THE RADIO BROADCASTING MOUStry

Alan B. Albarran Gregory G. Pitts

The Radio Broadcasting Industry

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Alan B. AlbarranSouthern Methodist University

Gregory G. PittsUniversity of North Texas

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To my aunt, Judy Shaffer ABA

To my wife, Stephanie Qualls, and my son, Garrett Pitts GGP

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Preface

THE RADIO BROADCASTING INDUSTRY

We love radio. We both had the opportunity to work professionally in the radio industry in a variety of capacities. Radio represented more than just a job in the broadcast industry, it opened our eyes to the medium's unique potential. Best of all, the radio industry we worked in placed a strong value on cross-training and multitasking before these words entered corporate America. We both "did it all" from announcing to news reporting, from sales to engineering.

Our love for radio was based not just on the fact that we both worked in the industry. We grew up listening to the radio as the medium made the transition from AM to FM broadcasting, and as the industry moved from "mom and pop owners" to radio groups of 100 or more stations. So when the opportunity came up to participate in Allyn & Bacon's Series in Mass Communication by writing a book on the radio broadcasting industry, we jumped at the opportunity. We're grateful to Al Greco, the series editor, and to Karon Bowers, our editor at Allyn & Bacon, for their support of this project.

In this book, we have done our best to try to provide the definitive work on the contemporary radio industry. Although the book's primary audience will be college students using this book for a course related to radio or broadcasting in general, it should also appeal to industry professionals, particularly new employees in the radio industry. The radio industry is not a stagnant entity, and there will no doubt be many changes in the coming years. In *The Radio Broadcasting Industry*, we have captured the contemporary aspects of the radio industry as it exists at the beginning of the twenty-first century.

We, the coauthors, shared in the writing of the book's first chapter. Greg is the author of Chapters 2, 5, and 6; Alan is the author of Chapters 4, 9, and 10. During the

writing we shared notes, sources, and various resources to make this a labor of love. Other colleagues wrote the three remaining chapters. Chapter 1 provides an overview of the contemporary radio industry and sets the stage for the succeeding chapters. In Chapter 2, the rich history and development of radio are presented, from the earliest innovations to radio in 2000 and beyond. Contemporary readers should know that people were as excited about radio during its early years as they are about the Internet today.

Dr. David Sedman, a colleague at Southern Methodist University, is the author of Chapter 3, Radio Regulation. Professor Sedman does an outstanding job of detailing the origins of radio regulation, the deregulatory periods, and current regulations.

Chapter 4 examines radio management and economics. The topics include radio management, supply and demand relationships in radio, and radio performance and profitability. Chapter 5 covers radio programming with a thorough discussion of current programming practices and radio formats. Chapter 6 covers the subject of branding and advertising, looking in detail at the subject of radio advertising from a sales perspective.

Dr. Kathleen Fox, another colleague at SMU, has written Chapter 7, which is devoted to the subject of research in radio. Dr. Fox introduces the reader to the major topics of sales research and programming research, and explains important terminology used in research.

Chapter 8 examines noncommercial radio. Dr. Phil Thompsen of West Chester University has written this chapter. We are grateful to Phil for his fine work.

Chapter 9 focuses on key individuals in the contemporary radio industry. The chapter profiles ten individuals classified among three groups: moguls, stars, and innovators. Chapter 10 examines radio in the twenty-first century. As one might surmise, technology promises to change how the radio signal is delivered to the listener and how the listener uses the radio.

Several reviewers contributed helpful comments throughout the writing process. We thank Louise Benjamin, University of Georgia; Vin Burke, University of New Haven; Sam Sauls, University of North Texas; and Ed Shane, Shane Media Services, for providing astute and thoughtful reviews of our work.

We are fortunate to teach and to do our research in the Dallas-Fort Worth area, one of the major media markets in the United States. Here we have the opportunity to interact regularly with professional radio broadcasters. These experiences have made this book even stronger. J. T. Anderton of *Duncan's American Radio* provided insightful comments on radio format evolution.

Last, but certainly not least, we are grateful for the support of our families during the work on this project.

Alan B. Albarran Gregory G. Pitts

1

Radio Broadcasting

An Orientation

"... and now we know we are not the only creatures in the universe." (From the 1938 Mercury Theater Radio Broadcast of H. G. Wells's War of the Worlds.)

"This is London." (Edward R. Murrow's famous introduction during broadcasts from the Battle of Britain.)

"December 7, 1941. A day which will live in infamy. . . . " (President Roosevelt's address to Congress and the nation the day after the Pearl Harbor attack.)

"The Giants Win the Pennant! The Giants Win the Pennant!" (A screaming Russ Hodges describes the home run by Bobby Thompson that came to be known as the "shot heard round the world.")

"You're here with the Wolfman. . . . " (Wolfman Jack)

"And now, on with the countdown." (Casey Kasem, host of American Top 40.)

"And I am my kid's mom." (Dr. Laura Schlesinger)

A FAMILIAR SOUND

These clips present a brief montage of the many memorable lines drawn from the rich history of the radio industry. Perhaps no form of mass media has undergone as much change and evolution as that of radio, which continues to reinvent itself today. This chapter provides an introduction to the radio industry and previews some of the issues discussed in later chapters.

Radio remains an important entertainment and information source, not only for Americans, but also for people around the world. This book centers on the radio industry in the United States, where stations operate much like any other business—to make a profit. What you hear broadcast may sound like it's all fun. In reality, it is part of the station's strategy to attract and retain an audience that could be spending its time with other radio stations or media outlets.

RADIO: IT'S EVERYWHERE

According to the Federal Communications Commission (FCC), there are 4,783 AM stations, 5,766 commercial FM stations, 2,066 noncommercial FM stations, and another 3,000 FM translators or boosters. With so many stations, there are few areas in the United States that do not receive multiple signals. In larger cities, a listener may be able to choose from as many as two dozen AM stations and nearly four dozen FM stations. Worldwide, there are few places on earth where the signal of a radio station intended for reception by the general public cannot be received.

These 12,000 radio stations provide local radio service to a specific geographic area, or market. In the radio industry, markets are not defined according to geographic borders, but rather to the range their signals can reach in a given locale. Thus, a market may contain several different communities, counties, and even carry across state lines. Because radio broadcasting is interstate, it falls under the jurisdiction of the Department of Commerce, which in turn regulates the industry via the FCC.

The FCC classifies and assigns stations to different categories based on the type of transmission (AM or FM), transmitter power, and assigned frequency. This classification system will be discussed in more detail later in the chapter. Local stations may be affiliated with a network programming service to provide news and features, and also music programming. Every station has the same goal: attract listeners, and then sell access to those listeners to advertisers.

Over the years, the U. S. radio audience has experienced a decline in terms of listenership. The typical person spent 1,205 hours per year listening to the radio in 1986.² That same person spent 1,082 hours with radio in 1997.³ Listenership is expected to drop to 1,040 hours per year by 2002. Between 1992 and 1997, radio listening at home, where 40 percent of all listening takes place, had a compound annual drop of 2.3 percent, while listening in automobiles increased at a compound

annual rate of 2.5 percent. Listening at places other than home or car did not change. Even as listenership drops, the number of stations on the air has continued to increase. The growth in the number of radio stations has actually given station operators new opportunities to alter the product they provide consumers.

Satellite-delivered audio programming will expand the listening options of many consumers. In the United States, two companies, Sirius Satellite Radio and XM Satellite Radio, will offer DARS (digital audio radio service), programming delivered nationally by geosynchronous satellites.⁴ Listeners will pay a monthly subscription fee to receive the service, though each company anticipates providing fifty channels of commercial-free programming plus another fifty channels of programming that may include commercial content. WorldSpace will offer a similar product for listeners in Africa, Latin America, and the Middle East.⁵

Radio stations are also broadcasting via the Internet. College students living in a dorm hundreds of miles from their hometown can listen to a favorite station through the station's Website. The popularity of the Internet has led to the creation of several Internet-only radio stations. These facilities may sound just like any other radio site available through the Internet, but the stations do not use the electromagnetic spectrum to transmit a signal. In that regard, they are not radio broadcast stations but audio programming services, delivered over the Internet. Chapter 10 examines the impact of these services on traditional stations.

RADIO'S EVOLUTION

To better understand how today's radio industry operates, we will first review the roots of the radio industry. During the 1930s and 1940s, radio stations operated in a manner similar to the current television industry, providing the best programming during the primetime audience hours.⁶ (Television stations primarily pass along their most attractive network programming during primetime.)⁷ Radio stations used to rely on national radio networks to provide the bulk of their programming, and offered limited local programming.

The national radio networks' programming ranged from soap operas to classical music and opera performances. The most popular programs were comedy, variety, and drama programs that aired during primetime. With the advent of television in the 1950s, the national networks moved their most popular performers and programs to the new visual medium, forcing radio to reinvent itself as a "local" programming service. Radio stations began to adopt specific formats, and targeted different audience groups based on the content they offered.

Today, a multitude of radio formats offer even greater differentiation and choice to listeners Most radio stations depend on programming they produce, combined with community identity, to attract and retain listeners. Station competition has led to the identification of niche audiences to which programming is targeted. Radio formats come with names like AAA (Triple-A) for album adult alternative,"

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which should not be confused with the alternative format.⁸ Jammin' Oldies shouldn't be confused with oldies or golden oldies. Rhythmic Crossover shouldn't be confused with either contemporary hit radio, urban contemporary, churban, or rap. More detailed discussion on radio programming is presented in Chapter 6.

Stations have continued to face new competition for listeners, especially from recorded music. Radio was forced to compete with 8-track tapes in the 1970s, cassettes in the 1980s, and CDs in the 1990s. Minidiscs, the Internet, and MP3s will present new challenges for radio listener retention. Throughout its evolution, radio has always had great resiliency in its ability to adapt to the competitive environment.

RADIO—A LOCAL MEDIUM

For the most part, we think of radio broadcasting as being built around the concept of localism or local service. Research indicates that people listen to radio the most in the morning, typically when getting ready for work or school and commuting to work or school. It's certainly true that radio is easier to mentally tune in or tune out than television. Another reason for greater morning radio listening is that radio stations provide listeners with key news, weather, traffic, and other relevant information that will help the listener prepare for the day.

Broadcasters divide the day into segments called **dayparts** that provide a means to track radio listening and schedule programming. The typical dayparts are morning drive, from 6 A.M. until 10 A.M., midday, from 10 A.M. until 3 P.M., afternoon drive, from 3 P.M. until 7 P.M., nighttime, 7 P.M. until midnight, and overnight, midnight until 6 A.M. Each of these dayparts roughly follows listener patterns. For example, the midday period from 10 A.M. until 3 P.M. corresponds with listening at work. Afternoon drive, 3 P.M. until 7 P.M. corresponds with the end of the workday and the commute home.

Each radio station serves a specific city of license. The station's programming is intended to serve that city and perhaps adjacent communities. In the cases of suburban areas, the concept of city of license has become lost. For example, the Dallas–Ft. Worth, Texas market includes stations that are licensed to a variety of communities in the DFW Metroplex. In most instances, the stations have abandoned the concept of programming to a specific community of license. Recognizing that their signals cover a much larger area, the stations target their programming to the entire metropolitan area. Table 1-1 lists some of the stations serving the Dallas–Ft. Worth market along with their actual city of license.

Stations in smaller towns have continued to retain a local identity. The smallest communities might not need traffic reports nor is there a great deal of breaking news, but these stations furnish listeners with community announcements and they are often an important source of weather and farm news. For example, WGOH-AM in Grayson, Kentucky received a Crystal Radio Award for community service in 1999 from the National Association of Broadcasters. Chapter 5 includes a profile of the local programming commitment of this station.

TABLE 1-1 Dallas Fort Worth FM Stations

These FM stations call Dallas or Fort Worth home, yet only 19 actually list Dallas or Fort Worth as their city of license.

Station Call Letters	Frequency	City of License
KNTU	88.1	Denton
KEOM	88.5	Mesquite
KTCU	88.7	Fort Worth
KETR	88.9	Commerce
KMQX	89.1	Springtown
KNON	89.3	Dallas
KERA	90.1	Dallas
K213BP	90.5	Irving
KCBI	90.9	Dallas
KDKR	91.3	Decatur
KVTT	91.7	Dallas
KTTV	92.1	Glen Rose
KXEZ	92.1	Farmersville
KZPS	92.5	Dallas
KKMR	93.3	Haltom City
KLTY	94.1	Dallas
KDGE	94.5	Gainesville
KWRD	94.9	Arlington
KHYI	95.3	Howe/Plano
KSCS	96.3	Fort Worth
KNKI	96.7	Flower Mound
KEGL	97.1	Fort Worth
KBFB	97.9	Dallas
KLUV	98.7	Dallas
KHCK	99.1	Denton
KPLX	99.5	Fort Worth
KRBV	100.3	Dallas
WRR	101.1	Dallas
KTXQ	102.1	Fort Worth
KDMX	102.9	Dallas
KVIL	103.7	Highland Park
KMRR	104.1	Sanger
KKDA	104.5	Dallas
KTCY	104.9	Pilot Point
KYNG	105.3	Dallas
KRNB	105.7	Decatur
KHKS	106.1	Denton
KDXT	106.7	Grandbury
KZDF	106.9	McKinney
KZDL	107.1	Terrell
KOAI	107.5	Fort Worth
KDXX	107.9	Corsicana

Source: Radio Digest.Com, available online at http://www.radiodigest.com/dallas/dial/fm_dial.htm and online through the FCC at http://www.fcc.gov/mmb/asd/amq.html and http://www.fcc.gov/mmb/asd/fmq.html.

A LOOK AT LISTENERS

Receiver technology also helps increase the number of different stations available to the audience. Listeners may be categorized in a number of ways. One is to talk about **preset listeners** and **scanner listeners**. The preset listener may identify six to eight "favorite" stations and set the preset buttons on the radio to these stations. While one or two of the presets may garner most of the listener's attention, when those stations are no longer airing programming the listener wants, the listener may select another preset station.

Scanners jump from one station to the next. Rather than being loyal to a group of preset stations, these listeners hit the scan or seek button on their radio whenever they hear objectionable programming. They are less concerned with who (what station) they are listening to and more concerned with what (music or other programming) they are listening to. For many of these listeners, music utility plays a prominent role in station selection.

Think of how you feel about other products you use, such as soft drinks. Are you loyal to one brand? Or is Coke equal to Pepsi and also equal to Dr. Pepper? Is it the station that matters (along with the personality of the station created by its on-air image campaign) or just the music playing at the moment that matters? Chapter 6 will discuss the efforts by stations to create brands with listener value.

International Listeners

Shortwave broadcasting continues to bring news and information to listeners in many countries in Africa, South America, and Asia. The governments of the United States and Great Britain continue to operate shortwave radio services. These program services, referred to as "external broadcasting services" because their programming is intended to be listened to by people outside of the home country, include the Voice of America (VOA) and British Broadcasting Corporation World Service (BBC World Service). VOA airs programming each week in 53 languages to an audience of 91 million people. BBC World Service similarly airs programming each week in 43 languages. 11

A THUMBNAIL VIEW OF RADIO REGULATION

Congress, in the Communications Act of 1934, created the Federal Communications Commission (FCC) to formally replace the previous Federal Radio Commission (FRC). The FCC's purpose, in part, is "regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States a rapid, efficient, Nation-wide, and world-wide wire

and radio communications service. . . . "12 The five FCC commissioners are appointed by the president and confirmed by the Senate. The Mass Media Bureau has day-to-day responsibility for developing, recommending, and administering the rules governing radio and television stations.

New station allocations are based on demonstrated needs of communities for additional broadcast outlets and on engineering standards that prevent interference between stations. Though the FCC expects stations to be aware of the important problems or issues in their communities and air programming to address those issues, the FCC does not select or control the material broadcast.

The Communications Act prohibits the FCC from censoring broadcast programming. They can fine a station or revoke its license if it has, among other things, aired obscene language, broadcast indecent language when children are likely to be in the audience, broadcast some types of lottery information, or solicited money under false pretenses.¹³ The FCC also licenses television stations, microwave stations, and a range of mobile radio services used by broadcasters and various industries.

Radio stations receive a renewable eight-year license. The license holder can expect nearly automatic renewal if the owners have attempted to operate the station within FCC guidelines. Each radio station produces a carrier frequency onto which the programming material is added before signal transmission. The signal will travel as far as geographic and weather conditions allow. This also means that radio signals can and do interfere with each other. Each radio station not only produces the signal on its frequency but it also creates interference for stations on nearby frequencies.

The frequencies just above and below a station's frequency are called *first adjacent frequencies*. For example, the adjacent frequencies for Z100, WHTZ-FM 100.3 MHz, in New York City are 100.1 MHz, and 100.5 MHz. There are also second and third adjacent frequencies for positions two or three frequencies above or below the station's carrier.

The frequencies on which stations broadcast are part of the **electromagnetic spectrum.** The spectrum consists of invisible rays of light. The first successful commercial broadcast service for public listening in the United States used amplitude modulation (or AM) technology to transmit programming to listeners. AM listenership has been declining for the past twenty-five years but AM is still called "standard broadcasting" because it was the first system in use.

AM stations occupy a portion of the spectrum called "the medium wave band," from 535 kilohertz (kHz) to 1705 kHz. Each AM station is spaced 10 kHz apart with the first station operating at 540 kHz, the next at 550 kHz, and so on to the last station operating on 1700 kHz. The upper portion of the AM band from 1605 to 1705 kHz was authorized for broadcasting in 1991. Congress, along with the FCC, sought to reduce some of the station interference on AM by adding the new spectrum space and moving some existing stations to the new band. The stations operating on the expanded AM frequencies were given higher operating power and better

nighttime coverage. Millions of radios built prior to 1991 cannot receive stations on the upper portion of the band, which, along with AM's general loss of listeners, has made the move less effective than had been hoped for.

The FCC uses three classification systems to identify AM stations. Class A stations are called "Clear Channel stations" and may operate with up to 50,000 watts of power during the day and night. The Federal Radio Commission and the Federal Communications Commission created these stations to provide national radio service. The FCC has designated certain AM frequencies primarily for clear channel service. Usually no more than two stations will be authorized to operate at night on a clear channel. These stations have a coverage radius of about 750 miles. Class B stations operate day and night with power levels between 250 watts and 50,000 watts. Class C stations operate with power levels up to 1,000 watts, and broadcast on a group of local frequencies. These frequencies were designated for day and night service at a time when nearly all radio listening was to AM rather than FM. Class D stations operate with a daytime power between 250 and 50,000 watts. If nighttime broadcasting is allowed, the station's power is 250 watts or less. ¹⁶ Slightly more than half of all AM stations are limited to daytime operation.

AM signals follow the earth's surface and are called "ground wave signals." They provide primary local reception. The signal typically travels a maximum of 100 to 200 miles. The station's signal also travels into the air where it eventually attenuates or grows so weak that it fades away. At night, that same signal is reflected from the ionosphere and may be received by listeners several hundred miles away. This is why a listener, driving at night across the United States, might hear clear channel station WWL (870 kHz) from New Orleans while driving through North Carolina. The traveler might decide to change to WLW (700 kHz) in Cincinnati, or WCBS (880 kHz) in New York. These are three examples of 50,000-watt clear channel stations. Skywave signals are subject to fading and will vary with location and time of year.

While useful for the traveler, AM skywave signals can also be a form of interference among stations. To eliminate the interference, many stations are required to cease broadcasting, reduce power, or change the pattern of their station's antenna transmission at local sunset. The allocation of commercial AM service in its present medium waveband, with the static and interference that listeners sometimes think are typical of the AM band, resulted because commercial radio developed around the frequencies used by ships at sea for distress signals. Radio was first widely used for ship-to-shore communications. The limited technical knowledge about the spectrum and radio transmission led most inventors to work to improve the original ship-to-shore system rather than to try to perfect a system for home listening.

FM (or frequency modulation) stations occupy a portion of the spectrum called VHF or Very High Frequencies, from 88 megahertz (MHz) to 108 MHz. Each FM station is spaced with .2 MHz or 200 kHz separation, with the first station operating at 88.1 MHz, the next at 88.3 MHz, and so forth until the last station operating on 107.9 MHz. This produces 100 FM frequencies or channels. The lower portion of

the FM band from 88.1 to 91.9 MHz is reserved for noncommercial station operation. Television channels 2–13 are also part of the VHF band.

Unlike AM stations, which produce groundwave and skywave signals, FM signals travel in a manner called "line-of-sight." The signal travels as far as it can "see" to travel. The curve of the earth and geographic features (mountains or valleys) limit the coverage area. For this reason, FM stations rely not only on the station's transmitter power to create the coverage area but also on the height of the station's antenna. FM station engineers (and the FCC) use the term *HAAT* (or height above average terrain) to determine the height of a station's antenna.

The FCC also uses three classification systems to identify FM stations. Class A stations operate with a maximum power of 6,000 watts and a HAAT of 100 meters. Class B stations operate with a maximum power of 50,000 watts and a HAAT of 150 meters. Class C stations operate with up to 100,000 watts and a HAAT of 600 meters. Additional subcategories have been created as the FCC has attempted to allow station operators to obtain the maximum coverage area possible to serve their listeners. Table 1-2 lists the FM station classifications and powers. Chapter 3 provides more discussion of radio regulation.

TABLE 1-2 Station Classifications

Station Classification	Maximum Station Power and HAAT ¹	Primary Signal Radius Protection	
Class A	6.0 kW / 100 meters	28.3 km	
Class B1	25.0 kW / 100 meters	44.7 km	
Class B	50.0 kW / 150 meters	65.1 km	
Class C3	25.0 kW / 100 meters	39.1 km	
Class C2	50.0 kW / 150 meters	52.2 km	
Class C1	100.0 kW / 299 meters	72.3 km	
Class C	100.0 kW / 600 meters	91.8 km	

¹HAAT refers to the height above average terrain of an FM station's radiating antenna. Quite literally, each FM station must determine, from its tower location, the effect the surrounding topography will have on the propagation of the station's signal. By measuring the surrounding terrain, the FM broadcaster is also able to determine the height of the station's transmission antenna above these obstacles. For FM station signals, which travel line-of-sight, HAAT is as important as transmitter power.

²Class B and B1 stations are authorized only in Zones I and I-A, which include the following states and areas: CA (south of 40° latitude), CT, DC, DE, IL, IN, MA, MD, coastal ME, MI (south of 43.5° latitude), NJ, NH (south of 43.5° latitude), NY (south of 43.5° latitude), OH, PA, PR, RI, northern and eastern VA, VI, VT (south of 43.5° latitude), southeastern WI, WV. Class C, C1, C2, and C3 stations are not authorized in Zones I or I-A, but may be authorized elsewhere.

This information is available online at http://www.fcc.gov/mmb/asd/fmclasses.html

EFFICIENT RADIO SPECTRUM USAGE

The licensing process and station coverage areas allow the sharing of frequencies. Dozens of stations can therefore broadcast on a single frequency. Table 1-3 lists the stations operating on 100.7 MHz, 100.9 MHz, and 101.1 MHz in Connecticut, Massachusetts, New Hampshire, and Vermont. Though stations share frequencies, each station has unique call letters that identify the station. Typically, stations east of the Mississippi River have call signs that begin with W and stations west of the Mississippi River have call signs beginning with K. There are exceptions. Usually these stations were assigned a call letter combination before the Mississippi River became the dividing line. Examples are KDKA in Pittsburgh and WHO in Des Moines, Iowa.

Many stations might use words like Power, Rock, or Kiss before their frequency (Power 97, Rock 103, and Kiss 106) or individual letters (Q-107 or Z-98). Some examples include WUSL in Philadelphia, which refers to itself as Power 99; WQLT in Florence, Alabama, calls itself Q-107; WNNX in Atlanta is 99X, and WHTZ in New York is Z-100. All stations are required by the FCC to identify themselves once each hour, near the top of the hour, by the specific call letters and the city to which the station is licensed.

TABLE 1-3 Station Frequency Sharing

Approximately 80 stations throughout the United States are licensed to operate on each of the three FM channels shown below. Even in the Northeast, where states are geographically small but have greater population density, it is possible for seven stations to share these frequencies without interfering with each other. Similar situations are present throughout the United States.

Call Letters	City of License	Power	Antenna height
100.7 MHz			
WZLX	Boston, MA	21.5 kw.	777 feet, HAAT*
WVAY	Wilmington, VT	135 watts	1,460 feet, HAAT
100.9 MHz			
WTYD	New London, CT	3 kw.	328 feet, HAAT
WRNX	Amherst, MA	1.35 kw.	692 feet, HAAT
WGTK	Middlebury, VT	3 kw.	300 feet, HAAT
101.1 MHz			
WWKJ	Mashpee, MA	3.7 kw.	253 feet, HAAT
WGIR	Manchester, NH	11.5 kw.	1,027 feet, HAAT

^{*}Some stations may appear to exceed the FCC limits on power or HAAT. Instead, when stations increase their antenna height they must correspondingly reduce the transmitter power. Station WVAY in Wilmington, VT is a Class A station. The low power, 135 watts, is due to the extreme height of the antenna.

Worldwide, thousands of radio stations broadcast programming intended for reception by the general public. The stations include AM or medium-wave stations, FM stations, and HF or high-frequency or shortwave stations. Broadcast stations may be licensed to private owners, as is most common in the United States, the government may own the stations, or they may be operated by a government-authorized but independent agency. The best example of the latter category is the British Broadcasting Corporation (or BBC). The United Kingdom now has private station ownership but at one time the BBC held a monopoly on broadcasting in the United Kingdom.

Besides the number difference on your radio dial, there is another marked difference between AM and FM broadcasts. As mentioned earlier, all broadcast transmitters produce a **carrier wave**. The carrier wave is the frequency on which the station operates. **Modulation**, which means change, is the process by which the programming aired on the station is added to the carrier wave. How this change in the carrier wave takes place is the difference between AM and FM.

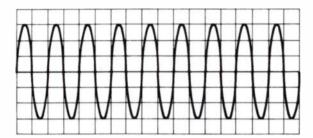
All carrier waves begin as sine waves. Figure 1-1 shows an unmodulated carrier wave, an amplitude modulated (AM) carrier wave, and a frequency modulated (FM) carrier wave. The number of sine wave cycles that are completed in one second determine a station's frequency. (We use the term *Hertz* as convenient shorthand for the longer term *cycles-per-second*.)¹⁸ An AM station broadcasting on 870 kHz generates 870,000 sine wave cycles in one second. An FM station broadcasting on 98.7 MHz generates 98,700,000 sine wave cycles per second. What happens when the programming is added to the carrier wave is different for AM and FM stations.¹⁹

The modulation process for the AM station results in variation of the amplitude or height of the carrier wave. The FM modulation varies the frequency of the carrier wave. Why don't we have just one standard? Amplitude modulation was invented first. It took a number of years to perfect transmission and reception of AM signals. By the time FM was first demonstrated to the public, hundreds of radio stations were already entertaining millions of listeners. Making an abrupt change from AM to FM would have meant that all the existing AM radios would have been worthless to their owners. Just as there are two operating systems for home computers, the Windows system and the Apple system, we have two radio systems. Each broadcast service does have some distinct advantages just as each of the computer operating systems has distinct advantages. For example, AM signals have greater coverage range while FM signals can deliver higher sound fidelity.

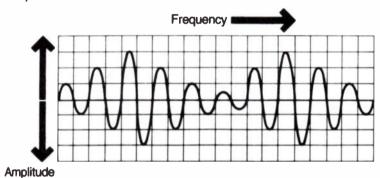
Consumers may see another radio service added within ten years or less. Stations may begin broadcasting digital signals using a system called IBOC, or In Band-On Channel.²⁰ The IBOC system would allow a station to continue to broadcast programming using normal AM or FM modulation, but the station could also send through the air a digital stream of information that would also be part of the station's carrier wave. The FCC is also considering whether digital broadcasting should be moved to an entirely new portion of the spectrum. Either way, consumers

FIGURE 1-1 Carrier Waves

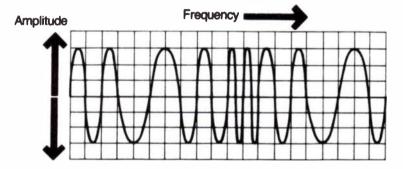
Unmodulated Carrier Wave



Amplitude Modulated Carrier Wave



Frequency Modulated Carrier Wave



would be required to purchase new receivers to hear the digital programming. The competitive advantage provided by the IBOC system would be superior audio compared to normal AM or FM programming.

RADIO PROGRAMMING

How does a radio station determine what to air? Stations use several tactics to decide programming. The most obvious approach is to determine what the public wants. If there were no stations presently serving an area, the station might seek to discover the format that is of greatest demand by potential listeners. If stations are already serving the audience, the newest station might try to determine how good a job the existing stations are doing and whether there is a weakness in their operation that can be exploited. Market research would be helpful in both determinations,

The type of station facility and the station's power are also important when determining programming. Some formats probably no longer belong on an AM station. Would listeners want contemporary rock music on an AM station if an FM station already existed? Probably not. If no FM programmed contemporary rock and the AM station adopted this format and was successful, it is likely that an FM station might change to this format and take away the AM station's listeners. A Class A FM station (6,000 watts) might not be successful trying to program country music if the market already had one or more Class C stations (100,000 watts) airing country. Assuming that market research supported the need for an additional country station, the Class A station might adopt a niche country format. Rather than compete head-to-head, a variation on the country format might work.

Stations have a variety of sources to help them make programming decisions. Once the market research has been collected and evaluated, a number of companies can supply music to stations. The music services supply either CDs, music that can be stored on a computer hard drive, or programming that can be delivered by satellite feed. The satellite feeds can be so inclusive as to provide music and on-air talent. Using a computer system, the station can be made to sound local, even though the announcers may be hundreds of miles away. Several radio groups currently use computers and telephone data lines to feed announcer comments from a central production facility to various station affiliates. Most station owners take this approach to control costs but also to improve the quality of talent listeners in a small market might be able to hear. More about programming in Chapter 5.

THE RADIO BUSINESS

Radio isn't just a source of entertainment or information. For the publicly traded corporations that own stations and hundreds of individual station owners, radio is a business. The radio industry sold more than \$15.4 billion worth of radio advertising

time in 1998.²¹ To answer the question of what business a radio station is in, one might respond, "it's in the business of selling opportunities for businesses to have people learn about a product." We might also say the station is in the marketing business: the station not only markets its programming but also markets the goods or services of clients who advertise with the station. The proliferation of stations means that the listener, not the manager or program director, determines the success of the station.²² Stations must attract and retain listeners not only from song to song but from hour to hour and daypart to daypart.

The airtime the station client is buying is intangible. It has a limited lifespan and, once gone, can never be recovered. For this reason, commercial time for sale by a radio station is a perishable commodity. The job of the account executives selling the airtime is to get the highest rate possible for the station but ensure that the time gets sold. If a station hopes to air an average of twelve minutes of commercial ads per hour, it cannot increase the commercial load to eighteen minutes one hour if only six minutes were sold the previous hour. Such a practice would alienate listeners who would seek other stations and might not return to the station with the heavy commercial load.

Commercials are commonly referred to as spots. Most stations sell spot time in lengths of thirty or sixty seconds. Sponsorships of programs, sports events, or program time are also sold but standard commercial units produce the majority of station revenue. Commercial purchases come through three areas. Local spot sales produce the majority of station income, though the amount of income varies according to market size. A station in a small town may earn 90 percent of its revenue from local ad sales. A major market station may earn only about 50 percent of its revenue from local spot sales. The other sources of ad revenue are regional advertising and national advertising.

Even if the station sets a maximum load of twelve minutes of commercials per hour, the mix of spot lengths could cause a station to air up to twenty-four commercials in one hour if all spots are thirty seconds in length. Likewise, if the station's clients all purchased 60-second spots, only a dozen commercials would air in an hour. Not all twelve or twenty-four would run at one time of course. Spot sets, clusters of between four and eight spots, are strategically placed to run at different times in the hour depending on the station's format. Besides paid commercials, some of the station's airtime is dedicated to airing station promotional announcements (promos) or nonrevenue-producing public service announcements (PSAs).

Station programming and promotional efforts create the perceived value of the station as a tool to help market a client's products or services. The station is assigned call letters but most stations prefer to use a word or letter as part of the promotional identity the station seeks to establish. For example, an Internet search for stations on frequencies between 92.1 and 99.9 MHz located thirteen stations using the letter X and their dial position as part of their on-air identification. When a station changes formats, it is relatively easy to dump one on-air identifier for another. More discussion of the relationship with the business side of the station operation is included in

Chapter 4, which discusses the economics of the radio industry, Chapter 5, which discusses programming, and Chapter 6, which discusses radio spot sales.

Radio is an interesting business that provides numerous opportunities for people wishing to enter the business either as talent, in sales, in production, engineering, or station ownership. There are also numerous career options in ancillary fields via advertising agencies, research firms, production houses, programming services, and networks.

THE PLAN OF THE BOOK

This chapter has provided an overview of the contemporary radio industry, and many of these topics will be discussed in detail in separate chapters. Following is a description of the other chapters in the book, which can be read either in sequential order, or as stand-alone separate topics.

Chapter 2 presents a historical look at the radio industry. Here you will learn about the development of radio, from the early innovators who invented the medium to the establishment of FM service and, ultimately, digital radio.

Chapter 3 is devoted to the subject of radio regulation, while Chapter 4 examines the management and economics of the radio industry.

Chapter 5 examines programming, while Chapter 6 centers on a topic critical in today's competitive radio industry—branding.

In Chapter 7, you will learn about the importance of research, and the way the radio industry utilizes different types of research to gain a competitive edge.

Chapter 8 is devoted to noncommercial radio, an important component of the radio industry. The chapter examines "public" radio broadcasting from both a local and national perspective.

Chapter 9 looks at key individuals who have shaped the radio industry during the last decade, and who will influence the medium in the twenty-first century. The chapter considers owners, talent, and innovators.

Chapter 10 looks at the future of radio. In this capstone chapter, issues related to technology, international broadcasting, programming, and ownership serve as a guide to assess radio's future.

Radio's rich history and diversity are difficult to capture in any single text. However, when you complete this book you will have a greater appreciation, and certainly a better understanding, of the radio industry, how it functions, and the significant role radio plays in America and throughout the world.

NOTES

¹"Broadcast Station Totals as of September 1999," available online at http://fcc.gov/mmb/asd/totals/index.html, accessed January 3, 2000.

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²The Veronis, Suhler and Associates Communications Industry Forecast, 6th ed., (New York: Veronis, Suhler & Associates, 1992), p. 12.

³The Veronis, Suhler and Associates Communications Industry Forecast, 12th ed., (New York: Veronis, Suhler & Associates, 1998), p. 44.

⁴Each company offers a Website with the latest information about its service and programming options, available online at http://www.siriusradio.com and http://www.xmradio.com/have.asp.

⁵As of October 1999, WorldSpace began delivering twenty-three broadcast services with programming in sixteen languages to listeners in Africa. WorldSpace also plans to provide programming to the Middle East, Asia, Latin America, and the Caribbean. Additional information about WorldSpace is available online at http://www.worldspace.com.

⁶Chapter 2 contains a discussion of the growth and history of the radio networks and lists source references.

⁷James Walker and Douglas Ferguson, *The Broadcast Television Industry* (Boston: Allyn and Bacon, 1998).

8http://gavin.com lists many frequently occurring radio formats as well as current songs being played by stations with the formats.

⁹"The Public and Broadcasting, June 1999," available online at http://www.fcc.gov/mmb/prd/docs/manual.html, accessed August 19, 1999.

¹⁰"VOA Special English Celebrates 40 Years," available online at http://www.ibb.gov/pubaff/media.html, accessed December 29, 1999.

¹¹"BBC Worldservice," available online at http://www.bbc.co.uk/worldservice/index.shtml, accessed January 3, 2000.

¹² The Public and Broadcasting, June 1999," available online at http://www.fcc.gov/mmb/prd/docs/manual.html, accessed November 1, 1999.
¹³ Ibid.

¹⁴Though Z-100 promotes itself as a New York station, the actual city of license is Newark, New Jersey.

15 Broadcasting and Cable Yearbook 1998 (New Providence, NJ: R.R. Bowker), p. xxv.

¹⁶ AM Station Classes: Clear, Regional and Local Channels," available online at http://www.fcc.gov/mmb/asd/amclasses.html#CLEAR, accessed July 17, 1999.

¹⁷"FM Station Classes and Service Contours," available online at http://www.fcc.gov/mmb/asd/fmclasses.html, accessed July 17, 1999.

¹⁸Heinreich Hertz was the first person to detect and measure sine waves. For this reason we use *Hertz* to refer to cycles completed per second.

¹⁹Broadcast Operator Handbook, 1st ed., Washington, DC: Government Printing Office, 1976).

²⁰"Digital Audio Broadcasting Systems and Their Impact on the Terrestrial Radio Broadcast Service," *Federal Register*, November 9, 1999, 64, 216. Available online at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=1999_register&docid=fr09no99-21, accessed January 3, 2000.

²¹"Radio Ad Sales Surpass \$15 Billion in 1998 to Extend Industry's Record-Setting Run," available online at http://www.rad.com/pr/dec98rev.html, accessed July 6, 1999.

²²David McFarlane, Contemporary Radio Programming Strategies (Hillsdale, NJ: Lawrence Erlbaum, 1990), p. 5.

The History and Development of Radio Broadcasting

The telephone was barely off the drawing board when the earliest radio experiments began. The purpose of this chapter is to help the reader understand and appreciate how wondrous radio (wireless) communication was as it was evolving in the early 1900s. The first practical uses for radio were to communicate with ships at sea and for military communications. But of greater significance was the realization that radio could simultaneously reach millions of listeners across a wide geographic area.

Radio has a colorful history. No single person can be credited with inventing radio. Most of radio's "inventors" should be credited with refining an idea first put forth by someone else. This chapter has space to cite only a few of the remarkable events in the fascinating history of radio. Readers are encouraged to read further about the personalities cited in this chapter. Not unlike the issue of which came first, the chicken or the egg, radio programming developed as a means of encouraging people to buy or build receiving equipment, not for the purpose of delivering news or entertainment. Until radio, it was impossible to simultaneously transmit entertainment or information to millions of people. As the acceptance of radio grew, radio networks were founded to become the first simultaneous, live, national medium of communications.

Today we enjoy the ability of the Internet to allow us to travel around the world without leaving our seat in front of the computer. For the listener in 1920 or 1930 or 1940, radio was the only way to learn about distant places.

ELECTROMAGNETIC SPECTRUM

At the turn of the twentieth century, over-the-air broadcasting was an emerging technology. Though omnipresent today, wireless communications had only been a theoretical proposition in 1864 when Scottish mathematician and physicist James Clerk Maxwell published the results of a study that suggested that a signal could be sent electromagnetically. Radio service depended on two electromagnetic spectrum characteristics: propagation of the signal at various frequencies and level of interference. Maxwell's theories predicted the existence of invisible electromagnetic frequencies that could travel through the air.

A little more than twenty years later German physicist Heinrich Hertz conducted a series of experiments in 1887 to prove that Maxwell's theories were correct. Hertz created a crude spark-gap generator that allowed an electric spark to be detected by a receiving coil. Though of limited detection range, Hertz successfully measured the presence of wireless signals. The fundamental unit of electromagnetic frequency, the Hertz (Hz) is named for him. Despite his discovery, Heinrich Hertz did not promote the use of wireless for communication.

Technological growth, inspired by the telegraph, the telephone, and other achievements, led private citizens to experiment with the new wireless communications medium. In the 1890s, three other inventors almost simultaneously worked on wireless transmission and detection. French physicist Edouard Branly invented a signal detector called a *coherer* that consisted of a glass tube filled with metal filings. The filings reacted when a signal was detected. English physicist Sir Oliver Lodge worked on the *principle of resonance tuning*, which would allow the transmitter and receiver to operate on the same wavelength. Russian Alexander Popoff developed a better coherer and a *vertical receiving antenna*.

MARCONI: INVENTOR, INNOVATOR, AND ENTREPRENEUR

Probably the most widely known inventor-innovator in wireless is twenty-year-old Italian Guglielmo Marconi. More than one Marconi biographer has reported Marconi's pragmatic view of wireless. He was interested in getting wireless to work, and not interested in how it worked! Marconi's family affluence enabled him to perfect the wireless equipment of Hertz, Branly, and Lodge. Marconi began his wireless experiments in 1894. He improved the Hertz transmitter and determined that an elevated antenna enhanced signal travel. Marconi was able to increase the sensitivity of the Branly-Lodge coherer and he added a telegraph key to control the wireless signal transmitted. Within two years, Marconi had created a wireless system capable of sending and detecting a signal over a distance of two miles.

When the Italian government showed no interest in wireless, Marconi traveled to England. His Irish-born mother's family contacts enabled Marconi to present his

wireless system to possible investors, including the head of the British Post Office. Three years after he began his first experiments, Wireless Telegraph and Signal Company was founded in 1897. Marconi marketed radio as a telegraph that did not require wires to send Morse code dots and dashes. His appreciation of wireless was limited to its use as a communications tool between ships at sea and shore stations. British Marconi and the U.S. subsidiary American Marconi dominated wireless communication of Morse code for ship-to-shore and transatlantic communications until after World War I. Noncoded broadcasts would follow.

THREE INVENTORS AND INNOVATORS: FESSENDEN, DE FOREST, AND ARMSTRONG

Unlike broadcasting today, Marconi's wireless business did not use a continuous, modulated carrier wave to transmit his dots and dashes of Morse code. His system used a spark-gap generator. Variation of the spark led to the production of dots and dashes of code. Canadian Reginald Fessenden, working in the United States, wanted to create a wireless system using a continuous carrier wave. On Christmas Eve in 1906, after a decade of work, Fessenden used an experimental alternator he had developed to broadcast programming from studios at Brant Rock, Massachusetts. Unlike Marconi's Morse code transmissions, Fessenden's transmission system allowed him to read scripture from the Bible, play "O Holy Night" on the violin, and talk to the audience. Fessenden's audience consisted primarily of radio operators on ships at sea, newspaper reporters who had been alerted to his publicity-generating broadcast, and home experimenters. The sound quality was poor but this marked the first transmission of noncoded radio signals for general reception by listeners. (Some people even claim Fessenden as the world's first disc jockey.)

