

# A New Network for New England

By GEORGE MALCOM-SMITH, of WTIC

A NEW network has taken its place on the ether waves. "The New England Network," as it is named, links five of New England's foremost transmitters in a chain that extends from the far reaches of Way Down East to that section known as Forty-five Minutes from Broadway.

The member transmitters are WTIC of Hartford (50,000 watts), WEEI of Boston (1,000 watts), WJAR of Providence (250 and 500 watts), WTAG of Worcester (250 and 500 watts) and WCSH of Portland, Maine (2,500 and 1,000 watts). Each of the quintet is also affiliated with the WEAFF wing of the National Broadcasting Company.

The new chain gives sponsors an intensive coverage of a very fertile field, a section which boasts that



PAUL W. MORENCY, MANAGER OF STATION WTIC OF HARTFORD AND ONE OF THE ORGANIZERS OF THE NEW ENGLAND NETWORK, COMPRISED OF STATIONS WTIC, WEEI OF BOSTON, WTAG OF WORCESTER, WJAR OF PROVIDENCE AND WCSH OF PORTLAND, MAINE.

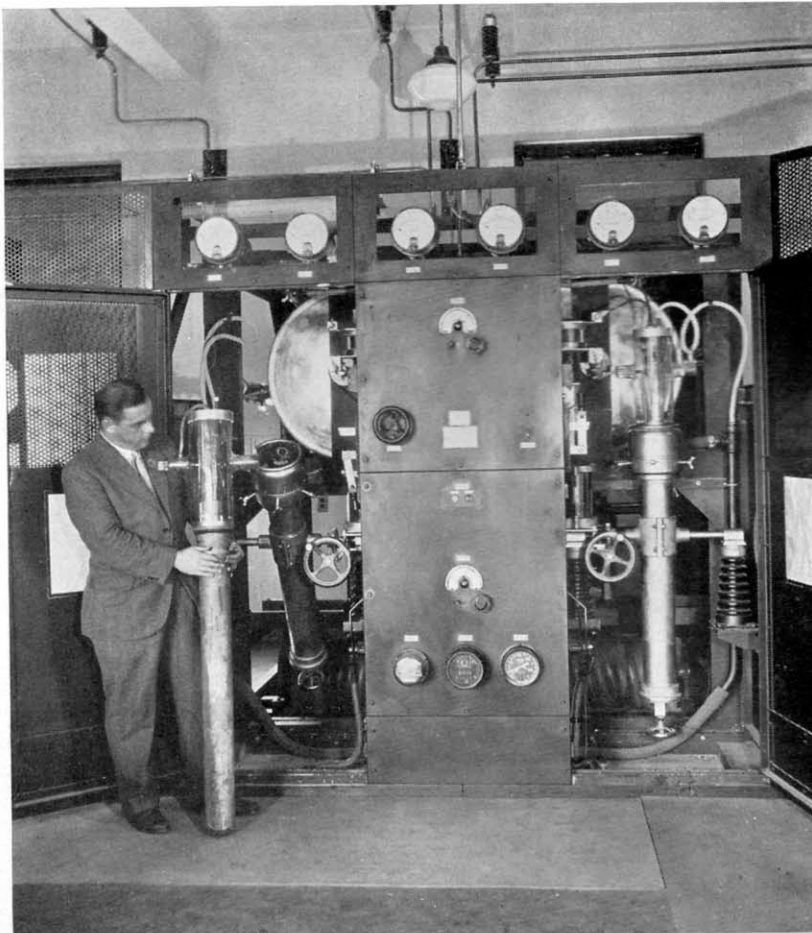
although it comprises only two per cent of the nation's total area, it contains nearly seven per cent of the nation's population and controls eight per cent of its wealth.

New England has long been regarded by advertisers as an ideal radio "testing ground." Its population of eight million owns nearly a million receiving sets, rendering radio a most effective medium in this neck of the nation. The new network serves as an excellent means of cultivating this rich market.

The programs transmitted over the hookup emanate from each of the five member stations, with the majority coming from the studios of the two larger units, WTIC of Hartford and WEEI of Boston. The Hartford member is especially well equipped as a key station, possessing as it does one of the largest permanent studio staffs maintained by any individual station in the country. Its staff orchestra, comprised of 45 musicians, is a particularly valuable asset to the new network. This ensemble, by the way, is one of the featured attractions of the National Broadcasting Company and is heard each week over the NBC coast-to-coast "red" chain.

