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**Sixth Edition**

# **The SRadio STATION**

**MICHAEL C. KEITH**



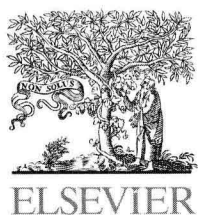
**Focal  
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Sixth Edition

Michael C. Keith



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# Preface

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The radio industry has virtually, if not literally, metamorphosized. In fact, it has changed dramatically since the last edition of this book, and to be sure it barely resembles the description in the book's first edition. Why? Succinctly speaking—the elimination of station ownership caps. This alone has altered the landscape of the industry almost beyond recognition. For example, today one radio company can own hundreds, even thousands, of stations, whereas it could own only a handful (a few dozen) a decade ago.

Indeed, since the first publication of this book, the radio industry has witnessed seismic change. In addition to the significant regulatory revamping of the last decade, radio has undergone unprecedented technical overhauling. The advent of digital audio (high-definition radio) promises to revolutionize broadcast signal transmission and reception. Of course, with such transformations come challenges and concerns, and these will doubtlessly occupy the thoughts of broadcasters well into the foreseeable future.

When this book was first published in the mid-1980s, radio was enjoying unprecedented prosperity. The prices being paid for radio properties were soaring, and station revenues were at exceptional levels. Life was good for almost everyone in the industry, or so it seemed. Many AM station owners were not in on the opulent banquet, and a growing number were pulling the plug on their operations. Yet on the whole, the 1980s were auspicious years for the magic medium.

The tide shifted as the final decade of the 20th century began. The nation had slipped into a nasty recession, taking radio with it on its downward slide, but soon the medium's fortunes were on the upswing and broadcast properties were again attracting gargantuan sums. The catalyst of this unparalleled resurgence was the Federal Communications Commission, which eliminated station ownership caps through the groundbreaking legislation of its Telecommunications Act of 1996.

The industry has indeed experienced many ups and downs since its modest inception 80 years ago, however, and it will doubtlessly know the thrill of ascent and the angst of decline again. Radio was, is, and will continue to be a wonderfully alive and dynamic medium with a seemingly incalculable life span. It is impossible to imagine a world without David Sarnoff's radio music box, but that is not necessary—it is safe to assume that radio in some form will continue to be an integral part of our lives for a very long time to come.

The mission of this book has not changed. This edition, like the previous ones, is the result of a desire and effort to provide the student of radio with the most complete account of the medium possible, from the insider's view, if you will. It is presented from the perspective of the radio professional, drawing on the insights and observations of those who make their daily living by working in the industry.

What continues to set this particular text apart from others is that not one or two but

literally hundreds of radio people have contributed to this effort to disseminate factual and relevant information about the medium in a way that captures its reality. These professionals represent the top echelons of network and corporate radio, as well as the rural daytime-only outlets spread across the country.

I have sought to create a truly practical, timely, illustrative (a picture can be worth a thousand words—stations explain and reveal themselves through visuals), and accessible book on commercial radio station operations; a book that reflects through its structure and organization the radio station's own organization. Therefore, the departments and personnel that comprise a radio station are our principal focus. I begin by examining the role of station management and then move into programming, sales, news, engineering, production, and traffic, as well as other key areas that serve as the vital ingredients of any radio outlet.

Because my strategy was to draw on the experience of countless broadcast and allied professionals, my debt of gratitude is significant. It is to these individuals who contributed most directly to its making that I also dedicate this book.

In addition, I would like to express my sincere appreciation to the many individuals and organizations that assisted me in so many important ways. Foremost among them are David Pearlman, Jay Williams, Jr., Ed Shane, Ralph Guild, Jason Insalaco, Bill Siemering, Lee Abrams, Lynn Christian, Dick Oppenheimer, Chris Sterling, Donna Halper, Bruce DuMont, Paul Fiddick, Norm Feuer, Ward Quaal, Frank Bell, Allen Myers, Ted Bolton, et al.—the list is endless. My hat is off to every individual and organization cited in this book.

