

# MICHAEL C. KEITH

**The  
RADIO  
STATION**

**Fourth Edition**

## Fourth Edition



# **The Radio Station**

**FOURTH EDITION**

**Michael C. Keith**


**Foreword by**

**Ed Shane**

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# Foreword

## *by Ed Shane*

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*Ed Shane is a broadcast adviser and founder of Houston-based Shane Media Services, which provides management, programming, and research consultation to radio. Since 1977 he has helped broadcast companies, both large and small, achieve success for their stations in a variety of formats. A trend-watcher, Shane combines insights on the world at large with research conducted specifically for radio. His writing has been published in both consumer and trade press. His first radio book, *Programming Dynamics* (1984, Kansas City, KS: Globecom), was an industry bestseller. He is also the author of *Cutting Through* (1991, Houston, TX: Shane Media).*

Welcome to the Golden Age of Radio. Revenues are the highest ever, setting records in the mid-1990s. Profits are up, too. Advertiser demand is high. Rule changes have allowed ownerships to consolidate.

Most people refer to “the Golden Age” as some period in the past, usually the “theater of the mind” days of the 1930s and 40s when listeners turned words and sound into mental pictures that commanded the attention of the nation. That was a unique period. Radio was the only free-entertainment medium for a nation emerging from a disastrous depression. For that reason alone, the phrase “Golden Age” applies.

The fifties and sixties are also described as a “Golden Age.” That was a time when the deejay was as much a king as Elvis because the deejay spun the soundtrack to the lives of Baby Boomers as teenagers.

If you’re using this book to learn radio, chances are you have no direct experience of those long-gone Golden Ages. That’s why I feel that today’s

radio—and for that matter, tomorrow’s—are Golden Ages, too.

To hear some people talk, the end of the nineties is hardly the stuff of a “Golden Age.” They say radio is endangered, threatened, about to die. New media will invade radio’s turf, they say, replacing radio as an information provider and music provider.

I’ll be the first to admit that there’s no holding back the interactive and digital future. Yet radio has already faced challenges, even threats, from other media: television, the long play album, CDs and cassettes, multichannel cable television, cable audio. Each time, radio survived and adapted.

Radio even survived the announcement of its own demise. Henry Morgan, a radio performer and satirist during the fifties, once claimed, “Radio actually died when ‘Stop the Music’ got higher ratings than Fred Allen.” While the event was noteworthy for lovers of the original Golden Age, it hardly spelled death. It did spell change and challenge. When Morgan made his acerbic comment, network radio faced more than a challenge. The medium was truly threatened by television.

Before television, the “pictures” were on the radio. A man named “Raymond” opened a squeaking door on “Inner Sanctum” and the stories told behind the door made spines tingle for a half hour. That age brought “The Shadow,” a Gothic thriller whose main character was a mental projection against a foggy night full of smoke from coal-burning furnaces.

The lighter side of that era was Fibber McGee’s closet, a packed-to-the-gills jumble that fell with a crash to the floor once per episode in an avalanche that usually included samples of the sponsor’s product. After the cacophony

there was a pause. Finally, a dinner bell crash-tinkled to the floor as punctuation.

These images, all formed in the mind of the listener, could not stand the transition to television. Even NBC-TV's attempt at a revival of "Fibber McGee and Molly" left the famous closet out of sight—in the hands of sound-effects experts and in the imagination of the viewer.

The transition was easier for other radio shows. Jack Benny simply added scenery and sets to the comedy scripts his crew was already performing. It was the same for Burns and Allen and for scores of other radio performers who moved from their radio desks to their TV desks and continued their careers in the visual medium.

While radio was disrupted by the introduction of television, it survived the challenge by finding new applications for its medium. Panic began to subside when audio broadcasters stretched individual music programs into 24-hour formats. Thus were born Top 40, Middle of the Road, Beautiful Music. Each station became something distinct. The days of being "all things to all people" on one radio station virtually disappeared.