The 50,000-watt plant of WTIC is one of the outstanding achievements of the RCA organization in the field of broadcast transmission. It has attained what is probably a record for long-distance broadcasting without benefit of short wave. Its signals are heard frequently as far west as Australia, New Zealand and Alaska and as far east as the British Isles, France, Germany and even South Africa.

The WTIC transmission equipment, installed in 1929 by RCA and known by RCA engineers as "Number One" of its type, is the first high-power commercial transmitter to use 100-kilowatt tubes, the first to use mercury-vapor type rectifiers throughout, and the first capable of 100 per cent modulation of its full rated 50-kilowatt carrier output. Incidentally,



A PEEK INTO THE INTERIOR OF THE 50,000-WATT TRANSMISSION PANEL OF STATION WTIC, ONE OF THE KEY STATIONS OF THE NEW ENGLAND NETWORK. THE TUBE HELD BY THE OPERATOR WAS THE FIRST 100,000-WATT TUBE EVER USED COMMERCIALY IN A BROADCAST PLANT. IT WAS MANUFACTURED BY RCA.

this apparatus served as the model after which RCA engineers patterned the new national radio station of the Italian government in Rome, perhaps the best known station in the Old World.

The station managers instrumental in organizing the new hookup are Charles W. Burton, WEEI; Paul W. Morency, WTIC; John J. Storey, WTAG; Henry P. Rines, WCSH; and Joseph S. Gettler, WJAR.

The New England Network should prove a source of pleasure to the New England audience and of profit to its advertisers.



THE "MERRY MADCAPS" OF STATION WTIC, ONE OF THE STELLAR FEATURES OF THE RECENTLY ORGANIZED NEW ENGLAND NETWORK, AND PROMINENT BROADCASTERS OVER THE NATIONAL BROADCASTING COMPANY'S "RED" CHAIN.

## WCAU Uses Dead End and Live End Studios

THE Studios of the new home of WCAU, 1622 Chestnut Street, have been designed to feature certain acoustical characteristics. This is the first attempt made in this Country to construct or to broadcast from what is known as a "live" and "dead end" studio. From one-half to two-thirds of each room, depending on the size of the studio, is lined with sound absorbing material to form a "dead end" where the microphones are properly placed to receive every note and part of the program which is in progress at the opposite, or "live end" of the room. The "live end" walls are constructed with a hard material that reflects the sound waves to the receiving, or "dead end".

Another innovation that has never been used in this Country are the zig-zagging walls of the two larger studios. These studios are constructed with "V" shaped walls which break up the sound as it strikes the sides and deflects them at various angles and prevents the reverberations of the notes from striking the opposite walls.

In order to minimize the transmission of extraneous sounds, special walls, floors and ceilings are employed. The walls have no direct connection with any of the outer walls for support or suspension except through intricate "insulators"

which serve to break all sound connections. The floors which are known as "floating floors" are also free from contact with other surfaces. The studios are virtually rooms within rooms. The ceilings are suspended in the same manner.

Each studio is entered through a vestibule which also decreases the possibility of any sound entering the studio during a broadcast. Special heavy duty soundproof doors are used throughout.

The acoustical treatment in all the studios includes a one and one-half inch rock wool blanket placed against the soundproof wall and another blanket of the same size and style placed in front of it with a two inch air pocket between the two blankets. The outer blanket is covered with perforated metal. Tests have shown that this method produces an ideal broadcasting studio.

Each studio and control room window is composed of a triple sash, and three panels of glass measuring  $\frac{1}{4}$ ",  $\frac{5}{8}$ " and  $\frac{3}{8}$ " respectively. Each section of the sash and glass is insulated inside and outside to stop sounds that might be carried through the framing. The heaviest glass,  $\frac{5}{8}$ " thick, is placed between the lighter layers as an added guard against sound waves caused by any vibration between panels.

## RADIOTRON LONGEVITY AGAIN

The following missive from the Chief Engineer of Station WDAY, Fargo, North Dakota, is printed for its face value:—

WDAY, Inc.  
Fargo, North Dakota  
September 15, 1932

H. C. Vance  
RCA Victor Company, Inc.  
111 North Canal Street  
Chicago, Illinois

Dear Sir:

Just thought you would be interested in hearing about a UV-211 tube which was recently taken out of service when we dismantled our old transmitter.

This tube was purchased about three years ago and was in operation in our broadcast transmitter continuously for over two and one-half years or a total of over 14,000 hours. When this tube was taken out of service it was working perfectly and had the same identical characteristics as when it was new.

We are now sending it over to KGFK, Moorehead, Minnesota and expect that it will run many more thousand hours over there.

Yours truly,

WDAY, Inc.

(Signed) Julius Hetland  
Chief Engineer