

# RADIO NETWORK for RURAL AREAS



There is "no pasture in all New York State which is not a broadcasting point" with this trailer which the RRN calls "Nemo" and uses for on-the-spot broadcasting from remote areas.

***This New York State net is supplying specialized radio programming to thousands of farm families.***

**F**EELING that radio was not getting sufficient and specialized farm information to the farmers, that an exchange of ideas was not keeping pace with farming progress, and that city stations were not necessarily serving the farmers' exclusive interests, it was decided recently by ten farm organizations at Ithaca, New York that an FM radio network should be established to serve farm homes throughout New York State.

The result has been the establishment of the Rural Radio Network, Inc., wholly-owned by ten farm organizations, serving 118,000 farms in New York State. It is the first all-radio network of its kind in the United States and, in its final phase, incorporates every known means of communication to carry on its operation.

## **Station Locations**

Stations in the network are located at Wethersfield, Bristol Center, Ithaca, DeRuyter, Cherry Valley, and Turin, New York. Each of these station's transmitter is located at an elevation of at least 2000 feet. It is also planned to establish full-time affiliates at New York City and Ogdensburg, New York, which means that the network may

soon blanket the entire New York State area.

Elevation of the transmitting sites, which offers line-of-sight radio transmission from Albany to Buffalo, also points the way to television application, although the first job of the RRN is to serve by aural FM radio the New York State farm population. Each station has a 250-watt *General Electric* FM broadcast transmitter with effective radiated power of 1300 watts. This power radiation enables the service area of each station to overlap that of its adjoining neighbor and, of course, makes the radio network possible.

## **Two-Way Radio FM Installation**

During the installation of the network, *G.E.* two-way radio communications equipment operating at 152-162 mc. was used. Later, *G.E.* made modifications in some of the units to permit their use as remote pickup gear. Jeeps and other mobile equipment, including a trailer ordinarily used for field-strength tests, were put into operation as adjuncts to network operations. Radio communication equipment in cars and at transmitter sites is used now by a floating force of

three field engineers who keep the network running. Called an "intercom" system by RRN engineers, it can call a jeep or truck from one transmitter site to another in a matter of seconds. Another technical feature is the fact that the network can be reversed through the use of *G.E.* consolettes which enable a fast switch in the radio communication lineup. Thus programs,

The Rural Radio Network's "Nemo" trailer "on location" at one of the county fairs.



originating from any station, can be aired from the network.

The engineering staff, headed by Chief Engineer Donald K. deNeuf, consists of about 19 electronics technicians. Two are located at each station in the network, three are field engineers traveling in the trucks and jeeps, and four handle the master control and "remotes" at headquarters. It is a young staff and enthusiastically concerned with keeping the network in a state of highly efficient technical operation.

### Coverage Techniques

Headquarters for the Statewide chain are located at Ithaca in the Ithaca Savings Bank Building. A *General Electric* ST (studios-to-transmitter) link beams programs from atop the headquarters building to a transmitter site at Connecticut Hill, 9½ miles southwest of Ithaca. There, the programs are put on the network and picked up by the other stations. High quality crystal-controlled receivers at each of the RRN stations pick up programs from headquarters and put them on the air simultaneously. Each station, in addition, can also originate programs, at which time the network is reversed, as noted previously. A "Nemo" trailer is used extensively for pick-up of programs covering county fairs, farm on-the-spot broadcasts, farm organization meetings, and other events as they happen. It is the boast of the network that "there is no pasture in New York State which is not a broadcast point for our network." The Nemo makes this statement a fact.

### Transmitter Site Buildings

Feature of the network are the buildings located at each transmitter site. They are clean-cut white-painted structures built of poured concrete  
(Continued on page 144)

Typical transmitter house and antenna on the site at Connecticut Hill, about ten miles southwest of Ithaca. The building and tower are similar to those at other transmitting sites. The wind vane relays weather data to a meter in control room.



