

North Central Massachusetts'
WGAW  98.1 FM
AM 1340 
Local NewsTalk





What is Radio?

Phrases used
in early days
of radio

- Hertzian Waves
- Electric Waves
- Ether Waves
- Spark Telegraphy
- Space Telegraphy
- Aerography
- Wireless

1838

- First Electric Telegraph began commercial operation in England
- Developed by William Cooke and Charles Wheatstone
- Used visual signaling rotated on a receiving device to point to letters on a display.

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1844

- Commercial service of Samuel Morse's electric telegraph design went into service between Washington, D.C. and Baltimore Maryland.
- Dots and dashes read directly by listening to the clicking of the receiver.
- Success followed by construction of telegraph lines throughout the United States

1848

- Telegraphic Press Association formed after telegraph recognized as ideal for rapidly gathering and distributing news items.
- Stock and commodity prices first
- News items added later

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1860

- 33 offices of American Telegraph Company linked together in order to conduct a business meeting
- Two wires employed, one for signaling, the other the return line
- Then, one wire employed, sending line grounded to a metal plate buried in the earth.
- Scientific community debated whether portion of signal actual traveling in ground for distances. Various experiments conducted.

1895

- Guglielmo Marconi discovers groundwave radio signals
- Generally considered the "father of radio"

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1901

- Hertzian Waves article in November issue of a mechanical and electrical hobbyist magazine, *Amateur Work*, includes information for construction of simple transmitter and receiver.
- Later issues included more complicated plans
- Problem of broadcasting free-for-all just in the beginning stages.
- Professor William Ayrton predicts that widespread personal communication using radio would eventually be developed and envisioned worldwide communication "extending from pole to pole."

1904

- Two Boston Massachusetts 8th graders build a set capable of covering eight miles.

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1905

- First-ever advertisement by a company offering an inexpensive complete radio system to non-professionals appears in Scientific American.
- Later, in a 1910 catalog the Electro Importing company claim it was “the largest maker of experimental Wireless Material in the world.”

1908

Three Magazines Founded with large amateur followings

- 1908 Modern Electrics
- 1913 The Electrical Experimenter
- 1919 Radio Amateur News

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1914

- President Woodrow Wilson issues Executive Order instructing Navy Dept. to censor international telegraph messages sent and received by radio firms.
- Ignored by Marconi Wireless Company of America
- Marconi's operation in Siasconsett, Massachusetts shut down for 3 ½ months while Marconi unsuccessfully contested military's action in court
- Station opened in 1915 with Marconi Wireless agreeing to follow Navy's censorship regulations.

1917

- Private U.S. radio stations ordered by President to shut down or be taken over by the Government.
- Illegal during the duration of World War I for private U.S. citizens to even possess an operational radio transmitter or receiver
- Military importance of radio communications immediately apparent during World War I

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1919

- Civilian radio restrictions end
- Scattered reports of military personnel firing up transmitters to broadcast entertainment to the troops
- U.S.S. George Washington outfitted with a vacuum-tube transmitter for a transatlantic voyage to test long range radiotelephony. Was heard in Derring, North Dakota

Radio (as we know it) Begins?

- Experimenters broadcast concerts
- Unsuccessful attempt made to broadcast Independence Day 1919 speech by President Woodrow Wilson.
- Amateurs adopt vacuum-tube technology
- Navy station in New York City started nightly broadcast of news for amateur enthusiasts.

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1920

- Equipment greatly advances
- Transmitting range improves greatly
- Crystal detectors (used as receivers) replaced by more sensitive superheterodyne vacuum-tube receivers.

1920 Pioneers

- International impact of Nellie Melba 1920 concert from Marconi station in Chelmsford England
- 1DF amateur station from Winchester Massachusetts transmitting concerts on weekday nights and Sunday afternoons
- May L. Smith, Manchester, N.H. first prize amateur station winner – Radio News

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Radio as a Business

- AT&T
- General Electric
- Westinghouse

- G.E. buys American Marconi assets and forms Radio Corporation of America –R.C.A.

