

# One of The World's First Broadcast Stations

*Going Strong Since 1909!*

By Alice Brannigan

In 1909, the Department of Physics of the University of Wisconsin opened a point-to-point radio station at Madison. In the spring of 1917, serious experimentation began when the equipment was moved from Science Hall to Sterling Hall. That March, Experimental Amateur license 9XM was issued to Professor Earle M. Terry. Though most private stations had been ordered off the air during World War I, 9XM was allowed to operate because it was at a U.S. Navy training facility.

Beginning on January 3, 1919, 9XM started transmitting weather bulletins in code, and in May, the station claims to have begun "regularly scheduled operation." The government's official wartime ban on radio transmissions was lifted on July 31, 1919. By 1920, 9XM's weather reports were being sent in voice.

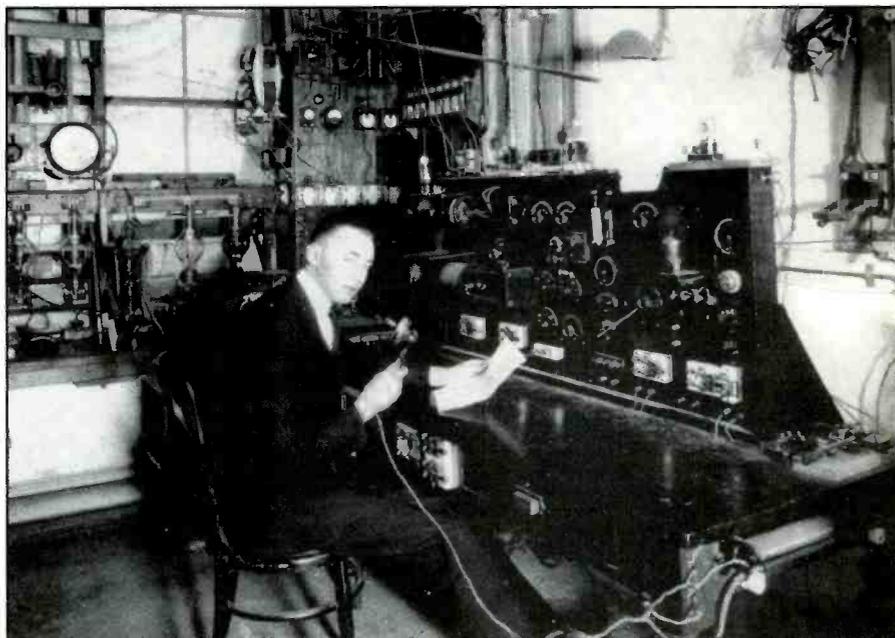
When the radio broadcast service was being created, the Radio Division, Bureau of Navigation, U.S. Department of Commerce suggested that the University should apply for a broadcast license. On January 13, 1922, the call letters WHA were given to this station for 4 kW operation on 833 kHz. It was the 34th broadcasting station license issued. The WHA transmitter was the reworked old 9XM spark-gap transmitter.

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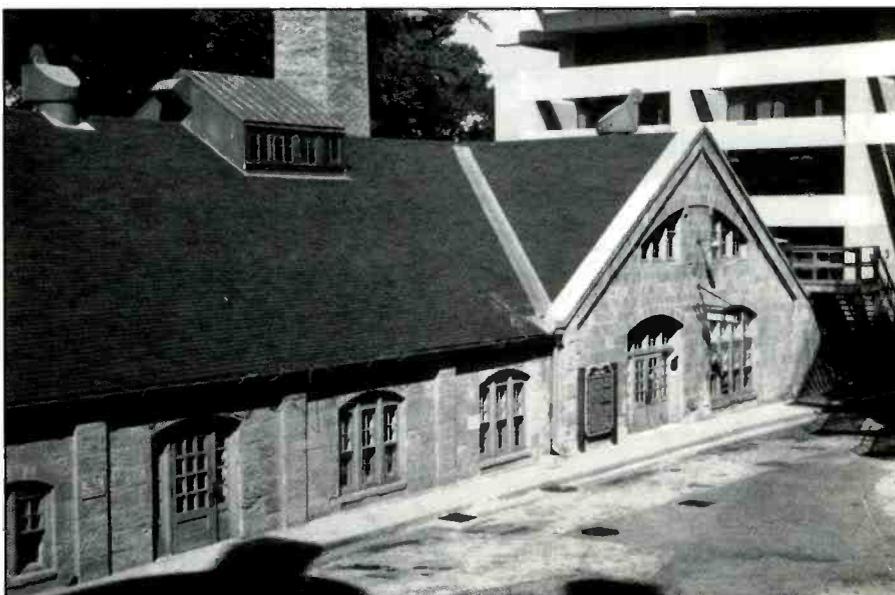
*"Though most private stations had been ordered off the air during World War I, 9XM was allowed to operate . . ."*