What is most interesting about early wireless experimentation is that no single person or company can be credited with inventing wireless. Marconi didn't invent wireless; he recognized its commercial value and improved the operation of early wireless equipment. Fessenden, a less astute businessman than Marconi, sought to improve the transmission process. American Lee de Forest was a self-promoter and a scientist. After several failures and claims by investors that he was a fraud, de Forest created a radio company that improved existing technology and aired publicity-generating broadcasts to attract both listeners and investors. One of his most famous was a 1908 broadcast from the Eiffel Tower in Paris. In 1906, de Forest also took credit for the creation of one of the most important wireless components.

Lee de Forest invented the Audion, or triode vacuum tube, that enabled wireless signals to be amplified for improved reception. Prior to the Audion, wireless receivers lacked suitable sensitivity to detect weak signals for the operators. Radio operators had to listen for the coded signals through earphones because there was no way to amplify the reception of the weak signals. The Audion not only could be used to build an amplifier to increase the strength of the audio signals but it was also used

later to build better transmitters. Author Tom Lewis, writing in *Empire of the Air*, notes that de Forest avoided giving credit to Thomas Edison, inventor of the light bulb, and John Ambrose Fleming, inventor of the vacuum tube. Though de Forest held the patent for the Audion, historians note that de Forest did not fully understand what he had invented or how it worked. It would take the work of another radio innovator to develop the next use of the Audion circuit.

Edwin Howard Armstrong's fascination with wireless emerged as news of the latest developments were being reported. In 1904, at the age of thirteen, Armstrong was already studying accounts of Guglielmo Marconi's wireless system. By 1909, Armstrong had enrolled in Columbia University's engineering program to study wireless. Though the Audion was being sold for use by wireless operators, no one knew precisely how it worked. Beginning in 1912, Armstrong measured the current emitted by the Audion, made a change that refed the current back through the circuit and discovered the principle of regeneration.²

Regeneration enabled two things to be accomplished. First, it enhanced the quality of signal amplification. It was now possible to use an external speaker, rather than earphones, to listen to incoming signals. This principle is still used today not only in radio but also in amplifier circuits. Second, Armstrong realized that regeneration produced a constant oscillating signal, or carrier wave, that became the founding principle behind new wireless transmitters. The use of regeneration vastly shrank the size of wireless transmitters, much as transistors and integrated circuits would later decrease the size of radio transmission and reception equipment.

Armstrong delayed applying for a patent to protect his new discovery until late October 1913, more than a year after his first regeneration experiments. His failure to disclose both the reception and transmission aspects of his regeneration circuit would later provide the basis for patent infringement suits by de Forest against Armstrong. It would be a battle Armstrong would ultimately lose.

The quest for personal glory and greed—stemming from entrepreneurial opportunities that might develop from new wireless technology and perhaps simply the combination of so many individuals focusing simultaneously on the same topic—led to a number of patent disputes, lawsuits, and counterlawsuits over wireless innovations. Fessenden, Marconi, de Forest, Armstrong, and a host of lesser players threatened lawsuits, then sued and countersued each other over simultaneous developments and improvements. All the while, whether for ship-to-shore communications or other commercial applications or simply to entertain curious citizens, radio prospered.

GROWTH OF PUBLIC INTEREST IN WIRELESS

The patent disputes ended shortly after the United States entered the war against Germany in 1917. During the war, as a national security measure, the Navy took over the operation of all high-power stations, even those owned by American Marconi.³ All amateur stations and radio experimenters were forced to cease broad-

casting. The wartime demand for reliable transmitters and receivers led to an emergency pooling of patent rights; the Navy agreed to pay the damages if manufacturers were later sued for patent infringement.

After the war, the U.S. Congress considered maintaining government control over wireless operations. Changing sentiments (as well as a Republican Party victory in the elections of 1918) resulted in the government dropping its claim to operate wireless. The stations seized by the Navy were returned to the original owners. Amateurs were also able to return to the air.

American Marconi (a subsidiary of British Marconi) attempted to return to business as usual before the war but opposition to a foreign company's monopoly over wireless communications in the United States eventually led General Electric (GE) to buy a controlling interest in American Marconi. GE's interest was in manufacturing radio equipment. Along with Westinghouse and AT&T, GE established the Radio Corporation of America and transferred the tangible assets of American Marconi to RCA. GE, AT&T, and Westinghouse ended the patent disputes by pooling nearly 2,000 patents. GE and Westinghouse would make parts they would sell to RCA. RCA would then manufacture radio receiving sets. AT&T would manufacture transmitters and station equipment. The three companies, through RCA, viewed radio in much the same way as the original Marconi companies—as a means for maritime and international communications. Radio broadcasting, as we know it, was not yet being considered.

Technological growth led private citizens to experiment with the new wireless communications medium. Increasing numbers of amateur operators and commercial establishments, in the business of selling transmitting and receiving equipment, set up broadcasting stations. Not unlike computer users today, amateur wireless enthusiasts traded information among themselves, learned from magazine articles and books, and used trial and error to build a receiver or transmitter.

Readers interested in studying the early history of wireless development will note that in the sexist world of the early 1900s, most of the early books and magazine articles suggest radio projects for boys or young men. The Boy Scout Manual contained information about radio equipment and urged boys to make their own sets. Boy's fiction hero Tom Swift had two books built around radio adventures: Tom Swift and His Wireless Message and The Castaways of Earthquake Island. By the time of World War I, a whole generation of (primarily) American boys had grown up learning about the excitement and mystery of wireless.⁴

A wireless receiver capable of detecting Morse code could be built for as little as \$2.25, with another investment of \$3.00 to 4.00 for an outside antenna. Frederick Collins's 1915 text, *The Book of Wireless*, also recommends a more sophisticated receiver that could be built from parts costing less than \$16.00.⁵ While these amounts are paltry today, \$2.00 in 1915 might have represented a day's wages for some segments of the population.

There is an important parallel between early wireless users and early adopters of virtually all technology, including computer technology. Computer users today commonly upgrade software or computer hardware and use Internet sites to share

computer information. The earliest experiences of the users often involved imprecise equipment or techniques. As the skill level of the user improved, improvements in the equipment were made. The earliest radio enthusiasts were able to share information and expertise with interested citizens and they provided a ready workforce for the developing radio industries. And, as young users of wireless matured and obtained full-time jobs, the higher income could be used to purchase better receiving equipment. The wireless tinkerer of 1910 became the faithful radio listener of 1920.

Early radio listeners consisted of three groups: hams, who were as interested in transmitting signals as in receiving them, "distance fiends," interested in broadcasts from faraway places, and members of a general listening audience, fascinated by the instantaneous information available by radio.⁶ All three listener groups wanted national radio services.

Probably the biggest single breakthrough in receiver design came from Edwin Armstrong. Armstrong had already patented a new application of de Forest's Audion. During service in WWI, Armstrong developed a new type of tuner that better amplified the radio signal and offered improved sound. Called the "superheterodyne receiver" and equipped with six tubes, the superiority of Armstrong's invention convinced RCA to abandon its own receiver development plans, purchase rights to Armstrong's new receiver, and begin development and then production of a moderately priced superheterodyne receiver.

Equipment manufacturers and retailers interested in selling radio receiving sets not only searched for and built cheaper and better performing receiver sets, but they also operated radio stations, not as a public service, but to give the public something to listen to and, thus, a reason to buy a receiver. One of the most famous of such stations was Westinghouse station KDKA in Pittsburgh, which is still on the air.

Though KDKA can trace its roots to a prewar experimental station that began to broadcast in 1916, KDKA's first broadcast came on election night, November 2, 1920. Generally, KDKA is thought to be the oldest radio station in the United States to hold a government license, to broadcast noncoded programming intended for reception by the general public by radio waves, and to operate in a continuous and organized manner.⁸ Thus, radio communications, aimed at many listeners, began to change radio into a mass medium.

THE FIRST WIRELESS REGULATIONS

As radio grew, the need to regulate wireless became more apparent. Part of the need for regulation resulted from domestic problems. Wireless had moved from ship-to-shore communications to land-based communications. Individuals interested in "tinkering" with radio could freely do so and they could expect few if any consequences resulting from the interference they created. Internationally, a protocol was needed to limit interference created by signals traveling across national boundaries.

By the early 1900s, wireless had become increasingly common aboard ships. The Marconi Company supplied the most reliable equipment, and, with the Marconi land stations, messages could be effectively sent, received, or relayed. Marconi was not the only source for equipment. The United Fruit Company used de Forest wireless equipment to schedule ships for loading fruit as soon as it was picked at the company's plantations in Latin America.

Maritime disasters were also averted through the use of wireless. In 1909, during a heavy fog, the ocean liner *Republic* collided with *Florida* off the East coast of the United States. The radio operator on *Republic* stayed at his post and was able to issue a call for help, saving nearly all the passengers on board. The *Republic* disaster made it apparent that wireless played an important role not only in the commerce of shipping but in safety as well. After several legislative attempts, Congress passed the first piece of legislation to regulate broadcasting in the United States, the Wireless Ship Act of 1910. The act required that all oceangoing vessels with 50 or more passengers and crew members, traveling between ports 200 miles or more apart, carry a "radio-communication apparatus" capable of transmitting 100 miles and operated by a skilled person. 10

Three years later, the legislation was put to the test. One of the biggest maritime disasters occurred when the *Titanic* sank on its maiden voyage. More than 1,500 passengers and crew died. While the ship *Carpathia* responded to the distress calls from *Titanic* and ultimately saved about 700 persons, that ship was 58 miles away and did not arrive until well after *Titanic* sank. A closer ship to *Titanic*, the *California*, did not respond to the distress calls because the ship's sole radio operator, after many hours on duty, was asleep when the distress messages were transmitted. Furthermore, because that ship was traveling through the same ice field as *Titanic*, the ship's captain had cut all power to the ship, ending the electrical service needed to power the wireless system.¹¹

Still a third ship, the freighter *Lena*, was only thirty miles away. But because of its small crew and no regular passengers, the ship was not equipped with a wireless. News of survivors of the disaster was slow to reach the mainland because the *Carpathia's* wireless equipment had a range of only eighty-five miles. Two U.S. Navy cruisers, sent by President Taft to intercept *Carpathia* on its way to New York, couldn't effectively relay information back to New York because the wireless operators on the Navy ships weren't sufficiently skilled. ¹²

The *Titanic* tragedy led newspaper and magazine editorials to call for the federal government, as an agent of the public, to establish control over wireless operation and corporate practices. The regulation of wireless was viewed as a public good, equal in importance to previous social and antitrust regulatory actions by the government to regulate the railroads, oil companies, and meatpackers. Regulation was to improve the welfare of citizens.

Within four months of the *Titanic* tragedy, transmitting in the *ether* (as the airwaves were sometimes called) would not be a personal right but a privilege assigned by the government. The Radio Act of 1912 required that all operators be licensed,

that stations adhere to specific frequency allocations, that distress calls take priority over all other communications, and that the secretary of commerce had the power to issue radio licenses and make other necessary radio regulations.¹³

Amateur radio operators were relegated to a shortwave portion of the spectrum for transmission though they were free to monitor transmissions on any frequencies. The Book of Wireless (1915), lamented the "taming of the airwaves" through regulation by noting that the time existed "not so very long ago, when a boy could own any kind of wireless set, use any length of wave he wanted to and send messages wherever he pleased and no one could say him nay."14 Amateur radio operators were also forbidden to reveal the contents of messages received. Divulging or publishing unauthorized information could result in a fine of \$250 or imprisonment for up to three months or both!

The Navy and major corporations (primarily Marconi) strengthened their monopoly over radio technology with passage of the Radio Act of 1912, but amateurs were unwilling to abandon the airwaves. If anything, maritime tragedy, newspaper and magazine articles, and government regulation only increased public curiosity about radio. The number of licensed amateurs increased from 322 in 1913 to 13,581 in 1917. 15 As the number of operators increased, they learned how closely they had to adhere to the 1912 laws. As with laws we have against speeding on the highways, the trick for radio amateurs was to decide to what extent they would obey the laws.

THE BEGINNING OF PROGRAMMING FOR THE MASS AUDIENCE

The name of the wireless service, along with the technology, evolved. Known first as the "wireless telegraph," between 1906 and 1912 the transition from wireless telegraphy to radiotelegraphy and radiotelephony (transmission of the human voice) occurred. The term was gradually shortened to radio by the time of the 1912 act, and the wireless reference became obsolete. The word broadcast was borrowed from agriculture and referred to the practice of scattering seed across a field. 16 The earliest coded radio transmissions were from a specific sender to a specific receiver. With licensing and restrictions on who could transmit, radio broadcasts increasingly moved from messages to individual receivers to messages intended for multiple receivers.

Just as the public rushed to the Internet in the 1990s, the public, seventy-five years earlier, was rushing to the airwaves. Middle-class Americans, intrigued with the scientific applications of radio and the potential for information and entertainment, purchased radio receiving sets at an astonishing rate. Sales of radio sets and parts totaled \$60 million in 1922, \$136 million in 1923, and \$358 million in 1924. 17 Radio listening also meant that individuals and families could enjoy the newly available information and entertainment from the comfort and privacy of their homes.

During the 1920s, the thrill of receiving signals from distant cities led many ads for manufactured receiving sets or parts (for building receivers) to emphasize the ability of the receiver or its components to bring in distant signals. By about 1925, as radio sets began to appeal to an even wider audience, manufacturers built receiver sets that looked more like furniture and did not appeal only to enthusiasts.

Radio programming evolved along with the receiving sets. During the 1920s, programming, even in major cities, often consisted of whoever was available to fill the on-air time. Local musicians, often unpaid by the station, were given time on the air to perform and promote other appearances. Informational programming consisted of federally sponsored agriculture programming from the U.S. Department of Agriculture as well as farm commodity information. Prior to radio, it wasn't unusual for local commodity buyers to cheat farmers by underreporting actual market prices. Valuable market price information became a prime motive for farmers to purchase radios. For the first time, a farmer in a rural area was able to receive accurate weather information as well as information about farm product prices. One radio magazine reported a rural listener's story related to egg prices. When a buyer told the farmer that prices were bad and getting worse, the woman told him that day's current price and advised him next time to stop by before she heard the 8 o'clock prices if he wanted to cheat her!¹⁸

While many books talk about early radio broadcasts of classical music, country music, the music of rural America, had a major impact on radio growth and radio listening in the 1920s. Industrialization had moved many Americans from the country to the city. Radio became a way for migrants to reconnect with their roots. Saturday night barn dance programs were regular program features on many stations. When one Chicago radio station had a request for a square dance caller, a listener telephoned the station to volunteer his services!

One prominent country program began in 1925 on WSM in Nashville. The WSM program starred George D. Hay, who had previously hosted the successful "National Barn Dance" show on WLS in Chicago. 19 Within two years the "WSM Barn Dance" adopted the name "The Grand Ole Opry." Station history suggests that after an NBC network opera broadcast concluded, WSM host George Hay told the listeners they had been listening to Grand Opera but that they would now hear "The Grand Ole Opry." 20

WSM attained clear-channel radio status in 1932 and an operating power of 50,000 watts. It continues to broadcast "The Grand Ole Opry" to much of the United States on 650 kHz every Saturday night.

THE SECRETARY OF COMMERCE ATTEMPTS TO REGULATE RADIO

While station and operator licensing instituted by the Radio Act of 1912 was intended to provide "monitored" growth of radio, the Department of Commerce failed to realize how quickly radio would grow. By the end of 1922, 690 licenses had been assigned to general broadcast stations, those airing entertainment and information.²¹ All of these stations occupied one of *two frequencies*, 360 meters (833 kHz) or 400

meters (750 kHz). Interference led many stations to become inaudible. Station interference eventually led to voluntary frequency sharing (time-sharing) by some stations. In the New York area, WOR, operated by Bamberger's Department Store, found itself sharing time with WJZ, operated by Westinghouse's Newark, New Jersey manufacturing plant. It was decided that the stations would alternate days broadcasting between sunrise and sunset to sunrise.²²

The "big four" corporations that dominated broadcasting in the 1920s, GE, Westinghouse, and AT&T, and their pooled patents, held through RCA, had an interest in developing national radio listenership but not necessarily commercial radio service. As radio interference increased, they encouraged the Secretary of Commerce to institute administrative laws, through the Department of Commerce, to regulate radio. A reluctant Herbert Hoover instituted a series of radio conferences.

Between 1922 and 1925, four annual conferences were held to discuss the problems facing corporate and amateur radio stations. The first National Radio Conference recommended complete government control and the Second National Radio Conference, in a unanimous opinion, affirmed that the Secretary of Commerce, under existing laws, had authority "to regulate hours and wave-lengths of operations of stations and to revoke or withhold licenses of stations when such action is necessary to prevent interference detrimental to public good." At the meeting of the Third National Radio Conference in October 1924, Secretary of Commerce Herbert Hoover noted the need for additional frequencies for station broadcasts.

While the conferences allowed discussion of issues, there was little real resolution of conflict. They did, with the further encouragement of the RCA-GE-Westinghouse consortium, lead Hoover to begin administrative regulation of wireless. One of Hoover's first actions was to begin to establish a limited number of "superpower" radio stations around the country. Hoover authorized some stations to operate with power levels as high as 50,000 watts and he also arbitrarily began to assign frequencies based on station power; the more powerful stations received the best frequencies.²⁴

At that time, both GE and Westinghouse believed not in local radio service but in the ability to cover the entire country with just a handful of high-powered stations. Their hope was to operate a sufficient number of stations to cover the United States and therefore encourage receiver sales, but at the same time to limit the operational and programming expenses by linking the stations to form a national network. (Not only had they not considered the idea of selling advertising but AT&T claimed that the patent pooling agreement had granted it exclusive rights to broadcast paid material.)

Hoover did not have the ability to deny station licenses to groups requesting them but his frequency, power assignments, and time-sharing alienated many station owners. They believed Hoover was attempting to gain favor with corporate owners. It is important for readers today to remember that computers were not available to help staff members in the Department of Commerce manage the station database. In

fact, large maps were laid out on the floor at the Department of Commerce and workers used colored paper to code station operations.

It was inevitable that Hoover's powers to regulate radio would be challenged. In 1925, Eugene F. McDonald of Zenith Radio, who owned a newly licensed station in Chicago, challenged Hoover's authority. McDonald's station had been authorized to broadcast only two hours a week. McDonald moved his station to another frequency, prompting Hoover's agents to close the station. McDonald sued. Hoover viewed the suit as a means of gaining court endorsement of his authority. The judge disagreed with Hoover.

The U.S. District Court for the Northern District of Illinois, in 1926, agreed with McDonald's claim that the commerce secretary had violated the Radio Act of 1912.²⁵ Secretary of Commerce Hoover did not have the power to impose restrictions as to station frequency, power, hours of operation, or a station's use of a frequency not assigned to it. The next day, Hoover issued a statement abandoning all his efforts to regulate radio. He urged the stations to undertake self-regulation and his action endorsed the need for a new law to regulate broadcasting.

Beginning in mid-1926, radio became chaotic. Operators and station owners could do virtually anything they wanted with no regulatory consequence. Perhaps the only thing that kept some operators in check was the knowledge that anything they did to another station to create interference could also be done to them. New stations continued to apply for licenses to go on the air. Listeners were beginning to receive only conflicting sounds caused by interfering signals. For the first time, radio set sales dropped drastically. In his December 1926 message to Congress, President Calvin Coolidge urged passage of legislation that would save radio before it destroyed itself. A little more than two months later, in February 1927, Congress passed the Radio Act of 1927 and sent the measure to Coolidge for his signature.²⁶

Rather than creating mere rules for regulating radio, the act borrowed from the language of railroad regulations. Radio was deemed to operate for the "public convenience, interest, or necessity." Though the Radio Act of 1927 did not define public convenience, interest, or necessity, it established the idea that no one could own a radio frequency. Government's responsibility was to manage the airwaves so that the public benefited just as much as the station owner. Further, the act declared that radio would not become a monopoly enterprise controlled by a few organizations. The airwaves were a public resource, not the private property of a licensee, and the public had a right to expect something from the radio station. 28

COMMERCIAL SPONSORSHIP BEGINS

AT&T, through the patent pooling agreement of 1919, had exclusive rights to manufacture transmitters and wireless telephony equipment. Further, AT&T claimed that the patent pooling arrangement gave it the right to sell commercials. AT&T exercised its claim to air commercials by starting station WEAF in New York in 1922.

AT&T envisioned a national network of radio stations, linked by AT&T telephone lines, that could not only air programming nationally, which was distributed by the telephone lines, but also sell commercials or "toll" time, much as AT&T sold time for long-distance telephone calls. ³⁰ Indeed, flagship station WEAF was open to anyone who wanted to buy time to speak. Just as citizens would contact the telephone company to arrange two-way phone service, so WEAF would provide one-way communications to anyone who wanted it.

AT&T viewed WEAF's telephone service comparison not only as an appropriate analogy but also as a way to answer a question that had been perplexing almost all of the early radio pioneers: how could radio be made to pay for itself?³¹ The first reported radio ad was for an apartment complex in New York and aired on WEAF in 1922. It cost \$100. Throughout the toll broadcasting effort, there were vigorous protests. Secretary of Commerce Hoover viewed advertising sales with "alarm."³² In 1925, a New York representative introduced legislation to ban advertising.³³

AT&T's vision of radio-linking the nation for important national events was attained in 1923. AT&T fed President Calvin Coolidge's first address to Congress to a network of six stations, consisting of WEAF, New York, WCAP, Washington, WJAR, Providence, KSD, St. Louis, WDAF, Kansas City, and WFAA, Dallas.³⁴

Why was it that radio in the United States developed through private ownership while it was often government-run in other parts of the world? Smulyan notes that radio developed as a private enterprise in the United States due to its large geographic size, the even distribution of the population, and the linguistically homogeneous population. By contrast, England and Germany, relatively small land areas, needed but a few stations to cover each country. Australia and Canada, though large in size, had most of their populations living in close proximity to a few major cities. The (former) Soviet Union was large in size and needed to program in more than sixty languages, thus eliminating the need for national radio service.³⁵

Whenever a few companies control an industry, through a monopoly or oligopoly, both government and consumer groups fear the potential harm consumers may experience. Just as the Justice Department in the 1970s began proceedings that eventually broke apart AT&T, and in the 1990s launched investigations of computer chip maker Intel and software maker Microsoft, the Justice Department of the 1920s was eyeing AT&T's wireless and telephone monopoly and the GE-Westinghouse-RCA receiver oligopoly. Concerns about control of both radio and telephone service eventually led AT&T to sell WEAF and other AT&T stations to RCA in 1926 and for RCA to use WEAF to form the National Broadcasting Corporation, NBC. The new corporation was owned by RCA (50 percent), GE (30 percent), and Westinghouse (20 percent). AT&T withdrew from radio but profited by maintaining the telephone monopoly, which now included the exclusive rights to lease telephone lines to NBC and other radio networks. AT&T ended its exclusive claim over commercial sales. Commercial radio service was created to not only pay for programming and station operational expenses but to pay the cost of the telephone lines leased from AT&T.

RADIO'S NEW REGULATORS

The Radio Act of 1927 created the Federal Radio Commission (FRC) with five commissioners, with limited staffing, to sort out the mess of the airwaves. The act also revoked the licenses of all radio stations, including commercial stations, transoceanic stations, coastal stations, experimental stations, educational, religious, and training stations, and approximately 14,885 amateur stations, more than 18,000 transmitters in all!

Despite public enthusiasm for radio, the FRC moved to reduce the number of radio stations on the air from 681 in 1927 to 606 in 1929. Also, the Commission reduced the number of stations that were allowed to broadcast at night from 565 to 397. At one point in 1928, 164 stations were notified that the Commission "was not 'satisfied that public interest, convenience or necessity' would be served by granting applications for renewal."³⁶

The FRC licensing system favored high-powered stations capable of serving national audiences of listeners, especially at night. The clear channel stations operated with 50,000 watts of power both during the day and at night. Twenty-one of the twenty-four clear channel assignments went to stations that were network affiliates. The government had previously deemed citizen communication important enough to create free mail delivery for citizens in rural areas. FRC Commissioner O. H. Caldwell equated high-power radio broadcasting, capable of reaching thousands—even millions—of rural residents with rural free mail delivery. Broadcast service was the first means of effectively reaching citizens in broader geographic areas. Reducing the power of existing 50,000-watt stations would be a mild inconvenience for persons in metropolitan areas but a disaster for rural listeners.

FRC licensing decisions pushed many educational stations to undesirable frequencies, low power, and, typically, no nighttime power. The FRC believed the success of radio depended not on many low-power stations but on fewer stations with higher power. By 1933, twenty-two stations were operating with the AM maximum 50,000 watts of authorized power. The clear channel-dominated standard broadcasting system was born; clear channel stations provided more than one third of the nation's voters with election returns in the 1930s. Local stations did operate but were sometimes forced to operate with powers of 250 or 500 watts. Regulators and station owners recognized that the AM station allocation scheme that was developing placed some stations in "a marked competitive advantage or disadvantage over other stations in the community." Most of all, the piecemeal AM scheme, along with the future demonstration of technological advantages of FM, would eventually drive the final nails into AM radio's coffin.

The developing radio networks preferred the system of a few high-power stations across the country rather than many low-power stations. For national programmers, the greatest revenue would come from nighttime service. Though NBC and CBS embraced the network concept, the limited hours of operation by some stations still made it difficult to gain network program clearances. In Chicago the hours of

station operation were so sporadic that CBS had to sign affiliation contracts with three stations to reach the residents of the city. NBC, with the Red and Blue Networks, had to sign affiliation agreements with five stations to reach the residents of the city.³⁹

THE DEVELOPMENT OF RADIO NETWORKS

Broadcast historian Erik Barnouw notes that NBC, like RCA, was born with a silver spoon in its mouth. The premiere of the network broadcast era took place on November 15, 1926, when NBC aired a four-hour program from the Waldorf-Astoria Hotel in New York. The broadcast featured singers, orchestras, and comedy teams, and it included two remote broadcasts from other cities, a singer in Chicago and humorist Will Rogers in Kansas City. 40

The event was reported to have cost \$50,000, though most stars performed for free and perhaps half that amount was spent for technical arrangements, including the 3,600 miles of special AT&T telephone cable that connected the WEAF program to about two dozen stations. New NBC president, Merlin Aylesworth, estimated that as many as 12 million persons might have heard the broadcast, a sizeable audience when one remembers that the U.S. population was less than 100 million. Most of all, the broadcast created the perception that the new radio network was powerful. It could attract star performers and millions of listeners.

Less than two months later, a second NBC network was started. This network used the former RCA station WJZ in New York as the flagship for the network. The WJZ-based network became the NBC Blue Network. The WEAF-based network was the NBC Red Network. A separate West Coast NBC Pacific Coast Network operated for about a year, connecting stations between San Francisco and Seattle, until both the Red and Blue Networks began offering coast-to-coast programming.

The network radio business began slowly. Initially, both the Red and Blue Networks had difficulty attracting advertisers and affiliate stations. In 1930, government antitrust action against RCA, GE, AT&T, and Westinghouse resulted in RCA becoming the sole owner of the NBC Networks. By 1931, NBC reported a profit of more than \$2.3 million and had an affiliate base of seventy-six stations.⁴¹

NBC was soon joined by two network competitors. The Columbia Phonograph Broadcasting System, named for its partnership with Columbia Phonograph Record Company, and later changed to Columbia Broadcasting System (CBS), was established in 1927. CPBS lost more than \$100,000 in its first month of operation, prompting Columbia Phonograph to withdraw from the venture. The Congress Cigar Company then bought a controlling interest in the network to promote its cigars. William Paley, son of the firm's founder, took over the now CBS network's operation, and would head the network for more than half a century.⁴²

Much of the programming carried by NBC and CBS from 1928 to 1929 was musical programming. Concerts featured classical compositions, though popular

dance music and jazz received some airplay. Radio drama began to develop as the complement to the musical programming. While some programming was built around rebroadcasts of historic events, such as *Great Moments in History* on NBC, writers were recognizing the opportunity to do creative storytelling through radio. The creation of a show on WGN in Chicago, first called *Sam and Henry* and later changed to *Amos 'n Andy* when the show moved to WMAQ and NBC, is often cited as the first show to demonstrate the power of radio dramatizations.⁴³

The show was about the misadventures of Amos and Andy, who were created to represent part of the migration of African Americans from the Deep South to urban cities in the North. Readers today probably cannot imagine listening to a program on which two white performers used exaggerated African American dialect to entertain listeners. Hut minstrel jokes and burnt cork routines were decades old and continued as part of vaudeville when Amos n Andy began to air. By 1929, the radio show had created several spin-offs, including a daily comic strip, phonograph records, and a candy bar,

A telephone survey of radio listeners in 1929 found that more than half of those telephoned reported listening to Amos 'n Andy and the accompanying sponsor messages for Pepsodent toothpaste. At one point the audience totaled more than 40 million listeners for NBC.⁴⁵ The show was popular with white and black listeners. Though some African American leaders openly scorned the show and began unsuccessful petition drives to have the show taken off the air. Amos 'n Andy not only prospered on the radio; the show eventually moved to television in the 1950s, though with black actors in the starring roles.

When radio was being touted as a marvel of technology, able to open the world to isolated Americans, *Amos 'n Andy* represents a sad example of how the new medium resorted to old stereotypes. Freeman Gosden and Charles Correll, the stars of the program, were notable performers; they sometimes played up to six characters each in a single 15-minute show and they did not rehearse before a broadcast. Instead, they preferred spontaneous interaction.⁴⁶ In that regard, *Amos 'n Andy* is a notable example of radio's earliest program creativity.

What Amos 'n Andy did for radio was to signal a listener desire for comedy programming. Though NBC was a step ahead of CBS with Amos 'n Andy, William Paley began the drive to bring popular, mass appeal entertainment to CBS. The quickest way to making the biggest profits, Paley reasoned, was to appeal to the largest audience (a thought obvious to us today but novel in 1929). Paley's first coup was the signing of musician Paul Whiteman and his orchestra. Whiteman, who had created a symphonic jazz band, was paid \$5,000 a week; members of the band split a \$30,000 salary each week.⁴⁷

By the early 1930s, the success and notoriety Bill Paley was achieving were akin to the fame and fortune now gained by Internet entrepreneurs. Paley had another incentive to program his network to attract the largest possible audience. In late 1929, before the stock market crash, Paley arranged a deal to sell half of CBS to Paramount Film Studies. But for the deal to be lucrative for Paley and CBS, the

network needed to earn a net profit of \$2 million by 1931. Paley scheduled programming designed to pander to listeners, from fortune tellers to gory thrillers. He likewise permitted commercials to become more numerous and more insistent in their pitch to listeners, even granting sponsors the right to mention product prices on the air.⁴⁸

Advertisers began to see radio as an inexpensive and effective way to reach the national audience. Paley added hour after hour of escapist programming to the CBS Network schedule. A complainant to the Federal Radio Commission wrote that the detective stories on *Street and Smith* included "dramatic and bloody murder" scenes.⁴⁹ NBC, though the top network, would soon follow the CBS programming strategy. By 1932 CBS and NBC aired 12,546 commercial interruptions in 2,365 hours of programming!⁵⁰

The perceived commercial excesses of the radio networks in the late 1920s and early 1930s led a new group, called the National Committee on Education by Radio, to request that Congress consider legislation to regulate radio more closely than the Radio Act of 1927. The group was motivated to advocate these changes because of the perceived ill-treatment many educational stations had experienced from Secretary of Commerce Hoover. Among the regulatory changes they requested was a requirement that 15 percent of all radio channels be reserved for education use.

William Paley testified before a Senate Committee in January 1930. Paley knew that his struggling network needed more affiliates. Reserving 15 percent of the channels for education use would stifle the growth of CBS and certainly cause him to miss his \$2 million profit mark by 1931. Paley told the senators that only 22 percent of CBS's programming schedule was sponsored; the other 78 percent wasn't.⁵¹ Of course, the sponsored programming aired during the most listened-to time periods and more than two thirds of the unsponsored programming consisted of popular music or symphonic music because it was the cheapest programming the network could find to air. And, if CBS had been able to increase the amount of sponsored programming, it would have done so. Paley's testimony was enough to forestall the attempt at regulation.

The third radio network, which began operation in 1934, was the Mutual Broadcasting System (MBS). The four founding stations were WGN, Chicago, WOR, New York, WLW, Cincinnati, and WXYZ, Detroit.⁵² All four stations are still on the air, though only WGN is still owned by its original owner, the *Chicago Tribune* newspaper, now Tribune Company. The Mutual Broadcasting System ceased operation in 1999.⁵³

THE GOLDEN AGE OF RADIO PROGRAMMING

Whether they were local stations or clear channel stations, the public listened. Not only had radio receivers improved in quality since the late 1920s, but receiving sets capable of using household current were widely marketed. By 1935, the Department

of Commerce estimated that radio broadcasts served 18.5 million families or over 50 million people. Approximately 60 percent of all homes in the United States had radios and radio sets in operation in the United States comprised 43.2 percent of the world total.⁵⁴

Congress passed the Communications Act of 1934 to create one agency to supervise wired and wireless communication. The Federal Communications Commission (FCC) replaced the FRC. The radio portion of the Communications Act of 1934 mirrored the provisions of the 1927 Act, thus providing continuity from the FRC to the FCC.

Policymakers acknowledged radio's importance through the increased number of commentaries about radio's political and social impact. The American Academy of Political and Social Science devoted its January, 1935 and January, 1941 issues of Annals of the Academy of Political and Social Science to the development of United States and world radio broadcasting systems and public response to the new entertainment and information medium. In the forward of the 1941 issue, Editor Herman Hettinger writes:

Since 1929, radio broadcasting may be said to have emerged from youth into adolescence, and now into the beginnings of maturity. Today, broadcasting, as a medium of entertainment, cultural and political enlightenment, and more formal educational training, extends its personal and all-pervasive influence into six out of every ten American homes. It has grown into the greatest medium of mass communication to be developed since the printing press.⁵⁵

Critics noted that the airwaves were being choked with mass appeal, commercial-laden programming. But corporately controlled radio, via the NBC and CBS networks, was here to stay. For the public, radio offered something comforting. The stock market crash in 1929 had changed the role of radio. While unemployment was rising and wages were plummeting, radio was proving to be a Depression-proof business. Radio receiver sets were certainly not cheap but, once the receiver was purchased, the radio provided hours of programming and the only cost to the listener was the opportunity cost of listening to commercials.

CBS continued to lead the way with popular radio programming though NBC, with both the Red and Blue Networks, typically had more affiliates and stations with better signals. Some of the most popular programming of the time starred comedians, such as George Burns and Gracie Allen, Jack Benny, and Fred Allen. In the earliest days of CBS, it was not uncommon for hosts of successful shows to change to NBC once a program and its host became popular. CBS fought back by conducting talent raids against NBC to recruit better affiliate stations and to lure star talent, such as singers Al Jolsen and Nelson Eddy and variety show host Major Edward Bowes away from NBC.

Serial melodramas ran during the daytime and soon drew a large audience of housewives. These daytime serials featured the trials and tribulations of everyday people and were often sponsored by soap makers, hence the name *soap operas*.

Entertainment and informational content are so pervasive today that it is difficult to imagine what it was like in the 1920s or 1930s to finally have radio broadcasting. Comedy, drama, and music (referred to as light entertainment) were the mainstays of radio programming. Most advertisers chose not to sponsor programs that reported on contemporary problems. Perhaps most famous among radio's news-related programming was the broadcast in 1933 of four addresses to the nation by newly elected President Franklin Roosevelt. Called "fireside chats" because of Roosevelt's informal and relaxed tone as well as the perception that he was sharing his thoughts with the public, Roosevelt's speeches created goodwill among the public and enabled many of his New Deal reforms to be quickly passed by Congress.⁵⁶

As the radio networks began to achieve profitability in the early 1930s, at both the local and network level, radio began to cover the news. Radio's news focus was not to be ignored by newspaper owners, who were already experiencing dwindling advertising revenue, partly from radio competition and partly resulting from the Depression. As NBC and CBS increased their news reporting, newspaper publishers fought back. Some local radio stations found their broadcast schedules were no longer considered "newsworthy" by the papers and therefore weren't published. Radio network advertisers experienced a newspaper publicity blackout.⁵⁷

At a December 1933 meeting at the Biltmore Hotel in New York, between NBC, CBS, the wire services (AP, UP, and INS), and the American Newspaper Publishers Association, CBS agreed to disband its news service and NBC would refrain from building a news-gathering operation.⁵⁸ Instead, the networks agreed to pay to establish a Press-Radio Bureau, which would send broadcasters brief news items—not to exceed 30 words per item. The news bulletins would allow the networks to schedule two five-minute newscasts, one in the morning after 9:30 A.M. and another at night, after 9:00 P.M. The hours were selected to protect newspaper circulation from radio competition.

Competing news suppliers soon emerged and extended radio news coverage continued on many stations. Just as newspaper owners were pondering how they might squash the press freedom of the radio stations, advertiser interest in sponsoring several daily newscasts led UP and INS, and eventually AP, to agree to sell their news content to the radio networks. The Press-Radio Bureau soon disappeared. Newspaper owners recognized the value of owning radio stations and began to apply for licenses. As Hitler and Mussolini were gathering followers in Europe, the radio networks in the United States were building the news departments.

In a time before the Internet or television, radio was the only live, simultaneous source of mass communications. The popularity of radio and importance of radio news can easily be seen by recalling the quiet Sunday afternoon in 1941 when, at 2:31 p.m. Eastern time, a CBS newsman interrupted the regular programming to announce that the Japanese had launched a surprise air attack on Pearl Harbor in Hawaii. The next day, an estimated 62 million Americans heard President Franklin Roosevelt declare war on Japan.⁵⁹

Radio broadcasts prior to the bombing of Pearl Harbor had told listeners of the fighting already underway in Europe. Probably the most memorable WWII broadcasts were the reports from London by CBS reporter Edward R. Murrow, who reported during actual bombings of London by the Nazis. While technology and government censorship provided some limits to news reporting, radio reporters accompanied troops into battle. For listeners at home, the battlefield reports, even though recorded, brought home sounds of war that most listeners had never before heard.

The U.S. government did not seize radio as it had during World War I, but, the government did establish the Office of War Information, headed by former CBS news commentator Elmer Davis. The OWI was charged with determining what the domestic and international audiences should be told about the war. This included both news, public affairs information about how and why the United States was fighting, and information about what the public could do to contribute to the war effort. To counter international broadcasts coming from Germany, Japan, and Italy, the OWI also established the Voice of America. VOA programming consisted of music, news, and commentary programs. By Congressional mandate, all VOA programming was transmitted for listeners outside of the United States.

AM RADIO: STANDARD BROADCAST SERVICE

Today, less than 20 percent of all radio listening is to stations operating on the AM radio band. However, from its earliest days as experimental service until the mid-1970s, radio stations using amplitude modulation were the dominant radio service. Problems with manmade interference, caused by poor receivers, natural static, and interference by other stations continued to plague AM radio even as the number of stations and listeners expanded. The FCC's 1939 Standards of Good Engineering Practice Concerning Standard Broadcast Stations noted that, "All classes of broadcast stations have primary service areas subject to limitation by fading and noise, and interference from other stations to the contours set out for each station." The general unsuitability of the medium wave (AM) band for broadcast of information and entertainment was noted in a New York Times article in 1940. The article reported that the FCC, despite complaints from listeners about local interference in broadcast reception, "had no authority to investigate, or require the elimination of such prominent noise sources or other electrical apparatus, ignition systems of automobiles and electrical signs."

The prospect of creating an additional radio service, using frequency modulation or FM service, was barely an issue until the late 1930s. Even then, FM service might have died for lack of support but for the dogged determination of Edwin Armstrong, who discovered the principle of regeneration and invented the superheterodyne tuner. Edwin Armstrong first began work on a radio system that would

eliminate static in 1923. A decade later, in 1933, Armstrong received five patents for his new radio service.⁶² Having previously sold his superheterodyne tuner to RCA, Armstrong first demonstrated his latest invention to RCA's President, David Sarnoff.

While Sarnoff recognized the quality of the FM signal, Sarnoff was unwilling to financially back the new system. Instead, RCA was already locked in battle against Philco and several smaller companies to develop television! Sarnoff saw FM as a competitor that would destabilize the growing AM radio industry, divert scientific research from television, distract the attention of the FCC from television, and compete with television for spectrum space over which to broadcast.⁶³

After working for a decade on FM, Armstrong was committed to making his system a success. He demonstrated the system in 1935 before a group of radio engineers and a year later he received permission from the FCC to build an experimental station. Though he battled against the television interests for the FCC's attention, the commission recognized the potential for FM. FCC Chairman T. A. M. Craven suggested FM would allow more local stations to be licensed and that FM service would eventually replace AM.⁶⁴

Using his own money to fund the construction, Armstrong built a 50,000-watt FM station in Alpine, New Jersey. The station finally reached full power in 1939. The other problem facing Armstrong was the absence of receivers: his new system would never gain support from the public unless the public could hear the product. Again, Armstrong supplied the financing necessary to commission General Electric to build FM receivers. With available receivers and Armstrong's evangelism, FM's higher fidelity audio gained new supporters. (It's important for readers to know that Armstrong's FM system was not stereo. He was broadcasting only a monaural or single-channel transmission. The FCC would not authorize stereo transmission until 1961!)

That fall, the FCC received station applications from about 150 FM enthusiasts. The problem for the FCC became where to find the spectrum or frequencies for FM. This time Armstrong had backing from General Electric and other receiver manufacturers and a newly formed FM Broadcasters Association. To create FM spectrum, the FCC removed television Channel 1 from the TV band and assigned it to FM.

Commercial FM service was authorized in May 1940 and the FCC authorized FM sound for the newly developing television service. Military needs led Armstrong to grant the royalty-free use of FM to the government for military communications. Soon FM was used for communication in U.S. tanks, jeeps, and other military vehicles. ⁶⁶ But the military needs of World War II halted civilian development of additional FM stations and FM receivers. When the United States entered the war in December 1941, FM was barely a commercial service. Fewer than 400,000 receivers were in the hands of the public. ⁶⁷ By contrast, AM station programs could be heard by approximately 29 million households.

After World War II, FM should have been set to grow. Receivers for civilian use could now be manufactured, a little more than fifty FM stations were already on the air, and the quality of FM sound was attracting listeners. Then the FCC made a crucial spectrum decision to change the frequencies allocated for FM. FM was moved from 42–50 MHz to the current 88–108 MHz.⁶⁸ The new allocation created more spectrum space for future station growth and it reserved twenty channels for educational station use. But it made obsolete all 400,000 FM receivers sold before the frequency change.