Countless companies and organizations contributed to the body of this work. They include the ABC Radio Networks, Arbitron Ratings Company, Auditronics Inc., The Benchmark Company, Bolton Research, BMI, BPME, Broadcast Electronics, *Broad-*

*casting and Cable*, Broadcast Programming, Burkhart Douglas and Associates, C-SPAN Radio, CBS, CIPB, Clear Channel Communications, Coleman Research, Communication Graphics, CFM, CRN, Denon, Direct Marketing Research, Edison Media Research, ESPN Radio, the FCC, FMR Associates, Global Radio News, Goldwave Inc., Greater Media, Halper and Associates, IGM Inc., Infinity Broadcasting, Interep Radio Store, International Demographics, Jacobs Media, Jefferson Pilot Data Systems, Katz Media Group, KD Kanopy, Library of American Broadcasting, Lund Consultants, Marketron Inc., Mediabase, Metro Traffic Network, MMR, Moose Lake Products Company, Museum of Broadcast Communications, National Association of Broadcasters, Orban, Premiere Radio Networks, Public Radio International, QuikStats, Radio Advertising Bureau, Radio Aahs, *Radio Ink*, Radiolandia, *Radio and Record's*, RTNDA, Radio Computer Systems, Radio SAWA, RCA, Satellite Music Network, Shane Media, Sirius Satellite, Society of Broadcast Engineers, Jim Steele, Annette Steiner, Superaudio, Talkers Magazine, Tapscan, TM Century, Westinghouse Broadcasting, Westwood One, and XM Satellite.

Since the publication of earlier editions, it is safe to assume—in an industry noted for its nomadic nature—that a significant number of contributors have moved on to positions at other stations (or in some cases left the industry). Moreover, it is equally certain that many stations have changed call letters, because that is the name of the game too. Due to the sheer volume of contributors, it would be difficult to establish the current whereabouts or status of each without employing the services of the FBI, CIA, and Secret Service. Therefore, I have frequently let stand the original addresses and call letters of contributors except when new information has become available; in those cases, changes have been made.

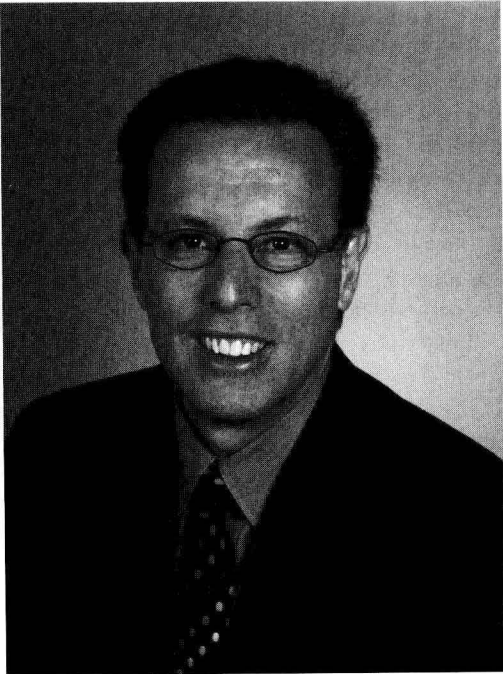
*In any case, good evening or good afternoon, good morning or good night,  
Whichever best becomes the sector of the sky  
Arched over your antenna.  
We wish some words with you  
Concerning magic that would make a  
Merlin envious  
The miracle, worn ordinary now, of just such business as this  
Between your ears and us, and oceanides of ether.  
We mean the genii of radio  
Kowtowing to Aladdins everywhere,  
As flashy on the run as light, and full of services to ships at sea and planes in the air and people  
in their living rooms, resembling you.*

—Norman Corwin, *Seems Radio Is Here to Stay*



# Foreword to the Sixth Edition

by David Pearlman



David Pearlman

Who would have bet that a \$5 wager could create a \$20 billion global industry that has served the world with music, news, and entertainment for over 82 years? Yet it was Dr. Frank Conrad's small stake with a fellow worker over the accuracy of his \$12 wrist-watch that led to the unveiling of the world's first audio over-the-air commercial programming service. To prove his point in the gamble, the Pittsburgh-based engineer built a small receiver to hear time signals from the Naval Observatory in Arlington, Virginia. Conrad won the bet, became fascinated with his new hobby, and proceeded

to build a transmitter on the second floor of his garage. For several years Conrad operated experimental broadcasts featuring favorites from his personal record collection. Only a handful of households heard him, but his employer, Westinghouse, recognized it as a business opportunity. Eight years later on November 2, 1920, KDKA aired the results of the Harding/Cox election, giving birth to the radio industry. As announcer Leo Rosenberg proclaimed the Presidential victor, the world of communications had been forever changed. The unique, unprecedented one-to-one relationship between radio station and listener had begun.