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In March of 1922, WHA shifted frequency to 730 kHz. In October of that year, with the installation of its new vacuum tube transmitter, power was reduced to 500 watts. Broadcasting was so new that neither the stations nor the government knew precisely how much power stations needed when faced with vari-



*The original WHA broadcast transmitter was converted from the station's previous spark apparatus operated under the amateur experimental call letters 9XM.*



*WHA's "Radio Hall" studios, which are no longer used by the station. This photo was snapped in 1972 by Jan D. Lowry, California*

ables such as seasonal, hourly, interference, coverage, and equipment differences between stations sharing frequencies. In January of 1923, WHA's power was cut back to 100 watts, but in April was brought up again to 800 watts, then down to 500 watts in July, and 100 watts again in October. Power went back up to 500 watts in January of 1924. WHA operated three nights a week, one hour each, with educational and agricultural lectures, plus special programs. On July 6, 1924 the station's license expired and broadcasting ceased. The government canceled the license in early September, but a month later WHA was reissued its license for 500 watt operation on 1090 kHz. This was a time-share arrangement with Chicago's KYW, which was shifted to 560 kHz in January, 1925, though WHA was soon allowed to increase its power to 750 watts.

In June of 1927, the newly formed Federal Radio Commission reassigned WHA to 940 kHz, where it would divide time with WLBL, in Stevens Point, Wisconsin. By November, the two stations were bumped to 570 kHz and told they must also divide time with WNAX in South Dakota, and WIBO in Illinois. This arrangement lasted until April of 1929.



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TECHNICAL DIRECTOR  
GLENN KOENLER  
ELECTRICAL ENGINEER

December 7, 1931

Mr. Joseph Leo Hueter  
1802 W. Columbia Ave.  
Philadelphia, Pa.

Dear Mr. Hueter:

We are indeed glad to verify your report on the reception of our test program of November 28, 1931. Word from you is gratifying as this program went on the air entirely unannounced beforehand.

We expect to make some changes in our equipment before long and plan to have a real DX party, at which time we hope you will be with us. This will be scheduled far enough ahead to be announced through the press.

Thank you for your report. It will be a pleasure to hear from you again.

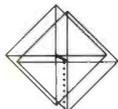
Cordially yours,

H. B. McCarty  
WHA

*This 1931 veri letter from WHA shows an enthusiasm for receiving DX reports. (From the collection of the late Joe Hueter, now in the Pop Comm archives.)*

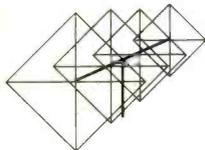
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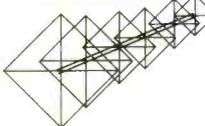
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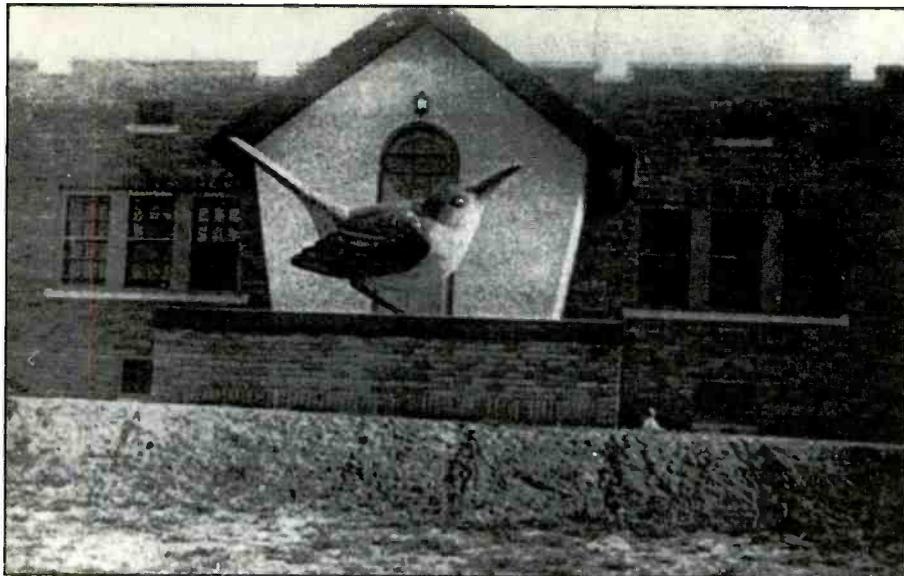
when WHA was shifted back to 940 kHz and licensed for daytime-only operation. After the death of Dr. Terry on 1929, operations of WHA were transferred to the University's Electrical Engineering Department. The antenna system was moved from its campus location to a new site three miles south of Madison. A 1 kW transmitter was installed, and power was increased to that level in January, 1933.