With so many out-of-date receivers, a resurgence in AM station growth, and the beginning boom in television, FM growth would be slowed to a snail's crawl for the next ten years. At one point the number of FM stations actually declined from 616 in 1952 to 530 in 1957. When FM stations did go on the air, they were typically owned with an AM station and the owner was allowed by the FCC to simulcast the same programming on the FM station as the AM station.

Although RCA initially discouraged Armstrong's research into FM, it had adopted FM for use in television sets as well as FM receiver sets, and RCA had never paid Armstrong a royalty for his invention. In 1948, Armstrong sued RCA. RCA fought back by claiming it had done more than anyone to help Armstrong develop FM and was entitled to use Armstrong's technology. Armstrong was infuriated. His legal expenses soared. Finally in 1953, estranged from his family and friends, he authorized a settlement with RCA. Before the settlement was concluded, Armstrong, neatly dressed, fell to his death from his New York apartment.

LOCAL RADIO SERVICE DEVELOPS

When World War II ended, AM station applications surged. In the twenty-seven months between the close of the war and January 1, 1948, 1,054 new AM stations were authorized, more than doubling the number of licensed or authorized AM stations from 912 in 1943 to 2,034 in 1948. (At one point in 1945, engineers estimated there was only room to license about 900 AM stations.) More than 50 million AM receivers were manufactured between 1946 and 1948. As radio set prices dropped, the multiset household developed. Radios moved from the living room to the kitchen and bedroom.

The postwar expansion of AM radio stations resulted in the first local service for many nonmetropolitan communities. As many communities were gaining their first radio service, the FCC, with the endorsement of equipment makers, was moving ahead with television. The 1952 release of the Sixth Report and Order created a television allocation plan for the United States, specifying minimum mileage separations, and free of any need for directional station antenna arrays. The FCC was committed to avoiding the piecemeal system that had created some of the

interference problems for AM stations. NBC and CBS moved from dominant national radio networks to dominant national television networks.

Television expanded far more rapidly because it was built on the existing radio structure. Television used radio program formats with added video, television networks were operated similar to radio networks, advertisers jumped from radio to television, and radio set makers added television set manufacturing. Radio station owners were encouraged by the networks to apply for television station licenses.

Radio persevered, still bound partly to the traditional but declining radio network programming relationships, and to station owner/operator desires to provide service to more local communities. A new network quiz show introduced on radio in 1948 went from nowhere to a 20 rating by January 1949. As television grew, the rating dropped to 8.3 in 1951. Film and radio comedian Bob Hope saw radio program ratings drop from 23.8 percent in 1949 to 5.4 percent in 1953.⁶⁹ For many radio entertainers, a move to television became the only way to resurrect a career.

At the close of fiscal year 1954, licensed or authorized AM stations totaled 2,697, nearly three times the number of stations operating in 1943. A majority of new AM stations were limited to daytime operation only, when the signals would not travel as far as at night. Two factors encouraged the growth of daytime stations: first, the existing AM band crowding made it difficult to identify unlimited time frequencies, and second, the growth of television drew nightly programming and audiences from radio. Licensees thus favored stations limited to operating only during the daytime. Radio survived by adopting the all-music format and shifting to a heavier emphasis on daytime listening to withstand the evening program encroachment of television.

As radio programming changed, so did the way people used radio and how advertisers bought radio time. Television networks became the means to reach large, national audiences. Radio became a local advertising medium. The growth in the number of radio stations reflects the faith many station owners had in radio. Radio had previously been an evening entertainment medium, but in the 1950s, it shifted to "morning drive" and "afternoon drive" listening patterns. There are obvious reasons for this change.

The mid-1950s was a time of economic prosperity in the United States. Out were the Depression and the WWII food and luxury shortages. In were consumer luxuries and increased consumer confidence. Also in was the suburban housing boom, the ability of families to own a car, or perhaps two vehicles (equipped with radios), and there was a dramatic increase in births after the end of WWII.

Also in was the miniaturization of electronics through the development of the transistor. While transistors boosted the production of television sets, they also improved the quality of radios. Small, battery-power transistor radios changed how and where people could listen to the radio. AFC circuits (automatic frequency control) reduced signal drift on the receivers.

This activity on the AM band took place while television expanded and FM sought a foothold. Commercial and noncommercial television authorizations had

grown from a total of 108 stations in 1952, the year the TV freeze ended, to 667 by 1959. Commercial and noncommercial FM stations, though limited by receiver availability, in 1959 numbered 769 and 165, respectively. FM receiver set sales would finally top one million in late 1958.

MUSIC AND MORE

In the 1950s, the networks shifted from controlling the programming heard on their affiliates to supplying program segments. As they had in the earliest days of radio, stations shifted more of their programming to "light entertainment" or music programming Radio seemed to be returning to its earliest programming strategy, airing recorded music because it was cheap to program. In a major city, a station might adopt an entirely classical format. In a small town, country and western might be played. Still other stations might adopt "block programming" that might feature a two-hour country and western program, followed by two hours of popular music, followed by two hours of classical music, and perhaps then followed by a network-supplied entertainment program. Stations in many markets attempted a "one size fits all" approach by airing a middle-of-the-road (MOR) format, which probably meant playing a mix of orchestral or vocal popular music. With network affiliations virtually meaningless, something was needed to help radio stations differentiate themselves from one another.

STATION DIFFERENTIATION: TOP 40

Just as the refinement of various radio ideas and inventions by Marconi, Fessenden, de Forest, and Armstrong had led to wireless transmission to crude homemade receivers, four independent station owners began to appear in the broadcast press in the 1950s with a new approach to station programming. The four programmers were Todd Storz, Gordon McLendon, Gerald Bartell, and Harold Krelstein. Each man and the company he headed made substantial contributions to the development of the Top 40 format that would create a new identity for radio.⁷⁰

One of the best explanations for creating a radio format built around 40 key songs came from a chance observation by Todd Storz. Storz observed customers in an Omaha bar playing the same few songs over and over on the jukebox. As customers left, the waitresses also played the same few songs over and over. Storz concluded that listeners most wanted to hear a select number of hit tunes, over and over. The music repetition was instituted by Storz at KOWH in Omaha. Within two years, the station's Top 40 format was number one in all time periods!

History suggests that 40 songs were picked because that's the number of songs a jukebox could hold. Others say the 40 songs allowed the station to broadcast for several hours before having to completely start the song rotation again. The Top 40

format emphasized music, news, and local flavor supplied by the disc jockeys and the station's on-air promotions. On-air promotions that might seem obvious to us today were pioneering strategies of the Top 40 programmer. Storz first contest promised to give a homeowner \$500 if the station broadcast the person's address and they called the station within a minute. *Time*, in a 1956 article, reported that Storz stations in Omaha and Minneapolis were offering to give away two bank drafts for \$105,000 each to listeners who could find the checks, based on clues given on the air. ⁷² An insurance company underwriting the contest estimated there was only a 1 in 47 chance of someone winning the prize.

Gordon McLendon's stations used the "Oops, sorry" promotion to attract listeners. Stations in Dallas and four other markets, over a six-week period, ran ads ostensibly to apologize for language inadvertently aired. In fact, the ads were to create talk about the stations and, ultimately, cause listeners to sample the stations, perhaps in hopes of hearing other naughty words! Another promotion called "the Walking Woman contest" consisted of giving a woman/man a sizeable prize. Listeners were given clues on the air and encouraged to walk up to someone on the street and ask if they were the "Walking Woman/Man." 73

While the number of FM stations had begun to increase, FM still constituted a small portion of total radio listening. For this reason, these programmers built Top 40 around AM stations that had typically been network stations. Each station owner tried to differentiate his station through refinement of the radio format. Station ownership was limited to only seven stations of a broadcast service (seven AM and seven FM). For the first time, programming was emphasized over sales. Owners freed themselves from the type of network programming decisions that had been influenced by advertisers and ad agencies.

Program directors at stations created "hot clocks," which presented a one-hour slice of the station's programming. The station might specify when to play an "up tempo" song, when to play a solid hit, and when to play an emerging hit. Stations also used jingles, weather forecasts, and other segments to create a unique but consistent identity for the station. A 1955 *Billboard* survey asked managers who controlled the music at their station. The survey reported that management controlled or influenced programming at more than 75 percent of the large stations and at about 60 percent of the small stations.⁷⁴

As competition among Top 40 formats increased, stations found further need to differentiate themselves. Usually this meant expanding the playlist by adding oldies. Just as the Top 40 relied on currently popular hits, the oldies theory held that songs, once popular, would still be popular. Ultimately, Top 40 would lead stations to classify their formats in one of three ways: Roots, based on the origin of the music, such as country, reggae, or folk songs; Targets, referring to the presumed target audience for the music; Presentation, based on how each individual station chose to deliver the music to the listener.⁷⁵

The Top 40 mix was aimed at a teenage or young adult audience. While older listeners had switched to television viewing, inexpensive and very portable radios

made Top 40 a natural draw for the teen audience. Teens were also the fastest growing population segment (the segment growth was fueled by the post-WWII baby boom); they had plenty of disposable income and they had time to listen.

THE DECLINE OF AM AND THE RISE OF FM RADIO

The mix of Top 40 stations helped reposition radio in the minds of listeners but it also created a group of similar sounding stations. Many stations aired similar music and jingles, played loud and lengthy sets of commercials, and were generally of poor fidelity. The growth spurt in the number of stations had not stopped either. The number of authorized stations increased from 2,034 in 1948 to 3,456 by 1960. If it is proper to characterize the AM band in the early 1960s as being "in trouble," the FCC was aware of it.

AM radio in the early 1960s found itself in trouble similar to that of the 1920s. The number of stations in 1960 led to listener complaints about interference and poor audio quality. The low-cost receivers, which had initially encouraged listening, now discouraged listening because consumers began to want higher audio fidelity. The same transistor technology that encouraged cheap radios also led to greater audio sophistication among manufacturers. Higher fidelity phonographic systems were available. Home tape recording was beginning to gain acceptance.

In the FCC Annual Report, for fiscal years 1961 and 1962, the Commission notes the problems with AM service, including band congestion and programming competition. Even the National Association of Broadcasters (NAB) recognized the hazards of uncontrolled AM growth. NAB President LeRoy Collins said the FCC had licensed more stations than advertising revenue would support. This gloomy AM assessment, with the endorsement of the National Association of Broadcasters, led to a partial freeze, from 1962–1964, on the acceptance of applications for new AM stations and for major changes in existing facilities.

With the freeze on AM station construction, potential station owners shifted their attention to FM. Besides the obvious FM advantage—that channels were frequently available while new AM service was frozen—operators began to recognize other benefits not available from AM stations. FM service provided day and night service, with uniform power levels and coverage areas. The 200 kHz channel width of FM produced superior audio; in 1961, FM stereo service had been authorized. The higher spectrum of FM service produced less susceptibility to atmospheric noise or radio frequency interference.

By 1963, the number of commercial FM stations had finally topped 1,000, with 1,081 authorized commercial stations and another 209 noncommercial stations. In cities with populations over 100,000, the FCC in 1964 required that half the FM station's programming not duplicate a sister AM station's programming.⁷⁷ Nonduplication, along with stereo broadcasting and wider availability of quality FM receivers would give consumers new reasons to listen to FM.

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FM stations in major cities began to counter program the AM stations. If the Top 40 AM formula suggested playing no song longer than three minutes, the FM approach was to play an album cut ten minutes long. Rock music, growing from the "flower children" and "make love not war" anti-Vietnam movements, featuring performers such as Jefferson Airplane, the Grateful Dead, Jimmie Hendrix, and Buffalo Springfield, provided much of the content for FM station programming. The teens and preteens of 1950s Top 40 were now the 18–34 audience and the target of FM rock stations.

The music industry also encouraged the growth of FM radio. While the playlist of the Top 40 stations had been tightly controlled, with very limited opportunity for new songs or new groups to gain on-air exposure, many of the FM stations would play virtually anything. Record companies effectively used the stations to introduce new artists and styles of music to a generation willing to listen and to buy the records.

Underground FM stations, programming long sets of rock songs, were still the minority among FM stations, but they signaled the ability for FM to attract listeners by offering counterprogramming. FM listenership was also still dwarfed by AM's listener share, but FM stations were gaining listeners and the number of stations continued to grow. By 1971, there were 4,343 AM stations and 2,196 commercial FM stations and another 472 noncommercial FM stations. Nearly half of all radios sold included FM tuners. About three-fourths of all households had FM radio. Nearly 40 percent of FM stations were broadcasting in stereo. About one third of all radio listening was to an FM station.

The underground rock formats of the 1960s gave way to progressive rock formats in the 1970s. In the South and Midwest, FM stations started programming stereo country. A few FMs marketed themselves to listeners as "fine music" stations and aired instrumental or beautiful music. FM resulted in more programming choices for listeners and made AM stations respond to new competition. National FM listener share passed AM in the fall of 1978; 50.698 percent of radio listening was to FM.⁸⁰

For both AM and FM, the number of stations has continued to rise, particularly the number of FM stations. Mass Media Docket 80–90 in 1982 created hundreds of new FM drop-in allocations (leading to a surge in the number of FM stations) and it made power increases by existing FM stations possible. While AM stations in many major markets continue to attract listeners with unique programming—particularly news, talk, sports, or "full-service" programming—for most listeners it is no longer a question of whether to listen to AM or FM. FM has become the *de facto* standard for the majority of radio listeners.

Changes in station ownership policies have also benefited FM stations more than AM stations. Station owners, since radio's infancy, had been limited to owning no more than seven stations of any one service, AM, FM, or television. (Only five of the television stations could be VHF; the other two had to be in the UHF band.) In 1985, the FCC increased station ownership to twelve stations of any one service.

This number was increased again to eighteen in 1992 and twenty in 1994. Also eliminated in 1992 was the restriction against owning more than one station of each service in a market.⁸¹ With passage of the Telecommunications Act of 1996, broadcasters may own up to eight commercial stations, in markets with forty-five or more commercial radio stations, not more than five of the same service, and they may own as many stations nationwide as they are able to purchase.⁸² The higher power levels of the FM stations, combined with stereo signals, uniform coverage areas, and static-free signals, have made the FM stations much more desirable purchases. Both of these ownership measures have led many smaller station owner groups to sell their properties to larger corporate groups. These owners have built successful stations groups that dominate not only station listening but also radio ad sales in their markets.

The AM band has been described as "saturated" for three decades. Some attempts have been made to improve AM's appeal to listeners. AM stereo, after a lengthy competition among various manufacturers, was finally approved by the FCC in 1993.⁸³ Though most observers say the decision was too little and too late. The FCC, in previous proposals for AM improvement, succinctly identified the difficulties inherent in AM service:

Channel congestion and interference, both radio- and environmentally-induced, have dramatically increased on the AM band. Coincident with this growth has been a decline in the fidelity of AM receivers. As a consequence, during the last twenty years there has been a well-documented shift of AM listeners to newer mass media services that offer higher technical quality and better aural fidelity. This shift in listenership has clearly dulled the competitive edge of this once vital service.⁸⁴

RADIO IN 2000 AND BEYOND

By 2000, approximately 85 percent of all radio listening was to an FM station, even though the number of AM stations totaled 4,783 versus 5,766 commercial FM stations and 2,066 noncommercial FM stations. The question now may be whether AM radio and possibly FM are simply transitional delivery technologies. Already, broadcasters are investigating (and investing in) digital terrestrial broadcasting that could eventually replace the AM and FM stations we know of. At the same time, the FCC has approved creating micro FM stations (low-power stations) to offer additional local programming.

The companies Sirius Satellite Radio and XM Satellite Radio are marketing satellite-delivered national audio service that will give subscribers national radio service. Ref Command Audio is launching a subscription audio service using FM subcarriers in the top forty markets around the country to deliver what they call "personalized content." Web Radio sites provide listeners not only with the chance

to listen to local radio programming but to enjoy distant stations too far away to be received over the air or to listen to "radio stations" programming solely on the Internet. These "stations" don't require a license from the FCC and can be put on the air with minimal effort and expense.

These programming options also should lead the reader to reflect on the most compelling issue facing the earliest radio station operators: How do you pay for these new services? WGN General Manager Ward Quaal, commenting in 1962 about the competition facing AM pointed out something still obvious, "we have learned the hard way that in our business additional competition does not necessarily mean a better product for the consumer." More stations have not necessarily meant better programming or improved service to the public. Some critics charge, and rightfully so, that many stations are adopting formats designed only to boost profits and cut costs. In the coming chapters, we will talk about broadcast station management and sales, how stations now use research to help determine station programming, and we will look further at some of the technological issues facing the industry and the public.

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Radio Regulation

DR. DAVID SEDMAN
Associate Professor of Electronic Media and Film
Southern Methodist University

Twentieth-century America has been unequivocally transformed by the invention of broadcasting. The United States government, from almost the inception of the earlier of the two inventions, radio, has attempted to provide legislation that would both promote and reign in the industry for the public good. Throughout most of the century, radio has constantly had to reinvent itself to remain profitable due to increased competition from alternate media forms. The key periods of maturation within the radio industry are inexorably tied to governmental regulation and deregulation of the industry. The three stages in radio's development may be characterized as: (1) the pioneer era, (2) the "golden age," and (3) the deregulatory period.

ORIGINS OF RADIO REGULATION: THE PIONEER ERA

The origins of radio regulation can be traced back to two laws passed by Congress during the first part of the twentieth century, the Wireless Ship Act of 1910 and the Radio Act of 1912. Both laws dealt with the requiring of emergency radio telegraphic equipment on ships at sea. During this period, the technological explosion in wireless transmission had advanced radiotelephony to enable the transmitting of voice and music. Radio science was given a tremendous boost during World War I when the United States Navy called on radio's pioneer inventors and important cor-

porations to pool their various patents for help in winning the War. By selecting the best of the workable designs available at the time, the Navy demonstrated the great potential of radio.

In 1920, the first officially licensed radio station began operation, but soon after a myriad of technical problems threatened to stunt the new medium's growth. Herbert Hoover recognized the problems faced by radio soon after President Warren Harding appointed him Secretary of Commerce in 1921. Because broadcast transmissions crossed interstate boundaries, jurisdiction fell under Hoover's office. Hoover wasted no time in arranging a conference to bring together the key players in the emerging radio industry. Following the first Radio Conference of 1922, it was decided that more governmental control over broadcasting was going to be necessary.

Hoover decided that limitations must be placed on the number of stations that would be allowed in a given city, the number of hours a day a station could operate, and the power level and frequency on which a station could operate. Though the broadcast industry recognized the need for some form of governmental regulation, there was not unanimous support for all of Hoover's restrictions. More importantly, the courts were not ruling that the Department of Commerce had the jurisdiction to control so many aspects of the industry.¹

While Hoover still enjoyed support from many within the industry and from the public, his court losses and the technological quagmire surrounding the radio broadcasting industry were increasingly frustrating to him. This frustration caused him to ask the Department of Justice for a definitive opinion on the scope of the broadcast business and of his power to regulate it. In 1926, the acting Attorney General under Calvin Coolidge, William Donovan, concluded, "I can only suggest that it be sought in new legislation, carefully adapted to meet the needs of both the present and the future." Coolidge concurred and pushed for the passage of legislation recommended by both Hoover and Donovan.

The Radio Act of 1927 established a five-member body to oversee the radio industry. The newly developed Federal Radio Commission (FRC) was given authority over basic operational guidelines including the classification of radio stations, assigning frequencies to stations, and assigning times during which a station could operate. This structural regulatory approach dealing with the basic technical issues and licensing parameters rectified the transmission problems and allowed the stage to be set for entry into radio's "golden age."

THE COMMUNICATIONS ACT AND RADIO'S GOLDEN AGE

By 1934, the public's acceptance of and appetite for radio led Secretary of Commerce Daniel Roper to suggest to President Franklin Roosevelt that a more central-

ized approach to communications regulation would be advantageous. Roper's suggestions were quickly acted on and resulted in the Communications Act of 1934.

Prior to the Communications Act, a number of federal agencies had some measure of jurisdiction over wireless and wired communication. This control group included the Postmaster General of the United States and the Interstate Commerce Commission, as well as the FRC. The 1934 legislation concentrated these controls in a single entity and placed all forms of communication under the auspices of the Federal Communications Commission (FCC). Much like the preamble to the United States Constitution, the first paragraph of the Communications Act makes a general statement as to the FCC's responsibilities:

For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States a rapid, efficient, nationwide, and worldwide wire and radio communication service with adequate facilities at reasonable charges... for the purpose of securing a more effective execution of this policy by centralizing authority heretofore granted by law to several agencies and by granting additional authority with respect to interstate and foreign commerce in wire and radio communication, there is hereby created a commission to be known as the "Federal Communications Commission," which shall be constituted as hereinafter provided, and which shall execute and enforce the provisions of this Act.⁵

Provisions of the act consisted of seven major divisions. Regulatory duties in the area of broadcasting were detailed in Title III. All sections of the Communications Act were to be carried out using the overriding principle of the "public interest, convenience, or necessity." This government supervision or trusteeship of the broadcasting industry is the key component to what is commonly referred to as the "public trusteeship model" of broadcast regulation.⁶

The government's limitation on entrants into the market and the public's insatiable demand for radio programming proved to be beneficial to the industry and the listening public. Radio transmissions were generally received without interference from other stations that placated the public while profit margins were favorable for radio station owners.

With the structural issues codified, the FCC turned to the behavioral aspects of broadcast regulation. Business aspects such as prohibiting unethical practices by advertisers regarding program content, including local programming and the discussion of controversial issues of public importance, were now under the control of the FCC.

The FCC made a number of rulings that seemed to border on infringement of the First and Fourth Amendments of the Bill of Rights. Control of program content and the restricted number of stations allowed to enter the field of broadcasting would normally be considered violations of free speech. The FCC maintained this power due to the definition of broadcasting as a "unique" industry. The rationale for government control and licensing of private stations was the concept of scarcity. Scarcity in broadcasting exists because of the limited amount of space on the broadcast spectrum. The finite number of stations that can be placed in a given area limits the number of entrants that can be allowed into the broadcast field.

For the next two decades, during its Golden Age, radio reigned supreme, flourishing within the confines of its FCC disciplines. As alternate media sources such as broadcast television, cable television, and Internet-delivered media have proliferated, radio has had to redefine its programming and business operation to survive. Of necessity, the radio industry has transformed itself from the preeminent mass media source of news and entertainment to a niche-audience provider of narrowly defined music formats and talk shows. As a result of these changes, regulations have been pared back and this, in turn, has benefited the industry.

DEREGULATORY PERIOD: ROUND ONE

The wisdom of politicians trying to establish fairness and morality in the broadcast industry rarely goes unchallenged. During the 1960s and 1970s, the FCC imposed a number of controversial regulations on the broadcast and cable industries. These regulations affected various phases of station and cable system operations. They included programming practices (e.g., television's Prime-Time Access Rule and Financial Interest and Syndication Rule), technical considerations (e.g., cable system's requirement to have two-way communication capability by a given deadline), and content (e.g., indecency standard prompted by a radio case). These and other regulations were revisited by the FCC and Congress because a number of the rules seemed either antiquated or ineffective. A deregulatory tack first advanced by FCC Chair Charles Ferris during the Carter administration was furthered by Chairmen Mark Fowler and Dennis Patrick in the Reagan years. Throughout the 1980s, the FCC torched the "regulatory underbrush" because it felt it lacked the resources and expertise to deal with the myriad of behavioral rules on the books. This attitude is best exemplified in the repeal of the Fairness Doctrine in 1987.

The Fairness Doctrine required broadcasters to present issues of public importance on their stations. The "fairness" portion required that stations provide the opportunity for airing opposing points of view on matters relating to the public interest. The Doctrine was used as a rationale for nonrenewal of a station's license. Many stations avoided controversial material due to the requirements of the Doctrine, the opposite of what the regulation intended. In 1987 the Fairness Doctrine was repealed from the regulatory landscape. Viewed as a hindrance to the open discussion of contemporary issues, the FCC felt that the marketplace (i.e., the listening audience, station, and advertisers) would be better arbiters of the numbers and types of issues to be discussed on the radio airwaves. The repeal of this law could not have come at a better time for the AM radio industry.

AM broadcasters, who had lost their listeners of episodic entertainment to television during the 1950s, became a poor second to FM radio in the late 1970s and 1980s. Popular music formats gravitated to FM and the loss of their audience forced some AM stations into oblivion. The repeal of the Fairness Doctrine, combined with low cost satellite transmission and reception, ushered in a new wave of long-form talk shows well suited to AM's inferior sound capability. Nationally delivered talk shows such as G. Gordon Liddy, Tom Leykis, and Rush Limbaugh would deliver solid audiences with minimal programming costs to the station.

Further deregulatory measures aimed at reducing the FCC's load also lowered the costs of station operations. It was now possible for the stations to have unattended operation with the use of automated equipment without FCC notification. The use of automated testing equipment was also allowed. Stations were able to trim personnel costs by reducing on-air personalities and contracting out and/or sharing engineering staff. A contemporary radio station could be run with a handful of employees.

An FCC ownership rule modification allowed competing stations to broker programming time and combine personnel through local marketing agreements (LMAs). In 1992, the FCC also eased the duopoly rule that had long prevented an owner from holding more than one AM or one FM station in a given market.⁸ Obviously, these deregulatory measures aided those stations that were looking to trim operating costs and streamline operations. These incremental changes were largely welcomed by the radio industry. The second wave of deregulation, however, would forever change the concept of radio station ownership.

DEREGULATORY PERIOD: ROUND TWO

Though the daily operations of radio stations were streamlined to some degree, radio suffered unprofitable years in the late 1980s and early 1990s. With LMAs and the relaxation of the duopoly rules as appetizers, the Telecommunications Act of 1996 proved to be the main course. The 1996 measure was the first major overhaul of communications law since the Communications Act of 1934. Given the major changes that had taken place in telecommunications over a sixty-year period, the radio industry was eager to embrace any positive regulatory change that would enhance its profitability. The radio industry's benefit came directly from a provision of the Telecommunications Act that discarded the long-standing notion of scarcity.

With audio services being delivered via direct broadcast satellite (DBS), the Internet, cable audio, and more than 12,000 radio stations in the United States by 1996, the notion of scarcity within the radio industry did seem antiquated. The long-term viability of radio hinged on the regulatory changes that would see it into the twenty-first century. The Telecom Act would repeal limits on the number of radio stations a single licensee could hold. Limitations on the number of stations an entity could own in a single market were relaxed significantly (see Table 3-1). 9 This por-

TABLE 3-1 Telecommunications Act of 1996 Limits

# of Commercial Stations in the Market	Limit of Ownership
45 or more	Up to 8 with no more than 5 in FM or AM
30 to 44	Up to 7 with no more than 4 in FM or AM
15 to 29	Up to 6 with no more than 4 in FM or AM
Fewer than 14	Up to 5 with no more than 3 in FM or AM but not more than 50% of stations in market
1999 Cross-Ownership Revision	
# of Media Voices in the Market	Limit of Ownership
20 or more	2 TV stations and six radio stations, or 1 TV station and seven ration stations, or 8 radio stations (see above)
10 to 19	2 TV stations and four radio stations

Source: Federal Communications Commission.

tion of the Act along with an earlier FCC provision which removed the three-year holding rule (known as the trafficking rule) which forced an owner to operate a station for three years before it could be resold, led to radio station brokering. Radio station transactions abounded.

Group owners continued to buy more stations, and consolidation within the industry continued. In the first quarter of 1997, radio station transactions (not including mergers) amounted to more than \$4 billion compared with less than \$800 million in the same period during 1995 and \$2 billion in 1996. ¹⁰ By comparison, the total radio transactions for all of 1991 amounted to less than \$1 billion. ¹¹ Meanwhile, publicly held multiple station owners saw their stocks increase an average of 400 percent between 1993 and 1998 and 110 percent during 1997 alone. ¹² After the regulation went into effect, stations traded hands so quickly that some employees would ask facetiously, "Who's my owner today?"

In 1999, the FCC again revised its ownership rules by allowing common ownership of two television stations and six radio stations by a single company in one market. For decades, licensees were restricted from adding stations within a market by cross-ownership restrictions. To qualify for the maximum number of radio and television stations, the market must contain at least twenty independent media voices. These outlets include broadcast stations, daily newspapers with circulation exceeding 5 percent of the local market, and cable service (counted as one no matter how many cable companies are represented in the market). In markets with ten to nineteen media outlets, groups can own up to four radio stations and two TV stations. The revised rule also allows a company to own as many as seven radio stations

in a market where it owns one TV station, or up to eight radio stations in a single market. The FCC reasoned that the rapidly evolving media marketplace necessitated the latest rule modification.

CURRENT REGULATIONS

Obviously, the radio industry is not totally deregulated and is not likely to be in the near future. The regulations that remain still affect all phases of a station's operation, including daily operations, program content, advertising, and licensing.

During the two stages of deregulation, some areas remained virtually unaffected and others were totally removed. There are some segments that would appear to be about half-gone. To some observers, these aspects of radio regulation appear to be a rather disconnected lot of odds and ends that are of great significance to the industry. During a 1999 review of ownership rules, FCC Chair Bill Kennard admitted as much when he said, "Instead of a set of rules, we just had a blur of policies." ¹⁴

An excellent example of the controversies that have taken place as a result of regulation reform can be found in the area of program content that deals with political candidates running for office. These focus on personal attacks, editorials, and equal opportunity.

Program Content Regulations

Personal Attacks, Editorials, and Equal Opportunity

When the Commission abandoned the Fairness Doctrine, the related personal attack and political editorializing rules remained on the books. The political editorial rule requires a station that endorses a candidate for office to inform opponents of the endorsement and offer the opportunity to respond to the station's position. The personal attack rule obligates a station to contact a person whose character, integrity, or honesty is attacked on its airwaves. In addition, the station must provide the person an opportunity for response.

Opponents of the two rules, such as the Radio and Television News Directors Association (RTNDA), suggest that the rules inhibit discussion of important political issues and are an abridgement of the First Amendment. During the summer of 1999, the U.S. Court of Appeals agreed and ordered the FCC to justify the retention of both rules. The rules appear to be both antiquated and disjointed in radio's contemporary regulatory framework. While the court was not favorable to the FCC's initial arguments for retention, future litigation will almost surely see a relaxation of the restrictions.

Two related provisions that have a more solid footing are found in sections 312 and 315 of the Communications Act and deal with reasonable access and equal opportunities. The reasonable access portion of the Act requires stations to make their

facilities available to all candidates for federal office. Further, it states that the station must permit the purchase of commercial time for legally qualified candidates for a federal office. While the reasonable access provision applies only to federal candidates, the equal opportunities provision applies to state and local candidates.

In the event that a radio station allows any legally qualified candidate for public office to utilize its facilities, all other legally qualified candidates for the same office may request an equal opportunity to appear on that station. Stations, however, are not obligated to sell local or state candidates airtime or to allow them usage of their radio facilities. Once access is given or time sold to a candidate, a recognized political opponent must be given the same access and opportunity to buy the same amount of advertisement time at the same rate and at similar airtimes. There are four exemptions from equal opportunities claims. They include appearances on bona fide news programs and spot news coverage, documentaries, interviews, and debates. The equal opportunities provision provides stations with a variety of challenges during an election season. Regulations also affect the station's profit margin at election time through the lowest unit charge. This topic is found in the advertising selection later in this chapter.

Payola and Plugola

Payola and plugola violations have served as black marks throughout radio's history. Payola is the unreported payment of money or a valuable gift given to a station employee in exchange for playing some form of programming. Payola is most often associated with the rock and roll era of the 1950s when payment was given to disc jockeys for playing particular songs. Today, when payment is given for playing music, stations announce the source of the payment prior to the song. Failure to report such payment is a payola violation under the Communications Act and could lead to criminal prosecution.

Plugola is a related activity in which the station employee promotes some product, service, or other item in which he or she has a direct interest or relevant, though indirect, interest. If the employee fails to note this interest, the FCC could rule the message as a violation of the sponsorship identification requirement. Such a violation carries a fine and must be placed in the station's public file. Other forms of onair speech can lead to difficulties for the station.

Unprotected Speech

All media are subject to criminal and civil laws of the land. Broadcasters and the print media can be held liable for defamatory statements. As can be seen in the discussion of candidate endorsements, however, broadcasters have modestly restricted First Amendment rights. Whereas a newspaper can freely endorse one political candidate over another, a radio station making the same endorsement would have to offer the opportunity to respond, as noted earlier. The sliding scale of protected speech is represented in offensive speech. One such example is obscene and indecent material.

Obscenity is not protected speech. The Supreme Court in *Miller vs. California* established a three-part test to determine whether a work—be it print, audio, visual, or any other format—will be considered obscene and, therefore, a violation of the U.S. Criminal Code. The Miller test requires that: (1) the average person, applying contemporary community standards, would find that the material appeals to the prurient interest; (2) the material describes or depicts sexual conduct in a patently offensive manner; and (3) taken as a whole, the material lacks serious literary, artistic, political, or scientific value. It would be a very unusual situation for a radio station to be found guilty of obscenity.

Music lyrics, comedy routines, and air personalities' comments that would fall well shy of meeting the Miller standard of obscenity have long been the target of criticism by some in the radio listening audience. The FCC responded to the public criticism and created an indecency standard following the Pacifica case (discussed below). The contemporary definition of **indecency** is any broadcast that "depicts or describes, in terms patently offensive as measured by contemporary community standards for the broadcast medium, sexual or excretory activities or organs" will be considered indecent.

The rationale behind the FCC's creation of this standard was the fact that broadcasts can be considered as uninvited guests. Unlike books or cable television subscriptions that require a buyer or subscriber purchase, broadcasts are pervasive. In the Pacifica case, an afternoon airing of a George Carlin comedy sketch was heard by a father driving with his son. Responding to the complaint, the FCC characterized the Carlin monologue as "'patently offensive,' though not necessarily obscene," and that it be regulated much like a nuisance law whereby the "law generally speaks to channeling behavior rather than actually prohibiting it." ¹⁷

The Commission's indecency rule was designed primarily to protect children from such indecent broadcasts. Therefore, indecent material is allowed between 10:00 p.m. and 6:00 a.m. Shock jock Howard Stern and his employer, Infinity Broadcasting, were repeatedly fined during the 1990s for indecency violations that occurred during Stern's morning show (see Chapter 9).

Another regulation designed to protect the listener is the FCC's hoax rule. The effects of radio programs on audiences date back at least to the golden age. The most famous example was Orson Welles's 1938 broadcast of H. G. Wells's *War of the Worlds*. Some listeners believed that the Martian invasion dramatized in the program was actually taking place. However, it was not until 1992 that the FCC created a rule about broadcast hoaxes.

A spate of incidents involving air personalities at various stations led to the rule. The most prominent case was a St. Louis station's airing of an emergency alert and a bulletin that the country was under nuclear attack. Because the incident took place during the Gulf War, listeners failed to grasp the intended humor of the broadcast. In another incident, a station told listeners that a vacationing air personality had been kidnapped. Listeners actually tried to aid the investigation. Because the air personality had not been kidnapped, the station received a number of complaints.

The FCC's hoax rule involves the answering of three questions: (1) Is the information known to be false? (2) Will foreseeable public harm stem from the broadcast? and (3) What was the result of the broadcast and did it directly cause public harm? One place where this type of speech is protected on the broadcast airwaves is in political advertisements.

ADVERTISING

Political Advertising

The area of political advertising is well covered by the Communications Act. Radio political spots are required to disclose the identity of the organization paying for the ad. The sponsorship identification provision is found in Section 317. Stations may screen the ad to ensure that the identification provision has been met. However, this is the only action that the station may take prior to airing the spot. If the spot contains defamatory statements, the station is not allowed to edit or shelve the spot. As such, it is also protected from lawsuits or fines that could have been successfully brought against the station.

Advertising rates are generally not subject to governmental regulation and scrutiny. One anomaly is the area of political advertising. Section 315(b) ensures that stations will not favor one candidate over another by offering markedly different advertising rates. In the forty-five days preceding a primary and sixty days preceding a general or special election, ad rates are subject to the **lowest unit charge** (LUC) provision. When within the LUC window, candidates pay no more than the lowest unit charge obtained by any other advertiser for the same class of time, spot length, and during the same time period or daypart.

If the station offers volume discounts for large purchases of commercial inventory, the candidate must be offered the same rate even if he or she only purchases a single spot. Further, bonus spots and make-goods are also factored into the LUC formula. The station is obligated to disclose all rates and incentives that are made available to other advertisers. The LUC formula must be recomputed on a week-by-week schedule. Because many radio stations offer volume discounts and incentives, the LUC can affect station profit levels.

Tobacco and Alcohol Advertising

Federal law prohibits the advertising of cigarettes, mini-cigars, and smokeless tobacco products in broadcasting. The Justice Department and the Federal Trade Commission (FTC) are responsible for enforcement of the tobacco advertising prohibition. There are no federal laws or FCC regulations with respect to alcoholic beverages. The content and acceptance of advertising are ultimately in the hands of the broadcast industry, the advertising agencies, and the alcohol and tobacco companies. State laws may also affect liquor advertising. Self-regulation from broadcasters and industry trade groups has limited the appearance of hard liquor ads on radio. The alcoholic beverage industry trade group has created guidelines for the depiction of products in ads. Because this area of advertising is particularly controversial to the public and Capitol Hill, the industries are very cautious in their advertising practices. They do not want to risk governmental intervention and a possible banishment of their ads from the airwayes.

A federal law banning radio and television ads for casino advertising was struck down by a unanimous Supreme Court decision in 1999. The ruling permits the carriage of casino ads only in states that permit gambling. Despite the First Amendment right to carry ads for certain types of tobacco, gambling, and alcohol, the industry does exercise varying degrees of caution when advertising these controversial products and places. Even with mundane products and services, however, the content of advertisements is always a concern due to listener criticism and advertising regulations established by the FTC.

False or Deceptive Advertising

In the 1980s, the FCC removed a number of regulations dealing with business practices. The Commission has no rules prohibiting false or deceptive advertising. However, the Federal Trade Commission does have jurisdiction over unfair and deceptive advertising.²⁰ The radio industry needs to practice care to ensure that commercials do not contain the elements found in previous cases of deceptive and unfair advertising practices.

The FTC is fairly clear about its standards. An ad is found to be deceptive if it contains statements or omits information that is likely to mislead consumers acting reasonably and that the information is material to the consumer's decision to take a particular course of action.²¹ The FTC considers a commercial unfair if it causes or is likely to cause substantial consumer injury that the consumer could not reasonably avoid, provided that the harm is not outweighed by the benefit to the majority of consumers.²² The screening of radio commercials is an important part of a station's regular operation.²³

DAILY OPERATIONS

As from its outset, radio regulations continue to have a direct bearing on the daily operation of a station. These rules range from the most finite, technical aspects of the station to the hiring practices of the station to the messages heard on the station's airwaves. One of the most familiar requirements is that of the station identification.

Station IDs

All radio stations must broadcast an identification message at the beginning and ending of each operating day, as well as an hourly identification near or at the top of

each hour within a natural break in programming. The message must contain the station's call letters followed by the community of license. A **legal identification ID** may also include the station's frequency, the licensee's name, and the operating wattage. Following the legal information, a station is allowed to include positioning statements or any other information it deems appropriate.

Required Communications and Engineering Concerns

The Emergency Alert System (EAS) was created as a means of providing emergency communications to the listening public concerning local, state, and national emergencies. The EAS superseded the Emergency Broadcast System (EBS) in 1997.²⁴ All stations must have functional EAS equipment that is certified by the FCC and must be operational, either manually or automatically, at all times of the broadcast day. (The FCC will consider waivers from translator or satellite stations that merely rebroadcast the signal of another station.) All EAS stations are considered as Participating Notification outlets (PN) and, during a national level Emergency Activation Notification (EAN), must remain on the air. Stations must monitor and may activate the EAS at the local or state level at their discretion.

EAS and the former EBS tests are familiar to both broadcasters and audience members. A weekly test is conducted at random days and times. The Emergency Communications Committee of each state coordinates an additional monthly test. All stations are required to carry these tests. On the weeks of a monthly test, carriage of the weekly EAS test becomes optional. Stations are required to log all EAS tests either by manual or automated means. A station with EAS equipment found to be defective must repair the system within sixty days or, in some circumstances, request an extension from the FCC.

Communication of another type is needed at the transmitter site. The FCC requires all radio towers to be painted and lighted per the station's authorization or as required by the Federal Aviation Administration. The lighting on tower structures should be observed at least once during twenty-four-hour intervals by observation or by automated means. The automated monitor device itself must be inspected every three months. The owner of the tower is required to contact the nearest FAA Flight Service Station to report malfunctioning lighting instruments that could pose safety threats to pilots. All information and action taken must be placed in the station's records. This became a particularly sensitive issue late in 1998 when the FCC issued two warnings to all stations following two lighting malfunctions involving emergency medical helicopter crashes. Violation of tower lighting has now become one of the largest fines in terms of the base amount of forfeiture as established by the FCC. Table 3-2 presents a list of selected base amounts for FCC forfeitures.

In addition to tower checks, the FCC requires stations to conduct inspections of their transmitter systems, as the operator deems appropriate. Performance measurements are also required and must be kept on file at the transmission site for a period of two years. These measurements must be signed and dated by a qualified person making the measurements.²⁷ With respect to station performance, the FCC's field

TABLE 3-2 Selected Base Amounts for FCC Forfeitures

Violation	Fine ¹	
Failure to comply with prescribed lighting/marking	\$8,000	
Transmission of indecent materials	5,000	
Violation of public file rules	5,000	
Unauthorized discontinuance of service	2,000	
Use of unauthorized equipment	2,000	
Failure to file required forms or information	2,000	
Failure to make required measurements	1,000	
Failure to provide station identification	500	
Unauthorized pro forma transfer of control	500	
Failure to maintain required records	500	
Miscellaneous violations	250	

Source: Federal Communications Commission

office inspectors arrive without notice to inspect the station. Any violation of engineering standards could result in a warning letter or the issuance of a violation notice that generally carries a fine.

Hiring Practices

Another station operation that carries a fine when not followed in accordance with FCC rules is that of hiring practices. The FCC's Equal Employment Opportunities (EEO) section was designed to ensure that stations would be forbidden in hiring to discriminate against any person because of race, religion, color, national origin, or sex.²⁸ Further, stations have had to adopt an affirmative action program targeted to minorities and women.²⁹ Stations that failed to implement an acceptable EEO program have faced sanctions including fines, short-term license renewal, and the possibility of license nonrenewal. A case involving KFUO-AM and -FM radio in Clayton, Missouri forced the FCC to alter its EEO requirements.