The early days of radio featured live concerts, dramas, comedies, news coverage, and re-creations of major sports events. The new "theater of the mind" allowed friends, family, or single consumers to be informed and entertained by the biggest personalities and politicians of its day. Radio created the artistic foundation for future forays in theater, film, and television. It was radio that ignited the careers of everyone from Milton Berle and Jack Benny, to Dan Rather, Dick Clark, Larry King, Bob Costas, and to Howard Stern. It is the inspirational platform from which the concepts of MTV, VH1, CMT, CNN, and others have come. It is the original culture creator and still the primary distribution source for the entire music industry.

For the past eight decades media watchers have prognosticated that every medium from movies, to TV, to CDs, to DVDs, and

to the Internet would lead to the demise of radio. Every year a different poison pen predicts its death, and yet as we weave our way into the start of the 21st century the industry is at an all-time high in consumer and customer acceptance. On a weekly basis, 95.4 percent of all adult Americans tune to the radio. Both TV—including cable viewers—(95%) and newspapers (80%) have less reach than this most mobile of all medias.

When a group of Al-Qaeda terrorists attacked the United States on 9/11 it was radio that provided the base coverage for a terrified nation. When the WTC twin towers fell to the ground they brought with them the broadcast antennas of all but one New York City television station. As the chaotic Manhattan scene unfolded only one over-the-air TV station was available to the millions of panicked New Yorkers. It was All-News Radio that provided the critical link to that day's events. Citizens in New York and around the world huddled on street corners, offices, homes, and cars, glued to their radios for the latest developments.

When a pair of snipers stunned the Washington area with a series of deadly attacks, an entire region was paralyzed with fear for its safety. Three weeks into the crisis and with no arrests made, literally within minutes of a radio broadcast of a description of the suspects' car, a heroic truck driver spotted the vehicle at a rest stop and notified authorities, who subsequently arrested the suspects. The case was solved and an entire population was released back into normalcy because of a response to a radio broadcast.

When President Bush wishes to regularly communicate with the American people he does so on the radio. In a tradition started by FDR in the 1930s with his "fireside chats," presidents have long utilized the radio as a primary communications link. The Saturday Presidential Address has become a radio staple for several administrations and today is the singular consistent communiqué from

the Bush White House. Although the traditional press conferences have become few and far between, President Bush never misses his Saturday date with the nation on the radio.

A radio renaissance is now upon us. With the passage of the Telecommunications Act of 1996, the ownership lids were lifted and a new world of consolidation has ensued. It has resulted in a dramatic change in the capitalization of broadcast companies and the requirements of the people who work for them. The industry has gone from an entrepreneur-based leadership to one of major publicly traded organizations. It has created a new cluster look to the local marketplace and has sent a new shockwave of requirements for the players who oversee this new world order of radio. The result is a fiscally stronger industry and greater career opportunities for the highly talented individuals in it.

Less than 10 years ago companies were limited to as little as one AM station and one FM station in a market, and 28 total stations nationwide. A corporate group president would oversee as few as eight stations in multiple markets and be a major player in the industry. Today, you can see eight stations on one floor in one market run by one GM. The group job of a decade ago is now replicated in one building. The change in ownership limits has created companies with hundreds, and in one case thousands, of stations. A meeting of local radio players would once fill a large room, but today they barely fill a large table.

With fewer owners controlling more stations, the consolidated world of radio has dictated a very different marketplace strategy. With a cluster concern rather than any single station dependence, local managers strategically approach the programming, marketing, and sales with a more group-oriented mentality. The one-stop shopping concept in revenue generation for a cluster has fundamentally changed the business of radio. In formulating formats for its stations, the cluster goals are always paramount.



Whether it is a five-station grouping in Little Rock or a six-station combination in Los Angeles, the goals of share maximization are the same. The result is a more sophisticated, strategic type of multitasking manager who needs to be a far more global thinker than ever before.

For those desiring a career in this business, the radio renaissance of the 21st century is an exciting proposition. Although there are fewer overall positions, the remaining slots are far more challenging and rewarding than ever before. For the creative, there is a larger stage to exhibit your skills. For the strategic, there is a bigger platform from which to plot your moves. For the marketer, there are more stations and options to offer your customers. For the motivator, there is a greater, more diverse universe of staff to lead. There is a rebirth

of opportunity in the oldest electronic medium with more market power than ever previously imagined.