The stories of radio's rejuvenation have been told plenty of times. The names Todd Storz, Gordon McLendon, and Rick Sklar are the stuff of legend because those men did not view the future of radio in terms of its past. The change to format radio stimulated another "Golden Age" as teenagers of the Baby Boom discovered Top 40 radio playing their music.

I was ten years old in 1955 when radio's evolution was taking place. With the exception of a few evenings with my parents listening to what remained of the old shows, all my radio experiences were tied up with the new disc jockeys and the new music—rock 'n' roll. I had no understanding of the plight of the radio industry against the threat of television. I assumed that it had been that way all along, one station for me and my friends, another for my parents.

Now that I've studied radio of that time and have had the chance to inter-

view people who either made it happen or watched it happen, I find the stories of rejuvenation in stark contrast to what was called radio's "death." There's further contradiction: The number of stations in the U.S. has grown from 700 then to more than 11,000 now! There's no indication that the number of signals is going to decrease. Technology was good to radio in terms of its ability to expand its numbers, just as technology has created radio's challenges.

Futurist Alvin Toffler wrote that "new technologies make diversity as cheap as uniformity." That applies to radio, too. The industry's newly formulated formats fragmented into narrower niches as space was made available on the dial for new facilities.

As radio expanded in the seventies and eighties, so did cable television. Again, radio was challenged by technology.

CNN and MTV were the eighties equivalent of "moving from the radio desk to the TV desk." Both networks borrowed radio's strong, cohesive positioning by using 24-hour vertical programming in the emerging cable medium. A staggering number of video music shows followed in MTV's wake. Record companies transferred promotional dollars from radio play to production of video clips.

What was radio's response? Radio met cable's challenge head on with adaptation. The result was Contemporary Hit Radio in the eighties, then a new breed of Country for the nineties.

Another of radio's Golden Ages is emerging as this book goes to press: the impact of talk radio on national discourse. A cohesive, singular, pop music doesn't exist amid the format fragmentation and fractionalization of the nineties. So words are stimulating Baby Boomers as adults the way rock 'n' roll did when they were teenagers.

Rush Limbaugh made his mark by speaking for large numbers of conservative Baby Boom males. Howard Stern expressed in words (often outrageous words) what rock singers have said in music. From politics to sex to comedy, the spoken word creates a new context for radio.



There may be context, but content is often no more than rhetoric. Talk show hosts rely on neatly turned slogans that amount to bumper sticker philosophy. At the root of the rise of talk radio is the glut of information confronting consumers. Talk shows are an attempt to sort it all out, to filter data from information overload.

There's a theme here. In each of radio's "Golden Ages," as I've defined them, technology is the driving force:

In the 1930s and 1940s radio itself was the driving technology. There was total national distribution of a free-entertainment medium.

In the fifties, TV challenged. At first radio worried, then it reinvented itself.

Radio's reinvention of the fifties and sixties took advantage of the phonograph record, especially the new 45 rpm discs.

In the late sixties and early seventies the LP record became the primary medium for popular music. Radio capitalized.

The technology of improved audio married the LP and FM sound to reinvent radio once again in the seventies.

The CD did the same for radio in the eighties.

The cable boom of the eighties caused radio to react, first with new vertical formats, then with music that had been seen on MTV and other music channels.

Instant and constant access to information prompted the rise of radio talk shows to "sort it all out" and to speak for the "average person."

The next Golden Age will be created by users of this book responding to the medium's next challenge: How do we use radio's unique attribute—portability—in a wired world?

Broadcasters line up on either side of that question. Some say on-line services will offer most of what radio can deliver—news, weather, music, odd facts—and that the click of a mouse can kill radio as we know it.

I don't believe it. I'm too optimistic about radio and its ability to adapt. I'm optimistic, too, about your ability to respond to what you'll learn in this book—a real world view of a medium that knows how to reinvent itself and re-energize itself.