Both KFUO-AM, a noncommercial religious station, and KFUO-FM, a commercial classical station with a religious orientation, are situated on the Concordia Seminary campus. Its hiring practices favored campus residents because the station believed that the station positions required knowledge of the Lutheran doctrine familiar to the campus community. The FCC claimed that the station violated EEO regulations by making insufficient efforts to recruit minorities and found it unnecessary for receptionists, engineers, and business managers to have knowledge of Lutheran doctrine. The court supported the church's claim that the Commission had violated both its religious freedoms and the equal protection component of the Fifth Amendment.³⁰ As a result, the FCC revised the EEO provisions.

¹Fee amounts are subject to change. Refer to FCC's Internet site for current fees at http://www.fcc.gov

The FCC's new EEO requirements no longer compare a station's employment profile to the composition of the local workforce. The scaled-back rules require outreach efforts designed to ensure that minority and female applicants are informed of, and have an opportunity to apply for, position openings.³¹ In light of the FCC's revised rules, the Commission waived at least nineteen fines against radio stations.³² The FCC will allow radio stations to design their own outreach programs. The self-assessment may be a consideration of the license renewal process.

LICENSING AND LICENSE RENEWAL

An initial license for a broadcast station will be granted only if the licensee meets basic criteria. The licensee must be a citizen of the United States, be of good character, and have the technical and financial capabilities to institute and operate the station. In addition, the applicant must obtain, file, and pay for a construction permit. (See Table 3-3 for a list of various applications and fees.) New stations are also the only facilities that carry a minimum operating requirement period for holding a license. Unlike existing stations, which can be bought and sold at will with FCC approval, a newly constructed station must be operated by its original owner for at least one year.

The Telecommunications Act of 1996 extended the license period for a radio station from seven to eight years.³³ The station pays an annual fee to the government for operating the station. Congress required the FCC to collect fees to recover the costs of their enforcement, policy and rule-making, international and user information activities. The fees paid are based on the classification of license(s) held by the licensee (see Tables 3-3 and 3-4).

Four months before the license expires, the licensee files an application for renewal. Renewal is based on three general criteria: (1) that the broadcaster is able to serve the public interest, convenience, and necessity, (2) that the broadcaster has had no serious violation of FCC regulations, and (3) the broadcaster has had no violations that would constitute a pattern of abuse.³⁴

The station maintains a public inspection file at its main studio. The file should provide the documentation needed at license renewal time. The public file contains required information such as a listing of programs aired on the station that dealt with issues of relevance to the local community. Public correspondence, time brokerage agreements involving another station in the same market, as well as the station's application, license, and construction permit must be kept in the file. Also to be included are the most current two years of the station's time allotment to political candidates, its coverage area or contour maps, and any documentation involving FCC actions or investigations. The file can be maintained in paper form, on a computer database, or a combination of both. Commercial and noncommercial public file requirements vary slightly. Although the renewal process is never guaranteed, it is extremely rare that a radio station fails to earn license renewal.

TABLE 3-3 Fee Table for Commercial AM and FM Stations

Type of Application	F	ee1
New or Major Change Construction Permit (CP)		
AM FM		2,885 2,600
Minor change, AM or FM	\$	725
New License		
AM FM	\$	475 150
Transfer of Control		
Long form, AM or FM Short form, AM or FM	\$	725 105
License Assignment per Station		
Long form, AM or FM Short form, AM or FM	\$	725 105
Hearing (New and major/minor change comparative CP hearing), AM or FM	\$8	3,640
Call sign application, AM or FM	\$	75
Replacement of CP or extension of time to construction, AM or FM	\$	260
Ownership Report, AM or FM	\$	45
Main Studio Request, AM or FM	\$	725
Directional Antenna Application		
AM FM	\$ \$	545 455

Source: Federal Communications Commission

¹Fee amounts are subject to change. Refer to FCC's Internet site for current fees at http://www.fcc.gov

FUTURE OF RADIO REGULATIONS

There has been a consistent pattern to give more latitude to the radio industry in the areas of business practices, ownership, and free speech issues. This trend will continue as the FCC clears out the remnants of "underbrush" regulations passed over during the deregulatory stages of the 1980s and 1990s. The FCC will spend more of

Station Classification	>20,001	20,001– 50K	50,001- 125K	125,001– 400K	400,001– 1 Million	<1 Million
AM Class A	\$430	\$825	\$1,350	\$2,000	\$2,750	\$4,400
AM Class B	325	650	850	1,400	2,250	3,600
AM Class C	225	325	450	625	1,250	1,750
AM Class D	275	450	675	825	1,500	2,250
FM Classes A, B1, C3	325	650	875	1,400	2,250	3,600
FM Classes B, C, C1, C2	430	825	1,350	2,000	2,750	4,400

TABLE 3-4 1999 FCC Fee Schedule by Market Size

Source: Federal Communications Commission

its effort on ushering radio into the digital transmission era and will continue to study new uses for radio as prescribed by Section 303 of the Communications Act.³⁵ Signs of this are evident heading into the twenty-first century.

In 1999, the FCC proposed three new classes of low-power or "microradio" FM stations. The categories include: (1) a 1–10 watt station with a service radius of two miles or less, (2) a 100-watt station with a radius of under four miles, and (3) a 1,000-watt station with a service radius of nine miles or less. The Commission's goal was to encourage a new breed of licensees. To discourage group station owners, the Notice of Proposed Rulemaking (NPRM) suggested that full-power broadcasters should be prohibited from owning, creating an LMA, or brokering any of the low-power FM stations. The proposal also sought to prohibit the use of a station as a translator service that would merely rebroadcast the programming of a traditional FM station. In addition, it proposed a limit of one low-power FM station per licensee in a given community and a national limit of ten or fewer stations.

The most eagerly anticipated FCC action is radio's gravitation from the analog to the digital domain. The FCC continues to watch the progress of an in-band, on-channel (IBOC) terrestrial radio transmission system to supplant the present analog system. A separate satellite-delivered digital radio service is also under consideration and would provide even more options in the radio landscape. The public would benefit from superior digital service and alternative modes of delivery. The transition to digital service could also make the FCC inspection process more efficient through virtual inspections. The questions that remain will be the influence of group owners on the public interest and whether radio's influence will be altered as it makes use of new technology.

By freeing radio of restrictive regulations, radio is in a unique position to retain its primary audience and take further advantage of lucrative synergistic partnerships with traditional and new media companies. The FCC will balance the remaining behavioral regulations with the evolving structural nature of the medium in its supervision of the radio industry's future.

NOTES

¹In 1923, a federal appeals court ruled that the Secretary of Commerce did not have the authority to refuse radio licenses to qualified individuals or to select the frequency on which a station would operate. Hoover v. Intercity Radio Co., Inc. 286 F. 1003 [D.C. Cir., 1923]. And in 1926, a federal district court ruled that the Radio Act of 1912 did not allow the Secretary of Commerce to require a licensee to broadcast at specific times or to broadcast on a designated channel. United States v. Zenith Radio Corporation, et al., 15 F.2d 614 [N.D. Ill., 1926].

²35 Ops. Att'y Gen 126 [July 1926].

³By February of 1927, both Houses approved of the Radio Act of 1927, and that same month Coolidge signed the Radio Act into law. See generally, Stephen Davis, *The Law of Radio Communication* (New York: McGraw-Hill, 1927).

⁴Public Law 632, "The Radio Act of 1927," 69th Congress [February 23, 1927].

⁵Communications Act of 1934.

⁶Mark S. Fowler and Daniel L. Brenner, "A Marketplace Approach to Broadcast Regulation," Texas Law Review 60 (1982): 217.

William B. Ray, FCC: The Ups and Downs of Radio-TV Regulation (Ames, IA: Iowa State University Press, 1990), p. 169.

⁸Federal Communications Commission, "Revision of Radio Rules and Policy," 1992.

⁹Public Law 104, "Telecommunications Act of 1996," 110 Stat. 56 [February 8, 1996].

¹⁰ Changing Hands," Broadcasting, March 30, 1998, p. 46.

¹¹Vincent M. Ditingo. *The Remaking of Radio*)Boston: Focal Press, 1995).

¹²Elizabeth Rathburn, "Wall Street Tuned to Radio," *Broadcasting & Cable*, June 3, 1996, p. 58.

¹³Federal Communications Commission, "FCC Revises Local Television Ownership Rules," Report No. MM 99-8 MM Docket No. 91-221 and 87-8 [August 5, 1999].

¹⁴Christopher Stern. "FCC Ending Duopoly Ban: Votes Big Changes to Ownership Rules," *Daily Variety* August 6, 1999, p. 1.

¹⁵Radio-Television News Directors Association v. FCC, 98-1305, D.C. Cir. (August 3, 1999).

¹⁶Candidates have seven days from the time of their opponents' usage and/or appearance to request equal time. To be considered legally qualified, candidates must have publicly declared their candidacy. Further they must be legally qualified to hold the office for which they are running. Finally, they must qualify for a place on the ballot or publicly seek election by write-in votes.

¹⁷FCC v. Pacifica Foundation, 438 U.S. 726 (1978).

¹⁸See Broadcast Hoaxes, 47 CFR 73.127.

¹⁹Greater New Orleans Broadcasting Association v. U.S., No. 98-387, S. Ct. (June 14, 1999).

²⁰Because the FTC is an administrative agency that regulates interstate commerce, if the product, service, or advertising medium is wholly considered intrastate (i.e., unaffected by interstate commerce), the advertisement would not be under the domain of the FTC.

²¹Federal Trade Commission, "FTC Policy Statement on Deception." Letter to the Honorable John D. Dingell, Chair of the Committee on Energy and Commerce [October 14, 1983].

²²Federal Trade Commission. "FTC Policy Statement on Unfairness." Letter to the Honorable Wendell H. Ford Chairman, Consumer Subcommittee [December 17, 1980].

²³For further information see, Federal Trade Commission, "Screening Advertisements: A Guide for the Media." [September 1998].

²⁴In the Matter of Amendment of Part 73, Subpart G, of the Commission's Rules Regarding the Emergency Broadcast System, FO Docket 91-171 [June 4, 1997].

²⁵FCC and FAA members also reminded tower owners that registration of towers that are 200 feet tall and higher or that are within 20,000 feet (approximately 3.8 miles) of a public use airport is required. See Federal Communications Commission. "FCC Hosts Forum on Tower Lighting and Year 2000 Issues, Urges Compliance with Tower Registration Rules" (Press release, December 14, 1998).

²⁶Other infractions can result in markedly higher fines, generally many multiples higher than the FCC's base amount. These large fines, such as for the transmission of indecent material, are usually the result of repeated violations, the nature of the violation, and/or the degree of recklessness on the part of the licensee.

²⁷The FCC used to require "licensed operators" to observe and adjust the transmission instruments of an attended station. The Commission now allows stations to determine the qualification of their operators. See Harold Hallikainen, "Chronicles of Transmitter Control," *Radio World*, June 23, 1999.

2847 C.F.R. 73.2080(a) (1997).

²⁹47 C.F.R. s 73.2080(b) & (c) (1997).

³⁰Lutheran Church–Missouri Synod v. FCC, No. 97-1116, D.C. Cir. (April 14, 1998).

³¹Federal Communications Commission, "Revision of Broadcast and Cable EEO Rules and Policies," MM Docket No. 98-204 (December 1, 1998).

³²Jeremy Shweder, "FCC Waives Fines against 19 EEO Violators," *Radio and Records*, July 30, 1999, p. 4.

³³110 Stat. 56 at 112 [February 8, 1996].

³⁴110 Stat. 56 at 112-113 [February 8, 1996].

³⁵Under the Powers and Duties of Commission, the FCC shall "regulate the kind of apparatus to be used with respect to its external effects and the purity and sharpness of the emissions from each station and from the apparatus therein" and "study new uses for radio, provide for experimental uses of frequencies, and generally encourage the larger and more effective use of radio in the public interest. . . . " Sections 303 E and G, Communications Act of 1934.

The Radio Industry

Management and Economics

This chapter centers on the role management and economics play in the radio industry. Radio management and economics are interdependently linked in radio; both areas influence and impact one another. The value of a radio station is directly related to management's ability to manage the operation's **cash flow** (the inflow and outflow of revenues and expenses for a specific time period). In turn, cash flow is but one variable used to monitor a station's economic performance.

To increase performance and efficiency, management must understand the economics of radio in terms of a single station operation, a cluster of owned and operated stations, and the broader industry level. At the same time, managers must understand how to motivate and lead employees toward completion of organizational goals and objectives.

The first part of this chapter examines the role of management in the contemporary radio industry. The remainder examines radio industry/station economics. Throughout the chapter, key concepts are introduced in order to understand the complexities associated with the changing world of radio management and economics.

RADIO MANAGEMENT: A BRIEF OVERVIEW

Radio has a rich and colorful history, as discussed in Chapter 2. As a result, radio station management has been in a continual state of evolution. Historically, each radio station had its own unique management team, which at a minimum usually consisted of a general manager (often the owner in a small market), a sales manager,

and a program director. As radio stations grew in size and complexity, departments were expanded and the range of managerial responsibilities increased and was shared with other management-related positions.

Radio ownership and management underwent massive changes with the passage of the 1996 Telecommunications Act. As detailed in Chapter 3, the 1996 Act eliminated previous national caps on ownership limits. Prior to the new legislation, individuals and corporations had been limited to the number of radio stations they could own nationally. Originally, ownership limits followed the "rule of sevens," meaning an owner was limited to a total of seven AM and seven FM stations. Further, the old rules limited ownership in an individual market. Previously, owners could own only one type of station in each class (AM/FM).²

Over the years, as the industry evolved, the ownership rules were modified several times to reflect changes in the marketplace. Owners were given the opportunity to acquire more stations, but always capped by a national limit.

But the limitations on station ownership still negatively affected the radio industry for its owners. By the early 1990s, many radio stations were losing money due to a national recession that dramatically impacted local economies, the primary source of radio station revenues. Part of the problem lay in the FCC's controversial 80–90 docket, which allowed a number of new additional radio stations to begin operation in the 1980s. The 80–90 decision created a glut of radio stations, further increasing competition in many markets. When local markets suffer a downturn in the business cycle, many small businesses cut back on local advertising. Radio stations began losing money in all types of markets: large, medium, and small. In 1991, three out of every four stations suffered a loss for the year.

Responding to radio's financial crisis, in 1992 the FCC eased the restrictions on the original duopoly rule that limited ownership to one type of station in each class in a given market. In large markets (defined as markets with forty-five or more stations) owners could own up to four radio stations. In markets with less than fifteen stations, an owner was limited to a total of three stations.

The revision of the duopoly rules enabled radio groups to begin clustering their operations on a very small scale. By adding additional stations in a market, owners could now consolidate management responsibilities and other areas where duties overlapped. For example, one general manager could be responsible for the station cluster, as would a single engineer and a central office staff. The ability to combine operations led to some job losses, but also allowed stations to reduce overhead expenses and improve their revenue picture, enabling the industry to engage in what economists call economies of scale.³ Basically, radio operators realized they could minimize the fixed costs of operating a series of stations, while at the same time increasing profit margins.

Radio owners continued to be frustrated with the ownership limitations, despite the modifications in the original duopoly rule. Radio's related industries, television and cable, were also clamoring for major reforms and relaxation of many governmental policies. It was this environment, coupled with a strong national economy and increasing technological convergence among the computer, broadcast, and telecommunications industries that led to the passage of the 1996 Act.⁴

While Congress removed national ownership limits, local market limits were enacted using a tiered system. In the largest radio markets, if there were at least forty-five stations, an owner was now limited to a total of eight stations, with no more than five in a single class. In a market with thirty to forty-four stations, ownership was capped at seven with a maximum of four in each class. Markets with fifteen to twenty-nine stations limited ownership to six stations (four in a single class); while markets with less than fifteen stations limited ownership to five stations with three in a single class.⁵

With national ownership caps removed, a number of owners began rapid acquisition of stations and smaller groups. In a span of two years following the passage of the 1996 Act, the top seventy-five radio companies were consolidated into four giant radio companies: Chancellor, Infinity, Clear Channel, and Jacor. By mid-1999, the number was reduced to three major players. Chancellor (renamed AMFM, Inc. in 1999), the largest, acquired several groups including Evergreen and Capstar. Infinity was acquired by CBS. Clear Channel acquired Jacor. In October 1999, Clear Channel announced it was acquiring AMFM, creating a massive radio conglomerate. The top ten radio groups are listed in Table 4-1.

The impact of this consolidation affected management more than any other level in a radio station's operation. Instead of being responsible for a maximum of four stations, many managers found themselves managing clusters of stations, especially in large- and medium-size markets where merger and acquisition activity were particularly high.

TABLE 4-1 Top 10 Radio Group Owners (as of September 1, 1999)¹

Owner by Rank	Stations Owned	
Clear Channel Communications	830 ²	
Infinity (CBS)	163	
ABC Radio	43	
Entercom Communications	85	
Cox Radio	58	
Hispanic Broadcasting	42	
Cumulus Media	248	
Citadel Communications	118	
Susquehanna Radio	29	
Emmis Communications	18	

Source: Adapted from Special Report: Radio, *Broadcasting & Cable*, August 30, 1999, pp. 26-32, and other trade publications.

¹Station acquisitions affect the data in this Table on a monthly basis. Consult trade publications such as *Broadcasting & Cable* to locate ownership updates.

²The number of stations Clear Channel is expected to own following its approved merger of AMFM Inc.

Taking on the management of additional stations (often with different formats) meant spending more time and effort on effectively managing the resources and personnel within each station operation. The term multitasking became commonplace in management vocabulary. The term presented an entirely new dimension for many radio managers, who found the increasing workload and stress levels to be higher than anticipated.⁷

MANAGEMENT RESPONSIBILITIES

Managers of radio stations engage in similar responsibilities, whether they manage a cluster of up to eight stations in a given market or a stand-alone station. These responsibilities are best described by breaking down responsibilities into the different levels of management, the skills required of radio managers, and the roles radio managers play.8

∠ Levels of Management

One common misconception regarding management is that there is one person who leads an organization. This is rarely true, especially in the radio industry. Management is often described as operating across three distinct levels. The General Manager (GM) represents the executive level of management. This person is vested with the control of the station, and is accountable to the ownership for its successes and failures. Middle managers are delegated responsibility for a specific unit, and usually have decision-making authority for the personnel and budget with the approval of the GM. In a typical station, the Station Manager, the General Sales Manager, and Office Manager would be considered middle management representatives. Supervisors oversee other employees and monitor their performance. Supervisory or lower level managers might include the Local Sales Manager, Program Director, and Promotions Director. It is important to recognize that management is not accomplished through one person, but with a group of people working together to achieve organizational goals and objectives.

/ Radio Management Skills

Management theorists often identify three areas where different skill sets are utilized: technical skills, interpersonal or people skills, and conceptual/problemsolving skills. In reality, these skill sets are interrelated and sometimes overlap. Technical skills are needed in radio management to understand basic differences between AM and FM broadcasting, analog and digital transmission, engineering standards, and computer applications. Interpersonal skills are critical in radio management. Managers must be able to understand, relate, and communicate with employees, provide motivation, and build a sense of working toward achieving organizational goals. Conceptual skills are used in a number of different ways. Radio is heavily dependent on its external environment, or relationship to the community in which it operates. Management must understand the complexity of both the internal (station) and external environments, and be able to respond quickly to changes and adapt as necessary.

Two other skill sets are also needed in today's competitive radio industry, financial skills and marketing skills. Financial skills require an understanding of the financial statements used to evaluate economic performance. Typically, these statements include the income or profit/loss statement, the balance sheet, and the statement of cash flows. But, in addition to knowing how to read and interpret financial data, managers need to have strong budgeting skills, meet revenue projections, and manage a station's cash flow.

Marketing skills involve utilizing any and all available methods to effectively market and sell the radio station to target advertisers and audiences. In today's strategic radio environment, marketing involves using other media (e.g., television, newspapers, Internet) to broaden and expand the station's promotional reach. In managing clusters of stations, marketing becomes even more challenging. One key issue is being able to effectively market each individual station, usually toward a different demographic group with a different format, while at the same time marketing the entire group of stations to prospective advertisers. Generating new business in terms of retail and local sales is a critical part of local marketing efforts.

As seen in this limited discussion, a number of skill sets are needed to be an effective radio manager. These skill sets do not function in isolation; they overlap and intertwine with one another. There is debate within the industry as to the best way to acquire these skills, whether by sheer experience or a combination of education and experience. Further, few individuals will have an equal balance of these skills, meaning some managers may be more oriented toward conceptual and marketing skills as opposed to technical and financial skills. Finding competent, experienced managers who have command of these skill sets remains a long-term challenge for the radio industry.

Radio Managerial Roles

Radio managers, like many people in management, find themselves in a variety of different roles depending on whom they interact with in various situations. Much of the management literature presents mixed findings on the different types of roles needed in management. In terms of radio management, managers tend to exhibit three types of roles: leadership, representative, and liaison. Leadership is a given for any manager, and better managers are often perceived by their employees as being strong leaders. Leadership involves a number of traits, including adapting to change, ability to make decisions, good communication skills, and character.

Radio managers serve in representative roles, involving the local, state, and national level. The General Manager or Station Manager typically represents the

station to the community in which it is licensed. This may involve speaking engagements and other civic responsibilities. The GM also represents the station to various trade organizations at the state and national levels, and, where appropriate, labor unions. Middle managers, like Sales Managers (and their respective staffs), interact on a daily basis with their client base of advertisers. Being a public licensee, radio stations recognize their community responsibilities, and many employees aside from management assist in this representative role.

Finally, the liaison role refers to the relationship between the station and its parent owner. As more and more stations have become part of larger group operations, managers of single stations or station clusters must represent their respective station(s) to the parent company. In this sense, management serves as a conduit between the parent company and the individual station. Managers in the liaison role facilitate the flow of information between the owner and the local station, and communicate company-wide objectives and strategies.

ISSUES IN RADIO MANAGEMENT

Having discussed radio management in general terms in regard to managerial levels, skills, and functions, we now turn to a review of some of the key management issues facing today's radio manager. While management takes place at different levels, the focus in this section centers on the issues requiring the decision making of the General Manager. Further, these issues are applicable to managers in all types of markets, from small markets to urban top ten markets.

Maximizing Cash Flow

Radio is first and foremost a business, and while all stations are expected to operate to serve the public interest, ownership expects profitability. Meeting revenue goals and projections has always been critical in evaluating management success, but in today's competitive environment the ability to effectively manage and maximize cash flow is critical.

Historically, the radio industry has produced stable profits for its owners except in times of recession. Following the last major recession in the early 1990s, the radio industry bounced back to generate double-digit profit margins, with some station groups earning as much as 50 percent on the dollar.

This is not meant to suggest that owning a radio station automatically results in heavy profits. There is considerable competition for advertising dollars at the local level, from newspapers and television to Internet and alternative forms of advertising. The ability of the GM to effectively manage cash flow, meet revenue projections, and handle contingencies in a quickly changing world is extremely demanding.

Personnel Issues

Radio is a people business, and ultimately the success of any organization depends primarily on the people it employs. Managers need to be involved in all aspects of employee selection, training, and evaluation. Further, management must keep abreast of labor laws, union requirements (where applicable), and the needs of the employees.

Today's radio staffs tend to be more multicultural, better educated, and have a higher degree of mobility (less likely to remain in a position for an extended length of time). Consolidation has forced many personnel changes, with some job areas actually declining over the years (e.g., engineering, office staff), and other areas expanding (e.g., sales and marketing, Webmasters). Maintaining a productive and contributing workforce continues to be a key issue for radio managers.

Management must also control personnel costs. In any organization, personnel usually represent the greatest expense of doing business. Radio salaries vary across positions in a radio station, and across market size. Examples of average salaries in the radio industry are presented in Table 4-2.9

The Challenge of Competition

Radio faces more competition today for audiences than at any time in its history. There are now over 12,000 radio stations in operation in the United States. There are hundreds of Internet-only radio stations available on the Web, with thousands of on-

TABLE 4-2 Examples of Radio Station Salaries (1999)

Job Title	Average Total Compensation*		
General Manager	\$189,726		
General Sales Manager	132,708		
Local Sales Manager	108,761		
Morning Drive Talent	114,277		
Program Director	89,494		
Music Director	46,695		
News Director	43,838		
Promotion Director	42,615		
Account Executive	50,884		
Receptionist	19,765		

Source: Adapted from 1999 Radio Station Salaries. Washington, DC: National Association of Broadcasters.

^{*}Salary figures are based on total compensation (including bonuses and incentives) for all stations, nationwide. It should be noted that salaries vary considerably based on size of market, station revenues, region, and format. The authors are grateful to Mark Fratrick, Vice President/Economist with the National Association of Broadcasters, for providing the data.

air stations from around the world accessible to listeners via shortwave and the Internet. **Digital Audio Radio Services (DARS)** and other types of digital subscription services have announced various stages of deployment.

In 1999, the FCC shocked the radio industry with an announcement that the Commission would consider establishing hundreds of lower-powered **microradio** stations (e.g., limited to 10, 100, or 1000 watts). The industry, led by the National Association of Broadcasters, reacted very negatively toward the proposal. If microradio stations become reality, competition would take on an entirely new dimension. These new stations would compete for the same audiences now served by the radio industry. It is unclear if the Commission will allow this new class of stations to be noncommercial or have the option of carrying advertising. If allowed to sell advertising, the decision could negatively affect existing radio broadcasters. ¹⁰

Radio stations draw and build audiences from the same base that watches television, movies, and videos, reads newspapers, magazines, and books, and engages in other media-related activities. Dealing with competitors by garnering effective and consistent marketing and promotion strategies is an ongoing daily activity for today's radio managers. Further, the microradio issue illustrates the need for the radio industry to maintain strong lobbying efforts in Washington to stave off policy decisions that could prove economically harmful.

The Demise of AM

Despite the growth of popular national radio hosts like Dr. Laura, Rush Limbaugh, Don Imus, and Howard Stern, the AM side of the radio bandwidth continues to suffer from lower audience levels. In addition to talk formats, AM has become the home for news and news talk, sports and sports talk, and niche/ethnic programming. Most importantly, the age of the AM audience continues to be dominated by people over forty.

While AM audiences will never again surpass FM audiences, the long-term erosion and aging of the AM audience raises questions about the future of the medium. AM is not likely to wither and go away, but as audiences continue to decline, the ability to maintain profitability remains a key issue. Further, AM has failed to attract new, younger listeners to the medium. To date, news talk and sports talk stations have been the most successful in terms of generating revenues for AM, primarily in major markets.

Embracing the Internet

The majority of the radio stations in the United States have linked home pages to the Internet for listener access and Internet broadcasting. The challenge for radio management lies in how to effectively transition the station's Web presence from an informational/broadcasting mode to a medium that can complement the existing radio industry.

Ultimately, radio owners would like to use the Internet for many different purposes, especially in generating additional revenue streams. Ideally, the radio industry needs to be part of the electronic commerce revolution. For that to happen, successful business models on how to best embrace the Internet need to be developed.

Clearly, the Internet can help in terms of providing additional marketing support and research information about the station's audience. Questions remain as to the best way to fully utilize the Internet to supplement the radio industry's primary mission of linking audiences with advertisers while serving the public interest.

These issues are not exhaustive but illustrate the diversity of challenges faced by contemporary radio management. Radio is not a static industry, and the issues the industry faces will continue to change and evolve. Interestingly, many of these issues have economic implications for the radio industry. Understanding the economics of the radio industry, the next topic of this chapter, is paramount to achieving success in this dynamic media industry.

RADIO ECONOMICS

Radio economics is best understood when considered as a part of the larger field of media economics. ¹¹ Media economics is defined as "the study of how media industries use scarce resources to produce content that is distributed among consumers to satisfy various wants and needs." ¹² Media economics considers the role of both macroeconomics and microeconomics in media industry analysis.

Briefly, *macroeconomics* refers to the entire economic system and is typically studied at a national level. *Microeconomics* considers individual markets, firms, and consumers. The radio industry can be studied from both macro- and microeconomic perspectives. Considering the aggregate impact of the radio industry at the national level would require macroeconomic analysis. Here the focus of topics studied might include the economic performance of the radio industry in comparison to other media industries, the profitability of national radio networks, impact of policy decisions on industry performance, or trends in labor (employment) for the entire radio industry.

Examining individual markets or firms operating in the radio industry would require a microeconomic examination. Such analysis might involve case studies of a selected radio company, the analysis of individual radio markets, the structure of individual radio markets, or ratings analysis of individual stations/markets. In this chapter, the primary focus will be on microeconomic aspects of the radio industry. Where applicable, macroeconomic concepts will be discussed.

Radio Markets: The Local Market

The radio industry operates in two distinct markets: local and national. In terms of local markets, radio stations are individually licensed to serve specific geographical

markets and the FCC assigns the classification and maximum power the station can transmit. Markets with larger populations have more radio signals than smaller, more rural communities. The stations assigned to a specific geographic area constitute a local radio market. Within the local market smaller submarkets exist, such as the market for female listeners between the ages of 18–49, or the market for a particular type of format, such as country music.

Radio stations draw the majority of their revenues from the sale of local advertising, so the local economy directly influences the station's economic performance. When the local economy is strong, local advertising also tends to be strong, or, to use the appropriate term, in high demand. Conversely, if the economy is in a downward cycle, local advertising tends to decline, resulting in a greater supply of available advertising time. Supply-demand relationships in the radio industry will be discussed in more detail later in the chapter.

Radio Markets: The National Market

At the national level, radio networks and programming services attract audiences through their distribution on local stations. Radio networks consist of traditional services offering packages of news, features, and sports programming, as well as twenty-four-hour satellite-delivered formats (such as ABC Radio Networks) that can supply the entire programming for a local station. Ultimately, these aggregate local audiences are used to attract national advertisers seeking to use radio to complement their advertising mix.

Data on the national radio industry is compiled by several different sources. The Radio Advertising Bureau (RAB) gathers information on radio advertising in terms of local, network, and national spot advertising. National radio listening to networks is provided by RADAR (Radio's All-Dimensional Audience Research), which provides ratings estimates for nationally distributed radio programming. Several publications detail the economic state of the radio industry, such as Duncan's American Radio, and the Veronis, Suhler and Associates annual Communications Industry Report. The Federal Communications Commission maintains data on station transactions.

SUPPLY AND DEMAND RELATIONSHIPS IN RADIO

Supply and demand make up two of the key concepts in the field of economics. In terms of application to the radio industry, supply can be thought of primarily as the entire radio industry or individual radio stations. Supply takes on different meanings in regard to listeners, advertisers, and owners. The number of stations in the local market makes up the available listening outlets; the types of programming they provide to listeners constitute the supply of entertainment and information available to the audience via radio.

From the advertiser's point of view, radio stations represent an outlet for their messages, and a chance to target messages toward specific demographic groups that are desired. Advertisers then think of radio stations as suppliers of advertising time that can be acquired to reach audiences. Most national advertisers utilize radio to cross-market products and services in conjunction with television and print advertising. Radio's cost efficiency and audience reach make the medium a strong complement to other forms of advertising.

From an ownership perspective, individual stations represent commodities that can be acquired or sold to other owners. Cash flow is the most critical variable used in assessing the valuation of a radio station. Stations in larger markets are more valuable to an owner's portfolio than stations in smaller markets. Frequency location and class of station also affect station values.

In turn, audiences, advertisers, and owners represent the three primary categories of demand for radio stations. Listeners love radio. According to estimates provided by the Radio Advertising Bureau, 95.8 percent of all people age twelve and up listen to radio during a given week.¹³ Weekday listening averages around three hours and eighteen minutes a day, with higher averages (over five hours) found on weekends.

Advertisers have found radio to be a cost-effective and efficient means of reaching key demographic groups. Radio advertising is segmented into three categories: local, spot (national advertising found on local stations), and network. With both the national and local economies experiencing strong growth during the mid-1990s, radio advertising increased dramatically from 1994 to 1998. In 1998, local advertising totaled \$11.9 billion, spot \$2.77 billion, and network \$720 million for total advertising revenue of \$15.4 billion. 14

Demand for stations increased dramatically after the passage of the 1996 Telecommunications Act that eliminated national ownership restrictions. Radio acquisitions soared in 1996 and 1997 as the industry pursued consolidation. Prior to the 1996 Act, there were an estimated 5,222 owners that controlled approximately 10,250 stations. By 1999 the number of owners declined to 4,500, a loss of over 720 owners. Acquisitions have slowed in 1998 and 1999, leading one analyst to remark that "for all practical purposes [radio] is consolidated . . . there are less stations to sell."

In summary, supply and demand relationships differ in regard to the market structure of an industry. Radio continues to experience an evolving market structure.

MARKET STRUCTURE FOR RADIO

Media economists use different labels to characterize the market structure of an industry. ¹⁷ Historically, the radio industry has resembled a monopolistic competitive structure, which features a number of suppliers that offer a product that is similar in nature, but qualitatively different from one another. Such a definition aptly de-

scribes radio formats, which may appeal to similar age groups but differ in the presentation of the format.

For years the radio industry operated in a monopolistic competitive structure at both the national and local levels. But given the consolidation of ownership in the industry, there is growing evidence that the industry is moving toward an oligopoly at both the local and national levels. In an oligopoly, a smaller number of players tend to dominate an industry by controlling the majority of the market share.

There is no question this is happening with the huge radio companies like CBS and Clear Channel, which not only dominate local radio, but also network radio as well. According to estimates from Duncan Radio, in 1997 the top fifty radio groups reported revenue totaling \$6.99 billion, representing 56 percent of the total radio revenue for the year. ¹⁸ In 1996, the top fifty groups accounted for 51 percent of the total radio revenue, and in 1995 approximately 41 percent of the total radio revenue. Duncan estimates that by the year 2000 the top fifty groups may control as much as 65 percent of the total radio revenue unless additional regulation is enacted.

Radio's evolving market structure means higher revenue potential for larger station groups, as the medium becomes more appealing to advertisers who can acquire access to larger audiences with greater efficiency. The radio industry continues to exhibit good growth potential. From 1992 to 1997, the radio industry grew at an average compound rate of 9.3 percent with the same growth rate projected through 2002. 19 Stable audience levels, consolidation of ownership, and crossmedia marketing potential lead to high economic expectations for the radio industry.

RADIO PERFORMANCE AND PROFITABILITY

Overall, the radio industry has been attractive to investors because industry performance remains strong. Radio stations have the ability to generate strong cash flows while holding expenses relatively constant. Profit margins and performance measures for the industry have averaged double-digit growth since 1994. With projections for growth averaging near 10 percent through 2002, analysts remain bullish on radio's potential.

Long-term industry performance has been threatened by the large amount of debt some companies have acquired in order to become larger group owners. In particular, the former AMFM and Entercom are representative of this trend. The stock of both companies suffered strong declines during 1999 as Wall Street analysts downgraded the stock when it failed to meet revenue projections.²⁰ Much of the pessimism has centered on management's ability to effectively manage the huge debt load, resulting in depreciation of stock.

The performance of the radio industry will be enhanced by the industry's ability to generate additional revenue streams. Radio remains too dependent on local advertising, drawing over 70 percent of its revenues from the local market.²¹ In this regard, the Internet and electronic commerce hold great potential for the radio

industry, but no clear-cut business models exist as to the best way to generate revenues.

SUMMARY

This chapter has presented a general discussion of current trends and issues in radio management and economics. Management and economics function in an interdependent relationship in the radio industry; the actions of one area influence the other.

Management has undergone significant change and modification due to the rapid consolidation of the radio industry, and escalated with the passage of the 1996 Telecommunications Act, which removed national ownership limits and ushered in an area of unparalleled merger and acquisition. Many radio managers found themselves managing clusters of stations as opposed to single-station entities or AM/FM combos.

Industry consolidation gave the radio industry the opportunity to engage in economies of scale by reducing overlapping employment areas and lowering operational costs. The industry has experienced strong economic growth since the passage of the 1996 Act, and future projections reflect a healthy economic future.

At the same time, consolidation has also affected the debt load carried by some of the larger radio companies. Uncertainty over debt may continue to affect the performance of these companies. Still, radio remains a lucrative investment for its owners and stockholders. Management's challenge is to maintain the positive performance and continue to increase the cash flow and ultimate value of the stations under their direction.

NOTES

Ownership limits were placed on radio and later television due to the principle of scarcity, the notion that more individuals desired a license to broadcast than there were available frequencies to operate. Today, the concept of scarcity is still widely debated. On one side, proponents argue that scarcity remains, otherwise there would not be such high valuations placed on individual stations. Skeptics claim the marketplace no longer suffers from scarcity, given the range of outlets for expression and dissemination of information.

²Limitations on owning only one type of station in each class became commonly known as the "duopoly rule."

³Economies of scale, or "scale economies," allow a company to spread costs across several different operations. In the case of radio, a group of stations located in a single market could theoretically share the same physical location, transmitter tower, and employees, allowing for considerable cost savings. Economies of scope, a related concept, allow the company to share similar expenses (e.g., programming, research) across geographical operations.

⁴The 1996 Telecommunications Act was signed into law by President Bill Clinton on February 8, 1996.

⁵Alan B. Albarran, Media Economics: Understanding Markets, Industries, and Concepts (Ames, IA: Iowa State University Press, 1996), p. 68.

⁶Chancellor changed its name to AMFM during the summer of 1999. AMFM, CBS/Infinity, and Clear Channel also own television stations.

⁷See Alan B. Albarran, *Management of Electronic Media* (Belmont, CA: Wadsworth, 1997) for a discussion on multitasking in the new managerial environment.

⁸Material in this section was culled from a number of sources including *Management of Electronic Media* (Albarran, 1997, Wadsworth); *Electronic Media Management*, 3rd ed. (Pringle, et al., 1995, Focal Press), and *Telecommunications Management* (Sherman, 1995, McGraw-Hill).

⁹See 1999 Radio Station Salaries. Washington, DC: National Association of Broadcasters. ¹⁰Bill McConnell, "Big Flap over Small Stations," *Broadcasting & Cable*, April 18, 1999, pp. 26–36.

¹¹For more information on media economics, see Albarran, *Media Economics* (1996); Robert Picard, *Media Economics: Concepts and Issues* (Sage, 1989); and Alexander, et al., *Media Economics: A Reader*, 2nd ed. (Hillsdale, NJ: Lawrence Erlbaum, 1998).

¹²Albarran, Media Economics, p. 5.

¹³See http://www.rab.com/station/mgfb98/fact1.html

¹⁴"Radio Revenue Is Growing," available http://www.rab.com/station/mgfb99/fac28.html ¹⁵"The State of the Industry Radio Report," available http://www.bia.com/state_radio.htm ¹⁶Elizabeth A. Rathburn, "Going, going, gone . . ." *Broadcasting & Cable*, February 15, 1999, pp. 33–34.

¹⁷These labels are monopoly, duopoly, oligopoly, monopolistic competition, and perfect competition. For more information, see Albarran, Media Economics (1996) and Picard, Media Economics: Concepts and Issues (1989).

18 Available http://www.duncanradio.com/rankings13.html

¹⁹See "Radio Broadcasting," Veronis, Suhler, and Associates, *Communications Industry Forecast*, October, 1998, p. 150.

²⁰Steve McClellan and Joe Schlosser, "Street Spanks Station Groups," *Broadcasting & Cable*, February 15, 1999, pp. 8–9.

²¹The NAB published the most recent study on industry revenues and expenses in 1992 and reported that local advertising made up over 70 percent of a station's revenue base.

5

Radio Programming

Programming that attracts listeners is the dynamo that propels radio. But today, the proliferation of media choices has put the listener in the driver's seat.

DAVID MACFARLAND, CONTEMPORARY
RADIO PROGRAMMING STRATEGIES¹

BRAND NAME AWARENESS AND USAGE

The last time you purchased a beverage from a vending machine or at a convenience store, you probably examined various beverage options that were available. They ranged from colas and other carbonated drinks to juices and bottled water. The beverages were packaged in aluminum cans, glass, or plastic bottles of several sizes. Brightly colored packaging presented the product logo and name. You selected your beverage, paid for it and consumed the product. It would seem to be an unremarkable experience except when you consider the variety of factors that ultimately led to your product selection. These factors included price and packaging, product taste, and the product image. These and other factors contribute to the brand awareness consumers associate with the product.

A brand is more than the name a company uses for a product or line of products. The brand is a perceived image residing in the mind of the consumer. Brands help consumers differentiate between similar products manufactured by different companies. Brands also help the sellers of goods or services establish a presentation of their products. If the product is readily available to the consumer, at a reasonable price, and a product of consistent quality is offered, consumers become brand loyal.² To the extent that a brand has a positive image, it can be thought of as an asset of a company.

The brand and the brand image are the result of extensive consumer research by manufacturers. Consumer products manufacturer Proctor and Gamble (P&G) uses consumer brand research to make certain their products appeal to the proper consumer segment. P&G also looks for ways to extend the appeal of a brand. Brand extensions might be as simple as Proctor and Gamble marketing Tide laundry detergent in a variety of fragrances (or perhaps with no fragrance), or a brand extension might include adding bleach to Tide. Another way to extend the sales appeal of the familiar Tide name is to create a new product category with the familiar name, such as Liquid Tide. Of course, the product has to satisfy the need of the user in a similar manner. If the product does not satisfy the consumer need, the brand name is damaged. One of the best examples of a branding disaster was the decision by the Coca-Cola Company to change the formula for Coke. "New Coke" was rejected by consumers, resulting in the Coca-Cola Company's having to reintroduce the old Coke formula, this time called "Classic Coke."

RADIO BECOMES BRAND AWARE

As discussed in Chapter 2, the limited number of radio stations during radio's infancy enabled station owners and the radio networks to offer almost any type of programming they wanted. Most consumers were so taken with the technology of radio—the fact that they could sit at home and receive *anything* through the radio receiver was a small miracle—that they would listen to whatever programs were offered. As the number of radio stations increased, competition fostered greater choice.

Beginning in the 1950s, the growth in television service killed radio as the national source of entertainment and information. Individual radio station owners began to apply **demand marketing** to their operations. Demand marketing simply means that the station owners analyzed the listener market to determine the product listeners wanted. Perhaps the best example of early demand marketing was Todd Storz's observance of the waitress playing the same favorite songs. Gordon McLendon used a variety of stunts and promotions to create word-of-mouth interest in his stations.