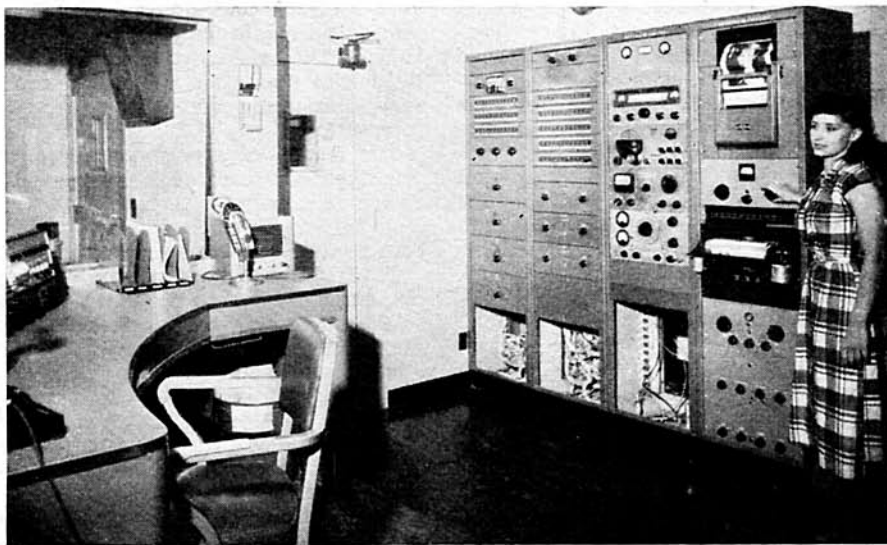
Engineer Tom Humphrey makes an adjustment on the studio-transmitter radio link microwave dish antenna which beams programs from atop the Ithaca Savings Bank Bldg. to Connecticut Hill, whence they are channeled to six other stations in net.



A soil-conservation program being broadcast in the studio of the Rural Radio Network at Ithaca offers advice to farmers. This is typical of services offered.



The studio master control room in the Ithaca headquarters is complete with a two-studio console and audio-facilities cabinets which contain all of the equipment necessary for putting the Rural Radio Network programs on the air.





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## Rural Radio Network

(Continued from page 65)

and cinder block to make them serviceable during the rigorous New York State winters. Radiation-heated, they contain a complete broadcasting studio, two-car garage, basement, generator room, furnace room, shop-and-kitchen combination, and sleeping quarters for any of the engineering staff who might be snow- or storm-bound on the transmitter site.

Another little-known point in connection with these transmitter buildings is that each has a rain gauge and wind-direction velocity instrument atop the roof. These, combined with a number of other instruments, will be utilized to make available to the U. S. Weather Bureau at Albany regular meteorological observations from these 2000-foot mountaintops. The Weather Bureau is already providing RRN with detailed localized weather forecasts, especially for New York State, to help them with this job.

### Programming Techniques

The network's main programming policy is to give farmers information and entertainment they want when they want it—this policy dictates all programs.

Ithaca is known as the fountainhead of farm information for New York State because the headquarters of various farm groups are located there and because of its proximity to the New York State College of Agriculture and Experiment Stations. This is the reason Ithaca was chosen as the headquarters and origin point for the Rural Radio Network and it helps their programming techniques tremendously.

Head of this department is Robert Child from General Electric's WGY at Schenectady who brings to the network a world of experience as director of farm programs. Rather than resting on old tried-and-true techniques, Child makes it a point to visit farm meetings, learning just what the farmers want in their programs. One evening this month he learned that Hawaiian music, strangely enough, is very popular with the farmers and they would like more of it.

A special effort is made to properly time all programs. For example, women's programs are at 1:00 p.m., not at 2:00 p.m. when chores usually occupy the farm wife's time. For the man of the house, the period from noon until 1:00 is considered the best time of the day (with the exception of evenings), because the farmer is having lunch and is not out in the fields.

The network programs highlight fine music and straight reading of carefully-selected stories, in place of soap operas. Bonafide farmers and experts from the ten sponsoring farm organizations discuss farmers' problems daily. Some fifteen other agricultural agencies also send guest speakers regularly.

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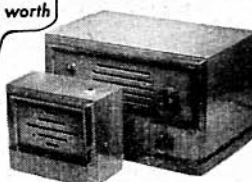
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Market reports, right off the wire from New York City, are bought. It is claimed that many hours are saved this way. No program is safe from an interruption with a newsworthy report on markets or weather which will help the farmer in any way. A special programming feature during Farm Safety Week was the ringing of an unearthly-sounding gong every time a farmer was hurt in the field. They announced this as "grim harvest." For instance, about 12:30 p.m. one day, a farmer caught his arm in a hay-loading machine and was rushed to the hospital. About 1:10 the "grim harvest" gong was rung on the RRN.