1920

- KDKA broadcasts Harding-Cox election night returns as amateur callsign 8ZZ, later switched to well-known letters.
- Touted as first radio broadcast, not actually true, many earlier broadcasts took place
- Within 1 year, Westinghouse adds 3 more stations: WJZ Newark N.J., WBZ, Springfield MA, and KYW Chicago, Illinois

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1921

- RCA debuts broadcasting with heavyweight boxing championship of Jack Kempsey vs. George Carpentier on WJY.
- Rebroadcast by KDKA Pittsburg

1922

- AT&T builds station in New York City to operate "Toll Broadcasting" with unusual policy of leasing out airtime for others to use.
- Station was WEAJ, now WFAN and gained reputation of best engineered radio outlet in the country.
- AT&T announces plans of first radio network same year.

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BROADCASTING BOOM!

- Department of Commerce formally establishes broadcast service
- Businesses, organizations, and individuals put up over 500 radio stations by the end of 1922.
- Because of resulting chaos, Commerce Dept. enforces regulations and number of authorized stations drops to 67.

1922 - 23

- Hundreds of thousands of Americans buy battery-operated crystal sets tuning to either 750 or 833 kc
- 1922 – Radio networks begin as stations linked to broadcast sports events.
- 1923 – Commercial radio born as various radio station operators turn to advertising as a source for funding operations

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1926

- First major broadcast network established in 1926 by the Radio Corporation of America and was named the National Broadcasting Company (NBC). Consisted of two dozen stations!
- NBC operated two separate networks known as the red and blue.

1928

- Columbia Phonograph Broadcasting System formed – later called the Columbia Broadcasting System – CBS
- Started with 16 stations
- William S. Paley was the founder and remained the chief executive into the 1980's!

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1929

- Famous program Amos n' Andy made its debut on NBC in 1929

1933

- President Franklin D. Roosevelt launched series of radio broadcasts on March 12, 1933.
- Known as the "fireside chats" because FDR was so at home with the microphone.

1934

- Communications Act of 1934 resulted in the establishment of the Federal Communications Commission, the F.C.C.

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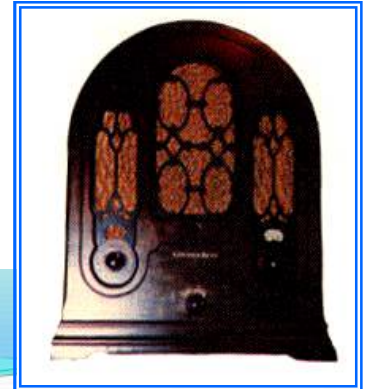
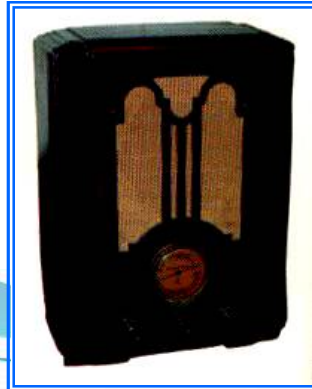


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1934

- The third network was formed – Mutual Broadcasting System had affiliates in New York, Chicago, Detroit, and Cincinnati.
- By 1941, Mutual was the leading network with 160 affiliates.

1939

- 1465 radio stations were authorized to broadcast in the United States of America. (Nearly 15,500 radio stations are in operation in U.S. by the year 2021.)

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1943

- Federal Communications Commission implemented rules forbidding the ownership of more than one network and in turn authorized the sale of NBC's blue network to Edward J. Noble who made a fortune as owner of Lifesaver Candy Company
- Established American Broadcasting Company, ABC in 1945

1946

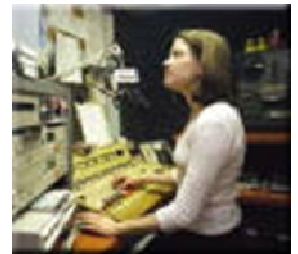
- FM stations under construction even though approved in 1938 before World War II.
- Most Americans felt development of new radio band was not necessary.
- **WGAW** launches in Gardner, Massachusetts initially under different call letters.