See you in the Golden Age—the one you create!

*Radio waves  
sing, dance,  
glide and spin  
through the air  
like strange magic,  
delivering messages  
as individual  
as the fingerprints  
of each listener.*

Lindy Bonczek

# Preface

---

It seems remarkable that a decade has passed since the publication of the first edition of this text. Truly gratifying is the fact that during this time it has become the most widely adopted book of its kind at colleges throughout the country and enjoys a sizable following overseas, as well as among industry practitioners. It is what may be called the “standard,” and it has become so because of its 3-C formula—comprehensive, concise, and candid.

Since the first outing of this book, the radio industry has witnessed enormous change. It has been a time of significant technical innovation and economic flux. The advent of digital audio promises to revolutionize broadcast signal transmission and reception. Of course, with such a transformation come challenges and concerns, and these will doubtlessly occupy the thoughts of broadcasters well into the next millennium.

When this book was first published in 1986, 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 eighties were auspicious years for the magic medium.

The tide shifted as the final decade of the twentieth 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. The industry has indeed experienced many ups and downs since its inception over 75 years ago, however, and it will doubtlessly know the thrill of ascent and the angst of decline again.

It is impossible to imagine a world without David Sarnoff's radio music

box, but that is not necessary for 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 group-owned radio, as well as the rural daytime-only outlets spread across the country.

We 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. Therefore, the departments and personnel that comprise a radio station are our principle focus. We 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.

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



In addition, we would like to express our sincere appreciation to the many individuals and organizations that assisted us in so many important ways. Foremost among them is Ed Shane, whose contribution to this edition brings new meaning to the term generosity. A profound word of thanks is also due Jay Williams, Jr., Ralph Guild, Bill Siemering, Lee Abrams, Lynn Christian, 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 station cited in this book.

Countless companies 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, *Broadcasting and Cable*, Burkhart Douglas and Associates, Coleman Research, Communication Graphics, CFM, CRN, Denon, DMR, the FCC, FMR Associates, Halper and Associates, IGM Inc., Interep Radio Store, International Demographics, Jacobs Media, Jefferson Pilot Data Systems, Lund Consultants, Marketron Inc., Mediabase, Metro

Traffic Network, MMR, Museum of Broadcast Communications, National Association of Broadcasters, Premiere Radio Networks, Public Radio International, QuikStats, Radio Advertising Bureau, Radio Aahs, *Radio Ink*, *Radio and Records*, RTNDA, Radio Computer Systems, RCA, Satelillite Music Network, Shane Media, Society of Broadcast Engineers, Jim Steele, Annette Steiner, Superaudio, Tapsan, TM Century, Westinghouse Broadcasting, and Westwood One.

Since the publication of earlier editions, it is safe to assume—in an industry noted for its nomadic nature—that a number of contributors have moved on to positions at other stations. 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. We have therefore let stand the original addresses and call letters of contributors except when new information has become available; in those cases, changes have been made.

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# State of the Fifth Estate

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## IN THE AIR— EVERYWHERE

As we approach the new millennium, radio remains ubiquitous. It continues to be the most pervasive medium on earth. There is no patch of land, no piece of ocean surface, untouched by the electromagnetic signals beamed from the more than twenty-seven thousand radio stations worldwide. Over a third of these broadcast outlets transmit in America alone. Today, over eleven thousand stations in this country reach 99 percent of all households, and less than 1 percent have fewer than five receivers. There are nearly a billion working radios in the United States.

Contemporary radio's unique personal approach has resulted in a shift of the audience's application of the medium: from family or group entertainer before 1950, to individual companion in the last half of the century. Although television usurped radio's position as the number one entertainment medium four decades ago, radio's total reach handily exceeds that of the video medium. More people tune in to radio for its multifaceted offerings than to any other medium—print or electronic. Practically every automobile (95 percent) has a radio. "There are twice as many car radios in use (approximately 132 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).