The broadcasting studios had remained at 132 Sterling Hall, but in 1934 the main studios were replaced by those in Radio Hall, a specially remodeled heating plant located behind Science Hall, adjacent to the old WHA tower bases. In April of 1935, WHA increased its power to 2.5 kW. With the completion of its new transmitting plant on Fish Hatchery Road, power was further increased to 5 kW in September, 1936. Two 205-ft. towers supported the single wire "T" antenna system.

In late 1938, the licensee name was changed to the State of Wisconsin, which owned the previous licensee, the University of Wisconsin. That same year, several on-campus studios were added in the west wing of the Memorial Union. A major North American frequency overhaul in March, 1941 saw WHA change to 970 kHz.

In May, 1972, WHA was granted permission to relocate its transmitter to the intersection of Martin Street and Frazier Place at the University Arboretum. A new transmitter there is operated by remote control from Radio Hall. In 1973, the license was transferred to the Regents of the University of Wisconsin.

Later that year, new studios were completed in the seven-story Vilas Communications Hall on the campus. This houses the offices and AM/FM studios, replacing Radio Hall. In 1989, WHA began low-power (51-watt) night operation.



The WREN transmitter at Tonganoxie, Kansas, back in 1932, displayed a gigantic wren on the front stoop. (Courtesy Jan D. Lowry, California)

Today, WHA is Wisconsin's oldest continuously licensed AM broadcaster. It operates on 970 kHz with 5 kW. The NPR and PRI affiliate is non-commercial and runs an educational/talk/news format. Offices and studios are at 821 University Ave., Madison, Wisconsin. There are those who feel that WHA is entitled to wear the mantle of being the world's earliest broadcasting station.

Our thanks to Broadcast Pro-File for allowing us to excerpt some highlights from their lengthy and detailed research report on the history of WHA. BP-F is a commercial research service that, for a reasonable fee, can provide detailed histories of all American AM/FM/TV broadcasters, past and present. A complete catalog is available for \$1. For more information, write to: Jan D. Lowry, Broadcast Pro-File, 28243 Royal Road, Castaic, CA 91384-3028.

**"Today, WHA is Wisconsin's oldest continuously licensed AM broadcaster."**

### Taking A Call Sign Literally

As you know, some broadcast station call letters incorporate certain corporate or network initials, or spell out words. Stations may request specific call letters and, if the requested call letters are available to broadcast stations and aren't already assigned to another station, the

FCC will often look with favor towards honoring the request.

Stations have long known that a catchy call sign is easy for the public to remember, and helps to give their station a desired image. How long have they known this? Jan Lowry passed along a wonderful photo of the original WREN transmitter building at Tonganoxie, Kansas, when the station first started broadcasting from Lawrence, Kansas, on 1220 kHz with 1 kW back in June of 1932.

Notice the humongous cement wren statue placed on the front stoop, which looks like a bird house! Now that's taking fullest advantage of a call sign, wouldn't you agree?

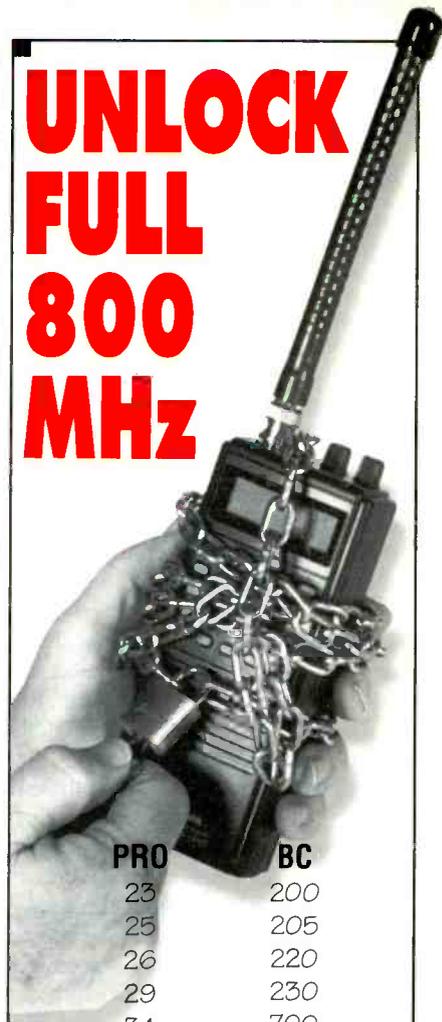
WREN shifted to 1250 kHz in 1942, then moved to Topeka soon after World War II. At Topeka, WREN increased its power to 5 kW. This was a station that shared hours on the frequency with KFKU in Lawrence, Kans. throughout its existence, which lasted into the 1980s.

### Let's Hear From You!

We are always looking for old time radio and wireless photos, QSLs (originals or good copies), picture postcards, news clippings, station listings, personal memories, and what-have-you. If you have or find anything that might be of interest to us here at *Pop'Comm*, send it to us at *Popular Communications* magazine, 76 North Broadway, Hicksville, NY 11801.

Best wishes for the Holidays! See you on the road to Radioville. ■

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