

**HOW
W47A
DID IT**

AN FM SUCCESS STORY

GENERAL  ELECTRIC

HOW W47A DID IT

*An organization story of interest to anyone
planning on entering FM broadcasting.*

by

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Since this article was written—one month after the dedication of this pioneer commercial FM station—the promotion and expansion as described has been carried out substantially as planned.

The S-T relay was delivered and installed as scheduled and the studio was moved for convenience to downtown Schenectady. Through the use of this type of equipment, costly inadequate wire-line facilities were avoided. To date, this system has already provided more than 6,000 trouble-free hours of service, giving excellent service even during the most adverse weather when storms brought down every communication line in the area of the transmitter.

Unforeseen at the time of the writing of this article was the adaption of a new type antenna. However, with the development of the circular antenna by General Electric this station, now WBCA, obtained one of the first single-bay units available, replacing the "lazy H" installed when the station was built. Through the use of this antenna the station's signal was substantially strengthened and the station's coverage within its service area greatly improved. Postwar, the single-bay antenna now on a 60-foot wooden mast will be replaced with a 2-or 4-bay circular antenna on a higher steel mast. This new antenna will further increase

the signal strength and provide the station with the coverage originally planned.

Today, as at the start of operation, this station is broadcasting 16 hours a day—every day. The number of advertisers as well as the number of sponsored programs has increased. The station now is a full affiliate of the Mutual network, and its long list of advertisers, before largely local, now includes a number of prominent national advertisers. 85% of all time sold by this station today is for commercial programs, against 15% for spot time.

As the station grew its staff was increased until today the stations organization numbers more than fifteen including special sales and merchandising representatives. At no time has audience and merchandising promotion been relaxed even though receivers are no longer available. In fact, when receiver production was stopped in 1942, Capitol Broadcasting corralled from far and near all available receivers and sold them to a select group in the Albany-Schenectady-Troy area . . . greatly increasing the number of FM receivers in their listening area.

The planning for FM as described in this article is definite indication of the job that can be done even under the most adverse conditions, and it can readily serve as a basis for your postwar FM station promotion.

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W47A TRANSMITTER HOUSE TOPS MT. PINNACLE, 1,600 FT. HIGH, NEAR ALBANY, N. Y.

HOW W47A DID IT

The Inside Story of the Planning That Put the Capitol Broadcasting Company in the Black from Its First Day on the Air

BY WILLIAM F. MARQUET*

AMERICA'S first independent commercial FM station, W47A, is on the air. Its inaugural ceremonies, on the night of July 17th, brought to fruition a dream born six years ago. Located in the heart of the economically fertile Tri-City triangle formed by the cities of Schenectady, Albany, and Troy, Station W47A commands the FM waves which blanket a population of almost a million people inhabiting the 6,589 square miles covered by the new up-State FM outlet.

To the casual onlooker attending the inaugural program, it might have appeared that Station W47A, like some Olympian deity of mythology, had sprung full-grown at the instant of birth. Only the insider looking out would have known that over five years had elapsed from the time W47A was conceived as

a vision until it attained actuality. Credit for the long, upgrade pull that finally put the station on the topmost site of Pinnacle Point in the Helderberg Mountains goes to Leonard L. Asch, President of the Capitol Broadcasting Company, Inc., which operates W47A.

Probably unique in the history of broadcasting is W47A's feat of commencing commercial operations on the very first day with a schedule of programs sufficient to just meet operating expenses, exclusive of capital costs. Most of the station's present thirty-six contracts were signed in advance of the July 17th debut. All accounts at present are local sponsors; all are for thirteen weeks' duration.

The logical question arises: "How was it done?"

First, a realistic approach to the "circulation" or FM set problem dictated the adoption of an unorthodox rate card. Time rates were

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established on the basis of the cost of a direct mail campaign per FM listener-home. The fact that FM homes constantly were increasing in the W47A area, plus the fact that time cost would remain constant for the contract period, enabled the station to sell the idea of a less than direct mail cost equivalent.

The results of these tactics, so far as national advertisers were concerned, were disappointing. No definite commitments for time have been secured yet from national agencies.