Seven out of ten adults are reached weekly by car radio.

The average adult spends over two-and-a-half hours per day listening to radio. A survey conducted by RADAR (Radio's All Dimensional Audience Research) concluded that 95 percent of all persons over twelve years old tuned in to radio. In the 1990s, this computes to around 200 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.

The number of radio receivers in use in America has risen by more than 50 percent since 1970, when 321 million sets provided listeners 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 three billion dollar mark annually, up 30 percent since 1970. 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 Radio Advertising Bureau concluded that seven out of ten computer purchasers and wine and beer drinkers tune into the medium daily.

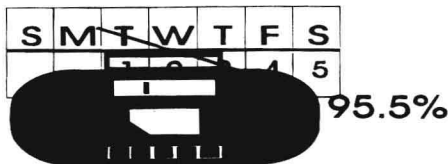
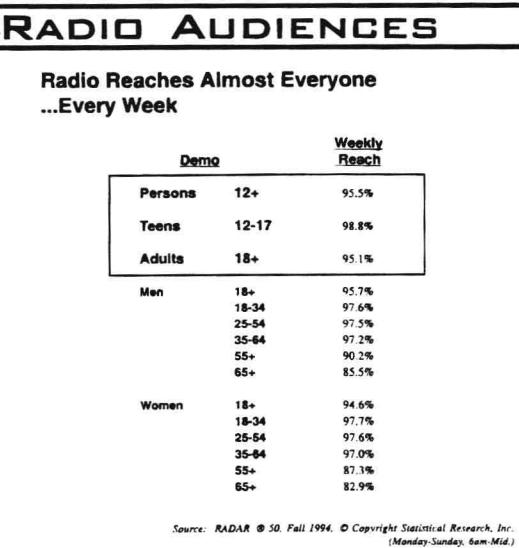
Radio appeals to everyone and is available to all. Its mobility and variety of offerings have made it the most popular medium in history. To most of us, radio is as much a part of our day as morning

FIGURE 1.1  
Radio celebrated its  
75th birthday in  
1995.



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 recent 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.

FIGURE 1.2  
Courtesy RAB.



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.

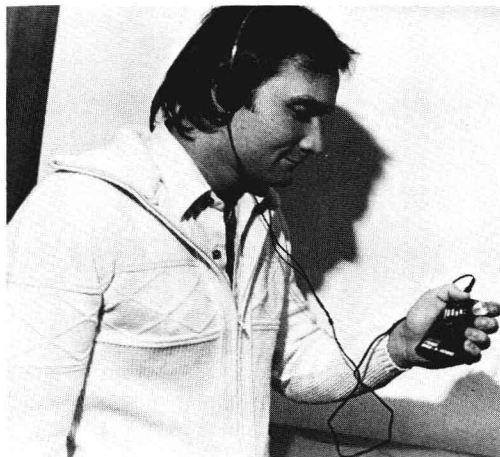
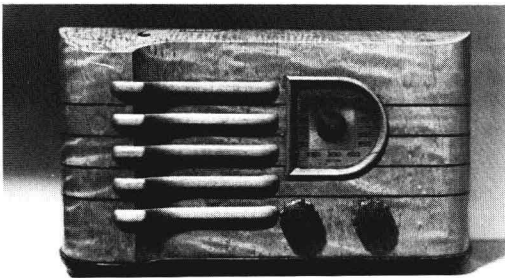
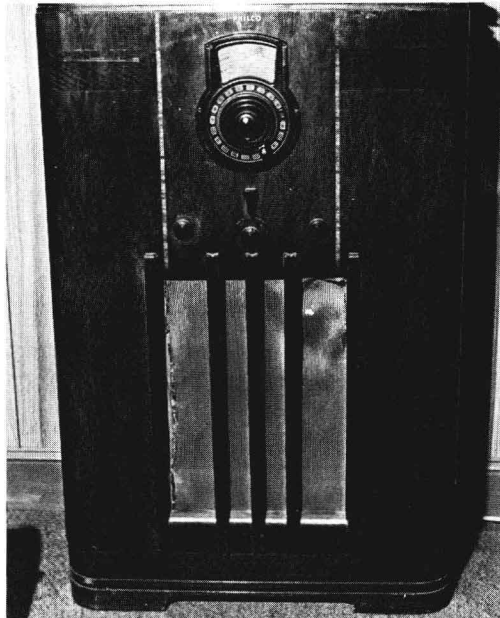
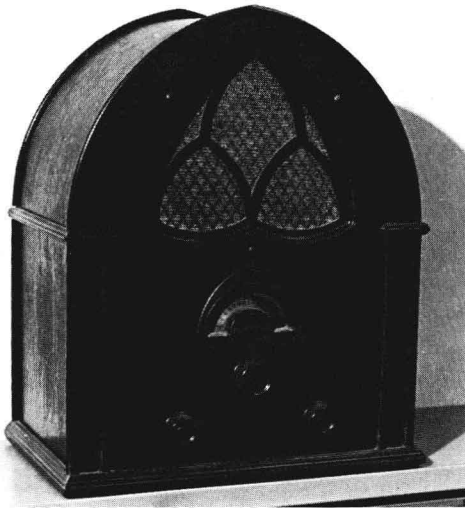
### A HOUSEHOLD UTILITY