PROGRAMMING FOR A SPECIFIC AUDIENCE

Radio has changed from being a program-specific medium to a format medium.³ More radio stations choose to air a music format than any other programming option. These stations know that they must do more than serve as jukeboxes for their listeners. The station's on-air sound includes the music and announcer presentation but also of great importance is the listener perception of additional "value" the station provides. Radio analyst J. T. Anderton of Duncan's American Radio says, "It is

essential that you mean something to the listener. Otherwise there's no point in turning on the transmitter." Anderton adds that radio should be a showcase for entertainment and information that listeners can't get through the Internet or from listening to CDs. Contests, concert information, and listener "lifestyle" information are used to create the perception of added value. News and talk stations cultivate an image of dependability as a source for breaking news and as a source for talk programming that agrees with the listeners' political or social values. All radio stations use a combination of jingles and other promotional announcements to reinforce the station's call letters and logo. Station jingles are discussed later in this chapter.

The radio station and its format seek to satisfy consumer needs. Radio listeners are most interested in how a radio station's format will provide the gratification they desire. The station must, in the execution of its format, enhance the presentation of the programming with on-air and off-air marketing efforts that create a brand name in the minds of the listeners. This brand must not only be thought of as one that satisfies consumer wants and needs, but it also must be a brand that is easy to recognize, remember, and return to for additional consumption. While the listener expects the station to play different songs from one hour to the next or from one day to the next, the listener also expects a certain sameness in the sound or style of the music or the artists played. This is referred to as *format continuity*; maintaining a consistent on-the-air sound that satisfies listeners is essential. The radio listener seeks a product that is familiar. This doesn't mean that individual announcers at a station must sound the same. But it does mean that the announcer working a particular shift should do things in a similar way from day to day.

Radio listeners consume the on-air product "sold" by a radio station. While the programming does not have the sort of literal cost as a beverage, the sheer number of stations competing for listener attention does create a cost for listening. The primary listener cost is time. The station attempts to maximize the total time spent listening. The magic of radio has always been its accessibility and unique ability to deliver a product with a low cost to use, a modest expenditure for a receiver and the time cost of listening to commercials. But listeners can't effectively listen to more than one station at a time. When the station plays a song a listener does not like, the commercial breaks are too long, or the announcer says something that isn't interesting, the listener may conclude he or she has the wrong product and may make another selection.

SUPPLYING MORE THAN MUSIC UTILITY

Increasingly, consumers will encounter two kinds of entertainment and information programming: direct programming by the listener and programming done by the station. Through cable television, CDs or other recorded music sources, and the Internet, consumers have come to see themselves as the producers or programmers of the content they want to consume. The number of available cable television chan-

nels gives consumers more control over how they will spend their viewing time. CDs, minidisks, and MP-3 files provide consumers with the opportunity to determine what they hear. The number of Websites and the variety of customizable content on the Internet give the consumer the chance to tailor the media experience. Radio stations don't provide the kind of custom experience of these other media. But, at the same time, the radio station must do more than attract listeners through music utility. CDs or other recorded forms can replace radio stations that are only in the business of supplying music. The radio station that works to create a brand identity that demonstrates value to the listener will create product sampling and encourage loyal product users.

In the crowded and competitive radio marketplace, most stations no longer try to program for a single mass audience. They customize their programming to reach a particular group of listeners. This customization means paying considerable attention to the perceived product needs of their anticipated listeners. Just as the soft drink company uses a logo, package design, and advertising to promote the beverage, the radio station also has a logo or on-air persona. Its programming is designed around the image the station wishes to portray. The station uses a combination of onair promotion and advertising through other media—such as television or billboards-to reach potential listeners. Part of the radio station's persona may be created with a combination of letters or words. These range from "B" (B-97.9), "O" (Q-107), or "Z" (Z-100) to "Lite" (Lite Rock and Less Talk) to "Magic" (Magic 102). Three common animal names currently used as part of station brand building include wolf, duck, and frog (99.5, The Wolf, K-Duck 100, or Froggy 94). These letter or word combinations afford the station the opportunity to create an identify or brand that customers will remember, particularly through the use of jingles or other on- and off-air promotions. This brand image should be easier to remember than the usual set of call letters that the station must use to meet FCC requirements.

EXTERNAL AND INTERNAL BRAND BUILDING

Radio ratings company Arbitron identifies what it calls External and Internal factors that affect programming and decision making within a radio station. The external factors include market competition, both from other stations and other media. Stations compete directly for listeners with stations playing similar music, but they also complete with other media and all other activities. Consumers increasingly have the ability to sample radio signals from other parts of the country through using their computer; CD players or MP-3 files can allow listeners to create custom music blends. Even though radio programmers are fond of talking about the portable nature of radio, other demands for time—whether at work or during leisure activities—can limit radio listening.

Music availability and the quality of the music determine the sound of a radio station. If the station plays mostly current hit songs, the number of new releases and

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corresponding quality of the music will influence the station's sound. Record companies have an incentive to supply new music but the cost of producing, distributing, and promoting new music also means that record companies don't produce an unlimited supply of new product for consumers or radio programmers to select from. As electronic distribution of recorded music has increased, record companies have a distribution system that can bypass the traditional music sellers. This will allow record companies to increase the number of music products they offer. While the increased product range may give radio stations more music to select from, it will also give consumers a similar choice. This may make it even harder for radio stations to select the "right" songs that will attract and retain a sizeable listening audience.

Changes in lifestyles, most notably the aging of the baby boomers, have resulted in an increase in the number of stations playing Classic Rock and playing 1970s disco and R&B music. Stations in the latter group are airing the Jammin' Oldies format. Lifestyle changes also cause stations to reposition themselves in the audience marketplace. *Duncan's American Radio* reported 374 stations airing beautiful music or easy listening formats in 1977. That number dropped to 179 in 1986. Beautiful music/easy listening did not make the list of national format shares in the *Radio and Records Directory* in 1999. What lifestyle change contributed to the format change? As the baby boom generation aged, they were not interested in listening to the traditional easy listening or beautiful music format that their parents or grandparents listened to. And the pool of previous listeners kept shrinking as a result of natural mortality (advancing age and death). Some of the stations repositioned themselves as light rock or soft adult contemporary stations. Still others changed their formats entirely. We will talk further about the differences in formats (such as light rock and soft adult contemporary) later in the chapter.

The growth in the number of radio stations (from about 3,000 FM stations in 1980 to 5,700 in 2000) has meant that stations must work harder to be noticed in the marketplace. Additionally, stations must give consumers a reason to listen to the radio rather than prerecorded music. Except for a few heritage stations with long traditions in the community, most stations can't expect listeners to just happen to know about the station. Off-air or external promotions allow the station to introduce its logo and brand identity to consumers. Typical external promotions include bumper stickers and billboards. Station promotions also include remote broadcasts from concerts and sporting events and Friday afternoon "bring-in-the-weekend" type remotes from a restaurant or bar. Selling T-shirts, caps, or sweatshirts with the station logo or brand will not only enhance listeners' awareness of the station but may contribute additional revenue to the station. For stations with particularly mass appeal formats, television advertising may be used to promote cash or automobile giveaways. Most of these external promotional efforts reinforce the brand value of the station to existing listeners or encourage nonlisteners or infrequent listeners to sample the product at other times.

Internal factors affecting station programming include the number of songs a station plays and the quality of the songs, on-air promotions, quality of production,

commercial load, and announcer performance. Listeners often think that radio stations play any song that matches the station's general format. In fact, nothing could be further from the truth. Radio stations typically have a tightly controlled library of song titles. Becoming part of the music library often depends on station testing of the song to determine what listeners think of it (see Chapter 7, Radio Research, for more information), the addition of the song to the playlist by other stations in a station's peer format group, or perhaps the recommendation of a programming consultant. Monitoring services such as *Radio and Records*, *Billboard*, and *The Gavin Report* also track current hit songs and may be another source of information for determining which songs are added to a station's playlist. This is especially true for stations airing any sort of "hit music" format that relies on the latest hits to "drive" the sound of the station.

Think of all the songs that are written and released in a single year. Multiply that number by the number of years of music represented in a station's format. Ultimately, only a small number of the total number of songs released will make it into the station's active music library. A station playing Classic Rock might have between 700 and 1000 titles in its music library. A Contemporary Hit Radio (CHR) station might have between 400 and 600 titles in its music library. A country station might have 700 to 900 titles in its music library.

Listeners sampling the music or "sound" of the station for the first time hear not only the music but also a variety of **on-air promotion** segments that help shape their opinion of the station. On-air promotions may be as simple as announcer-delivered commentary about the station or as complex as a multitrack audio production complete with a variety of sound effects, music segments, and radio production techniques. Effective on-air promotion depends not only on the quality or quantity of the audio production but also on the nature of the promotion. Most on-air promotions accomplish one of two things. The promotions encourage longer listening—this might be as simple as an announcer previewing or teasing the upcoming songs. If the listener hears a song title or artist she likes, listening may continue. Or on-air promotion may try to recycle listeners by getting them to listen at another time of the day.

Production quality refers not only to the production of commercials and station promotional announcements but also to the overall execution of the station's format. The effectiveness of the production staff determines whether the station has a consistent sound. Just as you might be unlikely to return to a restaurant where you received poor service or a bad-tasting meal, listeners are less willing to return to a station that is inconsistent, though, at least in the case of the radio station, the listener is not required to make a monetary expenditure to sample the station's product. Even the time spent listening to the station can be as short as the time it takes to push a button to go to the next station.

Commercials are probably the single biggest irritant to radio listeners but for the station management the commercials are the most important part of the station's programming. Station owners or managers establish the number of commercial minutes aired each hour. At one time, the National Association of Broadcasters enacted codes for radio and television advertising. The NAB's voluntary codes suggested

that radio stations limit advertising to no more than eighteen minutes per hour and that television limit advertising to no more than fourteen minutes per hour. In 1979, the U.S. Justice Department brought suit against the imposition of commercial limits, charging that the NAB Code artificially limited the supply of advertising time and thus unfairly increased the price of television and radio advertising. In response, the NAB, in 1982, voluntarily dissolved the radio and television codes.¹⁰

Station competition, after the limit was ended, was expected to keep the amount of commercials aired in check. A strong economy and radio consolidation have made it difficult for some stations to say no to potential advertisers. The radio ad market has been robust. Debt burden from various station purchases has pushed managers to take the ad revenue as it has become available. Advertisers have fewer ad options because of consolidation. They may be able to purchase advertising on a variety of different stations but ultimately only two or three owners may control the top stations in the market. Consumers find themselves sitting through long commercial breaks with no legitimate radio option because all the stations in the market are under similar pressure to air more radio ads. The variety of radio formats and the audiences targeted by those formats make it easier for radio to reach large but narrowly defined audiences. Consumer products manufacturer Proctor and Gamble has increased its use of radio to advertise twenty of its national brands. Internet or "Dot-com" companies have found radio to be an effective way to reach consumers with brand information.

Announcer performance refers to the quality of the on-air staff as demonstrated by its ability to relate to the listeners. Depending on the station's format, the announcers may need to be funny, conversational, or opinionated, or all of these, simultaneously. Announcers must demonstrate consistency within a day or several days. For most listeners, the announcer is the radio station. Internal or external promotion influences the sound of the station but execution of the on-air sound of the station depends on the announcer. If the announcer is perceived to have done something wrong, the listener may push the button and listen to another station.

MAINTAINING ON-AIR CONSISTENCY

How do radio stations maintain a consistent on-air sound? Historically, the station would have maintained a **continuity book**. The continuity book listed the introductory and closing comments for any program or broadcast aired on the station as well as provided background material to the announcers. Stations are now less likely to have a continuity book, but they will have a list of liner phrases or positioning statements that the announcers will use—a **hot clock**, a **program log**, and a **music log**.

The liners or positioning statements reinforce the brand image the station wants to create. Every time the announcer speaks, the first thing out of the announcer's mouth will be either the station's call letters (WBAP, Newstalk 820), a station brand

identifier (The Wolf, 99.5), or a positioning statement (Your Dance and Party Station, Hot 100.) These identifiers reinforce the station brand and are intended to help listeners who may be participating in station ratings reporting. Stations register with Arbitron or other ratings services the various liners, slogans, or statements their announcer staff will use on-air to refer to the station. Additionally, stations may air a jingle identification package that will reinforce the call letters or station logo, type of programming, or other programming element. Figure 5-1 discusses several of the successful jingle production companies.

A hot clock is a visual representation of one-hour of the station's programming. Shown on the hot clock will be the approximate times when commercial breaks are taken, when particular types of songs are to be played (a current hit, new song, or oldie), and, perhaps, when the announcer should talk on-air (and with the help of liner phrases or positioning statements, what the announcer should say). Radio may sound like one big jukebox for the person sitting at home or in the car but what and when the listener hears something does not occur by chance. The hot clock ensures format consistence by providing the announcer with a visual representation of the elements the listener is to hear.

Announcers also typically follow a program log, which lists not only program names or time periods, but also the commercials the station will be airing. Most music-oriented stations air few actual programs but newscasts, traffic reports, or weather updates are common programming elements that are listed on the program log. Commercials include sponsor names and are usually allotted to clusters or spot sets. The music-oriented station is also likely to have a music log for the announcer. The music log, produced with the help of scheduling software, will list every song the announcer will play. Most stations preselect the songs to provide tighter control over the music played not just on-the-air, but to control songs played within even a selected time of the day. Both the hot clock and the music log will list songs according to various categories including top hits or currents, oldies and golden oldies, or perhaps by tempo (slow, medium, or fast) or artist (group, male soloist or female soloist). The number and type of songs played on a station will depend on the station's format and target audience.

David MacFarland suggests that perhaps stations don't want to be too consistent in what they do. Too much consistency makes the radio station too much like a jukebox, supplying only music. It also means the station may not have anything that makes its brand unique. Even McDonald's, which prides itself on providing consistent products from its thousands of franchised restaurants around the world, offers more than a single menu item and the food company develops advertising campaigns to increase consumer awareness of new product offerings. Consistency is one thing but consumer boredom with the product is another. Listeners should receive a "good" product every day but it should be a "fresh" product that offers a slightly new experience. Whether stations are effective in delivering consistent, yet fresh, on-air content each day depends on how well the station knows its audience and what the audience wants. Among other things, MacFarland argues that radio

FIGURE 5-1 The Radio Jingle Capital of the World: Dallas, Texas

A favorite on-air promotional tool for many radio stations has been the station jingle package. Jingles, whether a cappella or with musical accompaniment, can be used by almost any format as one of the elements contributing to a station's unique sound. Jingles contribute to the image or identity the station wants to create and help listeners remember the call letters or station logo. Jingles are also a programming transition device. The jingle signals the end of a commercial break and the return to music, introduces a contest, or serves as a transition between two songs.

Dallas, Texas isn't the exclusive location for jingle production but the jingle industry's presence dates back to the 1950s and the use of jingles by Gordon McClendon. Probably the grandfather of all jingle companies was PAMS, "Production Advertising Merchandising Service," founded in 1951 by William (Bill) Meeks in Dallas, Texas. Meeks, after working for Gordon McLendon's legendary Top 40 radio station KLIF, including creating jingles for the station, formed PAMS to begin marketing jingles to other stations. PAMS's clients during the 1960s and 1970s, included some of the most widely listened to radio stations in the country, including: WABC and WNBC in New York, WLS in Chicago, WXYZ in Detroit, KFWB in Los Angeles, WKYC in Cleveland, KJR in Seattle, WAYS in Charlotte, WWWE in Cleveland, WCBS-FM in New York, WLW in Cincinatti, and KDKA in Pittsburgh.

JAM Creative Productions

Dallas is also home to JAM Creative Productions, founded by Jon and Marylyn Wolfert in 1973. Jon Wolfert became interested in the radio jingle through listening to WABC, 770 kHz. Located in New York, it is a station some regard as one of the greatest Top 40 stations in the history of the format. Wolfert worked for PAMS, which for more than a decade created most of the WABC jingles. JAM Creative Productions produces jingles for radio and television stations around the world, creates custom commercials for advertisers, supplies postscoring for film or video production, and owns the rights to the jingles created by Bill Meeks PAMS that launched many Top 40 formats. Production facilities at JAM include two twenty-four-track studios. JAM productions are sold to a worldwide customer list, including the BBC as well as other stations in Europe, South America, and Africa.

Thompson Creative Services

Founded in 1986 by broadcasters Larry and Susan Thompson, Thompson Creative Services produces jingles and station ID packages as well as customized ads for radio & TV promo, voiceovers, and turnkey radio commercials. Production facilities include a twenty-four-track recording studio.

TM Century Productions

TM Century Productions began as two separate companies: Century 21 Productions and TM Productions. The companies merged to become TM Century, a publicly traded company listed under the symbol TMCI. TM Century, Inc. creates, produces, and distributes music-based products for broadcast media use. Product lines include music libraries and music services, production music, commercial jingles, and radio and TV station jingle packages. TM Century's clients include radio and television stations; satellites and Internet networks; Websites and portals; the American Forces Radio Network; advertising agencies and commercial businesses.

TM Century can furnish clients with complete music libraries for formats ranging from adult contemporary to traditional country. Clients can download music files from the TM Century Website.

Jingle packages are prepared on a market-exclusive basis; only one station in a market will have jingles of a particular sound. However, the goal of most jingle companies is to create a jingle concept that can be sold to a number of different stations around the country. While 50 or even 100 stations might buy the full package of jingles, each station will have exclusive use of the jingles within a market area.

Sources: Al Brumley, "Jingles: All the way," *Dallas Morning News*, January 3, 1999, p. C1 and C6, and Jam Creative Productions, http://www.jingles.com/, PAMS, http://www.pams.com/, Thompson Creative Services, http://www.thompsoncreative.com/index.htm, TM Century Productions, http://www.tmcentury.com/. Visit the Websites to listen to audio files containing jingle demos.

stations should apply a higher standard of research to determine precisely what they play on the air.

MUSIC FORMATS

The magazine *Television/Radio Age* quoted author Tom Ratner as noting that "music programming on radio is swinging into an era of fickle formats and shifting audiences." What is most remarkable about this observation is when it was made. The quote, while not identified by specific date, was used in the book *The Radio Format Conundrum*, published in 1978. The book's authors devote nine chapters to specific radio formats and their subformats. They note that a radio station may select a format to fill an immediate void in the radio market, but once the format is selected the format will likely "be subjected to a dozen subtle or obvious shifts and adjustments" as the station determines its sound. This observation is still true today. It illustrates how a station must be both proactive and reactive as it determines not only the music to be played but also the other elements that contribute to the station sound or brand.

We have discussed a number of elements that contribute to the station brand though, for most listeners, ultimately it is the music played by the station that is the primary factor in determining whether they will listen even once to the station or not. Once the listener has sampled the product, the station hopes that other elements it contributes will encourage the listener to remain with the station or to return to listen again at another time.

At one point, most mainstream radio formats could fit in one of five categories: contemporary, country, black, middle-of-the-road (MOR), and other. Today, radio formats have splintered into multiple formats; one radio industry-tracking group identifies at least thirty-seven formats and that number will likely continue to grow. Figure 5-2 provides a glimpse of radio format growth over a twenty-year period. New formats often represent a further segmentation of existing formats or the creation of subformats or niche formats. Top 40 of the 1950s led to the creation of rock and adult contemporary. Rock spawned mainstream rock, hard rock, classic rock, and alternative. Adult contemporary led to oldies, soft rock, classic hits, hot AC, and modern adult contemporary. Each format variant represents an effort by a radio station or group of stations to establish a programming identity for themselves that will set their station apart from others in the market. The stations no longer are trying to be "all things for all people." They recognize that it is better to have a strong listener base among a particular audience segment.

RADIO FORMAT SEGMENTATION

Three factors have been the driving force behind the growth in radio format segmentation: the sharp rise in the number of radio stations on the air, a greater awareness of audience segmentation, and radio consolidation. As more radio stations (primarily

FIGURE 5-2 Just how many radio formats are there, anyway? Format categories used in *Duncan's American Radio* to track stations beginning in 1977.

1977	1986	1998
CHR/AOR/ Contemporary	CHR/Top 40/Contemporary	Adult Contemporary
MOR/AC	AOR	Modern AC
Country	MOR/Variety	AOR
Black/Urban	AC/Soft Oldies	New Rock
News/Talk	Country	Progressive Rock
Beautiful Music/Easy Listening	Black/Urban	Black
Spanish	News/Talk	Black Adult Contemporary
Religion/Gospel	Beautiful Music/Easy Listening	Black Oldies
Classical	Spanish	Business News/Talk
Other	Religion/Gospel	Country
	Classical	Classic Country
	Other	Contemporary Hit Radio/Top 40/Contemporary
		Classical
		Classic Hits/70's Oldies
		Ethnic (usually Foreign Language)
		Easy Listening/Beautiful Music
		Full Service
		Gospel
		Jazz & New Adult
		Contemporary
		News
		Oldies
		Religion/Christian
		Contemporary Christian
		Soft Adult Contemporary
		Hispanic/Spanish
		Hispanic Contemporary
		Hispanic News/Talk/
		Information
		Hispanic-Regional
		Hispanic-Tropical
		Hispanic-Variety
		Tejano
		Sports
		Standards, Big Band, Nostalgia
		Talk
		Urban
		Variety/Other

Source: Duncan's American Radio Tenth Anniversary Issue, 1976-1986 and Duncan's American Radio Fall 1998 Ratings Report. Used with permission, Duncan's American Radio.

FM) have gone on the air, new stations have realized they need to offer a product slightly different from the competition if the new station is to succeed. These new stations have also displaced many AM stations. As the new FM stations began airing programming similar to the AM stations' offerings, listeners abandoned AM service. The AM station owners needed something new.

Awareness of changing audience demographics has given stations the impetus to redirect their programming. The music we listen to no longer has the same meaning to various segments of our population; there is no one format or musical sound that is a common part of the U.S. culture. Just as music has broadened to appeal to a variety of age and ethnic groups, advertisers no longer covet only the 25–54 or 25–49-year-old listener groups. The U.S. population includes segments of affluent consumers in other age ranges and ethnic backgrounds who can be reached effectively through radio programming.

Radio consolidation refers to the growth in the number of large radio groups that began after the Telecommunications Act of 1996 increased the number of radio stations a single owner could control in a market. Consolidation has put stations that were once fierce competitors in a market under common corporate ownership. The new owners, unwilling to have their stations compete with themselves, have mandated both subtle and extreme format changes at the stations they purchased. The format changes sometimes allow two stations to develop even greater strength among their listening audience. For example, two stations previously targeting a listener group of women, ages 25–54, might now split the demo into two categories. One station might try to reach women ages 18–34 and the other station might reach women ages 35–54. Some of the music aired on the two stations might be the very same; at the very least, the programming on the stations would complement each other.

RADIO FORMATS: FROM AC (ADULT CONTEMPORARY) TO UC (URBAN CONTEMPORARY)

Adult Contemporary (AC) has traditionally been one of the top radio formats both in terms of the number of stations airing the format and the number of listeners. Adult Contemporary developed from the Top 40/Pop sound of the 1960s as that format began to split. The AC station targets an audience between the ages of twenty-five and fifty-four; while both male and female listeners are sought, women often constitute about two-thirds of the format's audience. The broad age range for Adult Contemporary listeners also suggests that not all AC stations will program the same mix of music. The AC format has gradually fragmented to include Mainstream AC (current hits and older AC hits), Hot AC (a cross between mainstream AC and Contemporary Hit Radio), Full Service AC (older skewing with a softer music appeal), Urban AC (a hybrid between traditional AC and Urban Contemporary), Modern AC (a blend of AC and pop/alternative) and Light AC (also sometimes called Soft Rock).

Contemporary Hit Radio or CHR is the grandchild (or great grandchild) of Top 40 radio. The format mostly closely resembles the traditional Top 40 sound; stations air a limited music playlist of current hit songs, the format is high energy, and often

includes contests, promotions, and strong on-air personality identification. Most CHR stations target listeners 18–34, though the station may also have especially strong listenership among teens. The station's format depends heavily on current music trends. The CHR format also includes the variation CHR/Rhythmic (a mix of contemporary hits and dance and Urban hits). The format appeals to the same general age audience, though this format variation likely includes a greater percentage of Hispanic and African-American listeners.

Country music moved from a regional format of the South and Southwest (Country & Western) to a national format during the 1970s as a result of U.S. population changes, television and movie exposure to the country genre (from *Donnie and Marie* to *The Urban Cowboy*), and crossover artists who also appeared on AC stations. The country format attracts a broad audience; the 25–54 age group is the traditional audience. Women compose slightly more than half of all country listeners. As with other music, some format segmentation has occurred.

The Country format has fragmented to include Classic Country (past hits and the traditional country sounds of the 1960s, 1970s, or early 1980s), which appeals to listeners 35+, Young Country/Modern Country (current hits with a strong emphasis on the young country stars who are also popularized through music videos), and Americana (a blend of Traditional Country and Young Country). Still, compared with some music formats, country has failed to reach the fractionalization of some formats.

The News/Talk format includes stations airing all news, all talk, all sports, all business, or a mixture of the four. The format usually targets both male and female listeners, though its strongest following is among men, who comprise about 60 percent of the listener base. The listener age range is 25+; the news/talk format is especially strong among 35–54-year-old listeners, though audiences 55–64 and 65+ can also be regular listeners.

Traditionally, All News stations operated with each programming hour split into two or three segments of thirty minutes or twenty minutes each. The typical listener could expect to hear local, national, and international news, weather, sports, business news, and traffic within a segment. The cycle would then repeat itself, with fresh copy or updated information being added when possible. Gradually, some news stations recognized the desire for listener discussion of news topics and the talk component was added to the news format. The talk radio phenomenon fragmented to include sports talk. The typical all-sports or sports talk station will likely anchor its on-air brand around one or more major professional teams, then establish talk programming to provide a platform for fan discussion of the teams' performance.

Growing public interest in the stock market and investing, along with the stock market's strong performance in the 1990s, led to the creation of the all business format. All business radio usually relies on a network provider to supply the latest breaking national and international business trends. The affiliate station will focus on local business stories as well as traffic information. The latest twist on business news has been technology news and information company CNET's deal with

AMFM Inc. (Chancellor Media) to create a business technology radio format to extend CNET's reach beyond the Internet. While many readers may view the Internet as more powerful than "mere radio," CNET views the radio format as an effective method to build its brand recognition as "the center for tech information." ¹⁶

Urban Contemporary (UC) is a mixture of dance, rap, R&B, and Contemporary Hits. The format itself is actually a fragmentation of what was once called Black or Ethnic radio. The UC format is now more widely used to cover a category of stations that appeal to women, men, and teens, with slightly more women than men. While the format is strongest among African Americans, more than one fourth of the listeners are Caucasian. The Urban Contemporary format includes: Churban (dance tempo hit format consisting of Urban and contemporary hits targeted especially at African American and Caucasian women, 18–34), Urban AC (a slower version of the UC format targeted to reach an older audience than the usual UC station), Black Oldies (R&B and soul hits targeted to reach an audience age 35+), Rap (rap music without the CHR or dance crossover music and targeted to an under 25 audience), and Urban (similar to UC but the programming is designed to attract an audience consisting almost exclusively of African Americans).

The term *Ethnic radio* has come to include foreign-language programming aimed at a local audience segment. Examples of such stations might include a station airing programming intended to attract Korean listeners. Some AM station owners have found market success by selling blocks of programming time to entrepreneurs who produce programming in a variety of languages ranging from Indian to Korean to Chinese to Arabic. Most communities could not sustain a single station airing programming in one or two of these languages, but by airing programming in multiple languages the local communities are served and the station's ethnic format is economically sustainable.

Oldies/Classic Rock, while often lumped into one broad category, actually consists of formats appealing to different listener groups. The oldies format has greater listener appeal among women while classic rock is stronger among men. Oldies may include hits from the 1950s—the earliest years of the Top 40 format—to an oldies AC or Classic Hits format consisting of music from the 1980s and 1990s. The Classic Rock format may include music from the early 1970s through the early 1980s; most of the artists are male performers.

Rock/Active rock is a mixture of current rock music and older rock music and is another of the lifestyle formats that gears the listening experience not only to include music but also contests, promotions, and personalities. Two-thirds of Rock/Active Rock listeners are likely to be men; most of the format's listeners are Caucasian. The target audience consists of listeners ages 25–44, with additional appeal to 18–24-year-olds.

Rock has become one of the most fragmented formats. The earliest pure rock format was Album Oriented Rock (AOR), which emerged on FM stations in the early 1970s as a response to Top 40 radio. Today, rock includes Alternative (also called Modern Rock), New Rock, Mainstream Rock, and Album Adult Alternative

(Triple-A) or Progressive Rock. Stations establish their niche through music selection and presentation and both on-air and off-air promotional appeals. The Modern Rock format may target the 25–34-year-old audience segment of recent college graduates or high school grads early in their careers. The Triple-A station may focus on the 35–44-year-old adults who have been out of college for more than a decade, are likely to own a home, and may be concerned with family and individual issues. The number of radio signals available in most markets, plus the wide use of CDs or other playback sources, suggests that the rock station would face a daunting task if it tried to be all things for all rock listeners. Figure 5-3 discusses the unique efforts of one station owner to establish a variation of the rock format on two newly purchased stations.

Spanish is a broad label given to a category of radio formats that range in age appeal from attracting teen listeners to adults 45+. Population and economics experts recognize that the U.S. Hispanic market has one of the highest percentage growth rates both in population and economic clout. This segment growth has led to format delineation. Spanish formats now include Hispanic/Spanish, Hispanic Contemporary (an Hispanic version of AC), Hispanic News/Talk/Information, Hispanic Regional, Hispanic Tropical, Hispanic Variety, Tejano, and religious Spanish. Language is often the one aspect that separates these formats from other radio formats. Many of the stations include on-air delivery in English and Spanish by the announcing staff and in commercials; other stations focus exclusively on Spanish delivery.

Spanish formats have provided opportunities for station owners to better use an existing AM radio signal. Small AM stations that might not be able to sustain a music format if forced to compete against FM stations, have established a viable listenership with a Spanish format. Cities such as Nashville, Tennessee (sometimes called the Cradle of Country Music) or Springfield, Missouri, which might not be thought of as having a sizeable Hispanic population now have sufficiently large Hispanic populations to justify the operation of Spanish-formatted radio stations in such cities. If the format succeeds on AM and the market's Hispanic population continues to grow, the format will migrate to FM.

Standards, Big Band, and Nostalgia refer to stations airing music from the 1940s up to the 1960s, including some of the songs that might be thought of as early rock and roll or pop. The term Middle-of-the-Road (MOR) is another name used for Standards. While not exclusively an AM format, Standards/Nostalgia is one of the remaining music formats present in regular numbers on the AM band. The format appeals to listeners thirty-five to sixty-four years of age, many of whom grew up listening primarily to AM radio. Many of the older recordings were not originally produced in stereo.

Easy Listening/Beautiful music is a close relative of Standards. The EZ format sounds very different—consisting of instrumentals and slower remakes of hit songs—but the audience appeal is to listeners in the 35–64 age range. Easy Listening was once a standard FM radio format; today it can be found on a limited number of AM or FM stations. Many Easy Listening stations repositioned themselves as

FIGURE 5-3 What's in a Name?



Susquehanna Radio Corporation, headquartered in York, Pennsylvania, is one of the largest privately owned radio broadcast group owners in the United States. In 1997, Susquehanna purchased a two FM stations in the Dallas–Ft. Worth, Texas, radio market to join other properties they already owned. One station was licensed to Haltom City, Texas, a community situated between Dallas and Ft. Worth; the other station was located in Sanger, Texas, a community situated northwest of Dallas. The Haltom City station's power was upgraded to 50,000 watts, making it a class C2 FM. The Sanger station is a class C3 FM, with 11 kw and 150 m HAAT.

Once you buy a new radio station (or two stations) how do you program them? The stations initially simulcast a Triple-A, album adult alternative format using the on-air promotion The Zone. After failing to break into the Top 20 stations in the Dallas-Ft. Worth market, Susquehanna unveiled a new format and positioning campaign during the fall of 1999.

Calling the station Merge Radio, the stations began airing what they called "Cool Rock Smart Pop." Not only does the programming air on the FM band but listeners can also receive the music via the Internet at Merge933.net. Unlike other stations that operate a Website and stream audio, the station maintains a staff of fulltime "Webjammers" who can interact with online listeners, and the Merge Radio site is updated regularly during the day. The site even informs listeners about MP-3 audio files, what they are, and where they can be found on the Internet.

The station's Website describes the format and station brand this way: "Where the Burning Passion of music meets the cool steely gleam of the digital future! At Merge Radio 93.3 FM and Merge 933.net, we offer an innovative, new brand of adult alternative music for Dallas/Fort Worth, Cool Rock Smart Pop. R.E.M., Pearl Jam, Lenny Kravitz, Collective Soul, Foo Fighters. Along with established bands that we love, count on Merge 933.net to embrace emerging music from bands that will define the future."

The Merge Radio signal is completely digital from the time the music is played back via CD or hard-drive audio file to the time the station's programming reaches the transmitter. Unfortunately, the over-the-air is still an analog FM broadcast signal.

How is the station doing with listeners? Ratings were not available at the time this book was being published. Readers can check one of the online radio Websites to find the most recent ratings. Radio and Records (http://www.rronline.com/) provides a free quarterly listing of radio ratings data supplied by Arbitron. Merge Radio (http://www.merge933.net) uses the call letters KKMR-FM, Haltom City/Dallas and KMRR-FM, Sanger, Texas.

Merge Radio, Cool-Rock-Smart-Pop, and Webjammer are copyrighted service marks of Susquehanna Radio. Used with permission, Susquehanna Radio Corporation.

Light Adult Contemporary stations in an effort to improve their listenership and ability to sell advertising time.

Religious radio refers to a broad category of formats ranging from radio preachers to music programming of several different styles and appeals. Many of the first radio stations to begin operation in the 1920s or 1930s were run by evangelists who wanted to use the airwaves to save souls. Religious radio grew from this tradition to include Gospel formatted stations: both black gospel and white gospel, Contempo-

rary Christian programming, and religious talk/information programming. Contemporary Christian has become a strong FM format in many large cities. While the market may only support one such station, it is a viable format that appeals to a 25–54-year-old audience. Gospel programming in large cities is more likely to be found on the AM band than the FM, but in small towns gospel may occupy a sizeable portion of the airtime on small market AM or FM stations. Religious news/information formats may consist of individual stations selling airtime in program length segments varying from fifteen minutes in length to two or three hours. The stations furnish the airtime and the program producers provide the program content. Another religious format present in many markets occupies the noncommercial portion of the FM band (discussed in Chapter 8). Low-power translator stations rebroadcast religious programming that is beamed in by satellite.

Full Service is the format description for a handful of mostly clear channel AM stations. Most of these stations began broadcasting in the 1930s and have survived the public shift from AM to FM by continuing to build on their traditional success in the market as news and information leaders. Unlike a News/Talk station, Full Service stations emphasize their heritage in the market and commitment to community service, including news coverage. One of the best examples of the Full Service format is number one-rated WGN radio in Chicago. *Duncan's American Radio* lists WGN's format as Full Service/Talk; the station is the flagship radio station for Chicago Cubs baseball. WGN was estimated to have billed \$32.5 million in 1997 for its owners, making the station not only the top billing station in Chicago but one of the highest billing stations in the country.¹⁷

The Full Service approach isn't limited only to Clear Channel AM stations. In small to medium markets, many AM stations have also built their identity through community heritage and service. These stations place a heavy emphasis on localism and typically air local events such as high school football and basketball broadcasts. Some stations may choose to identify their format as Variety or Block Programming to reflect a mixture of various types of music, local news and talk, local sports, and community announcements. While they may not be as successful as WGN, the stations have created a visible community brand name. A great example of localism comes from stations WGOH-AM and WUGO-FM, owned by Carter County Broadcasting, in Grayson, Kentucky. Though each station does air a specific music format, the stations pride themselves on serving the local community. WGOH-AM received the NAB's Crystal Award for Community Service in 1999, and the stations have been named one of the Top Five Small-town stations in the United States. Figure 5-4 provides a profile of the stations' programming.

New Adult Contemporary/Smooth Jazz is one of the most recent radio formats to develop. The format is a blend of soft adult contemporary ballads and instrumental jazz sounds that emerged beginning in the late 1980s. In some respects, NAC has tried, unsuccessfully, to become the millennium version of easy listening. The format lacks a sufficiently large library of familiar music capable of helping the station reach the critical audience mass. NAC/Smooth Jazz targets the 35–54-year-old audience and attracts slightly more female listeners than male listeners. Additionally,

FIGURE 5-4 Community Radio Service the Old Fashioned Way



Radio station licensing in the United States historically sought to establish stations capable of addressing the needs of a local community. Changes in ownership and changing perceptions of radio's role as a mass medium have altered the level of community service provided by many radio stations. The National Association of Broadcasters recognizes radio public service through its annual Crystal Award. Crystal Award winner WGOH-AM and sister station WUGO-FM in Grayson, Kentucky demonstrate outstanding community service. WGOH/WUGO, known by the radio brand "Go Radio," serves Carter County (population 26,848) and residents in surrounding counties, a blend of information, entertainment, and public service more reminiscent of radio from an earlier time than what people usually hear today.

WGOH-AM went on the air in 1959 and WUGO-FM was established in 1967; both stations are owned by Carter County Broadcasting, an independent group of local owners. The stations describe themselves as home-owned and operated by a staff that has been with the station an average of thirty years. General Manager Francis Nash joined the station as an announcer in 1966. Go Radio operates with computer-controlled studios, operates a Website, and programs and sells ad time on a community cable channel.

The stations feature more than 210 minutes of news each day, including a morning news block from 6:00–8:15 a.m. called *Mornings on the Go*. As part of its Crystal Award, WGOH documented airing more than 5,000 public service announcements for the community. The stations' other accomplishments include airing a radio auction to raise funds to keep open an Adult Education Center, a Kids Safety Fair each fall, staging a Christmas Parade for foster children, helping restock the community pantry to feed the needy, sponsoring a record-breaking blood drive, and helping clean up forty tons of trash.

WGOH-AM, 1370 kHz, with 5,000 watts of daytime power and up to 500 watts of presunrise and postsunset power, airs a country gold format but includes midday segments of bluegrass and gospel programming. WUGO-FM, 102.3 MHz, with a power of 4.8 kw and an antenna height of 111 meters, airs an adult lite rock format and provides complete coverage of local high school sports from East and West Carter High Schools, plus University of Kentucky sports and Cincinnati Reds baseball. Station programming also includes the *Trading Post* program (listeners call in items to sell, buy, or trade), the *Great Person of the Day* program (a community citizenship feature), community bulletin board, church news and obituaries, a weekly call-in public affairs program with county leaders, and color Doppler weather radar. The stations are also affiliated with the CBS Radio Network and with the Kentucky News Network.

Advertising rates on the stations range from a low of \$2.80 for a :15 commercial purchased through a yearly contract to a high of \$6.00 for a :60 commercial purchased through a weekly contract. All members of the staff serve as account executives and thus share in sales commissions. These ad rates might seem low compared to major market rates but they reflect the size of the market and the pledge of the station owners to serve the community and have fun with local radio. Go Radio has twice been nominated for the NAB's Marconi Award as Best Small-Market Radio Station in the United States.

Folksy community programming is one of the things that adds a personal dimension to radio. Radio is a mass medium, but it can retain the ability to speak to individual listeners.

Sources: GO Radio Rate Card, 1999; Francis M. Nash, *Towers over Kentucky*, (Lexington, KY: Host Communications, 1995); Francis Nash personal correspondence; and "WGOH-WUGO Website." Available at http://www.wgohwugo.com, accessed November 2, 1999. Used with permission, Francis Nash.

NAC/Smooth Jazz crosses ethnic lines to attract Caucasian, African-American, and Hispanic listeners. The greatest listener strength for this format is on the U.S. West coast although stations may be found throughout the United States.

Classical music, with a few exceptions, was once limited to airplay only on noncommercial radio stations. Increasingly, commercial station programmers have recognized that Classical, while not a ratings winner, can be a revenue winner for the station owner and the station can virtually own a desirable segment of the radio listening audience. Slightly more than half of the Classical listeners are female. While a sizeable number of listeners are over the age of 65, the format has a significant following among listeners ages 35–64. Classical listeners are also more likely to belong to households with higher incomes than listeners of other formats. The audience characteristics of the classical radio listener can help the station sell advertising time to advertisers who otherwise might not buy radio advertising time.

EVER-CHANGING FORMATS

All radio formats remain in a state of flux; the station desires consistency but it doesn't want its sound to become stale so new approaches are tested. Likewise, stations monitor the on-air sound of their competitors. When one station is successful with a new song, a new contest idea, a new promotion, a new identifier, other stations are quick to copy the successful strategy. Quincy McCoy, Senior Editor with Gavin.Com, notes that, "Content drives the radio industry... compelling content is what radio needs." Content includes music, news, and talk but it also refers to air talent who remember that they provide a product that must be consistently important to the listener.

Who is actually in charge of the programming has changed as the radio industry has changed. Historically, an individual with the title of program director (PD) would program the station. Today, if the station has a program director, he or she likely will be responsible for the daily execution of the format by the staff of the station. This will include seeing that announcers follow the hot clock, use the correct positioning statements on-air, and generally maintain format continuity. Sometimes the PD may carry the title Operations Manager. The actual programming of the station is more likely to come through involvement of various research companies or programming consultants along with input from the program director, general manager, and probably the sales manager. These changes reflect both the competitive nature of the radio market and the increased pressure from profit-driven owners for the stations to perform well.

Radio stations have been facing increased competition from home audio sources, the Internet, and now from satellite-delivered audio services. Satellite-delivered radio programming, since the 1980s, has been available to station owners who wanted to cut costs while maintaining a consistent on-air sound. The latest satellite technology bypasses the terrestrial radio broadcaster much as Direct TV and The Dish Network have bypassed local television stations. Consumers seem to

be less concerned with where the content comes from as long as it is content that satisfies their needs. Consumers, in droves, demonstrated this as they abandoned AM monaural signals for FM stereo.

It would be wrong to suggest that new technology is beginning to write the obituary of the radio industry; radio's obit has been incorrectly written in the past. Building a radio brand does become all the more important. A familiar product, one that consistently brings listeners back to a station on a daily basis, will determine the success of not just that individual station but it will also contribute to continuing consumer preference for over-the-air broadcasting. Success as a radio programmer is no longer a matter of selecting the right music or being an effective announcer. Yes, both are part of the equation. Figuring out who the audience is and what they want from a radio station, then consistently satisfying their wants, is the radio station's objective.

