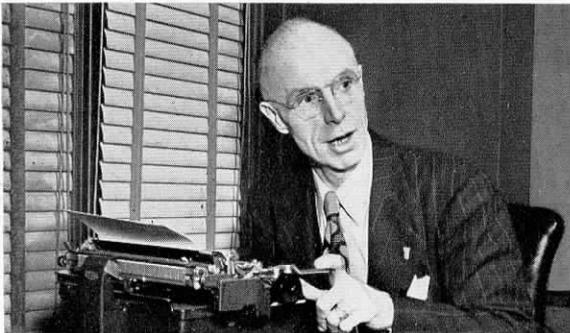




Ben Strouse,  
Vice-President and General Manager,  
WWDC and WWDC-FM.

## How to boost **FM** . . . or How WWDC-FM

### Gave Its New 10 KW FM Transmitter A Big Send-Off



Norman Reed, Program Director, WWDC and WWDC-FM.



Helen K. Mobberly, National Sales Manager,  
who directed successful mystery contest for WWDC-FM.



Ross H. Beville, Chief Engineer of WWDC and WWDC-FM.

CHIEF ENGINEER ROSS BEVILLE started it early in December 1947, when he announced to Manager Ben Strouse that WWDC-FM would be on the air with full rated effective power of 20 kilowatts within a month—the first FM station in Washington, D. C. to reach full authorized power. The Western Electric 506B-2 10 kw FM transmitter had been delivered. Installation, including erection of the new 350-foot tower to carry the six-bay Clover-Leaf antenna, was under way. WWDC-FM was about to reach the goal that the management and every member of the staff had looked forward to for several years: the wideawake Washington independent, on 250 watts AM since 1941, would have the high-quality day-and-night coverage of the entire Washington metropolitan area that the 20 kilowatts of frequency-modulated r-f would bring.

It was then that the now famous "Mr. FM" contest was born. It was evident that an outstanding promotion of the FM operation was desirable to enlighten the public on the advantages of FM, promote the sale of FM receivers in the Washington area, and alert the listening public to availability of WWDC-FM's full-grown FM service. With interest in the just completed "Miss Hush" network contest at its height, Helen Mobberly, National Sales Manager, with the assistance of Norman Reed, Program Director, and their staffs, worked out Washington's and FM's own "mystery person" quiz.

#### A \$5,500 Gift From "Mr. FM"

Special recordings were made of the voice of a person who was presumably well known to the radio audience—in this case Peter Donald, star of a transcribed program regularly presented by WWDC and WWDC-FM. Over a period of three weeks, excerpts from the recordings were played several times each day, and WWDC announcers read a series of clues to his identity. The winner of the contest had to give Mr. FM his proper name and write

twenty-five words or less on "Why I think Mr. FM is....." \$5,500 worth of prizes for the winner were donated by Washington merchants, including a \$3,000 Frazer automobile. Newspaper advertising, displays of the prizes in windows of the donors, placards and streamers at the dealers selling FM receivers, all drew attention to the contest.

### Contest Draws 25,000 Washingtonians

The flood of contestants nearly carried WWDC away from its moorings. Over 25,000 people in the Washington district sent in entries. On the final night a gala presentation program was held in Washington's Hotel Statler with all the prizes on view, a company of notables and leading radio entertainers on hand, and the winner still unknown to the public. The big drama of the affair came when a remote crew knocked on the winner's door, made the announcement to him and the radio audience, and then whisked him and his family to the Statler to take over the prizes.

The station generated a most satisfying volume of interest in itself and in FM with this stunt. Not only was there the wholesale participation in the contest in Washington, with excellent coverage in the local papers, but its planning and execution were enthusiastically noted throughout the industry.

WWDC went on the air May 3rd, 1941, with a Western Electric 250 watt AM transmitter, and a second 250 watt transmitter, seven miles from the first one, as a "satellite" to boost the station's coverage.

