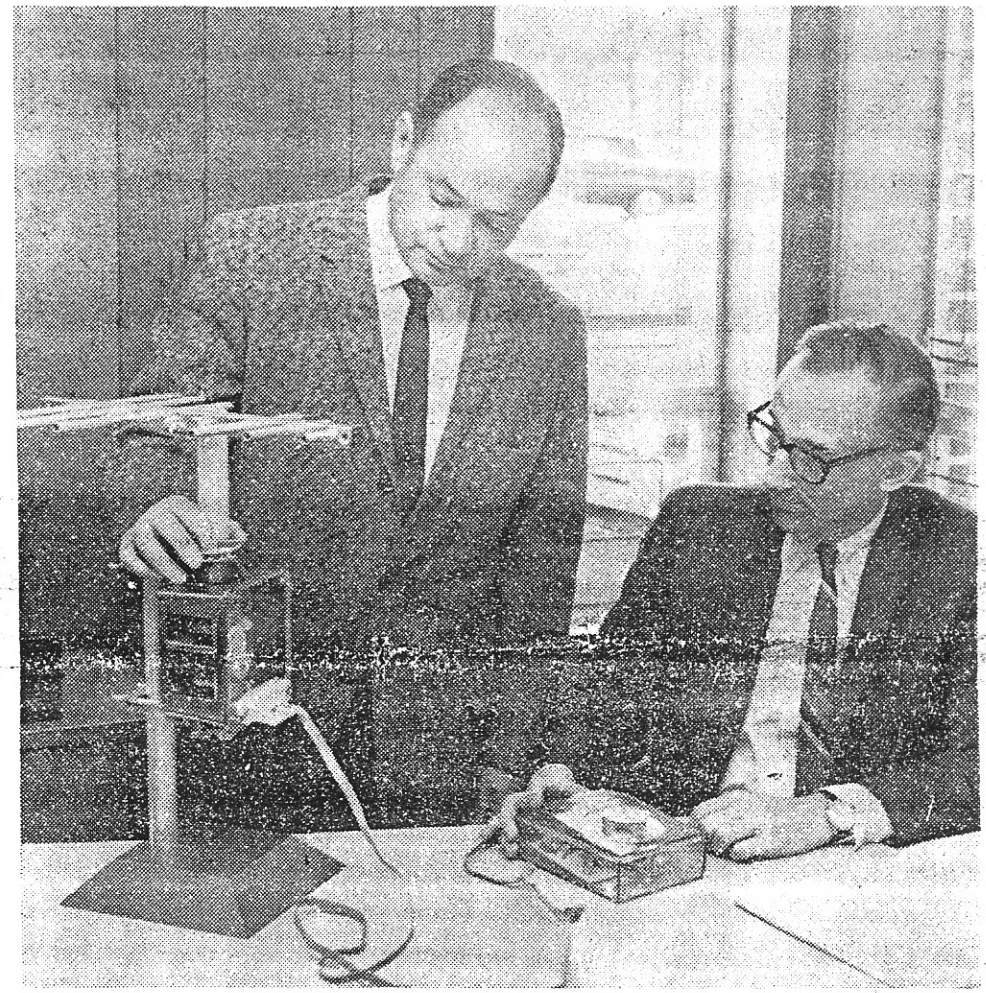
The important and extensive line of equipment and systems produced here is supplied throughout the United States and Canada, as well as in Mexico, Europe, South America and Australia.

And, according to the firm's

principals, there are indications that in the foreseeable future the plant will be expanded to cover about 250,000 square feet and employ as many as 1,000 more and better TV pictures to ever-increasing numbers of viewers.



AT WORK ON THE WORKS—Preparing to give a finishing touch to a TV rotor assembly is Nancy Lee, of Kearny, long-time employe of the company which for the past 20 years has been making a line of products aimed at bringing more and better pictures to viewers.



PROUD NEW PRODUCT—Isaac S. Blonder, standing, and Ben H. Tongue, top men of Blonder-Tongue Laboratories, Madison, admire their new TV antenna rotator and control box—developed after 10 years of research and development in their continuing campaign to provide better TV reception for millions of viewers.