NOTES

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⁸National Format Shares, R&R Ratings Report & Directory, Vol. 1, 1999, p. 6.

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¹⁶Kara Swisher, "Latest Twist for CNET: A Radio Deal," Wall Street Journal, January 4, 2000, pp. B1, B4.

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6

The Radio Brand and Advertising

What do your favorite radio station and your favorite fast-food restaurant have in common? The instinctive answer a reader of a chapter on radio sales might give is to say that the radio station helps promote the fast-food restaurant by airing commercials. A better answer might be to suggest that the consumer has found the radio station and the fast-food restaurant to be acceptable **brands**. The products supplied by each business satisfy a user need.

Once the radio station has found a programming approach that satisfies listener needs, the station must begin to satisfy the needs of another group. The second group consists of advertising clients who purchase the radio station's ad time. For the potential advertiser, the radio station is not in the entertainment business but the ear leasing business. Just as the radio station must build listener awareness of its programming, advertising clients need listener awareness of the goods or services they sell and, most importantly, the clients need customer traffic. Selling any product involves satisfying needs. The job of the radio station is to provide the ears of listeners who will hear the ad buyer's message, then visit the store or otherwise obtain the product.

It is easy for listeners to criticize radio advertising. Commercials interrupt the music or talk programming we want to listen to. Commercials are played in blocks or sets sometimes consisting of six or more commercial units. Depending on spot lengths, a commercial break might consume five minutes of airtime. As distracting as commercials may sometimes seem to the listeners, radio stations from the earliest days recognized that there had to be a way for the station to pay for the operating expenses. For radio stations in the United States, this meant the adoption of commercial advertising. Some countries, most notably the United Kingdom, funded

their broadcast services by charging receiver license fees to pay for the operation of the broadcast services. Eventually, British listeners demanded more programming choices than the BBC provided and the British government authorized private, adsupported broadcasters to begin operation.

At the least, listeners should think of advertising as the fuel that keeps the station running. And, when the advertising is sold effectively—based on the station's target audience and programming niche—the listener actually benefits by receiving worthwhile consumer information.

Radio stations and radio networks have increased the amount of money their clients spend on radio advertising. More than \$15.4 billion was spent on radio advertising in 1998; about \$11.9 billion was spent on local spot advertising.² Radio commercials are usually sold in lengths of :30 or :60 seconds. A Sales Manager or General Sales Manager supervises the day-to-day sales operation and helps make revenue projections for the station. The members of the sales staff are usually called "account executives" though some stations may refer to their AEs as Marketing Executives or Marketing Consultants.

It is the job of the account executives to prospect for potential clients, develop client presentations, secure advertising buys, and then service the account. Servicing includes ensuring that the ads run when they should, updating the ad copy as needed, and, in some smaller markets, even collecting payment from the client. This last issue can be especially awkward for the AE and client if the client fails to pay on time. Clients who don't pay their bills may cause the AE to receive a "charge back" (money previously paid to the AE is taken back out of a future paycheck) if the client never pays the bill. Some stations avoid this by only paying their staff based on revenue collected from clients.

As with any electronic medium, the biggest problem stations face is inventory management. For any broadcast station (radio or television), **inventory** refers to the number of commercials the station has available for sale. A newspaper has the ability to increase or decrease the number of pages printed or to increase or decrease the amount of news (versus advertising) that is published. For electronic media, advertising time is a product inventory that is an absolutely perishable commodity. Any commercial inventory not sold by the station is lost forever. There is no effective way for the station to store, save, or warehouse the unsold commercial inventory for use at a future time when demand is higher. Stations that add extra commercials to their schedule may experience short-term revenue increases but they are likely to experience declining ratings at a later time when listeners tune out the station because of the heavier commercial loads.

Radio, when compared with television, cable, newspaper, or magazine advertising, offers the advertiser some unique advantages. Nearly everyone listens to the radio. Radio reaches more than three fourths of all consumers every day and about 95 percent of all consumers each week.³ That number exceeds the number of newspaper readers and television viewers. The typical person spends about three hours and eighteen minutes listening to radio on the average weekday.

Just as radio offers advantages, competitors can cite disadvantages of radio advertising. It is virtually impossible to buy advertising on just one or two radio stations and find that this meets the advertiser's marketing needs. The number of stations and their niche formats often mean that the advertiser must make a multiple-station buy. Radio is sometimes considered a "background" medium. Listeners often tune out commercials or, even worse, go to another station when the commercials air. Where people listen to the radio makes it difficult for consumers to benefit from certain types of product information, such as telephone numbers, addresses, or other product attributes. When a station's audience is perceived as being small, the client may think the ad buy will not be effective. When the station's listening audience is too large, the client may think an ad campaign involves overspending.

A strong economy in the 1990s, along with regulatory changes, has provided a robust advertising market. This market has encouraged the radio mergers and shielded station groups from potential problems associated with advertising sales. These problems include declining listenership and increasing ad costs. Thom Moon, director of research for Duncan's American Radio, estimates that radio listening is at its lowest level in twenty years. *A The Wall Street Journal* cites two studies that identify reasons for decreased listening. *A survey of 1,071 respondents by Edison Media Research found listener perceptions of increased ad clutter on many stations. The Wall Street firm BancBoston Robertson Stephens found commuters who owned a cell phone reported listening to the radio less than a year earlier.

Most radio sales managers will tell you the first job of the sales staff is to help clients understand how effective the radio medium is when compared with competing advertising media. The second job is to sell advertising time on the account executive's station. This is the toughest job. As with the increasing number of fast-food restaurants, the proliferation of radio stations and continued fragmentation of audiences have made it even more important for stations to market a station brand not only to listeners but to advertisers as well.

Advertisers are no longer buying just a mass audience from the station. An advertising executive once suggested that advertisers wanted the sizzle as well as the steak. For radio advertisers, this includes the station's **listener demographics** and the on-air presence of the station, which includes the announcers, music, and promotional events. As discussed in Chapter 5, listener demographics refers to the listener age range, gender, ethnicity, socioeconomic background, consumer spending patterns, plus a host of other qualitative variables.

The advertiser is interested in both the literal and hidden costs of advertising. The obvious cost is the cost of an advertisement, represented either through an actual dollar cost for the spot or the cost per thousand (CPM). The hidden cost refers to the quality or nature of the audience the advertiser is buying. How closely does this audience match the advertiser's customer profile? Significant deviation from the audience the advertiser needs to reach probably means the advertiser is making an inefficient advertising purchase.

Radio station owners and the industry trade organization, The Radio Advertising Bureau, work to maintain radio's position as a valuable ad source. (See RAB Profile, Figure 6-1.) Most radio station managers acknowledge that their biggest competitor is not another radio station in the market playing the same music and

Radio Advertising Bureau



The Radio Advertising Bureau (RAB) describes itself as the sales and marketing arm of the radio industry. Nearly 5,000 member stations, networks, and sales organizations in the United States and abroad are members of RAB. The RAB promotes the effectiveness of radio advertising, helps its members effectively market radio advertising to station clients, provides sales training for station employees, and serves as an information resource for station members.

A continuing theme for the RAB has been to promote the effectiveness of the radio industry as an advertising medium against other competing media. RAB's current campaign, titled Radio Gets Results, includes a focus on local stations providing specific examples of how the stations have solved marketing problems for clients. Gary Fries, President and CEO of the RAB, described the Radio Gets Results campaign as a way to provide the radio industry with documented proof of radio's unique ability to deliver outstanding results for its advertisers.

RAB has been aggressive in its use of the World Wide Web to supply station members with information (www.rab.com). RadioLink is RAB's twenty-four-hour Internet access service. Available through the World Wide Web is information to help radio account executives find clients, prepare client proposals, make client presentations, and become a marketing resource for advertising clients. RAB members will find RAB Instant Backgrounds on 150 businesses, promotional and sales ideas, consumer information from Simmons Study of Media and Markets and media information, including not only facts on radio usage but information to help account executives sell against other media such as newspapers, television, Yellow Pages, and the Internet.

Professional development is another role of RAB. Station members receive an RAB Sales and Marketing kit each month to help sales managers conduct successful sales meetings and to highlight new sales opportunities for account executives. RAB sales training includes four levels of sales certification: RMP (Radio Marketing Professional), CRMC (Certified Radio Marketing Consultant), CRMS (Certified Radio Marketing Specialist), and CRME (Certified Radio Marketing Expert). RAB calls certification, "the Radio equivalent to a CPA and the mark of a Radio Marketing Professional."* The first RAB training program was established in 1973. Persons wishing to receive the CRMA designation must combine knowledge gained from studying CRMC materials with what they know from day-to-day experience as a radio account executive. The three-hour written examination requires the demonstration of knowledge of the media industry to solve marketing problems for clients. RAB holds an annual three-day conference to bring together sales and marketing trainers and radio station staff members.

Unfortunately, much of the RAB's information is available only to members. The RAB's Website (http://www.rab.com) includes the Radio Gets Results station testimonials, media statistics, links to other sites, and the latest press releases from RAB, which often highlight industry trends.

Source: Used with permission, Radio Advertising Bureau.

^{*}http://www.rab.com/pr/crmc.html

attempting to attract the same listener group. The biggest competitor for most radio stations are other media forms, such as television stations, newspapers, the Yellow Pages, billboards, and direct mail. Radio advertising, in 1998, received about 10 cents of every dollar spent on advertising. Television and newspapers each received about 33 cents of each advertising dollar. Yellow Pages advertising received about 8 cents of every dollar spent on advertising. On-line advertising is one of the fastest advertising growth segments, but only received about 1 cent of every dollar spent on advertising. 6 Convincing advertisers to divert money from other media buys to radio would increase the size of the advertising pie slice for the radio industry.

RADIO CONSOLIDATION AND THE EFFECT ON SALES

The radio industry has been influenced in several ways by passage of the Telecommunications Act of 1996. As we've talked about in Chapter 3, the Telecommunications Act enabled station owners to increase the number of station properties they owned in a single market. Radio consolidation has not yet helped the radio industry to sell more advertising, but consolidation has provided cost savings to the owners. It has also allowed the radio industry to move away from its mom-and-pop status. In most of the major media markets, two-four owners have been able to purchase as many as eight stations each. This has affirmed the need for station account executives to sell the virtues of the radio medium and then to sell the specific audience of a radio station or stations they represent. Account executives who tried selling "against" other stations might find themselves selling against stations also owned by the same parent company. Besides buying multiple stations in the same market, some station groups have built regional station clusters.

Prior to its purchase by Clear Channel Communications, Jacor Communications was one of the first group owners to build station clusters. Jacor's strongest cluster was in its home market of Cincinnati, where the company controlled nearly half of the radio advertising revenue in the market. Cumulus Broadcasting has devised a station clustering technique that consists of small market stations. Chancellor Broadcasting, a successful large market station group, was itself purchased by Clear Channel Communications. Consolidation has led to a slowdown in sale approval for some radio properties as the Department of Justice has investigated the potential for monopoly control of the radio ad market by one or two owners. In some instances, stations groups have been forced to divest ownership of some stations before a consolidation purchase would be approved. Probably the best example of consolidation causing station divestiture was Chancellor Media's merger with Clear Channel Communications. Approximately 125 stations needed to be spun off to gain FCC and DOJ antitrust approval of the purchase of Chancellor by Clear Channel.

RADIO ADVERTISING CLIENTS

Radio stations generally sell advertising to three distinct groups of clients: local clients, regional clients, and national clients. The percentage of clients in each category usually depends on the size of the market the station operates in and the station's ratings. Successful stations in large markets command more national and regional advertising. Small market stations air primarily local ads. About 75 percent of all radio ad dollars are spent on local spot radio purchases.⁸

Even though most radio ad purchases are local, national manufacturers or distributors are often involved in local ad sales through **cooperative advertising programs**. Cooperative advertising, or co-op advertising, is a shared-cost ad program involving local retailers and national manufacturers or distributors. The national company provides an advertising allowance to the local retailer, usually determined by the dollar value of the inventory purchased from the national company. This advertising allowance can then be used to buy ads to promote the national brand and the local retailer.

A typical co-op plan might provide the local retailer with an ad allowance equal to 2 to 3 percent of the inventory brand purchased from the national company. The local retailer can use this money to pay advertising expenses to promote the national brand, though some national companies also require the local retailer to contribute to the ad costs. Depending on the size of the local retailer purchases, the money provided by a co-op program could range from several hundred to several thousand dollars. Cooperative ads also may include nationally produced radio commercials that only need the retailer's name added as a "local tag" at the end of the ad.

RADIO: REACH AND FREQUENCY

Radio advertising effectiveness is gauged by measuring the **reach** and **frequency** of ad exposure. Reach refers to the number of different people who are exposed to the ad while frequency refers to the number of times different people hear the ad Most radio and television ads probably won't produce the degree of effectiveness the advertiser wants if consumers are exposed to the ad only one time. The nature of radio and television use suggests that consumers are often engaged in other activities while they listen to the radio or watch television. To create an impression in the consumer's mind, repeated exposure to the message (frequency) is typically needed.

Generally, if an advertiser began an advertising campaign by planning to run one commercial per hour between 6 A.M. and 6 P.M., the advertiser might reach the majority of the radio station's listeners. But, because people don't listen to the radio continuously, each listener might hear the ad only once or twice. To increase the likelihood that the ads would actually cause the consumer to take action, frequent exposures to the message are desired. Instead of scheduling only one day of

commercials, the advertiser might schedule multiple days of advertising with one or more ads per hour during a selected time period.

RESEARCH AND RATINGS

How does the radio station account executive know how many listeners the station has? Just as research is important in programming a radio station, research is essential to the sales staff. The most widely used supplier of radio ratings information is the Arbitron Company, headquartered in Columbia, Maryland. Arbitron has been measuring radio listening since 1964. The company uses a personal, seven-day diary to measure radio listening in 260 markets, with 94 markets being measured yearround.9

Arbitron research data is an important part of station sales though Arbitron data and other forms of research are also used to help the station program effectively. Radio research plays three important roles for the radio station. First, research helps the station determine its programming approach. Second, once the programming is on the air, research enables the station's program director to determine the effectiveness of the format and to make appropriate adjustments in the on-air sound. These first two steps are brand building for the station, creating the ear product (listeners) the advertiser will want to buy. Third, research helps the station quantify and qualify the listening audience—advertisers want to know how many people are listening and just who the listeners are, with respect to age, income or gender. Most station account executives try not to sell a station solely on the ratings. Ratings will vary somewhat and most stations feel they can offer other marketing services to a business than just a quantitative number of listeners. But ratings are important.

Advertising agencies, representing national or international clients, need a way to compare the cost of advertising on various stations. Ratings data provides the comparison. Radio listening is tracked using fifteen-minute increments called Average Quarter Hour measures. Audience estimates can be expressed as rating percentages or as actual listener estimates in hundreds or thousands.

Gross Impressions and Cost Per Thousand are probably the two most common ad calculation comparisons. Gross Impressions provide a quantitative way to compare the ad exposures delivered by a proposed ad schedule or station with another ad schedule or station. Cost Per Thousand provides a way to compare the cost of reaching the targeted audience either on a single station or among multiple stations. Evaluations can be made based on all station listeners, usually referred to as listeners 12+, or evaluations can be made for particular audience segments, such as women 25-49 years of age.

Gross impressions (GI) are the actual number of impressions an ad schedule will deliver. GIs are calculated by multiplying the AQH persons estimate for the particular daypart by the number of spots to be run in the daypart. 10 The number of

listeners or AOH persons is the number of persons listening to the station in a fifteen-minute period. Consider an ad schedule during morning drive to be purchased on stations A and B. One spot will air each hour between 6 and 10 A.M. Station A's AOH persons estimate is 100,000. Thus 4 spots \times 100,000 AOH persons = 400,000 GIs. Station B's AOH persons estimate is 20,000 AOH. Thus 4 spots × 20,000 AOH persons = 80,000 GIs. If more than one daypart is involved in the ad purchase, the GIs for the various dayparts are summed to determine the total number of GIs for the ad schedule. GI calculations allow ad buyers to compare different stations in a market or different ad schedule proposals on a single station. They can also give the client a comprehensive look at what is being purchased when ads are placed on multiple stations within a radio market.

Cost per thousand, abbreviated as CPM, (the Roman numeral M equals 1,000) allows the advertiser to know how much money it costs to reach one thousand of the station's listeners. (This is sometimes referred to as Listeners Per Dollar.) The simplest way to calculate cost per thousand is to divide the cost of the ad by the number of listeners (in thousands) who are expected to hear the ad. Thus, if the commercial costs \$50 and the station reaches 20,000, the cost per thousand is calculated by dividing \$50 by 20. The resulting CPM is \$2.50 to reach each one thousand listeners. The biggest problem many people face when doing CPM calculations is to remember that they are figuring a cost per thousand listeners. The listener figure needs to be thought of as twenty one-thousand listener groups rather than dividing the cost by 20,000 individual listeners.

Consider the example of morning drive advertising purchased on two radio stations. Station A charges \$100.00 for a :30 spot that reaches 100,000 listeners. Station B charges \$25.00 for a :30 spot that reaches 20,000 listeners. Which ad purchase is a better value for the advertiser? Station A's CPM is \$1.00 (\$100.00 + 100 = \$1). Station B's CPM is \$1.25 (\$25.00 + 20 = \$1.25). Station A, based solely on CPM, has a lower cost for each 1,000 persons reached and is a better ad buy. Other issues to consider might be station listener demographics. It is certainly possible that a more suitable listener profile might make the station with the higher CPM a more appropriate ad buy.

Another method for calculating CPM is to divide the total cost of the ad schedule by the total number of Gross Impressions:

A one-day ad schedule consisting of five spots costing \$100.00 each and reaching an AQH of 100,000 persons, plus another seven spots costing \$80.00 each and reaching an AQH of 70,000 persons, would produce the following calculations:

Total Gross Impressions for the schedule equal:

 $5 \text{ spots} \times 100,000 \text{ AOH} = 500,000 \text{ GIs plus } 7 \text{ spots} \times 70,000 \text{ AOH} = 490,000$ GIs, for a total of 990,000 GIs.

Total cost of the schedule equals:

 $5 \text{ spots} \times \$100.00 = \$500.00 \text{ plus } 7 \text{ spots} \times \$80.00 = \$560.00 \text{ or a total schedule}$ cost per day of \$1,060.00.

To calculate CPM we take total schedule cost and divide this by GIs. $$1.060.00 + 990.000 \text{ GIs} = .00107 \times 1.000 = 1.07 CPM . (This number has been rounded.)

In this case, after we have divided the cost of the schedule by the GIs, we must multiply that product by 1,000 to arrive at a cost that represents the cost for reaching 1,000 listeners. (We might also choose to drop the extra zeros in our calculation: \$1.060 + 990 GIs = \$1.07 CPM.

Cost Per Thousand can be used to compare ad rates for different dayparts on the same station or to compare ad rates among several stations in the market. Cost Per Thousand is an effective way to evaluate station ad costs but usually isn't the only thing for an ad buyer or seller to consider. The listener profile of the station is important, as is the station's image in the community. There are stations and products that might not want to be associated with each other. A station with a religious format would probably never want to sell advertising time to an establishment that made most of its money from the sale of alcoholic beverages. An urban contemporary station would not likely sell ad time to a client who sold western boots and clothing. A traditional country station would probably never sell advertising to a teenoriented clothing store.

It is also helpful for account executives and advertisers to know a station's cume listeners. Cume listeners refers to the exclusive listeners a station has. Rather than count listeners multiple times during the day, this calculation allows the advertiser to see how many different people listen to the station during a day. A CHR format will usually have greater listener turnover and a higher cume because there are usually several stations in a market with this format or a complementary format. A classical format, usually present on one station in the market, will have a smaller exclusive audience or cume.

Figure 6-2 illustrates additional calculations that can be used to evaluate ad purchases.

OPTIMUM EFFECTIVE SCHEDULING

Another ratings-related strategy used by radio stations to increase the effectiveness of a client's ad schedule is a technique called Optimum Effective Scheduling (OES). OES is based on the concept of audience turnover. Think about people who patronize a library and a convenience store. You will likely find the library has customers who stay for a longer period of time but it may have fewer total customers than the convenience store. If you were trying to reach customers in the convenience store with radio ads, you would need to repeat the ad broadcast in the convenience

FIGURE 6-2 Additional Advertising Buying and Selling Formulas

A variation on Gross Impressions is Gross Ratings Points (GRPs). GRPs are the number of ratings points a schedule will deliver. GRPs may be calculated by dividing the Gross Impressions of an ad schedule by the market population. Another variation is to multiply the number of ratings delivered in a time period by the total number of spots to be aired in that time period. Five spots that air during a time period with an Average Quarter Hour Rating (AQHR) of 9 deliver 45 GRPs. Gross Ratings Points are, however, only a summary of the number of ratings points in an ad schedule. One hundred GRPs does not mean that 100 percent of the audience has been reached by the ad schedule.

Reverse Gross Impressions is a term used when calculating the number of spots needed on a competing station to match your station's Gross Impressions. To calculate, divide your station's Gross Impressions by the AQH Persons on a Competing Station.

Gross Impressions on Your Station + AQH Persons on Competing Station = # of spots needed.

Cost Per Gross Rating Point is the average cost for one GRP in an ad schedule. Calculate by dividing the total cost of the schedule by the total number of GRPs.

Cost of Schedule + GRPs = Cost Per Point

Reverse Cost Per Thousand is the maximum rate per spot that a competing station can charge to remain as cost-effective as your station.

(Your Station CPM × Competing Station AQH Persons) + 1,000 = Reverse CPM

Account Executives sometimes perform CPM or other calculations with the help of a pocket calculator, but most stations also have a software program available to simplify the calculations. Arbitron provides Maximi\$er 99SM for radio stations and Media ProfessionalSM for advertising agencies and advertisers. TAPSCAN WORLDWIDE® is a division of Arbitron and offers additional software services to simplify ratings data analysis. Their services include software to analyze radio, TV, cable, print, and outdoor media through TAPSCAN®, TVSCAN®, QUALITAPSM, TAPSCAN CUSTOM COVERAGESM, PRINTSCANSM, and MEDIAMASTERSM. These are proprietary software systems available to subscribing stations or station groups.

store more often because the customer group is constantly changing. That's the principle behind OES.¹¹

Steve Marx and Pierre Bouvard wanted to balance the desire for ad frequency and reach while producing an effective commercial schedule. To accomplish their goal they developed Optimum Effective Scheduling. 12 Marx and Bouvard use station turnover or T/O (cume audience + AQH) times a constant, 3.29, to determine the number of spots an advertiser should schedule each week. Thus a station with a turnover ratio of five would need 16 spots per week while a station with a turnover ratio of twenty would need to air about 66 spots each week to produce an effective ad schedule for the client.

From the standpoint of generating ad revenue for the radio station, stations with low turnover may be at a disadvantage when using OES. Because their listeners spend more time with the station, fewer spots are needed to produce an effective schedule of reach and frequency. Assuming ad rates per thousand listeners are

reasonably comparable, these stations must attract more clients to generate the same amount of ad revenue as would a station with high listener turnover. Of course, as we discussed in Chapter 5, stations with high listener turnover have higher programming costs. They must spend more to promote the station's format and to attract new listeners.

RATE CARDS

Radio station advertising rates are typically shown on the station's **rate card.** Historically, the station produced one rate card that was typically valid for six months to a year. The card might list rates for program sponsorships, such as sponsoring a newscast or remote broadcast. The card also might specify a price discount provided to the advertiser for increasing the quantity of spots purchased. This rate card is sometimes referred to as a "quantity card" or "quantity-discount rate card." In some situations, especially in smaller markets, the quantity card may be an effective way of rewarding a client who spends more money with the station. The obvious drawback to this card is that the radio station, which has a limited inventory of commercial time, must discount the price of its product. The discount applies, no matter what the available advertising situation is like.

A better option used by most radio stations is the grid rate card system. The grid system is based on computerized inventory tracking that helps the radio station determine how much of its inventory is still available for sale. Depending on how the station chooses to track its inventory, the station can tabulate total commercial minutes sold or total number of commercial units available (:30 or :60 spots). The computer inventory tracking also allows the radio station to change the price of advertising on a daily basis.

Basic economic principles suggest that when the supply of a good decreases but demand remains high, the price of the good should increase. When the station has sold nearly all of the advertising it can effectively run, this indicates not only that the station has an effective sales force but that the station is perceived to be an effective marketing tool by its advertisers. Therefore, a successful station, as determined by high advertiser demand, should be able to charge more money for the remaining commercial units. A grid-rate card enables the station to adjust its ad rates according to the amount of inventory remaining.

Stations sometimes encounter clients who are hesitant to commit early to an ad schedule on the station. The grid-rate card can help the account executives pre-sell the station's inventory prior to peak demand periods. A retailer wanting to get the lowest ad rates available for pre-Christmas advertising would want to place an order with the station as soon as possible for Christmastime, perhaps as early as January 2. The longer an individual waits to place an order for a flight of commercials, the more likely the available supply of ad time will decrease and, correspondingly, the price of the remaining time will increase.

AGENCY SELLING

Account executives often do not deal directly with retailers or manufacturers. Instead, advertising agencies are the contact source the account executive must deal with if the AE wants to sell advertising time to retailers or manufacturers. The advertising agency may serve as a creative development center for the client by devising the marketing approach and advertising campaign for the client as well as coordinating advertising placement among various media including radio, television, and newspapers. Typically, the ad agency is paid a fee or commission based on the cost of a station's advertising. Not only does the radio station account executive receive a sales commission but the ad agency also receives a commission. The standard agency commission is 15 percent. If the ad agency buys \$1,000.00 of advertising on a radio station, the purchase price is grossed up to include the agency commission. To add a 15 percent commission you would actually multiply \$1,000.00 by the constant 1.1765. When you do the reverse math on \$1,176.50 and subtract 15 percent, you will arrive at the \$1,000.00 purchase price.

What did the advertising agency do to earn the 15 percent commission? Very little, some station account executives say. In fact, the ad agency serves as a gatekeeper to evaluate the effectiveness of a variety of advertising options and coordinate ad placement. Agencies evaluate station strength and ad costs by examining station ratings and computing CPMs and GIs. This is a vital role for large retailers or national brands. The client holds the ad agency accountable for the success of the marketing campaign.

VALUE-ADDED SELLING

Unlike television advertising or newspaper advertising, one of the strengths of radio advertising has always been value-added selling. Rather than sell a client only a schedule of commercials, many radio stations market the client's products through on-air giveaways, remote broadcasts, or other creative approaches that join the client brand with the station brand/image. These value-added approaches create value for the advertiser and offer another reason why the client should purchase advertising on the radio station.

Examples of value-added selling can include station giveaways. When a station gives away a vehicle or vacation package, the station probably warts to accomplish two things; to promote the station's format with current and potential listeners and create additional advertising opportunities. The giveaway allows the account executive to offer something special to a select group of sponsors. These sponsors may have remote broadcasts scheduled from their business or perhaps receive registration forms for customers to fill out to enter to win the vehicle. On-air announcer mentions identify registration locations and generate store traffic.

Radio production techniques offer additional value for the client. Radio copy and production techniques appeal to the "theater of the mind." While television ads may involve costly location shooting and tedious editing, radio copywriters and production staff can create multiple ad appeals for the client and typically not charge a production fee to the client. Production techniques allow minor changes to be made in the voice track of an ad while the same music and sound effects appear in the background.

THE BUSINESS OF SELLING

Radio account executives are usually paid according to their sales performance. This may mean they are paid a straight commission or a percentage of the sales dollars they generate. This compensation plan carries a strong incentive for the salesperson to produce results, but it also means the account executive has little job security. Another approach is to pay the account executive a draw against commission. The draw enables the account executive to establish a minimum compensation amount based on anticipated sales. Once this minimum is reached, additional compensation is paid through sales commissions. If an account executive accepts a draw and commission but later has a client who defaults on a bill, the account executive may have a **charge back** to the draw and commission. In other words, the account executive must return any income earned on ads that aired but were not paid for by the client.

Radio advertising sales, then, is a relationship business built on trust between the account executive and the client. It is in the best interest of both parties that each succeeds. The account executive (AE) is there to solve a problem for the client—generating store traffic and increasing sales. The relationship between the two is not a one-time event. Successful account executives may spend years working with successful business clients. As the client's business increases, the client may spend more money on the AE's station. Successful clients also provide sales referrals to other prospective clients of the account executive. The account executive also recognizes that the relationship with the client involves consultant selling or consultant marketing. Effective account executives may recommend other radio stations or advertising approaches for the business owner. This may initially reduce the ad money spent on the AE's station but it reflects the obvious: One radio station or even a station group in a major market can't accomplish everything a business owner may need to market his or her products or services.

As a matter of business ethics and professionalism, the radio account executive wants the business owner to succeed. A successful business is part of a healthy economy and means continued prosperity for the business owner and the radio station. It eventually means repeat advertising business for the radio station and thus strengthens the consultative relationship between the account executive and the business owner. Establishing this relationship is essential for the millions of people who make their living through some form of consultative sales.

Money magazine once asked its readers to determine what "Steve" did for a living. Among other things, a former neighbor described Steve as shy and withdrawn and meek and tidy. Money asked whether Steve was likely to make his living as a librarian or a salesman. The natural assumption is that Steve's personality type is that of a librarian. In fact, Money notes that Steve is about 75 times more likely to be a salesman.¹³ The point of this example is to not ignore the obvious: Millions of people make their living in sales. They do sell a product or service but a sale occurs only if the client is convinced that the product satisfies a need. Successful account executives solve problems for their clients.

Radio consolidation has pushed radio stations into the most competitive environment the industry has encountered. While consolidation will result in greater pressure on general managers and sales managers to establish revenue forecasts and resulting pressure on account executives to achieve the revenue goals, the changes in the industry will likely produce a better trained sales force. To achieve the revenue objectives the owners need, they will need not only highly motivated employees but they will also need to train them to succeed, thus creating outstanding career opportunities.

NOTES

¹Thomas Streeter, Selling the Air: A Critique of the Policy of Commercial Broadcasting in the United States. (Chicago: University of Chicago Press, 1996). This book provides an informative history of how commercial broadcasting developed in the United States.

²"Radio Revenue Is Growing," available online at http://www.rab.com/station/mgfb99/ fac28.html, accessed January 4, 2000.

³Radio Reaches 75% of All Consumers Every Day," available at http://www.rab.com/ station/mgfb99/fac1.html, accessed January 4, 2000 and "Radio Reaches 95% of All Consumers Every Week," available online at http://www.rab.com/station/mgfb99/fac2.html, accessed January 4, 2000. Calculated using data collected by RADAR ® 59, Fall 1998, © Statistical Research, Inc.

⁴Martin Peers, "Radio's Results: Genuine Gains or a Dirge for the Urge to Merge?" Wall Street Journal, December 27, 1999, p. B8. ⁵Ibid.

⁶Calculated from advertising spending estimates provided in The Veronis, Suhler & Associates Communication Industry Forecast, 12th ed. (New York: Veronis, Suhler & Associates, 1998), p. 84.

⁷See Martin Peers, op. cit.

8"Radio Revenue Is Growing," available online at http://www.rab.com/station/mgfb99/ fac28.html, accessed January 4, 2000. Calculated using revenue totals supplied by RAB.

⁹A Guide to Understanding and Using Radio Audience Estimates, Arbitron, 1996, p. i. ¹⁰Ibid., p. 36.

¹¹Ed Shane, Selling Electronic Media (Woburn, MA: Focal Press, 1999), p. 384.

¹²Steve Marx and Pierre Bouvard, Radio Advertising's Missing Ingredient: The Optimum Effective Scheduling System, 2nd ed. (Washington, DC: NAB Publications, 1993).

¹³Clint Willis, "The Ten Mistakes to Avoid with Your Money," Money, June 1990, p. 87.

7

Radio Research

DR. KATHLEEN A. FOX
Assistant Professor of Electronic Media and Film
Southern Methodist University

Radio consists of many intangible variables that affect its success as a business. Due to the nature of radio's product as one that people cannot touch or see, radio professionals have difficulty explaining the importance of their product to outsiders. Radio's profitability depends on selling advertising time to many companies unaware of radio's impact on its listeners. Historically, potential advertisers have been skeptical of radio's potential to attract loyal and attentive audiences. Advertiser skepticism is due to their doubt that an intangible medium like radio could persuade large numbers of consumers to purchase a product. This skepticism led to the rise of radio research initiated by advertisers, not broadcasters, to investigate how many people heard their messages and how effective the messages were. Radio research still exists today to persuade advertisers that radio is a viable medium for advertiser money, and researchers continuously strive to improve the research process.

Research is the tool all radio stations use to measure their success. Radio research is important because it allows individual stations to compare themselves with other stations in the market, evaluate promotional activities, and examine trends in programming. Without research, stations would have little evidence of the size of their audience and the tastes of their audience. Not only does research serve as a vehicle to estimate audiences, but research also helps radio stations improve their ability to serve the needs of their audiences and advertisers.

One method of categorizing radio research is to divide the process into the divisions of sales research and programming research. Sales research is primarily con-

cerned with ratings research, in other words, the hard numbers estimating the size of a station's audience. Account executives use these numbers to explain to potential advertisers the number of possible consumers, including the anticipated demographic makeup of the audience available through buying time at that radio station.

Programming research, on the other hand, is concerned with investigating the quality of the station's music, radio personalities, and promotions. Programming researchers examine listener attitudes to understand listening trends and motivations. Programming and sales research are essential to the success of a radio station. Programming research focuses on delivering a quality product to the station's listeners so they tune in to that particular station. Furthermore, programming research is important to the sales process because, without quality programming, audience numbers will decrease. If audience numbers decrease, sales research will reflect poor numbers and harm the sales process.

So, who conducts all this essential research? Research is usually generated by one of three groups of people: rating firms, individual consultants, or an in-house department. Rating firms collect data from listeners regarding listening patterns for an entire radio market without special attention to any one station. The most widely known and used rating firm in radio is Arbitron Research, discussed in some detail later in this chapter. Examples of other radio ratings services include AccuRatings from Strategic Media Research and Statistical Research.

Another group of researchers is individual consultants. Many radio stations hire individual consultants (i.e., Ed Shane, Mike McVay) to conduct programming research for them. These consultants analyze data concerning listener perceptions of the station exclusively for that station. Often consultants help a station to gain a competitive edge over other stations in the market.

Finally, some stations have an in-house department that conducts research for the station. This research is usually programming research because no one would believe ratings collected by the station itself. An in-house research department can be very beneficial because researchers gathering the information are in tune with the programming needs of the station. However, due to their high cost, in-house research departments are usually only found in larger market radio stations, which draw more advertising revenue and can afford the cost.

It is essential to understand the importance of research to the success of a radio station before attempting to understand how to interpret radio research. Advertisers need proof that their money is being spent wisely and that the message is actually reaching potential consumers. Not only does research help estimate the total number of listeners being reached, but research helps paint a picture of who those listeners are. Advertisers are concerned with reaching only their specific target audience, in other words, those people who are most likely to purchase their particular product. This is where the beauty of radio lies. Radio, due to formatting, is an ideal medium for targeting a specific demographic group.

For example, a local beauty salon may wish to advertise on the radio, but may only want to reach women because they are the most frequent users of a salon. A locally owned beauty salon, which probably does not have a great deal of money to spend on advertising, would only want to buy time on a radio station geared toward women. An adult contemporary station would be ideal for the salon to consider because it targets women between the ages of 25–49. Furthermore, radio is relatively inexpensive for the local advertiser compared to mediums such as television or magazines. Buying time in a medium that has a mass audience of both men and women would waste the advertising money on a great number of people who have no intention of using the product.

Radio is an ideal advertising medium for both local and national companies. However, radio needs to continually improve its own product, which is entertainment, and prove that people are listening. This is where radio research enters the picture. The remainder of this chapter will demonstrate in detail the importance of sales research and programming research, and conclude with some thoughts on future advances in radio research.

SALES RESEARCH

Radio sales research consists of two different types of research: quantitative and qualitative research. Quantitative research explains the data in numbers. Quantitative research asks questions such as "How many people listen to radio?" and "How many hours a day does the average person listen to the radio?" Qualitative research gathers more in-depth data that explains the reasons why something occurs. Qualitative research asks questions such as "Why do you listen to radio?" and "What qualities do you look for in a radio station?" Quantitative research uses methods such as survey research, while qualitative research employs methods such as personal interviews and focus groups.

Arbitron

An important tool for account executives in the radio sales business is "the book." The Arbitron Market Report, commonly referred to as "the book," is the industry standard for quantitative radio data. Arbitron, a company that surveys radio listeners in local markets nationwide, sells its book of listener behavior data to radio stations to use in their sales and programming decisions. While other companies have attempted to compete with Arbitron to be the national leader in quantitative data for radio, Arbitron remains the industry leader in ratings research. Because Arbitron is the leader in ratings research, the next several pages will concentrate solely on how Arbitron gathers radio data and how to interpret Arbitron data.

Sample Procedures

One of the most important questions to ask when interpreting research data is "How was the sample constructed?" A sample is simply the group of people who partici-

pated in the study. It is important that one group of people (i.e., men) is not given more opportunity to participate in a study than another group of people because it will skew the results. In a quantitative study, every member of the population should have an equal chance of being selected.

In creating a sample, Arbitron defines radio markets as one of the following: the Metro, TSA, or DMA (see Figure 7-1). The Metro is a geographic area used by Arbitron and is defined by Arbitron subscribers.² The Metro is the smallest of the three geographic distinctions. TSA, the next geographic distinction, stands for Total Survey Area. The TSA is a geographic area that expands the Metro by a few additional counties. DMA stands for Designated Market Area, defined using A. C. Nielsen's television rating report. The DMA is composed of sampling units and every county or split county within the sampling unit is assigned exclusively to only one DMA. Arbitron uses the DMA distinction in only the top fifty radio market reports.3

In evaluating research, it is not only important to know who was included in a sample, it is just as important to understand how a sample is derived. Arbitron generates a sample through a random selection process of both listed and unlisted telephone numbers. The addresses for these households are then located and initial contact is made by mail, informing them of their selection and that they will be telephoned soon about their participation in the study. Households are telephoned to gain consent, to determine the number of persons over the age of twelve, and to determine the race/ethnicity and demographics of the household. Arbitron includes all persons over the age of twelve who have consented to the study in the sample. Arbitron includes monetary incentives of varying amounts, depending on race/ ethnicity, to encourage greater participation.4

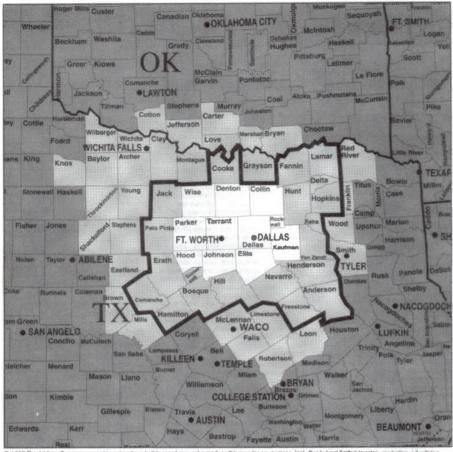
Methodology

Arbitron conducts its survey on a quarterly basis. Large markets are surveyed four times a year for a twelve-week period in the winter, spring, summer, and fall. Every Arbitron market is surveyed at least once a year in the spring; some markets are surveyed twice a year every spring and fall.⁵ While all radio stations are included in the survey, it is important to note that it is the decision of each individual station as to whether it decides to purchase the results of the study.

Arbitron distributes a diary to the sample to measure radio audience listening behaviors (see Figure 7-2). All members of the sample receive a personal diary. Each person is asked to record all radio usage both in and outside of the home. The Arbitron diary week begins on Thursday and ends on Wednesday. Respondents are expected to record the time they began listening, station call-letters, station name, program name, whether the station is AM or FM, and where they were listening to the radio. In some of the smaller markets, Arbitron also asks a few qualitative questions in the back of the radio diary. The qualitative questions include information concerning employment, retail purchases, fast-food consumed, television networks viewed, and other categories.6

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Dallas-Ft. Worth



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☐ Metro ■TSA ■DMA®

TSA and DMA sampled in Spring and Fall only. For definitions of the terms Metro, TSA and DMA, see Page M3, Paragraph 1, and Page M7, "Selected Arbitron Terms."

Metro Rank: 7

Market Surveyed: Winter, Spring, Summer, Fall

BFB-FM	KDGE-FM	KDMDX-FM	MA-XXQX	KDXX-FM	KEGL-FM
ESS-AM	KHCK-FM	KHKS-FM	KHVN-AM	KKDA-AM	KKDA-FM
CCN-FM	KLIF-AM	KLUV-AM	KLUV-FM	KMEO-FM	KOAI-FM
CPLX-FM	KRBV-FM	KRLD-AM	KRNB-FM	KSCS-FM	KTCK-AM
CTXQ-FM	KVIL-FM	KYNG-FM	KZPS-FM	WBAP-AM	

^{*} Station subscribers as of release to print.

ARBITRON

DALLAS-FT, WORTH 2 WINTER 1999

FIGURE 7-1 Dallas-Ft. Worth Radio Market (Metro, TSA, DMA)

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	Ti	me	Station	1			Pla	ace	2
-0.00		10.00	Call letters, dial setting or station name	Mark	(X) one	At	Mark In a	(X) one	Othe
	Start	Stop	Don't know? Use program name.	AM	FM	Home			
Forth	:	:							
Early Morning	:	:							
(from 5 AM)	:	:							
	:	:							
Middow	:	:							
Midday	:	:							
	:	:							
	:	:							
Late	:	:							
Afternoon	:	:					36%	TIS	台色
	:	:							
	:	:							
NT 4	:	:							
Night (to 5 AM	:	:							
Friday)	:	:							
	:	:							

If you didn't hear a radio today, please mark (X) here.

FIGURE 7-2 Arbitron Company Sample Diary Page © 1999 The Arbitron Company

After placing the diaries with sample members, Arbitron makes further contact reminding individuals to return the diary to achieve a high return rate. The more diaries returned the more accurate the results of the study; however, the company is lucky if a 50 percent response rate is achieved in a local market.⁷

After Arbitron collects the diaries, the data is analyzed. Diaries that are not legible or accurate are eliminated from the sample. The usable diaries are tabulated and quantified into numbers. Arbitron has a complex process of creating numbers that reflect a demographic breakdown of listener behavior during the particular survey period. Arbitron breaks listener responses into demographic groups, separating overall audience, men, and women in the following age designations: 12+, 12-24, 18-34, 18-49, persons 25-49, 25-54, and 35-64. Teen listening is also included in the market report.