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 debate continues to be waged today as to just who should rightfully be honored with the title "father of radio." There are numerous candidates who actually take us as far back as the last 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 called grand patriarch of radio is Guglielmo Marconi, who is credited with devising a method of transmitting sound without the help of wires—thus "wireless telegraphy." There are a host of other inventors and innovators who 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



**FIGURE 1.3**  
Radio receivers  
from the medium's  
inception to the  
present.



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 allegedly 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 concluded that Sarnoff's 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.

## A TOLL ON RADIO

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

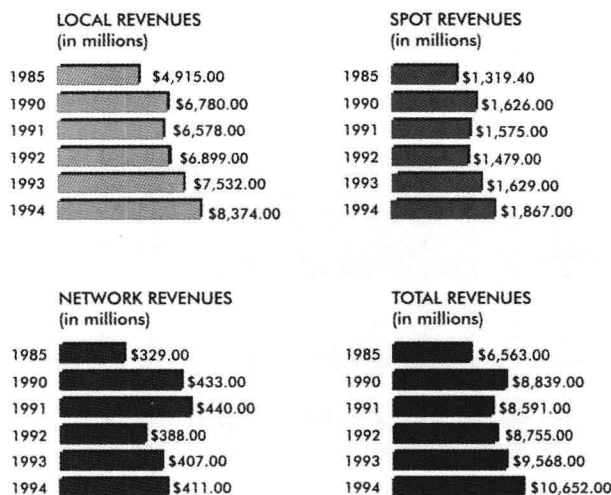
sands of Americans were purchasing the crude, battery-operated crystal sets of the day and tuning the two frequencies (750 and 833 kc) set aside by the Department of Commerce for reception of radio broadcasts. The majority of stations in the early 1920s were owned by receiver manufacturers and department 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.

The first paid announcement ever broadcast lasted ten minutes and was bought by Hawthorne Court, a Queens-based real estate company. 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.

FIGURE 1.4  
Courtesy RAB.

## RADIO FACTS

### Radio's Revenues Are Growing



Source: 1980-FCC (last year); 1985-present RAB estimates based on Radio Network Association, CMR, and 100+ market billing periods.

## 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 was in operation, the Columbia Broadcasting System (CBS, initially Columbia Phonograph Broadcasting System) began its



**FIGURE 1.5**  
David Sarnoff, the man who helped put radio into the home. Courtesy RCA.

network service with sixteen 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.



**FIGURE 1.6**  
Radio fans circa 1921. Courtesy Westinghouse Electric.