With local establishments, however, the situation was eminently gratifying. Merchants responded to the direct mail sales angle and admitted the tariff had been calculated on a reasonable initial basis. In some instances, farsighted businessmen who spotted the future opportunities of FM asked to have contracts made on a two- or three-year basis. All such offers, naturally, were declined with thanks.

Even prior to actual solicitation of accounts, the management of W47A took the position that, for some time to come, considerable attention would have to be paid to assisting all elements in the radio distribution field to sell their FM sets and translators. Accordingly,

during the last two months of last year and the first month of 1941, W47A launched a receiving set merchandising campaign, with the valuable co-operation of FM Station W2XOY and the General Electric Company's merchandising department.

During that three-months' period, W47A assisted directly in placing approximately 600 more FM radios in the station's area. Specific activities included the use of co-operative newspaper advertising, radio dealer and department store window displays, the use of dealer and theater tie-ups, and the like. Incidentally, W47A, in co-operation with dealers and department stores, sponsored an FM radio training institute which enrolled radio salesmen to teach them the fundamentals of frequency modulation, during the mornings, and left them free in the afternoons and evenings to solicit FM prospects. Since this set-selling campaign was instituted late last year, slightly over 2,000 FM homes have been added in the territory serviced by W47A.

A third major factor which promoted the sale of radio time was in stressing the program versatility of W47A. Clients and prospects were

PROGRAM MANAGER GILBERT BAYEK IS AT THE FM STUDIO MICROPHONE, WHILE D. S. HOAG MANIPULATES THE CONTROLS OF THE CONSOLETTTE, DURING A W47A BROADCAST





WELLE S. HOAG, W47A CHIEF ENGINEER, WATCHES FOR A SIGNAL FROM THE STUDIO. NOTE THE COMPACT "ARM'S LENGTH" ARRANGEMENT OF CONSOLE AND TURNTABLES

told that, in addition to benefiting from the well-known superior audio characteristics of FM, they would receive both Mutual and Yankee Network programs, plus ASCAP and BMI music, MacGregor dramatic transcriptions, Associated Press radio processed news service, and several distinctive station-sponsored features. Capital was made, also, of the fact that W47A would operate on a somewhat longer schedule than other comparable stations. The station is on the air full time from 8:30 in the morning to 1 o'clock the following morning on weekdays, and from 8:30 Saturday morning to 3 o'clock Sunday morning, providing a "night club of the air" program from 1 to 3 A.M., Sunday. W47A at the moment is the only station in the Tri-City area which continues broadcasting after the usual 1 o'clock sign-off period on Sunday morning.

High on the station's agenda is the objective of keeping in close, constant touch with the radio dealers in the territory served by W47A. Names and addresses of all purchasers of FM and FM combination sets are obtained from dealers and distributors. Letters welcoming the radio set purchasers to W47A's channel are mailed regularly, urging them especially to

send in their comments and suggestions. The letters endeavor to stress the note of friendliness and informality, and are intended to make each FM listener feel more like a participant in the programs than an inactive member of the radio audience.

A continuing flow of fan mail is encouraged by periodic announcements that Pioneer Listener Certificates are being sent to all listeners who send in their comments. Emphasis is placed on the undeniable fact that such pioneer listeners are participating in research and development of radio's newest art by volunteering helpful and practical information on program reception.

Turning for a moment to the topic of how the station came into being, it will be recalled that mention was made above of the fact that Mr. Asch's struggles for a radio outlet covered almost six years, long before frequency modulation became a household word. Mr. Asch, while still a member of the merchandising strategy staff of General Electric, was bitten by the radio bug. He made several attempts, without success, to obtain an AM license.

Then FM, with its multiplied opportunities for licenses, swept onto the horizon, and im-



ENGINEER A. N. RUSCITTO PUT ON A TRAINING COURSE FOR FM RECEIVER SALESMEN

mediately Mr. Asch said, "From now on, it's FM for me." Late in 1939, James E. Cushing, one of Schenectady's most prominent business leaders, Harold E. Blodgett, former State As-

DR. W. R. G. BAKER DELIVERED ONE OF THE PRINCIPAL ADDRESSES AT THE W47A INAUGURAL

semblyman and president of the Schenectady County Bar Association, and Mr. Asch agreed that an FM station in the Schenectady area had the possibilities of a bright business future. They formed the Capitol Broadcasting Company, Inc., and, with the aid of Paul G. Fritschel, as consulting engineer, dispatched to Washington the original-style 42-page application on August 7, 1940. The Federal Communications Commission granted a construction permit October 31, 1940.