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1952

- With invention of transistor in 1948 by Bell Laboratory scientists, radio makers could now make more portable receivers and enhanced radio's mobility



1955

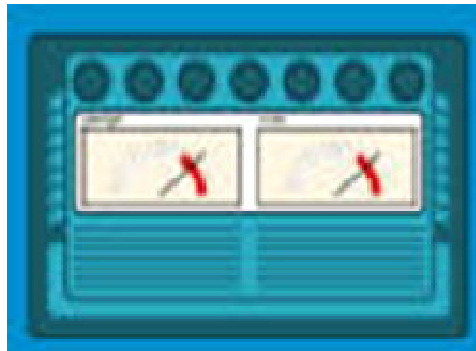
- Music becomes the primary product of radio stations and the disc jockey, deejay, dj, jock became the new star.
- Bill Haley's recording of "Rock Around the Clock" sold over a million copies.
- Dozens of stations around country begin focusing on Top 40 music which quickly narrowed to Rock n' roll records.

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1960

- Rock stations led their competitors in most cities (still was AM Radio)
- FM still drawing less than 10 percent of listening audience



1961

- FM begins to evolve after FCC authorizes stereo broadcasting on FM

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1965

- F.C.C. makes FM stations in cities with populations over 100,000 people run separate programming at least 50 percent of the broadcast day – simulcasts of existing AM stations not thought to be efficient use of FM frequencies.
- Many FM stations automated “beautiful music”

1979

- FM and AM listenership equally split.
- **WGAW AM 1340** continues to compete effectively with a format of adult contemporary music, heavy local news coverage, local and sports broadcasts, and a NUMBER ONE public service tradition dating back to 1946.

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1980

- Many AM stations switch to Talk radio as FM becomes dominant music medium. **WGAW** switches to Talk Radio about 20 years later.
- About 10,000 stations on the air!

Some Radio Formats

- Acid Rock, Adult contemporary, album-oriented rock, beautiful music, big band, black, bluegrass, children's classical, Classic Hits, Classic rock, Contemporary country, Contemporary Hits, Country and Western, Chicken Rock, Dance, Disco, Easy Listening, Ethnic, Folk Rock, Jazz, Lite, Middle-of-the-Road, Mix, Modern Rock, Motown, News, News/Talk, New Wave, Nostalgia, Oldies, Pop, Progressive, Punk Rock, Religious, Rhythm and Blues, Soft Rock, Southern Rock, Standards, **Talk**, Top 40, Urban Contemporary. With all those formats, WGAW's News/Talk is #2 nationwide today.

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1991

- Economic downturn makes this year one of the worst ever: Proliferation of stations, high prices paid in 1980's, selling binge, recession
- More than half of stations in the country running in the red.
- Financing of radio properties crippled by the recession.

1990's

- Local marketing agreements became means of functioning during tough economic times
- One radio station leases time and/or facilities from another station in the same area.
- Consolidation of commercial radio occurs in the 1990's with fewer owners owning more stations – due in part to deregulation of rules.

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Early 1990's

- By the early 1990s, WGAW was simulcasting the programming of a co-owned station in Marlboro, Massachusetts as a money-saving move.
- Subsequent owners of WGAW have included Anastos

1992

- Number of radio stations in the U.S. grows to 11,086

Late 1990's

- Computers become very powerful
- Many stations computerizing basic functions including the playing of music via mp3 files
- WGAW utilizes digital editing in producing radio commercials.

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2000s

- WGAW reverts to locally originated programming with a News/Talk format.
- **WGAW** continues its **NUMBER ONE** Public Service tradition to North Central Massachusetts and Southern New Hampshire.

2006

- Number of radio stations in U.S. up to 13,837

2013

- Number of radio stations in U.S. up to 15,358

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2010s

- Broadcast veteran Steve Wendell purchases WGAW AM 1340 and reinvigorates the station with a renewed focus on local news, local sports, local weather, and local public service programming.
- Radio Hosts have been hand-selected from among those achieving the highest successes and audience acclaim in major markets across the United States
- WGAW launches popular program Hotline Radio and the ever-popular Morning News Show.
- Live and Local. WGAW Radio.

2021

- **WGAW AM 1340** celebrates its 75th anniversary.
- **WGAW** adds coverage on **98.1 FM**
- **WGAW** broadcasts a successful News/Talk format 24 hours a day, 7 days a week and influences more than 2 dozen communities in the region.

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