Author Michael Keith has dedicated his life to the study of radio. He is one of those rare academics who actually has spent a major portion of his career working in the trenches of the medium he so loves. The sixth edition of *The Radio Station* is the standard bearer in its field. It gives the reader a wonderful foundation on an industry that plays such an important role in all of our lives. It covers the broadcasting basics and beyond with input of the best of the best in the business. We are never far from our radios, and if you are sincerely interested in this industry, this book should not be far away from you.

*David Pearlman is one of the Nation's foremost radio executives and consultants.*

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# State of the Fifth Estate

1

## In the Air—Everywhere

In the first decade of the new millennium, radio continues to hold its own in the face of many new competing audio technologies and the seismic shifts in its management and operational structure due to the elimination of long-standing ownership caps and the subsequent consolidation and clustering of thousands of stations. Says station owner and communications entrepreneur Jay Williams, Jr., “The wave of consolidation rolling over radio is only one in the turbulent sea crashing through most of American business. Unleashed by the Telecommunications Act of 1996, sweeping legislation passed by Congress has affected most forms of communication causing consolidation of radio to explode.”

Although overall listenership has declined (up to 12 percent between 1990 and 2000 according to one study) over the past decade due to increased competition from other audio choices, radio continues to be the most pervasive medium on earth, even more so than the Internet. There is no patch of land, no piece of ocean surface untouched by the electromagnetic signals beamed from the more than **40,000 radio stations worldwide**. Nearly a third of these broadcast outlets transmit in America alone. Today, more than **13,000 stations in this country** reach 99 percent of all households, and less than 1 percent has fewer than five receivers (most have at least eight). There are nearly a billion working radios in the United States.

Contemporary radio’s unique personal approach resulted in a shift of the audience’s application of the medium: Radio went from family or group entertainer before 1950, to individual companion after the debut of the video medium. Although television usurped radio’s position as the number one home entertainment source five decades ago, radio’s total reach handily exceeds that of the video tube. More people rely on radio for its multifaceted offerings than on any other medium—print or electronic. Practically every automobile (95 percent) has a radio. “There are twice as many car radios in use (approximately 140 million) as the total circulation (60 million) of all daily newspapers, and four out of five adults are reached by radio each week,” contends Kenneth Costa, vice president of marketing for the Radio Advertising Bureau (RAB).

Eight out of ten adults are reached weekly by car radio. The average adult spends two hours per day listening to radio (see figure 1.2). A survey in 2002 conducted by RADAR (Radio’s All Dimensional Audience Research) concluded that 95.8 percent of all persons over 12 years old tuned in to radio. As the new millennium proceeded, this computed to around 220 million Americans, and the figure continues to grow. The RADAR report also found that working women account for nearly 65 percent of radio listening by women, a statistic that reflects the times. Meanwhile, radio continued to be tremendously popular among African Americans and Hispanics, where the medium’s weekly reach is about 95

**FIGURE 1.1**

Howard Stern was the nation's top radio personality for the under-35 crowd as the new century began. Courtesy 97.1 FM TALK.

**FIGURE 1.2**

Courtesy RAB.

Source: RADAR ® 71, Fall 2001 © Copyright Arbitron.

percent of that population. The number of radio receivers in use in America has risen by more than 50 percent since 1970, when 325 million sets provided listeners with a wide range of audio services. In recent years, technological innovations in receiver design alone have contributed to the ever-increasing popularity of the medium. Boxes and walk-alongs, among others, have boosted receiver sales over the \$3 billion mark annu-

ally, up 30 percent since 1970. According to the *New York Times*, Americans bought nearly 60 million radios annually in the last years of the 1990s, and that trend continued into the new century. There are 25 million walk-along listeners. Radio's ability to move with its audience has never been greater. Out-of-home listeners account for over 60 percent of the average audience Monday through Friday. In addition, the RAB concluded that 7 out of 10 computer purchasers and wine and beer drinkers tune into the medium daily.

Radio appeals to everyone and is available to all. Its mobility and variety of offerings have made it the most popular medium in history. To most of us, radio is as much a part of our day as morning coffee and the ride to work or school. It is a companion that keeps us informed about world and local events; gives us sports scores; provides us with the latest weather and school closings and a host of other information, not to mention our favorite music; and asks for nothing in return. A Katz Radio Group study concluded that "only radio adapts to the lifestyle of its audience." The report dispelled the belief that radio listening drops during the summer, as does TV viewing, proving that radio is indeed a friend for all seasons.