Perhaps it is merciful to skip over most of the early difficulties experienced by W47A, especially since they have been duplicated, with variations, by almost all other pioneer FM stations. But one difficulty surmounted may deserve special mention — that of transmitting programs from the studios in mid-town Schenectady to the mountain top transmitter, twelve miles away by airline flight. The attempt to solve the difficulty by leased telephone wire resulted in obtaining a quotation of \$15,634.50 as installation cost, with a monthly rental of \$118.50. The quotation also contained the provision that, "transmission characteristics of proposed facilities indicated that they are capable of transmitting a band of frequencies from 30 to 15,000 cycles at ± 1 db., and that the noise level is about — 33 db. above reference noise level. . . . I would like to point out that transmission available is based upon existing power conditions and cannot be guaranteed against future changes in these conditions."





LEONARD L. ASCH, PRES., HAROLD E. BLODGETT, VICE-PRES., JAMES E. CUSHING, CHAIRMAN

Armed with this quotation and with the aid of FMBI, hearings were arranged in Washington, and the FCC authorized the use of a relay transmitter for a studio-transmitter link. The Capitol Broadcasting Company subsequently received STL Number 1 construction permit to operate on the 331,000 kilocycle range.

As no equipment of that character was available, the management of W47A decided to install temporary studios in the mountain top transmitter house, so as to begin operations promptly, rather than await the delivery of the relay transmitter sometime this fall. The plan of incorporating additional space in the transmitter house to provide room for television equipment in the future bore immediate fruit in that it permitted the allocation of that space for the temporary FM studios.

The transmitter house is equipped with a General Electric 1-kw. FM transmitter, operating at 44.7 mc. Two RCA velocity microphones and one Western Electric cardioid microphone are used. The control equipment consists of an RCA consolette, with a General Electric monitor loud speaker and amplifier, type JCP-10, and two RCA turntables, with combination vertical and lateral sound pickups. A G.E. frequency monitor has been ordered and is expected to be delivered soon. Meanwhile, monitoring is done weekly by the G.E. Laboratory.

Defense priorities have delayed delivery of the steel mast and turnstile, necessitating the

design and FCC approval of a temporary antenna, consisting of a 65-ft. wooden pole with a special "lazy-H" type antenna.

Permanent studio facilities will be available

TELFORD TAYLOR, GENERAL COUNSEL OF FCC, SPEAKING ON FIRST W47A PROGRAM





LEFT: THE TEMPORARY WOODEN MAST CARRIES A "LAZY-H" ANTENNA. THIS WILL BE REPLACED UPON DELIVERY OF PERMANENT STEEL ANTENNA MAST

RIGHT: ENGINEERS AND ANNOUNCERS AT THE ENTRANCE OF THE TRANSMITTER HOUSE. L. TO R., EARL STRICKLAND, A. N. RUSCITTO, ROBERT HENRY, GRANGER TRIPP, AND CHIEF ENGINEER D. S. HOAG