Arbitron Report

The Arbitron Market Report, once completed, is distributed to corporations, stations, advertising agencies, and other clients that have paid Arbitron for its services. Radio stations purchase the Arbitron book primarily for one reason: to sell radio time. While the book does help programming understand how it fares compared to other stations, radio managers buy the book to help their sales staff sell advertising time. Having high numbers in the Arbitron book can mean great profits for a radio station and high commissions for account executives. Every station eagerly awaits the distribution of the Arbitron Report each quarter with the hope of high ratings.

Once the Arbitron book reaches individual stations, managers and account executives analyze the numbers and demographic data to determine the best way to approach current and potential advertising clients. Advertising clients want some proof that if they buy advertising time they will get a return on their investment. Radio account executives use the *Arbitron Market Report* to convince clients that buying time on their station will allow the client to reach the number of people reflected in the book. It is important to remember, however, that the numbers reflect how the station has performed in the past, not how the station will perform in the future. The account executive's job is to convince the client that, of course, the station will reach at least as many people in the future.

Of all sales professions, radio account executives have one of the most difficult products to sell. Many clients are skeptical of radio's ability to reach consumers because they have difficulty visualizing the results. The Arbitron book provides account executives with tangible numbers to help convince clients that the people the client wants to reach are listening to their radio station. In order to sell radio, account executives need to be able to understand and explain the Arbitron book to clients. The following section provides a brief explanation of selected Arbitron terms.

Interpreting the Arbitron Book

At first glance, the Arbitron book appears to be an endless number of pages with strange numbers and charts. However, Arbitron has separated the material into relatively easy-to-understand sections so advertising clients, who have less training in the book's content, can understand the importance of the numbers. Before under-

standing how to read individual Arbitron pages, one must understand a few essential terms.

Average Quarter Hour

Radio listening is measured using the average quarter hour. Listeners must report listening to a particular radio station for at least five minutes within a period of fifteen minutes in order to be counted. In radio research, each hour is separated into quarter hours instead of half hours or hours because radio listeners often switch stations.

PUR

PUR stands for persons using radio. Reflected as a number, this term represents the total number of people who have a radio turned on. This term is important in calculating share (discussed later).

Daypart

Radio listening is separated into different time periods throughout the day. Arbitron separates these time periods, called dayparts, into the following categories: 6 A.M.-10 A.M., 10 A.M.-3 P.M., 3 P.M.-7 P.M., 7 P.M.-midnight, and overnights.

TSL

TSL stands for time spent listening. TSL estimates the amount of time an average person spends listening to a particular station or radio in general, during a specific daypart. This estimate is provided for the Metro only. Time spent listening numbers are important because advertisers want to be convinced that listeners do not switch radio stations every time a commercial break begins. This figure helps account executives persuade advertisers that listeners tune to their station even through the commercials.

Cume

The term cume stands for cumulative audience. Cume is the estimated number of different people who have listened to a particular station for a minimum of five minutes during the quarter hour. A cumulative audience may be important to an advertiser who wants to reach a large number of different people instead of reaching the same people repeatedly. For example, a store with a grand opening may be more concerned with advertising its location to every person in the area once rather than only a few people several times.

Rating

Possibly, the most important and well-known term of the Arbitron book is rating. To calculate a rating, use the following formula:

Rating = People tuned to a particular station **Population**

Ratings estimate the number of people within the target population that are tuned to a particular station and the market in general. This number is important in the sales process because it estimates a percentage of the total population that tunes to a particular station.

Share

A share is an estimate of the number of people who have their radios turned on and tuned to a particular station. Share is calculated through the following formula:

Share = People tuned to a particular station PUR (Persons Using Radio)

While share can be important to radio sales, it is more critical in radio programming decision making. Share differs from rating because it estimates the number of people who cared to turn on their radio that are listening to your station; rating estimates people who have their radio on or off that are listening to your station. In other words, share penetration gives programmers an idea of how many people who want to listen to the radio have tuned to their station instead of the competition.

Now that you understand some of the key terms of an Arbitron Radio Market Report, let's examine a page from the Report (Figures 7-3 and 7-4). Figure 7-3 represents Target Listener Estimates for Persons 12+ in the Dallas—Fort Worth radio market. The page is separated into five dayparts across the top of the page to illustrate listening patterns at different times of the day. Underneath the dayparts are estimates for the AQH, Cume, AQH rating, and AQH share. The left side of the page lists individual station call letters listed along with their numbers for that particular book and the totals for all four quarterly reports in that year.

Let us examine one station, KSCS-FM in the Dallas-Fort Worth market in both Figure 7-3, persons 12+, and Figure 7-4, women 18-49. For persons 12+ during the Monday-Friday 6 A.M.-7 P.M. time slot, KSCS has an AQH rating of 1.1 and an AQH share of 5.2 for the winter of 1999. For women 18-49 in the same time slot, KSCS has an AQH rating of 1.6 and an AQH share of 6.8. As you can see, KSCS's rating and share rise when broken down into the demographic of women 18-49. Actually, no other station in the market has a higher rating or share for this demographic group during the summer of 1999. This is where the Arbitron rating book will help KSCS sell airtime. KSCS will showcase the book's numbers to advertisers desiring to reach women within this age group and point out that no other station in the market reached as many women in the 18-49 category.

Criticisms of Ratings Research

Arbitron is the leader of ratings research in the radio industry. However, its research process is not without fault. Most people within the radio industry would agree that ratings research is flawed but accept the system because it is the industry standard in

Listener Estimates/Metro

Target Listener Estimates

		Monday-	Frides	,		Week	end	Make	Pe	Satur		2+	100	San	fav			Con	in.	
		6AM-	AQH		AQH	6AM-I	MID	HDA	AQH	6AM-1		АОН	AOH	Saturi 10AM-	3PM AQH	104	100	Sature 3PM-7		
-	AQH (00)	(00)	Rtg	ACH Str	AQH (00)	(00)	Rig	Shr	(00)	(00)	Rtg	AQH Shr	(00)	(00)	Rig	AQH Siv	(00)	(90)	AQH Rtg	AQ Sh
HOZN-FN VI 199 4-Seek	**	38	44	en.	2	11	**	00	**	dd	**	**	**		••	**	**		**	
KLTY-FN VI '99 4-Book	306 257	2665 2482	.8	3.7	181 149	2159 1961	.5	4.3 3.6	168 142	606 539	.4	3.5	312 251	1013 #37	.8	4.4	231 175	807 620	.6	4 3
KLUV-AH VI '99 4-8eek	41 30	520 543	.1	.5 .6	19 18	318 283		.4 .4	24 21	106 71	.1	.5 .5	48 36	158 114	-1	.7	37 22	109	31 31	
KLUV-PH VI '99 4-Beek	265 277	2794 3436	.7	3.2 3.4	133 163	2019 2328	.3	3.1	166 179	574 604	.4	3.5	225 299	832 1019	.6	3.2	177 225	665 786	-5	3.4
KNK1-FM KNK1-FM VI 199 4-Book	70	1029	.2	.8	53	751 88	-1	1,2	41	162	.1	.9	99	322	.3	1,4	96	282	.3	1,
KDA3-FM VI 199 4-Book	244 248	2347	.6 .7	3.0	123 140	1412 1641	.3	2.9	116 123	394 440	.3	2.4	198 243	551 670	.5	2.8	165	560 531	.4	3.
KPLX-FN VI '99 4-Book	306 296	3084 3193	.8	3.7 3.7	167 154	1906 1983	.4 .4	3.9	214 161	642 569	.6 .5	4.5	279 296	812 891	.7	3.9 4.2	192 184	607 636	.5	3
KRBV-FM VI '99 4-8eek	137 172	1948 1984	.4	1.7	108 119	1532 1499	.3	2.5	93 110	325 368	.2	2.0	147 174	580 548	.4	2.1	134 128	427 385	4	2.2
(PLD-AM VI '99 4-8eek	331 320	3898 3898	.9	4.0	111 122	1799 1829	.3	2.6	254 245	856 832	.7	5.3	180 181	681 676	.5	2.5	98 #3	417 345	.3	1
(RMB-FM VI 199 4-Book	52 56	938 918	.1 .2	.6 .7	35 38	491 572	4	.8	23 34	69 111	-1 -7	.5	34 47	119 181	:1	.5	51 52	120	-1 -J	1
(3CS-FN VI '99 4-Book	430 420	3690 3964	1.1	5.2	215 206	2507 2602	.6	5.1 5.0	239 244	744 776	.6 .7	5.0 5.3	382 346	1177 1145	1.0	5.4	301 287	904 930	.8	5.
KTCK-AM VI '99 4-Book	215 256	1490 1738	.6	2.6	51 68	1018 917	3	1.2	75 98	295 326	.2	1.6	95 109	358 362	.2	1.3	64 58	242 239	.2	1.
CDQ-FN VI '99 4-Book	271 233	2989 2947	.7	3.3	158 123	1955 1780	.4	3.7	151 118	519 420	.4	3.2	310 246	956 817	.8	4.4	264 183	724 829	.7	4.
CVIL-FN VI '99 4-Sook	406 429	3815 4005	1.1	4.9 5.3	187 186	2087 2664	.5	4.4 4.5	224 203	795 731	.6	4.7	307 274	932 942	.8	4.3	217 215	679	.6	4.
VAD-FN VI 199 4-Book	53 56	807 718	:1	.6	9	210 191		.2	22 17	50 62	.1 .f	.5	15 15	53 46		.2	7	36 33		
OCEB-AN VI 199 4-Sook	57	571	.1	,7 86	48	503	:1	1,1	45	173	<u>,1</u>	.9	113	358	.3	1.6	90	235	.2	1.
CYNG-PN VI 199 4-Book	210 219	2433 2786	.5	2.5	132 127	1554 1864	.3	3.1	156 131	515 422	.4	3.3	197 210	642 722	.5	2.8	160 159	579 888	.4 .4	2.
ļ	* Station	n(a) not:	report	ed	* Liste	ner estin	nates a	djusted	for	+ Stat	ion(a)	change te Page	d call	4-Bo	ok: A	vg. of c	nost rece	nd previo	tus 3 ss	urv

FIGURE 7-3 Dallas-Ft. Worth Market, Persons 12+ Target **Listener Estimates**

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Target Listener Estimates

		Inndev	Friday	ā		Week	and			men Saturd	18-	49		Saturd				Saturd	ay	
1	AQH (00)	6AM-7 Cume (00)	AQH Rtg	AOH Bly	AQH (00)	Cume (00)	AOH Rig	AOH BV	A()H (00)	6AM-10 Cume (00)	_	AOH Stvr	AQH (00)	10AM-3 Cume (00)	AQH Rig	AQH Shr	AQH (00)	3PM-79 Cume (00)	AOH Rig	AOH Shr
I-FN VI '99	(00)	9			3.776								84		••				**	**
4-Seek (-Fil VI '99	165	1382	1.4	5.9	98	1055	.8	7.4	83	298	.7	6.4	186	530	1.5	8.2	126	407	1.0	7.4
4-8eek /-All VI '99	133	1224	1.1	4.9	76	944	.4	5.8	2	276	.6	5.3	130	435	1,1	6.7	8 7	26	-1	.5
4-Book /-FN	ě	96	.1	.2	2	43		2	3	4		.2	6	17		.3	78	15	-1	
VI 199 4-Book	105 #4	903	.9	3.8	38 48	635 752		2.9 3.8	45 84	165 184	.5	3.5	79	250 300	.8	3.5 4.0	52 67	198 263	.6	3.1 4.1
D-FM (I-FM VI '99 4-Book	26 ee	346	.2	.9	18	254	-1	1:4	11	43	:1	.8	26	94	.2	1,1	20	66	.2	1.2
1-Fii 141 199 4-Sook	103	878 794		3.7 3.4	36 42				30 31	119 124	.2	2.3	54 74	160 199	.6	2.4 3.2	48 58	175 175	.4	
K-FN VI 199 4-Book	116 110				49 48		.4		54 48	221 190	.4	4.2 3.6	79 99	301 338	.7	3.5 4,4	- 81 - 66	263 241	.7	
V-FN VI 199 4-Book	73 82				52 88	715 866			40 46		.3		56 77	244 245	.5	2.5 3.4	55 87	182 188	.5	3.2
0-AM VI 199 4-Book	62				11 18	251 310		.8 1.3	19 36		.2	1.5	15 29		.2	1.3	14 12			.8
8-FH VI '99 4-Book	25 27	460 431		1.0	22	283		1.7	19 13	40 41	.2	1.5	28 24			1.2	33 26			
S-Ri VI '99 4-Book	190 154				80 71				59 73		.5		159 123	521 436	1.3	7.0 5.4	110			
X-AN VI '99 4-See k	12		.1	:1	1	112	2	.2	,	6		.2	2			;1	3	11	5	1
19-RN VI 199 4-8eek	124 87				77				63 42		.5	4.9	157				125 64			7.3
L-Fil VI '99 4-See k	155 192		1.3		44 57				55 87		.5	4.2	77	273	.0		66			
ID-FM V1 '99 4-Seek	20			7 .7			5	-1	,	4		.,				.1			5	:
B-AN VI '99 4-Book						2 2		.2		8		.2					. ا			
IG-FN VI 199 4-800k	80				54		0		56			3.4					71 6.	8 26: 3 22:		

FIGURE 7-4 Dallas-Ft. Worth Market, Women 18–49 Target Listener Estimates

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audience measurement. Many radio stations are able to compete effectively by using the Arbitron book to sell airtime and therefore feel no need to change the system.

Ratings research is often criticized for its sampling process and methodology. Some people believe that not enough people or the wrong people are included in ratings research. Others say using a diary to collect data is a poor way to estimate radio audience size. In the book Audience Ratings, Hugh "Mal" Beville summarized the national criticisms of ratings research as the following:

- 1. Ratings are not accurate.
- 2. Ratings are biased.
- 3. Ratings are misleading.
- 4. Ratings are misused.8

First, some people believe ratings data is not accurate because samples are too small, listeners may not accurately complete the diary, and ethnic groups tend to be underrepresented. Second, ratings are biased in the sense that stations have more promotion and publicity during rating periods. Third, ratings can be misleading because they only determine if a listener had a particular radio station tuned in, not whether the commercials were effective in gaining listener attention. Fourth, ratings can be misused because programmers may retain poor quality programs because they create high ratings, or ratings can cause stations to overemphasize ratings and profits over quality.9

Ratings research is regulated by the Electronic Media Rating Council (EMRC). The EMRC serves as a watchdog within the broadcast industry to assure that research is conducted honestly and that stations do not unfairly use their programming to boost ratings. Arbitron, as well as many other firms, receives accreditation by the EMRC to demonstrate its integrity to clients.

Other Sales Research

Arbitron, while the leader in providing ratings research, is not the only company involved in providing research data for local radio sales. AccuRatings also collects data for local radio stations to assist them in their sales efforts. Network radio audiences are collected and measured by Statistical Research in the Radio All-Dimensional Audience Report (RADAR).

Another research firm used widely in the sales process is Scarborough research. While not a research firm that measures radio alone, Scarborough is a leading local market research tool providing qualitative research. Scarborough surveys consumer behavior for 64 DMAs and provides comprehensive market measurements of media usage, retail shopping, demographics, lifestyle, and other consumer behaviors. 10 Scarborough research does help local radio sell airtime because it serves as a tool for account executives to explain the needs and wants of local consumers to potential advertising clients.

While not considered a research method, another sales technique should be mentioned in this chapter. Arbitron has created several software tools to help local stations analyze Arbitron research data and incorporate it in their local marketing plans. Some of the key applications Arbitron offers its radio clients are Maximi\$er 99SM and TAPSCAN. The computer applications help stations customize survey areas, demographics, dayparts, and target audience to help account executives sell the airtime for a station.¹¹

PROGRAMMING RESEARCH

While sales research is concerned with selling radio airtime, programming research is concerned with improving the quality of programming at the radio station. Programming departments at radio stations are constantly evaluating their performance. Good programmers understand the tremendous impact quality programming has on the success of a radio station. Quality programming brings listeners to a station, which brings high ratings, which in turn brings advertising dollars.

Every year radio stations invest thousands of dollars, either in-house or through consultants, to improve their programming. Stations spend this money so they can understand listener tastes in music, news, personalities, and promotions. In order to understand listener tastes, stations usually turn to researchers specializing in qualitative research. Qualitative research is important to programming because it centers on producing in-depth information from listeners regarding opinions, attitudes, and behaviors. Furthermore, qualitative data is often important to the research process because it complements quantitative research. For example, a station with low ratings can conduct focus groups or interviews with listeners to gather data on listener perceptions in order to improve programming. This section discusses some of the various qualitative and quantitative methods employed by researchers in their quest for information on listener preferences.

Callout Research

Callout research uses both quantitative and qualitative research. A method where telephone operators interview people regarding their listening preferences, callout research is widely used in the radio industry for programming research.

Callout research can be quite beneficial to individual radio stations. The advantage of callout research is that a large number of people can be accessed in a relatively short time frame regarding listening tastes. Furthermore, according to Ed Shane, in his book *Cutting Through*, "some programmers claim they can increase their station's share by as much as 20 percent with regular music callout." ¹²

During callout research, trained interviewers telephone people and ask several hundred people the same question. Callout research is often conducted to understand listeners' musical preferences. Interviewers play a **music hook** (a short sample of

music usually about 10 seconds long) and ask the listener to rate the piece on a scale. Music hooks are a common radio research term. Music callouts generally answer the following questions for researchers: "How familiar has the record become? How popular is it? Has the record become burned out?"13 Programmers use this information to plan music programming based on the research data.

Another use for callout research is to gain quantitative information regarding radio listening behavior. In this case interviewers telephone listeners and ask questions such as: What is your favorite radio station? How often do you listen to the radio? Where do you listen to the radio? The interviewer also asks questions regarding the respondent's age, sex, race, and so forth. Information from this type of callout research can be used to gain quick insight into which stations people are tuning into and why, without waiting several months for the Arbitron Radio Market Report to be published.

There are many advantages to using callout research in programming decisions. One great advantage is that several hundred people can be surveyed in a relatively short period. Also, callout research is inexpensive. The primary cost involved is interviewer salaries, Furthermore, callout research can be conducted on a continual basis.

Callout research also has disadvantages. One main disadvantage is the growing distaste of telemarketing among consumers. Consumers for years have been bombarded with telephone calls from companies trying to sell them one product or another. The backlash of telemarketing causes great frustration to researchers because it lowers response rates. This provides a great challenge to interviewers trying to persuade potential respondents to answer a few questions.

Auditorium Testing

Auditorium testing is another popular method employed by radio programming researchers. Usually conducted for an individual radio station's programming, auditorium research tests music preferences by that station's target audience. Similar to callout research, this method of testing is very popular with radio industry researchers.

The first step in auditorium testing is telephoning potential subjects and determining if they qualify for the research. In order to qualify, a person must fit the station's target audience, respond to a few questions regarding radio listening, and be willing to spend some time listening to music in an auditorium. Researchers provide a monetary stipend to respondents in order to persuade the subject to attend the testing.

Once all respondents are selected (usually 75-200 people) everyone is gathered in an auditorium to begin testing. 14 Respondents are asked to evaluate music hooks and score each hook by marking his or her opinion on a score sheet or by using an electronic device. The electronic device is a handheld meter; each respondent turns the knob to the point on the scale that most accurately represents his or her feelings

toward the music hook. If a score sheet is used, all score sheets are collected after completion and scanned by a machine that tabulates the scores.

Music testing is the most common form of auditorium testing. However, auditorium testing is used for other programming concerns. For example, respondents could be asked to score their feelings toward a disc jockey, a news topic, or station promotion.

Auditorium testing has several advantages. One advantage is that auditorium testing offers a higher sound quality for playing music hooks than callout research. Another advantage is that several hundred respondents can be tested in only a couple of nights.

The main disadvantage of auditorium testing is its high cost. Auditorium research can cost \$20,000-\$40,000 to test 800 songs. ¹⁵ Paying respondents, researchers, and renting the facilities are only a few of the costs involved in auditorium research. Another disadvantage is respondent burnout during the testing period. Often auditorium research attempts to test several hundred hooks in a session. During this testing period respondents may tire of the process and score the hooks with little effort or thought, leading to inaccurate results.

Focus Groups

Focus groups are a very popular research tool in many industries. Companies use focus groups during the marketing of their products. In particular, radio often uses focus groups in order to better understand listener tastes.

Focus groups, the grouping of six to twelve similar people to discuss a particular issue, are used to gather qualitative data. ¹⁶ Focus groups should be used to explore topics and gather rich information. In radio, focus groups can be used for various topics such as musical tastes, promotions, commercials, and specific programs. The key to focus groups is group dynamics. When gathered in a group, people discuss topics in a different manner. One person's comment may spur another person to think of the topic in a different way.

Subjects are recruited by telephone and later given a monetary reward for agreeing to participate in the focus group. They must meet certain criteria. The main criterion is for subjects to create a homogeneous group with one special characteristic in common. Sometimes focus groups are all men, sometimes all women, and sometimes represent a single ethnic group. In focus groups for radio, researchers are usually concerned with ensuring that all group members listen to a particular station or type of music. People agreeing to participate in the focus group are arranged into groups of six to twelve people and gathered around a large table. A facilitator guides the group through the topic at hand while trying to have as little impact on the group dynamics as possible. The facilitator is present to guide the group, not to offer her or his own opinion. After the focus group is completed, the facilitator should be able to summarize the group's discussion. A good focus group discussion will provide information not previously thought of and raise more questions.

A major aspect of focus groups is that they are qualitative, and, like all qualitative research, results cannot be generalized. The study's results provide information on listener attitudes but do not necessarily represent all listener attitudes. Recall that focus groups have only six to twelve people; this sample is too small to generalize to an entire population. Many researchers conduct several focus groups to gather information on one topic. However, this type of research will seldom reach a sufficient sample size to be generalized. Focus groups should be used to explore information, not draw conclusions.

The major advantage of focus groups is the rich in-depth information that can be collected. However, focus groups are extremely costly. The cost of paying subjects, paying a good facilitator, renting a room, buying food, and so on is extremely high. Therefore, while focus groups are one of the best ways to gather qualitative information, be prepared to spend a great deal of money.

Personal Interviews

Personal interviews are a less widely used research method in radio than auditorium testing, callout research, and focus groups. This is mainly due to the long period of time it takes to conduct a quality one-on-one interview. However, personal interviews often provide considerable quality information. In radio, personal interviews might be conducted to gain insight into topics such as a listener's attitude toward a disc jockey or a talk radio program.

One-on-one interviews last anywhere from a few minutes to more than an hour. The interviewer asks the respondent specific questions to gain insight into his or her opinions. The interviewer is usually free to probe into a respondent's answer and is trained to gather as much quality information as possible. Personal interviews are qualitative in nature and thus gather in-depth information that cannot be quantified.

An advantage of personal interviews is that they can gather large amounts of data regarding listener attitudes and beliefs. Another advantage is that the interviewer can read nonverbal responses to questions as well as verbal responses. The major drawbacks of personal interviews are that they are time-consuming and cannot be generalized. Hundreds of personal interviews would need to be conducted in order for the sample to be large enough to be generalized.

Intercept Research

Intercept research is another form of a personal interview, conducted spontaneously in a public area such as a shopping mall.¹⁷ During intercept research the researcher looks for shoppers with certain characteristics. If the researcher, through visual observation, feels the person meets the criteria, he or she stops the person and asks her or him to participate in the study. People who agree to participate are asked a few questions and given a monetary reward.

The advantage of intercept research is that it can be conducted quickly. Depending on the size of the interview, anywhere between five and fifty people can be interviewed in a day by one researcher. Intercept research is ideal for a station needing quick responses. For example, a station may wish to test listener opinions to a disc jockey who had recently used inappropriate language without consulting the station. The station may choose intercept research to determine whether damage control needs to be taken or whether listeners liked the disc jockey's show. Furthermore, intercept research can be conducted to gather quantitative or qualitative data.

The main drawback of intercept research is getting the desired respondents to participate in the study. Depending on the desired subjects, getting people to take even five minutes out of their day can be a difficult task.

Callout research, auditorium testing, focus groups, personal interviews, and intercept research are all legitimate research methods that can provide great data about the radio industry. However, each method has a specific purpose, and should be used only if the method fits the study's research question or reason for being conducted.

SOME CONSIDERATIONS FOR FUTURE RESEARCH

As mentioned earlier in this chapter, researchers are continuously striving for new and improved methods to study radio research. This section will discuss a few possibilities for future research.

One new method for collecting ratings is currently being researched by Arbitron: the possibility of using electronic meters. In 1998, Arbitron announced its first field test of the personal portable meter (PPM) to be tested in the United Kingdom. The meter was created to read inaudible codes embedded in audio signals. Through the reading of audio signals, the PPM would be able to read codes from radio stations, TV stations, and cable systems. If successful, the meter would replace Arbitron diaries as the method of collecting radio measurements. Consumers would carry the meter with them everywhere and each night the meter would transmit the data to processing stations. The meter would allow broadcasters to more accurately measure radio listenership without relying on the consumer to complete a diary accurately. However, even if the testing of the PPM is successful, the technology may prove too expensive for broadcasters to adopt for ratings research. Only time will tell.

Ed Shane of Shane Media has some interesting forecasts for radio research. One of his forecasts is that music testing will be conducted with computers instead of auditorium testing. Shane predicts people will be asked to participate in music testing and allowed to show up for the testing according to their own schedule. Instead of being asked to attend a music test at a set time, a person would be allowed to drive to the radio station or music consultant's office at his or her own preferred time. At the office respondents would listen to music hooks and score them by touching a computer screen. Not only would this be more convenient for the respondent and

increase response rates, but it would also increase the accuracy of responses. A person would be able to listen to hooks, repeat a hook if necessary, and take as much time as he or she feels is necessary to complete the study. Also, music testing would be relatively inexpensive and it would be possible to conduct it on a continuous basis.19

One interesting new development in radio research already in existence is called the Living Room Music Test. In 1998, Kelly Music Research received a patent for the Living Room Music Test; many stations have already seen positive results. The Living Room Music Test survey takes place in the comfort of the respondents' own homes. Respondents are mailed a music cassette along with a survey, instructions, and cash honorarium. The respondents complete the survey by listening to the cassette and return the survey for tabulation.

The difference between the Living Room Music Test and other music tests lies in the sampling process. Kelly Music Research knows that mainly avid radio listeners will complete their at-home test and they know that these are the people most likely to complete an Arbitron diary. In reality, radio stations care mainly about people who complete Arbitron diaries because those people determine the ratings of the station. Therefore, radio stations are making their music programming decisions to please Arbitron diary holders. According to Kelly Music Research, "The Living Room Music Test is designed to create a research sample of listeners similar to that created by Arbitron to determine ratings. The objective is to increase audience share by projecting the opinions of the types of listeners who are likely to participate in the diary and ratings process." Kelly Music Research's new test shows stations how to play the radio ratings game and win.²⁰

Internet Research

The rise of the Internet in our society has widespread implications for the broadcast industry (see Chapter 10 for more on the impact of the Internet on the radio industry). In particular, radio has been using the Internet to promote and air radio programs. Radio stations use the Internet to sell T-shirts, hats, promote radio personalities, and promote programs. Even more importantly, radio is using streaming technology to air radio programs via the Internet. Internet radio will be a growing trend because of the quality and clarity of sound. With the growth of radio's prominence on the Internet comes the problem of measuring radio's impact on Internet users.

Research professionals are currently examining methods to measure Internet audiences. The Internet is one of the most difficult mediums to measure audiences. Internet researchers currently know how many people hit a Website and can even measure how long they stay connected. The problem lies in determining who are the people using each individual Website. Advertisers are interested in specific demographics when using radio to advertise their products. Researchers currently know how many people are listening to the radio via the Internet, but are not able to adequately measure the Internet listener's age, sex, race, education, and so on. Radio researchers understand the importance of the Internet to radio's future and the importance of measuring Internet audiences. Researchers are currently scrambling to develop new research methods that include measuring the Internet.

There are many other researchers currently planning new research methods for the radio industry. Time will determine which new strategies will be successful. Those researchers that will find success in the future will undoubtedly have superb research knowledge in sampling techniques, quantitative and qualitative methods, and a great understanding of the radio industry.

NOTES

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²Ed Shane, Selling Electronic Media (Boston: Focal Press, 1999), p. 157.

³Arbitron Company, Radio Market Report: Dallas-Ft. Worth, Summer, 1996, p. 2.

⁴Ibid., p. 3.

⁵Shane, p. 157.

⁶Shane, p. 158.

⁷Wimmer and Dominick, p. 292.

⁸Hugh Malcom Beville, Jr., Audience Ratings (Hillsdale, NJ: Lawrence Erlbaum, 1988), pp. 223-224.

⁹Ibid., p. 224.

¹⁰Scarborough Sales Packet.

¹¹Arbitron, Radio Survey Information. Available online at http://www.arbitron.com/radiosurvey.htm, (accessed 7/15/99).

¹²Ed Shane, Cutting Through: Strategies and Tactics for Radio (Houston: Shane Media Services, 1991), pp. 54–55.

¹³Shane, 1991, p. 55.

¹⁴Wimmer and Dominick, p. 307.

¹⁵Wimmer and Dominick, p. 307.

¹⁶Richard Krueger, Focus Groups (Thousand Oaks, CA: Sage, 1994), p. 78.

¹⁷Shane, 1991, pp. 62–63.

¹⁸Bachman, Katy, "Arbitron Goes Portable," MediaWeek, October 19, 1998, p. 10.

¹⁹Shane, 1991, p. 58.

²⁰Kelly Music Research, Inc., Test Design & Procedure (Kelly Music Research, June 1999).

Noncommercial Radio Broadcasting

DR. PHILIP A. THOMPSEN
Assistant Professor of Communication Studies
West Chester University

This is a chapter about a different kind of radio broadcasting than has been the subject of previous chapters in this book. Noncommercial broadcasting is the oldest form of radio broadcasting in the United States, for the commercialization of radio came after the invention of the technology. Noncommercial radio arose from the radio broadcasting pursuits of college students, community groups, political parties, and nonprofit organizations. The use of radio waves to train and educate both students at a high school or university and students who composed the listening audience led noncommercial broadcasting to sometimes be referred to as "educational broadcasting." Despite the many challenges and struggles faced by noncommercial stations, it is a story that has only just begun.

We begin the chapter with an extended look at the early development of non-commercial radio in the United States. Two important events in this history merit special attention: the reservation of FM frequencies for noncommercial radio in 1945, and the last-minute inclusion of radio in the Public Broadcasting Act in 1967. We then turn our attention to the last quarter of the twentieth century. While a time for growth in the number of stations and listenership, it was also a politically turbulent time for the Corporation for Public Broadcasting. We examine the peculiar economics of noncommercial radio, the diversity of noncommercial radio program-

ming, and the noncommercial radio audience. Though much of this chapter will focus on federally funded noncommercial radio stations, we will also include the story of the sometimes-overlooked majority of noncommercial radio licensees who don't receive any federal funding.

DEFINING NONCOMMERCIAL RADIO

It may be an understatement to say that it is difficult to define *noncommercial radio*. A logical starting point for such a definition is the special status given noncommercial radio by the Federal Communications Commission. With few exceptions, these stations hold a special class of broadcast license for a "noncommercial educational FM." As of July 1999, the FCC reported that there were 2,055 noncommercial educational FM broadcast stations operating in the United States. The vast majority of these stations operate in a portion of the FM band that the FCC has reserved for educational use. In 1945, when the FCC allocated the frequencies 88 to 108 MHz for FM broadcasting, they designated the first one-fifth of that band—from 88.1 to 91.9 MHz—for the exclusive use of noncommercial educational radio.²

Yet the "noncommercial educational" designation is now an inadequate label for stations operating in this portion of the band for two reasons. First, noncommercial radio stations have adopted many of the strategies of their commercial counterparts, including the deliberate targeting of audiences that appeal to corporate sponsors. It is common to reward the generosity of such "program underwriters" with on-air announcements that have become nearly indistinguishable from the spot ads heard on commercial radio stations. Second, most noncommercial radio stations have distanced themselves from their educational roots, often minimizing the role of faculty and replacing student volunteers with professional staffs. It would similarly be a stretch to call the programming on many noncommercial stations "educational," as the majority of stations typically fill their broadcast day with programs designed as much to entertain as to enlighten.

The term **public radio** is sometimes used by listeners and holders of noncommercial educational FM licenses to refer to FM stations operating between 88.1 and 91.9 MHz. In fact, all AM and FM radio service in the United States is public. Any listener with a receiver can pick up the broadcasts of stations serving the listener's community. The listener is not required to pay a receiver license fee, nor is the overthe-air signal scrambled or otherwise encoded to limit access to the broadcast. In this regard, all AM and FM radio broadcasting is "public." Yet, noncommercial radio stations, particularly stations affiliated with National Public Radio (NPR), have appropriated the term *public broadcasting*. In this chapter, when the term *public broadcasting* is used, it will generally refer to these affiliated stations.

One can identify at least four types of noncommercial radio stations: CPB-qualified noncommercial stations, student stations, community stations, and religious stations. CPB-qualified refers to those stations that have met the requirements

set by the Corporation for Public Broadcasting (CPB) to receive federal money, and are members of National Public Radio (NPR), a private organization created by the CPB in 1970. As of July 1999, about 560 stations or about a fourth of the noncommercial radio stations in the United States were CPB-qualified stations.³ Most are full-power stations, and many have additional "translator" stations, low-power stations that serve specific communities outside the range of the station's main signal. Many NPR affiliates trace their origins to stations started at colleges and universities, and about half still maintain ties to a sponsoring educational institution.

The majority of noncommercial educational licenses are used to operate student or campus radio stations. According to the Intercollegiate Broadcasting System, there are over 1,300 student radio stations in the United States.⁴ Student stations can be found at colleges, universities, high schools, and other educational institutions. These stations are student-operated and usually student-managed stations, although typically a faculty advisor provides some oversight. They are generally not eligible to receive money from the CPB, because they rarely meet the minimum requirements to receive federal funds. (In particular, CPB requires that there be five fulltime noninstructional paid employees on the station's staff.) Although there are exceptions, most student stations operate with relatively low power (sometimes less than 1,000 watts), projecting a limited reception range that extends only a few miles. Many student stations serve as training laboratories for broadcast education programs, but more than a few have earned reputations as "electronic sandboxes" where students "play radio." A great variety of programming can be found on student radio stations, but generally such stations feature music from new artists who have yet to achieve popularity on commercial radio. In this role, the student radio station can be an effective venue for introducing new music to student listeners who may be receptive to new performers or music styles. Groups such as R.E.M., Nirvana, and Pearl Jam were introduced to listeners through college radio stations.⁶

Providing programming that is an alternative to the programming found on most commercial radio stations, both musically and politically, is also a task of community radio stations. These noncommercial stations are typically run by volunteers, although there often is a core staff of paid professionals. Some of the larger community stations receive grants from the CPB, but most community stations rely extensively on listener donations and support from nonprofit organizations. Most are members of the National Federation of Community Broadcasters, which represents the interests of about 140 community radio stations in the United States.⁷ Many community stations are affiliated with Pacifica, an alternative programming network that was started in 1949 at KPFA in Berkeley, California, which held "the first noncommercial license that did not go to an educational or religious institution."8 Perhaps the most distinctive feature of community radio stations is what Ralph Engelman has called their "commitment to sustain an independent, critical, and oppositional public sphere on the broadcast spectrum."9

A significant number of noncommercial radio licensees are religious radio stations. While only a minority of the 1,600 religious stations in the United States hold noncommercial licenses, a rapidly growing number of noncommercial educational FM licenses are being granted to religious organizations. ¹⁰ Many of these stations are affiliated with a religious radio network, such as Family Life Radio, the Bible Broadcasting Network, or the Christian Broadcasting Network. Most feature evangelical Christian programming, often with a fundamentalist and charismatic flavor. Although these stations often solicit listener support, they also take advantage of the fact that the FCC allows noncommercial licensees to sell airtime to nonprofit organizations, such as churches, charities, and evangelistic organizations. Religious broadcasters have aggressively pursued noncommercial FM translators, which rebroadcast satellite-delivered programming over low-power transmitters. The rapid growth of noncommercial religious radio translators has other noncommercial stations concerned over the increasing congestion of the noncommercial FM band. ¹¹

In general, however, these four types of noncommercial radio broadcasting coexist today in relative harmony. There are even a few stations that straddle the boundaries, such as student-operated stations with religious formats and community stations that broadcast NPR programming. But for the most part, each type focuses on its own unique strengths and largely ignores its siblings. This is particularly true of CPB-qualified radio stations; they represent a minority of noncommercial licensees yet command the lion's share of both transmission power and funding support. Noncommercial radio stations, despite some clear compromises with regard to noncommercial status, can rightfully claim a legacy that started long before the CPB and NPR. It is a legacy that is as old as radio itself.

THE EARLY HISTORY OF NONCOMMERCIAL RADIO

As we said in Chapter 2, the early history of radio is very much like the early history of a more recent communication medium, the Internet. Both radio and the Internet grew out of pioneering experiments in electronic communication. Both were non-commercial in nature for many years, with early ties to the military and education. Once business interests were introduced, however, both communication media became commercial very quickly. And with the blessing of the federal government, both radio and the Internet dramatically mushroomed to become dominant economic forces of their time.

The Internet today is driven by advertising and e-commerce, but the Internet has its roots in the computer communication networks jointly developed over the past thirty years by the military, various government agencies, electronic hobbyists, and educational institutions. ¹² In much the same way, radio began not as a business, but as a noncommercial experiment in wireless communication. The government's first attempt to regulate radio, the Wireless Ship Act of 1910, made no mention of the commercial use of radio, but rather addressed the use of radio to promote maritime

safety. 13 Colleges and universities started many of the earliest radio broadcast stations, typically by electrical engineering departments.¹⁴

Although KDKA received the first official broadcast license in 1920, a number of stations operated with experimental licenses before KDKA, and many of these early broadcasters had roots in educational broadcasting. One of the first radio stations in the country was established by Charles David "Doc" Herrold of San José. California in 1909. "San José Calling," as the station was originally known, was operated as part of Herrold's School of Radio. Lee de Forest said that Herrold's station, which eventually would become KCBS, "can rightfully claim to be the oldest broadcasting station of the entire world."15

Another early radio broadcaster was WHA at the University of Wisconsin. Faculty in the university's physics department began radio experiments in 1902, and within a few years had built the radio transmission facility that would eventually become WHA. Professors Earle Terry and Edward Bennett received an experimental license from the federal government to operate the station, which was initially granted the call sign 9XM. During much of the 1910s it broadcast weather forecasts in Morse code. Unlike most experimental radio stations at the time, 9XM was allowed to stay on the air during World War I, and the station began broadcasting voice transmissions shortly after the war. 16 Because other early stations (including Herrold's) were forced off the air by the military during World War I, many radio historians feel WHA has a justified claim of being "the Oldest Station in the Nation . . . in existence longer than any other."17

Regardless of which radio station has the most substantiated claim of being the first on the air, it is clear that colleges and universities, as well as other noncommercial organizations, were a significant presence in early radio. A 1923 tabulation by the Department of Commerce reported that educational institutions owned 13 percent of the radio stations then in existence, second only to radio manufacturers in station ownership. 18 The same report showed that a number of other stations in operation at the time were also owned by noncommercial organizations, such as churches, YMCAs, police and fire departments, and cities. Broadcast historians Christopher Sterling and John Kittross argue that even among commercial broadcasters, "a radio station was seldom the primary concern" but was "nearly always an arm of some other business or activity, often promotional but mostly noncommercial."19

As radio broadcasting developed in the 1920s, however, the noncommercial flavor of early radio would fade. The stage was being set for what Robert McChesney has called "the battle for the control of U.S. broadcasting." On one side of this battle were those who favored advertiser-supported radio. On the other side, a loose coalition of educational institutions, churches, labor unions, civic groups, and charitable foundations fought to preserve a significant place on the airwaves for noncommercial, public-service radio. The federal government played a decisive role in this battle when Congress created the Federal Radio Commission (FRC) in 1927. The

FRC decision to mandate a frequency reallocation plan that favored high-powered stations on "clear channels" required the vast majority of stations to switch frequencies. Noncommercial stations could not easily afford the expense of changing to a new frequency, and many simply went off the air. The FRC also established a competitive hearing procedure for determining who could use the limited number of available frequencies, a process that clearly favored wealthy corporations over nonprofit organizations.

Supporters of noncommercial radio fought valiantly during the early 1930s to keep the airwaves from becoming completely commercialized. In 1930, the Association of College and University Broadcast Stations called on Congress to reserve some frequencies for the exclusive use of noncommercial broadcasters. The Payne Fund's National Committee on Education by Radio also pressured Congress to pass legislation requiring that at least 15 percent of all frequencies be reserved for noncommercial use. There were sympathetic ears in Congress, including legislators sensitive to complaints from the listening public of the increasingly blatant commercial nature of radio broadcasting. At the 1932 convention of the National Association of Broadcasters, FRC Commissioner Harold Lafount warned commercial broadcasters that "an irate public is besieging Congress to stop overcommercialism of radio in America." From 1931 to 1933, Ohio Senator Simeon Fess repeatedly introduced legislation that would allocate frequencies for noncommercial radio, but the Senate never brought his bill to a vote. 22

During congressional debate over the bill that would eventually create the Communications Act of 1934, New York Senator Robert Wagner and West Virginia Senator Henry Hatfield proposed an amendment that would require that one fourth of all frequencies be designated for noncommercial use. This amendment garnered considerable support in the Senate, though the Wagner–Hatfield amendment fell to a counterproposal from Washington Senator Clarence Dill that the FCC study the proposal to reserve frequencies for noncommercial use and report its findings to Congress within a year. Not surprisingly, the newly formed FCC turned out to be as procommercial as the FRC. Its 1935 report to Congress recommended against any allocation of frequencies for noncommercial use.²³ It would seem that the "battle for the control of U.S. broadcasting" was over, and the commercialization of radio was complete.