It is difficult to imagine a world without such an accommodating and amusing cohort, one that not only has enriched our lives by providing us with a nonstop source of entertainment, but has also kept us abreast of happenings during times of national and global crisis. To most Americans, radio is an integral part of daily life.

## A Household Utility

Although radio seems to have been around for centuries, it is a relatively recent invention. Many people alive today lived in a world without radio—hard to imagine, yet true. The world owes a debt of gratitude to several "wireless" technologists who contributed to the development of the medium. A friendly

## Radio's Weekly Reach

*Read: Radio reaches 95.8% of persons 12 and older each week.*

### Persons

- 12+ 95.8%

### Teens

- 12-17 99.2%

### Men

- 18+ 96.6%
- 18-34 98.3%
- 25-54 98.0%
- 35-64 97.5%
- 65+ 89.3%

### Women

- 18+ 94.3%
- 18-34 95.8%
- 25-54 96.5%
- 35-64 96.4%
- 65+ 86.2%

Source: RADAR ® 71, Fall 2001, © Copyright Arbitron  
(Monday-Sunday, 24 hours, based on weekly cume)



debate continues to be waged today as to just who should rightfully be honored with the title “father of radio.” There are numerous candidates, some who date as far back as the 19th century. For example, there is physicist James Clerk Maxwell, who theorized the existence of electromagnetic waves, which later in the century were used to carry radio signals. Then there is German scientist Heinrich Hertz, who validated Maxwell’s theory by proving that electromagnetic waves do indeed exist.

The first choice of many to be anointed grand patriarch of radio is Guglielmo Marconi, who is credited with devising a method of transmitting sound without the help of wires—thus the name wireless telegraphy. A host of other inventors and innovators can, with some justification, be considered for the title. Nikola Tesla experimented with various forms of wireless transmission, and although he has been largely neglected by historians, today there are Tesla Societies that maintain he is responsible for the invention of wireless transmission and modern radio. Lee De Forest, Ambrose Fleming, Reginald Fessenden, and David Sarnoff are a few others whose names have been associated with the hallowed designation. (A further discussion of radio’s preeminent technologists can be found in Chapter 10.) However, of the aforementioned, perhaps the pioneer with the most substantial claim is Sarnoff. A true visionary, Sarnoff reportedly conceived of the ultimate application of Marconi’s device in a now-famous memorandum. In what became known as the “radio music box” memo, Sarnoff supposedly suggested that radio receivers be mass-produced for public consumption and that music, news, and information be broadcast to the households that owned the appliance. According to legend, at first his proposal was all but snubbed. Sarnoff’s persistence eventually paid off, and in 1919 sets were available for general purchase. Within a very few years, radio’s popularity would exceed even Sarnoff’s estimations. Recently some scholars have argued that Sarnoff’s



**FIGURE 1.3**  
Radio announcing was a new and glamorous profession. Courtesy WBZ-AM.

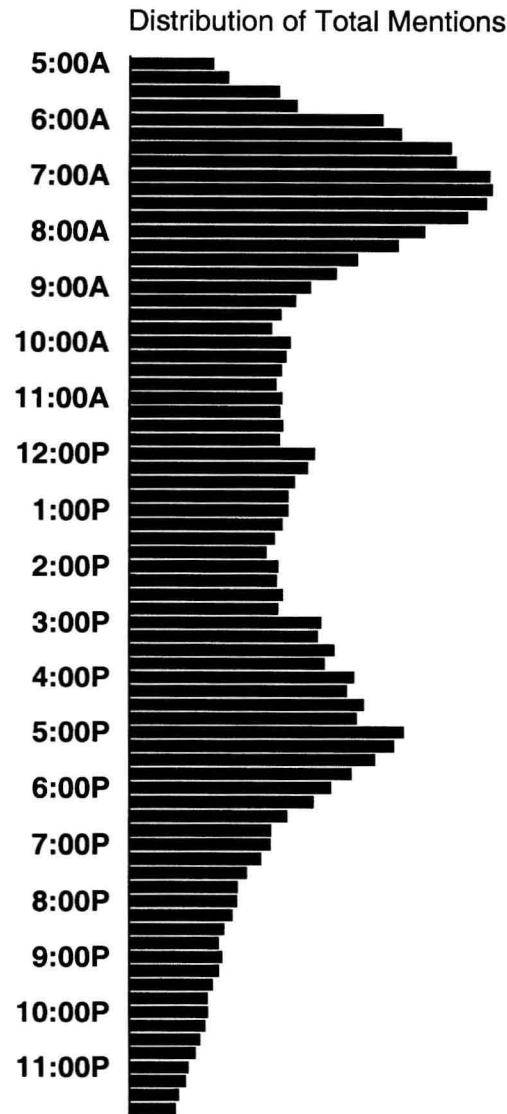
memo may have been written several years later, if at all, as a means of securing his status in the history of the radio medium. The latest consensus gives Sarnoff credit for proposing radio as we know it.