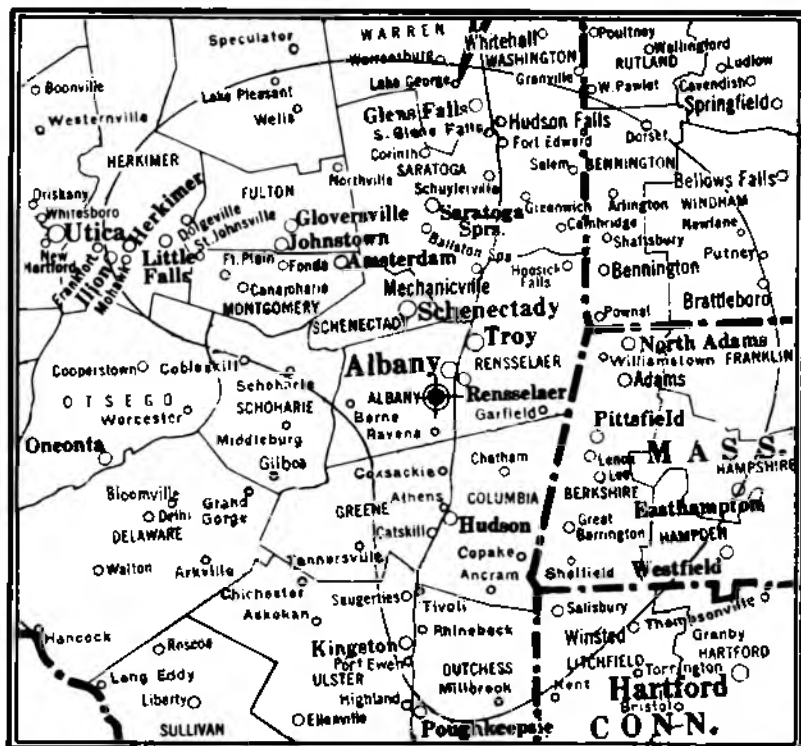
in Schenectady by early October, provided that the relay transmitter is received by then.

Temporary arrangements have been made to pick up programs from Paxton, Mass., by radio for rebroadcasting over W47A. For this purpose, a dipole and receiving set have been set up approximately 1,500 ft. from the transmitter house and 100 ft. higher. A shielded receiving set, with an RF stage added, is used for that purpose.

The staff of W47A now comprises a program manager, chief radio engineer, three announcers and three assistant engineers. Gilbert Bayek, formerly of WDRC in Hartford, is

program manager. Chief engineer is Dwelle S. Hoag, formerly with WGNY in Newburgh. He is assisted by A. N. Ruscitto, Norman Peterson and Robert Henry. Granger Tripp, William Van Steenburgh and Nelson M. Griggs constitute the announcing staff.

Publicity, inevitably, has played a conspicuous role in promoting the destinies of W47A. Public relations have been handled by the writer, engaged on a full-time basis as news editor. As an example of the part played by publicity, the advent of W47A on the air waves was greeted by five pages of promotional material in one Schenectady paper, six pages in



50-MICROVOLT CONTOUR COVERS 6,589 SQUARE MILES, 967,733 POPULATION, 264,090 HOMES WITH RADIOS. MAP SCALE 35 MILES PER INCH

the other Schenectady daily, and by two pages each in the Albany and Troy papers.

The problem of earning a reputation among both sponsors and the listening public for "class," without falling into the error of becoming a "snob" station, has required some ticklish maneuvering. Offers of programs from so-called "borax" houses and other opportunistic high-pressure merchandisers have been declined as tactfully as possible, in keeping with the high standards established for all Frequency Modulation broadcasting. It is believed that the temporary loss of immediate revenue will be compensated by an increasing public recognition of the worthwhileness of those sponsors whose programs are acceptable.

In keeping with the policy of building public acceptance from the top, W47A has followed the practice of promoting demonstrations and explanatory talks with such organizations as the Rotary, Kiwanis, Zonta and other service clubs. The nature of the questions asked, the

type of intelligent interest shown and the follow-up by station solicitors have proved beyond question that the practice is sound and feasible — at least for W47A.

In an effort to build a speedier and more widespread acceptance for FM from the so-called "general public," Station W47A already has laid plans for continuing its demonstrations and get-acquainted-with-FM-programs in the Schenectady, Albany and Troy schools. To dramatize more convincingly the merits of Frequency Modulation transmission, W47A is planning to ask school administrators and groups to produce some of their more ambitious dramatic projects over W47A. Simultaneously with each such demonstration, the station will make sure that interested neighborhood dealers are informed of the impending educational projects so that they will have ample opportunity to capitalize on these actual "live talent" demonstrations.

RADIO AND TELEVISION DEPARTMENT

GENERAL  **ELECTRIC**

SCHENECTADY, N. Y.