From its opening, WWDC has been a strong champion of FM, actively planning for the day when it would have an FM signal as a companion to the AM signal. With the interruption of the war, it was April 9, 1947, before WWDC-FM officially took to the air, with a 1 kw Western Electric 503B-2 transmitter. Now with WWDC-FM so effectively launched on its career, as one of the first independent local stations in the country to reach full author-

ized power on FM, Ben Strouse, Vice President and General Manager, is assured that his station has its proper place in the community.

Mr. Strouse became professionally involved with broadcasting at an early age. As a high school student in Baltimore, he wrote a radio column for the *Baltimore Post* for \$5.00 a week. This experience must have had a decisive effect, because in 1941 he left his 13-year career in merchandising and advertising in Baltimore and Washington to join the staff of WWDC. He became Manager in 1944. The station is owned and operated by the Capital Broadcasting Company, of which Joseph Katz, a Baltimore advertising man, is President.

Norman Reed, Program Director, started in radio as an announcer for WPG in Atlantic City in 1928, succeeding Norman Brokenshire. He was General Manager of the ocean-side station from 1935 to 1939. He came to WWDC as Program Director on its opening in 1941. Consistently, he has planned his programming to develop the widest possible appeal for listeners in metropolitan Washington and the surrounding communities. Special emphasis is put on a comprehensive coverage of local news and local public interest features. With the multifarious activities of the National Government at hand, there is an abundance of events, such as the meetings of the many Congressional Committees, which rank high in listener interest.

### Programs in the Public Interest

Definite sections of air time are set aside for public service broadcasting: these hours are never sold. Among the important public interest programs developed by the station: "United We Stand", devoted to improving religious and racial understanding; "Your Government and Mine", featuring interviews with prominent officials, which is of special interest to government employees; "Scholastic Sports Association", promoting high school sports; "Death

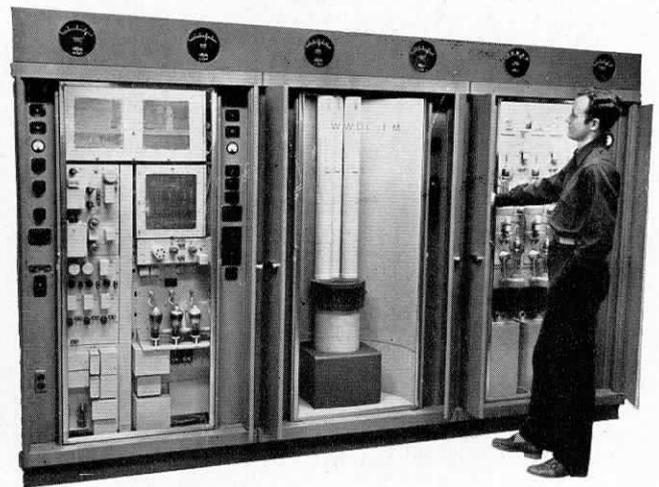
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Control room at WWDC and WWDC-FM has view of two main studios. Transcription equipment in foreground is within easy reach of operator.



May 1948

New 10 kw transmitter which brings WWDC-FM to full authorized effective power of 20 kw is adjusted by Transmitter Engineer Ken Cox.



meters for both AM and FM transmitters; a VU meter which can be switched to the incoming program line for either transmitter; and input switching facilities for audio lines, microphone, and transcription equipment. In addition, the usual master switches for both transmitters are included.

The convenience and efficiency of the operator have been considered not only in the control console, but in every feature of the technical installation and the building itself. The control room has been designed for a minimum noise level so that accurate aural monitoring is facilitated, and the operator does not suffer from "noise fatigue". The two Western Electric 728B speakers used as monitors, one for the program on each transmitter, are mounted directly over the control console. Because of the excellent acoustic conditions in the room, it is ordinarily possible by "selective listening" to monitor the transmitters individually, even with both speakers in operation. If the operator desires, however, he can use individual controls mounted on the console to fade out one speaker while listening to the other.