**FIGURE 1.4**

Radio rules in the car.  
Courtesy RAB.

## Daily In-Car Radio Audience

*The audience flow chart below shows the percentage of Arbitron diary mentions by quarter-hour, Monday-Friday, 5 a.m. to midnight.*



Source: PD PROFILE \* 718,700 Diarykeeper Study June 2002 © 2002, Research Director, Inc. Original data by Arbitron, Inc.

### A Toll On Radio

Though not yet a household word in 1922, radio was surfacing as a medium to be reckoned with. Hundreds of thousands of

Americans were purchasing crude, battery-operated crystal sets of the day and tuning the two frequencies (750 and 833 kc) set aside by the Department of Commerce for reception of radio broadcasts (a third fre-

quency was soon added). The majority of stations in the early 1920s were owned by receiver manufacturers and department stores that sold the apparatus. Newspapers and colleges owned nearly as many. Radio was not yet a commercial enterprise. Those stations not owned by parent companies often depended on public donations and grants. These outlets found it no small task to continue operating. Interestingly, it was not one of these financially pinched stations that conceived of a way to generate income, but rather AT&T-owned WEAf in New York.

According to most broadcast historians, the first paid announcement ever broadcast lasted 10 minutes and was bought by Hawthorne Court, a Queens-based real estate company. (Radio scholar Donna Halper contends that Boston's WGI actually aired a commercial before WEAf.) Within a matter of weeks other businesses also paid modest "tolls" to air messages over WEAf. Despite AT&T's attempts to monopolize the pay-for-broadcast concept, a year later in 1923 many stations were actively seeking sponsors to underwrite their expenses as well as to generate profits. Thus, the age of commercial radio was launched. It is impossible to imagine what American broadcasting would be like today had it remained a purely noncommercial medium as it has in many countries.

## Birth of the Networks

The same year that Pittsburgh station KDKA began offering a schedule of daily broadcasts, experimental network operations using telephone lines were inaugurated. As early as 1922, stations were forming chains, thereby enabling programs to be broadcast simultaneously to several different areas. Sports events were among the first programs to be broadcast in network fashion. Stations WJZ (later WABC) in New York and WGY in Schenectady linked for the airing of the 1922 World Series, and

early in 1923 WEAf in New York and WNAC in Boston transmitted a football game emanating from Chicago. Later the same year, President Coolidge's message to Congress was aired over six stations. Chain broadcasting, a term used to describe the earliest networking efforts, was off and running.

The first major broadcast network was established in 1926 by the Radio Corporation of America (RCA) and was named the National Broadcasting Company (NBC). The network consisted of two dozen stations—several of which it had acquired from AT&T, which was encouraged by the government to divest itself of its broadcast holdings. Among the outlets RCA purchased was WEAf, which became its flagship station. Rather than form one exclusive radio combine, RCA chose to operate separate Red and Blue networks. The former comprised the bulk of NBC's stations, whereas the Blue network remained relatively small, with fewer than half a dozen outlets. Under the NBC banner, both networks would grow, the Blue network remaining the more modest of the two.

Less than two years after NBC began operation, the Columbia Broadcasting System (CBS, initially Columbia Phonograph Broadcasting System) began its network service with 16 stations. William S. Paley, who had served as advertising manager of his family's cigar company (Congress Cigar), formed the network in 1928 and would remain its chief executive into the 1980s.

A third network emerged in 1934. The Mutual Broadcasting System went into business with affiliates in only four cities—New York, Chicago, Detroit, and Cincinnati. Unlike NBC and CBS, Mutual did not own any stations; its primary function was that of program supplier. In 1941, Mutual led its competitors with 160 affiliates. The network left the air in April 1999 following a long series of financial difficulties.

Although NBC initially benefited from the government's fear of a potential monop-