Children's programs have no "Superman" or "Jack Armstrong," but rather, specialize in dramatization of such books as "Treasure Island" for one age group, and interviews on farm youth project achievements for another age level. A good time to get the

teen-age audience's participation is found to be about 4:45 p.m., about the time they get off the school bus and are changing their clothes before helping their father in the barn before supper. The Rural Radio Network's time signal is the chimes from a mantel clock made in 1880.

At first the Rural Radio Network had trouble reaching farmers because there were few FM sets available. Now several nationally-known radio firms are very much interested in getting their sets out to RRN listeners. An arrangement was worked out whereby manufacturers make sets and the GLF stores market them. Right now there is available for farm use a needed high-sensitivity receiver and an omnidirectional antenna. This equipment is both sold and promoted by the GLF store and is often purchased when the farmer is buying feed or other necessary farm products. —30—

## PUBLIC TV SHOWINGS IELEGAL SAYS COLUMBIA LAW REVIEW

THE practice of exhibiting television programs in taverns, hotels, motion picture theaters, dance halls, and other public places can be legally stopped, according to an article in the current issue of the Columbia Law Review. Author of the article is David M. Solinger, New York attorney, who represents a variety of interests in the radio and advertising fields and is a member of the board of directors of Gimbel Brothers, Inc.

The article, entitled "Unauthorized Uses of Television Broadcasting," is believed to be the first authoritative analysis of one of the major problems arising from the rapid growth of the television industry.

Mr. Solinger thinks the courts will decide in the near future "whether the air is free or whether a telecaster may limit, restrict and control what he originates." Television broadcasters are already endeavoring to limit and restrict use of their programs to home consumption, he points out, because they "obviously do not believe that the air is free and that strangers may capitalize on their efforts and investments."

Typical of the problems that have developed in recent weeks are the following, according to the Law Review article:

"May a tavern pick up a television program for the entertainment of its customers without authorization from those who originate the telecast? May a hotel furnish television to its guests in private rooms rented, perhaps, at a premium, or in its public halls, without the consent of the telecaster? May a motion picture theater entertain its patrons by making television programs available, either on its regular motion picture screen or elsewhere in the theater, without authority? May an unauthorized motion picture be made from a television performance; and may such motion picture be exhibited without the consent of the originator of the telecast?"

To date there has been only one series of inconclusive legal tests of these and other problems, the article continues, noting that "the interested parties have thus far been squeamish about seeking a court test."

Examining the legal aspect of television broadcasting rights, Mr. Solinger discusses absolute property rights, unfair competition, "equitable servitudes" and unauthorized telecasts.

Television is protected by statutory and common law copyrights, he states, as well as by other common law property rights.

"An owner of a television receiver," he writes, "by performing a program in a tavern, hotel, restaurant, private auditorium, or motion picture theater, has thereby infringed on the common law copyright of the creator of an original literary property in the program to the same degree as he would have infringed had he reproduced the material on his own stage with his own live cast."

In the case of news events, clearcut decisions will have to be made as to what constitutes news, the article states, because "there can be no private property right in news such." Even if sports events are considered news, public exhibitions of televised sports programs may be restricted by the courts on grounds of unfair competition, Mr. Solinger believes.

Broadcasters of television program are also protected by "equitable servitudes," according to the article. A example is the standard announcement opening and closing programs, the effect that the broadcasts are a home reception.

"To obtain judicial acceptance of equitable servitude on a telecast, television broadcasters may have overcome a traditional judicial based on a long line of unfavorable precedents. But when the courts ready to acquiesce in the telecast analysis of the public policy involved the courts have available the necessary tools to enforce any equitable servitude they may deem socially and economically desirable," Mr. Solinger contends.

The article concludes with a summary of legal devices available to prevent unauthorized use of television broadcasts and notes that similar results could be obtained by legislation. Existing legal tools should be sufficient, however, to "resolve whatever conflicts of interest may arise." —30—