### No Afterthoughts on the Audio System

The complete advance planning of the audio system in the building produced the highly desirable low audio noise level and operating convenience, *without* any necessity for rearrangement or "improvements" after the system was installed. As explained by Mr. Wilmotte:

"In the ordinary course of events, when a transmitter plant is expanded, the audio system is expanded to match by throwing in an amplifier here, a new conduit there, with frequent trials and almost invariably a lengthy, sometimes desperate cut-and-try process to get the noise and cross-talk down to tolerable levels. At WDNC, under the able direction of Paul De Mars, we were able to do the whole job for the two transmitters in the ideal way. We made a complete system design in advance which will take care of the plant as far as we or the management can see, with noise, cross-talk, distortion, all 'designed out' to levels substantially better than FCC requirements."

A single-wire and ground system connects all audio equipment, with the ground to the building at only one point for the whole system. All conduit was positioned accurately on the plans, with electrical and mechanical characteristics in mind.

The antenna system comprises a three-element array for AM, with the Clover-Leaf antenna for the FM transmitter mounted on top of one of the AM towers.

The building, as can be seen on the floor plan, has ample shop and storage space in addition to the actual operating areas for the two transmitters, and a lounge and kitchenette for the operating staff. In its efficient layout and its long, sweeping modern exterior, it represents the very finest in contemporary transmitter building architecture.

From the very beginning of its plans for expansion, the management of WDNC was determined that it would have the finest transmitter plant that the most careful planning could produce. Western Electric is proud that its transmitting equipment not only served WDNC throughout its period as a 250-watter, but was chosen for the central role in such a superb modern transmitting plant.

## How to Boost FM

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on Wheels", a weekly dramatic program written and produced by Ira Walsh in cooperation with the D. C. Traffic Safety Department; and many others.

WWDC is also known as the "Sports Station" of the Capital city. Coverage has been given Washington Senators baseball, ice hockey, basketball and football. There is a daily All Sports Parade program. A number of highly popular disc jockey shows have been developed, with such recording-and-comment personalities as Jackson Lowe, the "Mayor of Connecticut Avenue," Milton Q. Ford, who calls himself the "Capital Crackpot"; Les Sand, known as the "Yawn Patrol Man"; Norman Gladney, Mark Austad, Willis Conover, and Bill Cox.

Helen K. Mobberly, National Sales Manager, who directed the "Mr. FM" contest so tellingly, started in radio in 1931 with NBC in Washington, as Secretary to the Sales Manager. She advanced to Assistant Sales Manager for the NBC outlet, then in 1940 went to WINX as Sales Manager, performing the feat of opening that station on the air with \$150,000 of time sales already on the books. She has been with WWDC since it opened, and has been National Sales Manager since 1943.

It was appropriate that Chief Engineer Ross Beville should open this story, because he and C. R. Shaffer, Transmitter Supervisor, along with the Western Electric engineers, put intense effort and skill into the problems of installing and testing the 10 kw transmitter, the 3 1/8-inch, 400-foot transmission line, and the six-bay Clover-Leaf with its new tower.

Ross Beville was born in Texas, but 1935 saw him in Washington at the Capitol Radio Engineering Institute, after his infection with radio by the "ham" virus. After graduation he held a progression of jobs in broadcasting and in the electronics industry: transmitter engineer, WIBG, Philadelphia; Engineer, Philco Radio Corp.; design engineer, Globe Manufacturing Company; Ass't. Chief Engineer, WINX, Washington; Senior Industrial Specialist with WPB during the war; Chief Engineer of WWDC and WWDC-FM since 1943.

One of his most important interests has been the development of "satellite transmitters", and WWDC's AM booster on 250 watts reflects his belief that boosters are the answer to low-power coverage on AM. He helped install the first "satellite transmitter" authorized by the F.C.C. . . . that for WINX, which went into operation in 1940. He has written extensively on this subject and served on the RMA Committee on Satellite Transmitters, and on the NAB Engineering Executive Committee.

With three transmitters in regular operation, and two of them—the two AM transmitters—on for 24 hours every day, Ross Beville has the kind of job he likes. "I enjoy keeping WWDC and WWDC-FM at the peak of performance," he says, "we have fine equipment. Most important, however, is the fact that with our booster on AM and our 20 kilowatt FM signal, we have an assured basis for our operation as a leading independent station in the Washington area. We are all 'bullish' on the future of our station."