NONCOMMERCIAL RADIO FINDS A HOME ON THE FM BAND

A decade after the FCC's report to Congress on noncommercial radio, the number of noncommercial stations in the United States had fallen to its lowest point. Only about twenty-five of the nearly one thousand radio stations on the air in 1945 were noncommercial.²⁴ Despite this spiraling decline, supporters of noncommercial ra-

dio, and in particular educational broadcasters, continued to call for frequency reservation. The Association of College and University Broadcast Stations, which had changed its name in 1934 to the National Association for Educational Broadcasters (NAEB), was particularly persistent. In 1945, the NAEB successfully persuaded the FCC to reserve for noncommercial use 20 percent of the band allocated for Frequency Modulation (FM), a newly approved technology for radio broadcasting.²⁵ The role of the educational community in this action is evident in the name the FCC gave to this new kind of radio license, noncommercial educational FM. Finally, noncommercial radio had found a home.

It was a quiet home at first. Few commercial broadcasters saw any value in starting an FM station; they were more interested in starting ventures in television broadcasting. By the end of 1945, only fifty-four FM stations were on the air in the United States, and eight of these held noncommercial educational licenses. 26 With so few FM stations to choose from, and with most commercial FM stations simulcasting the programming of a sister AM station, most Americans had little motivation to purchase an FM radio receiver. Many colleges and universities wanted to venture back into radio, but starting and operating an FM station was an expensive proposition, with little assurance there would be an audience.

Sensing the need for a nudge, the NAEB petitioned the FCC to consider lowering the minimum operating power requirements for noncommercial educational FM radio stations. In 1948, the FCC created the Class D educational FM license, which permitted schools to go on the air with as little as 10 watts of output power. (FM station classes A, B, and C are discussed in Chapter 1.) This was the spark that reignited the flame of noncommercial radio. The number of noncommercial educational FM stations shot up dramatically, from 10 stations in 1947 to 125 stations in 1957.27 Many of these stations participated in the NAEB "bicycle network," the first national cooperative program distribution service for noncommercial radio, which enabled college stations to share programs with each other through a tape exchange system.

Class D gave a needed boost to both student radio and FM radio. It's interesting to note that in the decade after the FCC started granting Class D licenses, the number of commercial FM licensees actually declined, while the number of educational FM licensees increased tenfold. By 1966, over half of the nearly 300 noncommercial FM stations on the air were Class D stations. These low-power stations were inexpensive to start and maintain. Many college and university programs in broadcasting were eager to take advantage of a great opportunity to provide a "real world" laboratory for students. Class D stations were particularly appealing to land-grant universities and liberal arts colleges. And for the predominantly youthful FM radio audience of the 1960s, Class D stations greatly added to the diversity of programming available, often featuring alternative or progressive music, providing an outlet for local talent, and covering news and public affairs with a very local flavor. It was the heyday of the hippie, and Class D stations were one of the few media outlets for the countercultural "underground" of the era.

RADIO FINDS A PLACE IN THE PUBLIC BROADCASTING ACT

It was from the 1960s that modern public radio would arise. It was a time of revolutionary idealism, of protests against the "establishment" of white middle-class values, and bitter division over the war in Vietnam. It was a time of tragic assassinations—of a President, a younger brother who wanted to be one, and a civil rights leader whose dream still lives today. It was a time of technological change, of television and computers and astronauts landing on the moon. And in this climate of social and cultural introspection, it was the perfect time for a new vision of noncommercial broadcasting, one that could finally provide a viable alternative to the overtly commercial fare that dominated the airwaves.

The distinguished Carnegie Commission on Educational Television powerfully articulated this new vision. Their report, "Public Television: A Program for Action." outlined a bold vision of what noncommercial educational television should strive to become.²⁸ The Carnegie Commission saw an opportunity to harness the miracle of television—at that time still a technological marvel to the general public—for enhancing the quality of the American way of life, for fostering the cultivation of the mind, and for advancing television programming of diversity and excellence. It called on Congress to form a Corporation for Public Television, which would provide federal funds to make the vision a reality.

Strangely missing from the Carnegie Commission report was noncommercial educational radio. Once again, the NAEB lobbied on behalf of noncommercial radio. While Congress was considering the formation of a Corporation for Public Television, it was the NAEB and, in particular, its radio division head Jerry Sandler. who pressed for the inclusion of noncommercial radio in the Public Broadcasting Act. With support from the Ford Foundation, Sandler commissioned a study of noncommercial radio, which resulted in a report appropriately entitled The Hidden Medium.²⁹ The report was released in early April 1967, just days before the Senate Commerce Committee began hearings on the Public Television Act.³⁰ These hearings were broadcast live on many noncommercial radio stations, a fact that helped underscore the potential of including radio in the proposed legislation.³¹ Testimony from educational radio stations, which substantially outnumbered educational television stations, as well as the extensive lobbying efforts of NAEB, convinced Congress to include radio in the bill, which was renamed the Public Broadcasting Act.

There was little resistance to the Public Broadcasting Act from the commercial broadcast industry. At the time, few believed that a stronger system of noncommercial broadcasting would substantially threaten the audience for commercial stations. Most noncommercial radio stations were safely segregated from their commercial counterparts at the lower end of the still struggling FM band. Only the most optimistic observers in the mid-1960s could foresee that the audience for FM would someday surpass that of AM radio. Of all the radios sold in 1965, only 15 percent could

receive FM signals, and only 6 percent of new car radios included the FM band.³² Commercial broadcasters may have also seen an opportunity for some relief from their own FCC-mandated public service obligations. A federally funded radio service would greatly increase the public interest programming available on the airwaves, which in turn could lead the FCC to relax some of the programming requirements for commercial stations. This scenario, in fact, was realized to a great extent during the FCC's deregulation of radio broadcasting, which began during the 1980s and has continued to this day. Without significant opposition from the powerful commercial broadcasting lobby, the Public Broadcasting Act was quickly passed, and was signed into law by President Lyndon Johnson on November 7, 1967.

THE POLITICS OF NONCOMMERCIAL RADIO

The inclusion of radio wasn't the only change Congress made to the Carnegie Commission's vision. A more significant modification was the rejection of the Carnegie Commission's call for a dedicated tax on radio and television receiving sets to finance noncommercial broadcasting. Instead, the Public Broadcasting Act called on Congress to make regular appropriations for the newly formed Corporation for Public Broadcasting (CPB), which would in turn distribute funds to noncommercial broadcast stations. Since the passage of the Public Broadcasting Act, the CPB has had to argue its case to every newly elected Congress, requiring it to respond to the ever-changing political landscape. Rather than creating the politically neutral "heat shield" between the federal government and noncommercial broadcasters originally envisioned by the Carnegie Commission, the Public Broadcasting Act created a CPB that was a political animal from the very beginning.

It wouldn't take long before politics would take center stage in the unfolding saga of noncommercial broadcasting. Although the Public Broadcasting Act of 1967 was signed by President Johnson, the CPB and NPR came into being a few years later during President Nixon's Administration. A conservative Republican, Richard Nixon made a concerted effort to steer noncommercial broadcasting away from its liberal roots. Nixon applied pressure through a 1972 veto of CPB's funding authorization bill, and by directing his chief of telecommunication policy, Clay Whitehead, to take an active role in shaping the nascent public broadcasting system. Nixon's actions antagonized many in the noncommercial broadcasting community, and prompted the resignations of CPB chairman Frank Pace and CPB president John Macy, whom Nixon replaced with individuals more open to his influence.³³ With the broad support of local stations, NPR was able to stand up to the Nixon-compromised CPB, but the resulting wounds have been slow to heal.

When Democrat Jimmy Carter became president, the battle-scarred CPB community tried to regain its original sense of mission. In 1976, the CPB and NPR

approached the Carnegie Corporation about funding a study that would focus on the future of public broadcasting. This second Carnegie Commission finished its inquiry in 1979, producing a much more comprehensive and critical document than the original Carnegie Commission report.³⁴ It was particularly critical of the CPB, which it said had "failed to function as the catalyst for creative programming envisioned by the first Carnegie Commission and the Public Broadcasting Act."35 The Commission recommended that the CPB be abolished and replaced by a new "Public Telecommunications Trust" that would "provide financial protection both for broadcast licensees and for a highly insulated, self-directed division of the Trust, the Program Services Endowment."36 Most CPB-qualified broadcasters applauded what has become known as Carnegie II; policymakers largely ignored the report. As public broadcasting scholar Willard Rowland put it, "Carnegie II was too aloof from both the general U.S. telecommunications policy environment and the realities of the structural changes and power relationships within public broadcasting that had emerged since Carnegie I to be effective in the applied political realm where its recommendations would have to be enacted."37 To put it bluntly, public broadcasting was no longer "a public trust," as the second Carnegie Commission described it. Public broadcasting, as it has evolved from the Public Broadcasting Act, has become a federally subsidized industry preoccupied with survival.

The will to survive would continue to be tested in the 1980s and 1990s. Republican President Ronald Reagan twice vetoed public broadcast funding bills, and Congress upheld both vetoes. As one observer noted, "[f]rom 1981 to 1986 public broadcasters had to live with the very real fear that federal funding might be totally eliminated." Although this fear was never realized, appropriations for CPB dropped significantly in the early 1980s, and NPR member radio stations were hurt by these cuts to a more dramatic degree than were their PBS television siblings. Many stations were forced to scale back personnel and programming budgets, and most became increasingly focused on generating financial support from local businesses and loyal listeners.

Some members of the noncommercial radio community may have breathed a sigh of relief when Democrat Bill Clinton was elected President in 1992. As it has turned out, however, the Clinton years haven't been particularly kind to the Corporation for Public Broadcasting. When the Republicans gained control of both houses of Congress in 1994, public radio was once again up against the ropes. Speaker of the House Newt Gingrich and South Dakota Senator Larry Pressler led the congressional effort to end federal funding of broadcasting, charging that its programming had a liberal bias and didn't reflect the values of most Americans. Among the complaints was the fact that it was NPR that broke the story about sexual harassment charges against Judge Clarence Thomas after his nomination to the Supreme Court.³⁹ These experiences have entrenched NPR member stations' fear of losing government dollars, dramatically changing how the stations view the role of federal funding.

PAYING THE BILLS: NONCOMMERCIAL RADIO ECONOMICS

Money is a problem that has always plagued noncommercial radio. Before 1967, most stations scraped by on meager budgets, typically provided by a university or college. Although the Public Broadcasting Act introduced federal funding for noncommercial radio, the shifting political terrain has prevented secure, long-range financing. The first Carnegie Commission report called for a tax on television sets; it never happened. The second Carnegie Commission suggested a spectrum use fee to fund public broadcasting; the proposal was ignored. Other ideas that have been suggested include a tax on commercial broadcasters, a tax on long-distance carriers, an advertising tax, and a per-household license fee on radio and television receivers. Even the radical idea of noncommercial broadcasters selling commercials was considered by Congress in the early 1980s, and a few stations were permitted to do so on a trial basis. Ultimately, however, none of these potential solutions survived the force of competing political interests.

As a result, most noncommercial radio stations operate largely at the mercy of short-term funding sources, assiduously courting favor with a broad base of constituents. Of particular significance are five funding sources that provide most of the financial backing for noncommercial radio. These major sources of support are: (1) grants from federal, state, and local governments, (2) budgets from the institutions that hold the broadcast licenses, (3) corporate underwriting, (4) gifts from the listening audience, and (5) the sale of airtime to nonprofit organizations. This mix of funding sources varies for each of the four types of noncommercial radio stations mentioned earlier in this chapter. CPB-qualified stations receive a significant, but dwindling, level of support from government sources. Student-operated stations rely primarily on institutional budgets. Community stations rely heavily on donations from the audience, although nearly all noncommercial stations now ask listeners for money. This includes religious stations that hold noncommercial licenses, which are also more likely to sell airtime to nonprofit organizations.

One may be surprised to learn that government support typically provides less than a third of a CPB-qualified radio station's budget. What may be even more surprising is that it is money from state governments, not the federal government, that provides the largest share of government funding. It should be pointed out, however, that state funds for radio may in turn rely on federal grants, so it is sometimes difficult to distinguish state support from federal. Further, most state money comes from state-supported universities or colleges, which in turn rely on a variety of funding sources, including the federal government. Nevertheless, state governments are a crucial source of funding for public radio. According to recent figures from the CPB, states provide about 18 percent of the total revenue of the public radio system, with 5.2 percent coming directly from state governments, and 12.8 percent funneled through state universities and colleges. 40 Much of the direct state support goes to the 10 percent of noncommercial radio stations that are licensed to state authorities or commissions.⁴¹

This is not to say that money from the federal government isn't significant, but on a percentage basis, federal dollars represent a declining share of total income. Federal support was much more important in the early years of noncommercial television and radio broadcasting. Many stations would not be on the air today if it weren't for construction grants from the National Telecommunications and Information Administration's Public Telecommunications Facilities Program (PTFP). This program, created by Congress in 1962 as the Educational Broadcasting Facilities Program, was the first significant infusion of federal money into noncommercial broadcasting. While PTFP grants continue to provide an important source of funding for construction and expansion of broadcast facilities, most of the ongoing federal support for noncommercial radio today is funneled through the Corporation for Public Broadcasting. Federal money accounts for 14.7 percent of public radio's total income, with the bulk of that (13.4%) coming directly from the CPB. Stations receive this CPB money primarily in the form of two types of grants. Annual community service grants are unrestricted funds that the CPB provides to all qualified stations. For stations in small towns or remote areas, the community service grant often represents the single most significant source of revenue. Most noncommercial radio stations also receive federal support in the form of restricted grants for programming development, production, and acquisition. Independent program producers, as well as NPR, also compete for programming grants from the CPB.

In addition to state and federal money, some noncommercial radio stations receive funding from local government authorities, such as cities, community colleges, and school districts. Local government support, however, represents only 2.6 percent of the total income of the public radio system, and many noncommercial radio stations receive no local government money at all. In a few cases, however, city governments hold the license of a noncommercial radio station and pay for much of the operational cost from the city treasury. The nation's most listened-to public radio station, WNYC, was licensed for many years to the City of New York, and until it recently gained independence from the city, it had relied almost exclusively on city support. As Still, local government agencies operate less than 5 percent of the nation's noncommercial radio stations, and these stations account for most of the local government funding.

The entities that hold noncommercial radio station licenses are ultimately responsible for financing the operations of their stations, and such institutional support is an important source of income. In the case of CPB-qualified public radio stations, slightly more than half (54%) are licensed to universities and colleges. Most of these institutions of higher learning are supported in part by states or local municipalities, which makes it difficult to distinguish between government and institutional support. However, private colleges and universities account for 27 percent of noncommercial radio's funding from educational institutions. Student-operated radio stations tend to rely extensively on institutional support, usually in

the form of school budgets. Student stations that exist primarily as a "student voice on the airwaves" typically rely on budgets drawn from student fees and administered by student governments. Stations that primarily provide facilities for student training are usually funded by academic departments. Many student stations rely on a combination of student fees, department support, and donations from local businesses. 44 Sometimes institutional support for a station takes the form of free studio space and utilities that the station is not required by a college or university to pay.

Corporate underwriting represents a significant and growing piece of the noncommercial radio financing pie. Donations from the business community in support of programming represent approximately 15 percent of public radio's income. The role of corporations and local businesses in supporting noncommercial radio has increased dramatically since the early 1980s. In response to the Reagan Administration's attacks on federal support for CPB, Congress created the Temporary Commission on Alternative Financing, which explored a variety of funding options, including the sale of commercials. Indeed, a handful of noncommercial broadcasters were granted permission to sell commercial time on a trial basis. Although the Commission ultimately recommended against commercials, it urged the FCC to relax its rules regarding the identification of program underwriters. The FCC obliged in 1984 with what has become known as the "enhanced underwriting" rules. Prior to this, noncommercial stations could mention only the name of the underwriter. With enhanced underwriting, noncommercial radio stations could broadcast more detailed acknowledgment announcements, including nonpromotional information about the business or corporation, such as a description of goods and services, a business's location, and even a "value-neutral" company slogan. In general, most noncommercial stations are careful not to promote a business in such announcements, but a few (including student stations) have crossed the fuzzy line separating enhanced underwriting from commercials and have been fined by the FCC 45

Another important source of revenue is listener support. This is the primary source of income for community stations, and is becoming increasingly important to all noncommercial stations. The idea of "listener-supported" radio is generally attributed to Lewis Hill, the founder of KPFA in Berkeley, California, the flagship station of the Pacifica network. 46 In 1949, Hill's Pacifica Foundation launched KPFA as an alternative to commercial radio, accountable only to listeners, who were asked to become "subscribers" by donating \$10.00 a year. 47 KPFA struggled at first but eventually became self-sufficient, and during the 1960s it was a driving force in the San Francisco counterculture movement. The Pacifica Foundation established additional radio stations in Los Angeles, New York, Houston, and Washington, D.C., created a low-cost programming service for other noncommercial stations, and inspired a community radio movement that continues to this day. Many noncommercial radio stations were slow to adopt the listener-supported model, perhaps in part to politically distance themselves from leftist-leaning community stations. By 1977, only 7.5 percent of the stations' income came from private donations.⁴⁸ But twenty years later, listener support would account for nearly 30 percent of non-commercial radio's revenue. Today, most noncommercial stations, including NPR member stations, religious, community, and even some student stations, regularly ask their audiences for money.

Finally, some noncommercial stations rely on the sale of airtime to nonprofit organizations. Although noncommercial stations are prohibited from selling airtime to for-profit entities, they may legally sell airtime to nonprofit organizations, as long as the time is not used to promote a commercial enterprise. This is the primary source of income for noncommercial religious radio stations, many of which publish rates for "preaching programs," just as their commercial counterparts do. Some student stations, especially at church-related colleges, also take advantage of this source of revenue. Noncommercial radio stations have generally not derived a significant portion of their budget from the sale of airtime to nonprofits, although this may change in the coming years if government funding continues to decline.

In addition to these five major sources of revenue, noncommercial stations have found a number of other creative ways of paying the bills. One of the most popular is the fund-raising auction, which has become a quarterly event at some stations. These auctions often include frequent mentions of donated items from local businesses, providing much more detail about a product or service than would be permissible in underwriting announcements. Other sources of income include philanthropic foundations and charitable organizations, and many radio programs are underwritten in part by foundation grants. Some noncommercial radio stations earn extra cash by leasing their subcarriers to specialized broadcast ventures, such as background music companies, wireless stock quotes, and radio reading services for the blind. Stations also earn revenue from the sale of program-related merchandise. Minnesota Public Radio, for example, has been particularly aggressive in the direct marketing of products related to the very popular radio program A Prairie Home Companion. And noncommercial stations were among the first to embrace the potential of the World Wide Web, not only for promoting programming, but also as an opportunity to more explicitly acknowledge the generosity of their program underwriters. National Public Radio has even ventured into e-commerce, selling books, tapes, and promotional paraphernalia on the Web.⁴⁹

A REFRESHING ALTERNATIVE: PROGRAMMING ON NONCOMMERCIAL RADIO

Noncommercial stations are sometimes referred to as "alternative" radio, suggesting that they offer a programming alternative to the content found on most commercial AM and FM stations. Despite their financial challenges, noncommercial radio stations provide the U.S. public with a wide variety of innovative, interesting, and illuminating programs. In terms of technical quality, artistic creativity, social relevancy, and journalistic integrity, NPR member radio stations arguably provide

some of the best news and cultural programming available. Community stations add a more clearly alternative flavor to the mix, and serve as an important outlet for minority voices. Student stations typically feature new music from struggling artists, and occasionally provide cutting-edge social commentary of a genuinely unique nature. Even noncommercial religious radio stations, while having much in common with their commercial counterparts, have nevertheless expanded the variety of religious programming in this country, and have been a major force in the surging popularity of alternative forms of religious music. When taken as a whole, the noncommercial radio stations of America provide a refreshing alternative to the programming of commercial radio.

The programming of CPB-qualified public radio stations serves the largest segment of the audience for noncommercial radio. These stations receive much of their programming from two national services: National Public Radio (NPR) and Public Radio International (PRI). NPR is the older of the two organizations. CPB created NPR in 1970 to provide programming and interconnection for a national public radio system. The first NPR network relied on telephone lines for programming distribution, but by 1980 NPR had established a state-of-the-art satellite delivery system. The semiautonomous Public Radio Satellite System provides NPR stations with multiple simultaneous program feeds, allowing stations great flexibility in the selection of network programming. This system not only distributes NPR network programming but also a wide variety of programs from independent producers, including those represented by PRI. Originally known as American Public Radio, Minnesota-based PRI does not produce programs itself, but rather serves as a distributor of radio programming. Its first and still predominant client is Minnesota Public Radio, but PRI has expanded rapidly in recent years to become a major producer and distributor of radio programs.

NPR is particularly known for its two "drive-time" news programs. NPR's longest-running program, and one of the most highly respected programs in public radio, is the afternoon news program All Things Considered. Launched in 1971, this "news magazine of the air" features news summaries, in-depth investigative reports, insightful analysis and commentary, unique public interest stories, and brief musical interludes that tie it all together. The musical breaks also provide "cutaway" points where stations can insert local news and weather. A faster paced morning version of the program, Morning Edition, debuted in 1979. Although both programs have weekly audiences approaching eight million, Morning Edition has a slight lead, making it the most listened-to program on noncommercial radio. Other popular programs from NPR includes Car Talk, which features the playful banter of two automobile mechanics dispensing advice; Fresh Air with Terry Gross, a daily interview program with a focus on literature and the arts; Talk of the Nation, an issue-oriented discussion program; and Performance Today, a classical music program with live performances, artist interviews, and extensive commentary.

Public Radio International is perhaps best known for the long-running A Prairie Home Companion. Since its debut in 1974, fans of this weekly aural journey to Lake

Wobegon have been among the most loyal in the public radio audience. But PRI's most popular program, heard by nearly 3 million people a week, is the daily business-oriented program Marketplace. PRI is also the U.S. distributor of the BBC World Service, which provides many CPB-qualified radio stations (as well as some community and student stations) with hourly news updates. Until the Christian Science Monitor suspended the program in 1997, PRI distributed Monitor Radio, a widely respected news service. Other notable programs distributed by PRI include Michael Feldman's Whad'ya Know?, a humorous call-in quiz show; St. Paul Sunday, a weekly program of chamber music; Pipedreams, a program featuring pipe organ music; and Schickele Mix, an engaging and entertaining program for music lovers. PRI also distributes a twenty-four-hour classical music service as well as a variety of jazz programs, including Jazz After Hours.

Although programming from these two national radio networks represents an important part of a typical CPB-qualified radio station's schedule, about half of its programming is locally produced. Most stations have a news department that provides local news and weather updates during breaks in Morning Edition and All Things Considered. But the most common local programs feature announcers introducing recorded music. Classical music programs are the most popular choice, with some stations featuring classical music exclusively. Jazz is also a staple at many stations. In markets where there is more than one CPB-qualified station, often one will focus on classical music while the other will concentrate on jazz. Another common programming strategy is to "daypart" by airing classical music during the day (between the two NPR drive-time programs) and airing jazz in the evening hours. On the weekends, most stations add some specialty music programs to their schedule, such as folk, "world," latino, and "new age" music programs.

In most cases, however, the diversity of music programming on CPB-qualified radio does not match that of community and student radio. Community stations tend to provide the most diverse program mix on the air. Most community stations rely on a staff of volunteer announcers, each of whom brings his or her own unique tastes in music and public interest programming. Pursuing the spirit of the Pacifica model, community stations focus on serving the interests of the audience that are not satisfied by the commercial market, even if that audience is very small. Ironically, this approach of serving small audience segments is currently at the center of an ongoing controversy at KPFA. Attempts by management to increase audience share and make programming tamer have led to violent confrontations at Pacifica's flagship station.⁵⁰ Similar shifts toward the mainstream at student stations have also led to conflict.⁵¹ But for the most part, community and student stations take pride in their efforts to provide genuine alternatives to commercial radio, and they tend to take more programming risks than CPB-qualified radio stations. Community stations provide an outlet for radical thought and minority interests, challenging the status quo and expanding the diversity of voices on the airwaves. Student stations provide an outlet for new forms of alternative music and have been a significant force in the rise of independent record labels.⁵²

EXAMINING THE AUDIENCE FOR NONCOMMERCIAL RADIO

The audience for noncommercial radio has been gradually but steadily growing. From 1986 to 1996, the weekly national audience for public radio increased more than 80 percent, from 11 million to 20 million.⁵³ Today, noncommercial radio signals are available to 91 percent of Americans, and 9 percent of the population tunes in to a noncommercial radio station at least once a week. The average listener spends more than eight hours per week listening to public radio, with most of that time spent listening to NPR's daily news magazine programs. The audiences for community stations tend to be smaller, but they also tend to be more diverse in racial composition and educational attainment. Student stations, because they typically have weaker signals, serve a more geographically bounded audience, and one that tends to be skewed toward young men of high school and college age.

The radio audience of the CPB-qualified public station is skewed toward older, well-educated, white middle-class men.⁵⁴ Although men represent 48 percent of the adult population in America, the public radio audience is over 59 percent male. Well over two-thirds of the audience is 35+ years of age, and almost a third is 50+. The audience is also overwhelmingly white. Only about one in seven public radio listeners is a member of a racial or ethnic minority.⁵⁵ Less than 9 percent of the audience is black, and only 3.5 percent is Hispanic. Recently, NPR was hit with a lawsuit charging the network with making racist business decisions, further fueling the attacks on what critics have called National Public Racism. 56 But NPR contends that the main reason for the low representation of minorities in its listening audience is that public radio programming tends to attract highly educated listeners, and there are unfortunate but real long-standing racial inequities in educational attainment in the United States. Most listeners in public radio's minority audience have at least a bachelor's degree. Black public radio listeners are three times as likely to have a college degree than blacks who don't listen to public radio, and Hispanic public radio listeners are five times as likely to have a college degree.⁵⁷ Public radio stations that feature classical music, the most common local programming format, attract the most highly educated—and white—audience. Jazz public radio stations, on the other hand, tend to attract a more diverse audience, both in racial composition and educational attainment.58

CPB-qualified radio stations are facing mounting pressures to expand their audience, and much of that pressure comes from NPR. Starting in late 1999, NPR dropped its long-standing practice of charging stations for programs based on their operating budgets, an arrangement that helped stations of all sizes focus more on the quality of programming than on the quantity of listeners. Now NPR charges stations for programming based on audience size. 59 The larger the audience, the more a station must pay for NPR programs. This policy is forcing stations to increase their reliance on corporate underwriting and listener support to pay NPR fees. Perhaps

more significantly, it is causing stations to take an increasingly hard look at the "cost per listener hour" versus the "return per listener hour."

These phrases are used repeatedly in the CPB-funded Audience 98 study. 60 In essence, "cost per listener hour" refers to the cost a station must pay (expressed in cents) to get one person to listen one hour to public radio, while "return per listener hour" refers to the listener-sensitive income generated by an hour of public radio programming, in the form of audience support and corporate underwriting. By comparing these two figures for individual programs, a radio programmer can more precisely identify which programs are the most successful in generating income for the station. For example, the Audience 98 study found that PRI's business-oriented program Marketplace had the highest gross return of any NPR program, largely because underwriters are willing to pay a high premium for the listeners of this program. Car Talk was another program identified by the study as a "high yield" program, because on a per-listener basis it generated the most listener donations. While programming strategies based on financial return are essential in commercial radio, many question the appropriateness of such strategies in noncommercial radio.

THE DECLINING ROLE OF **EDUCATION IN PUBLIC RADIO**

Many also question how far noncommercial radio has strayed from its educational heritage. The early years were a time of division among noncommercial educational radio stations. When the first federal funds were distributed in 1970, only 17 percent of the noncommercial educational stations on the air were eligible to receive those funds. 61 The strict CPB guidelines for federal funding were ostensibly established to encourage stations to expand and become more professional. But the effect of those guidelines was quite different. Noncommercial radio was being divided into two camps: the respectable, professionally staffed CPB-qualified public stations, and the scrappy, student-operated stations at colleges and universities. The divisiveness would escalate in 1976, when the CPB and NPR petitioned the FCC to reconsider the allocation of low-power Class D stations. NPR wanted to expand into a network of full-power stations, and all those pesky 10-watters were cramping the airwaves. In 1978, the FCC ruled that it would no longer issue Class D licenses, and it put pressure on 10-watters to increase their power to at least 100 watts by 1981 or face being reduced to secondary status. Although many of these stations were able to increase their power to the new minimum, some were forced off the air to make room for full-power NPR stations. Whatever their eventual fate, all Class D stations received the unmistakable message that the Corporation for Public Broadcasting was determined to distance itself from its educational roots.

Public radio even turned its back on the NAEB, the very organization that championed the cause of noncommercial radio for over half a century. NPR essentially took over the program distribution system that NAEB had created. In 1981, during its final year of operation, the NAEB launched a newsletter called Current, which today continues on its own as the major trade publication for the public broadcasting industry. For a few old-timers, this newsletter is a perpetual reminder of the long-severed ties between academia and public radio. With the end of the NAEB came the end of the last scholarly home for public broadcasting research in America. As public broadcasting scholar Robert Avery has noted, "The single most important factor in explaining the failure of communication researchers to focus their attention on U.S. public broadcasting in recent years is the demise of the National Association of Educational Broadcasters."62

To put it bluntly, the demise of the NAEB, and the death of Class D, gave a onetwo knockout punch to educational involvement in public broadcasting in the early 1980s. The passing of the NAEB was largely a blow to faculty, as academics lost a credible voice in the public broadcasting industry, and scholars lost a vital forum to publish research. The successful attack on Class D extended the damage to students, as college radio was shoved to the backwaters of obscure closed-circuit broadcast technologies like carrier current and "leaky FM." Changing institutional priorities, waning faculty involvement, and growing student apathy only accelerated student radio's descent into the "electronic sandbox."63 Even though most CPB-qualified radio stations today are still affiliated with a college or university, the relationship is often a strained one, with little real interaction between public broadcasters and the campus community. 64 Today's public radio, for all of the wonderful programming it has brought to the American people, has largely abandoned the educational mission that once was at its core.

SUMMARY

As noncommercial radio enters a new century, its mission is increasingly being shaped by the demands of the marketplace. Public radio broadcasters find themselves pulled in opposite directions, compelled by ideological tradition to serve a broadly defined public interest, but pushed by the instinct for survival into focusing on a narrow agenda of maximizing support from their diverse pool of funding sources. While the ideals of noncommercial radio support an educational mission of public service to the community, the practice of public radio reveals a business plan of selling the attention of an elite audience to commercial underwriters. The rationale for doing so has less to do with the public interest than it has to do with the desire to maintain marketplace viability by capturing audiences that remain underserved by the commercial system. Public radio is desperately seeking to claim the gaps in the audience that commercial radio fails to fill.

Unfortunately, those gaps are closing in on public radio. As the number of channels in the radio marketplace increases, the niche audiences targeted by public radio stations are shrinking precariously. This trend is likely to be even more pronounced in the near future, as alternative audio delivery systems, such as direct satellite radio, further dissect the radio audience.⁶⁵ By yielding to the seductive logic of the marketplace view of the public interest, some noncommercial radio stations may have sealed their own fate, giving up long-term ideological vitality for short-term economic viability. And as one critique put it, "Once sold, the soul of public service broadcasting may never be recovered."⁶⁶

Both critics and supporters wonder how long public radio can last in the new century. Some believe public radio is an anachronism of a bygone era, a bureaucratically burdened solution to the problem of an overwhelmingly commercial market-place limiting diversity of programming, a problem technology presumably has solved with today's abundance of program options. Others support the mission of noncommercial radio, but argue that it has lost that mission, that it has trapped itself into a desperate Faustian bargain with big business and big government to survive at any cost, even at the cost of the public interest principles it is supposed to serve.

The public broadcasting community even has a name for those who bemoan the drift away from public interest principles: "mission-firsters." Robert Duffey complains that this shrinking group of holdouts "think of themselves and their stations more as social institutions than media outlets, their charters being to stand fast and not yield in the onslaught of new media influences and market forces." Yet to many long-term observers of noncommercial broadcasting, it is remarkable that so many broadcasters do not see their stations as "social institutions" distinctive from the realm of commercial broadcasting. For this is precisely what the Carnegie Commission had in mind, "a system that in its totality will become a new and fundamental institution in American culture."

This institution has endured political trials, economic uncertainties, and ideological angst. Noncommercial radio stations, including public, community, student, and religious stations, have together created a unique national treasure. For many in the listening audience, noncommercial radio is a treasure waiting to be discovered, a "hidden medium" on the left end of the radio dial. But for a growing number of Americans, noncommercial radio is a vital alternative source of information, dialogue, and music. As we move into the twenty-first century, there undoubtedly will be many challenges ahead for the noncommercial radio community. It has already successfully met numerous significant challenges in its history, and, if the past is any predictor of the future, there is ample reason to believe that the story of public broadcasting is far from over. It may be just beginning.

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9

The Contemporary Radio Industry

Movers and Shakers

The radio broadcast industry has been influenced by a number of key individuals throughout its history. In radio's infancy, inventors and scientists such as Hertz, de Forest, and Armstrong paved the way for the creation of a new medium. Innovators like Sarnoff and Paley recognized the ability of radio to bring audiences together and then sell access to these audiences to potential advertisers. Performers realized that being on the radio was critical for name recognition and the hope of eventual stardom. Politicians found a way to reach their constituency in a timely and cost-efficient manner. Audiences found in radio a medium that could deliver instant news, information, and entertainment programming.

Today, the contemporary radio industry continues to be influenced by a number of key individuals. Who are the movers and the shakers in the contemporary radio industry that will continue to shape and influence the medium in the twenty-first century? This chapter looks at a number of key individuals who have shaped the radio industry during the past ten years and will likely continue to influence the medium for years to come.

Our discussion of these individuals is, by nature, arbitrary in its selection. However, we feel we have identified key individuals who, by their contributions at the time of publication, are major figures in the radio industry. Rather than offer a biographical entry for each person, the chapter highlights the individual's place in the industry, and how this person influences the medium.

THE MOGULS

As discussed in earlier chapters, consolidation became the norm for the radio industry during the 1990s due to passage of the 1996 Telecommunications Act, which eliminated national ownership limits on radio stations. The result has been a rapidly consolidating industry, with the number of companies owning radio stations shrinking rapidly.

Two companies dominate the radio landscape. Clear Channel Communications, through its merger with AMFM Inc. (formerly Chancellor Media), and CBS/Infinity (to be merged with Viacom) have emerged as the key players in radio ownership, with each company controlling hundreds of stations. The leaders who built these powerful radio companies—Thomas Hicks, Lowery Mays, and Mel Karmazin make up the radio moguls of the twenty-first century. Each of them is profiled below.

Thomas Hicks

Thomas O. "Tom" Hicks is best known in the financial world as the CEO of Dallasbased Hicks, Muse, Tate & Furst, a leverage buyout financier. Interestingly, Hicks, Muse has only existed since 1989, when he and his partners formed the private investment firm after leading several key soft-drink industry buyouts. Today, the portfolio of companies controlled by the LBO firm consists of real estate, consumer products, movie theaters, sports franchises, and broadcast stations.

Hicks became a common name in the radio industry during his tenure as CEO for AMFM Inc., the umbrella name for the media company built during the 1990s. Hicks grew up with an understanding of the radio business. His father owned a few stations in small markets in Texas, and during his teenage years he worked for a time as a radio disc jockey. Hicks began acquiring stations in earnest in 1993 via Hicks. Muse, with Chancellor Broadcasting and CapStar forming the cornerstones of the radio group as part of the Hicks, Muse overall investment strategy.

Acquisitions continued in 1996 and 1997 as Chancellor became Chancellor Media and acquired several key radio holdings, including Evergreen, SFX, and Viacom. Hicks, Muse ventured into television with the purchase of stations owned by LIN Television, as well as several outdoor advertising companies. Hicks attempted to merge the television holdings into Chancellor, but was rebuked by shareholders. In July 1999, shareholders approved the former merger of Chancellor Media and Capstar into a new company known as AMFM Inc. to reflect the emphasis on radio as well as matching the name of the company's national radio network. In 1999, AMFM owned 460 radio stations.² In October 1999. Hicks shocked the radio industry with the announcement that Clear Channel Communications would merge with AMFM.3 Hicks was set to become the Vice Chairman of Clear Channel Communications following the merger.

Aside from building one of the largest radio companies in the country, Hicks brought a new type of entrepreneurial spirit to the radio industry. By clustering stations in geographical areas and appealing to different target audiences. Hicks understood the changing economics of radio and the resultant cash flow that would come with streamlined operations. In an interview published in 1997, Hicks called radio "one of the all-time great businesses for pre-cash flows . . . with no capital expenditures than keeping your physical plant in order."4

Hicks's attitudes toward radio spurred other groups to consolidation in order to maintain a national presence in the radio industry. Ultimately, the wave of consolidation proved to be more profitable for Hicks, Muse to become a seller rather than a buyer. Hicks showed other investors that radio was still a profitable investment. While consolidation has not been without controversy, there is no doubt the radio industry has achieved renewed interest among the investment community and higher valuation as an industry group with Hicks as one of radio's leading advocates.

Lowery Mays

Lowery Mays is the Chairman and CEO of Clear Channel Communications, a San Antonio-based company that has been building a radio empire since 1972. The company became a publicly traded entity in 1984. At the time of publication, Clear Channel was the largest owner of radio stations in the world.⁵ A former investment banker, Mays runs Clear Channel with the help of his two sons, Mark, who is President and Chief Operating Officer, and Randall, who is Executive Vice President and Chief Financial Officer.

For years Clear Channel was considered a steady, conservative radio company. Beginning with a singe station purchase in 1972, the company was built very slowly during the 1970s and 1980s. By 1993, the company owned thirty-one radio stations (the maximum number any group could own at the time was forty) and seven television stations. In mid-1999, Clear Channel's holdings included 492 radio stations, 19 television stations, and over 425,000 outdoor billboards in twenty-seven different countries. But Clear Channel made the biggest acquisition in radio history with its announcement of a merger with AMFM Inc. in October 1999, a \$23.5 billion deal. Once approved by the FCC, Clear Channel would own 830 radio stations in America.6

Clear Channel's business philosophy is rather simple: Cut costs while at the same time increasing revenue. But Clear Channel, with Mays as its guiding force, has been able to do it with greater success than most other companies. Mays comments that "We're trying to create shareholder value because we're (family members) the largest shareholders in this company."7

Interestingly, Mays believes his company is not so much in the broadcasting business as it is in selling products to consumers. This entrepreneurial philosophy is certainly appreciated by advertisers in the cities where Clear Channel stations conduct business because of its customer-oriented focus.

In addition to being one of the most aggressive buyers of radio stations and outdoor advertising displays, Clear Channel has also invested in new media technologies. In 1999, the company invested \$15 million in Tunes.com, an Internet music network. The company also signed a contract with StarGuide Digital Networks to provide satellite-based distribution equipment for radio programming. Clear Channel will use StarGuide equipment to deliver programming originated by its regional and sports networks as well as content created at Premiere Radio Networks, Clear Channel's wholly owned programming subsidiary.

The company has invested heavily in outdoor display advertising in foreign markets, as well as partial ownership in broadcasting operations in several countries. For example, Clear Channel has interest in Australian Radio Networks, Grupo Acir Communcaciones in Mexico, and Radio Bonton in the Czech Republic.8

Many challenges await the company, including managing such a large conglomerate, and using the Internet to extend the reach and marketing potential of Clear Channel's radio holdings. As the largest radio station operator in the United States, Clear Channel has positioned itself as one of the largest media companies in the world. Its potential cumulative audience reaches an estimated 100 million people with annual revenues expected to reach around \$3 billion.

Mel Karmazin

Mel Karmazin became President and CEO of CBS in 1998 following the retirement of Michael Jordan, who had guided the merger of Westinghouse and CBS several years earlier. Karmazin's rise to the top of the well-known "tiffany" network happened just three years after the company acquired Infinity Broadcasting, at the time one of the largest and most profitable radio companies in the United States.

Karmazin's business skills of increasing stock values and profits were honed in the radio industry. Infinity Broadcasting focused on acquiring the best stations in the largest radio markets. Infinity was also well known as the company with the most controversial talent in the radio industry-Howard Stern. Infinity fought the FCC over the issue of indecency for years with the Stern program, and Karmazin was often called on to defend Stern and the First Amendment, a role that he found uncomfortable.9 Regulators continued to fine Infinity millions of dollars for numerous Stern violations.

With radio consolidation moving at a record pace after the passage of the 1996 Act, Infinity faced a decision many other radio companies pondered, whether to sell the company to another entity or try to become one of the major players in a revamped industry. The latter would mean investing billions of dollars in more stations. CBS not only made the most competitive offer for Inifinity, but the stations owned by CBS fit nicely with the Infinity holdings.

By folding Infinity into CBS, Karmazin became the President of CBS Radio, and because of his huge personal investment in Infinity, he became the single largest shareholder in the new CBS. The years following the merger were tough for the parent company. The television network had lost part of the lucrative NFL contract to the Fox network. Ratings for primetime television were falling as audiences shifted to cable television channels. An effort to establish a presence in cable television (CBS "Eye on People") failed to attract audiences.

While CBS suffered financially with several of its business segments, the radio division under Karmazin was generating most of the positive cash flow for the company. Karmazin became upset as he learned the economics of television, particularly with the way account executives were compensated. In an interim move to the top of the CBS board, Karmazin was assigned responsibility for the CBS television network. He quickly moved to cut costs at CBS-owned stations, virtually eliminating salaries for account executives and placing the staff on compensation-only income, a move that shocked long-time sales employees of CBS. Internal cost reductions, plus better television ratings for the TV network, led to a rebound in CBS's financial picture.

It was this environment that led Jordan to retire earlier than anticipated, paving the way for Karmazin to become the head of CBS, the first person with a background in radio to lead a major network since David Sarnoff. Interestingly, Karmazin is indifferent about television programming, and even radio programming. In an interview after becoming CEO of CBS, Karmazin claimed he spent little time as a consumer of TV or radio.10

But Karmazin's tenure as CEO of CBS would evolve in a manner of a few months. In November 1999, the largest media merger in history was announced: Viacom was buying CBS, creating a media company rich in radio and television stations, programming, cable services, publishing, film production, and other assets. Karmazin was set to become the President and Chief Operating Officer of the new company, second in command to Viacom CEO Sumner Redstone. On Redstone's retirement, Karmazin would become CEO.

While Karmazin's career has shifted toward oversight of a large media conglomerate, he will always be remembered as the man who built Infinity Broadcasting into one of the premiere radio groups in the country. Further, with his support of Howard Stern, Mel Karmazin will likely also be remembered as the man who financially backed the development of the shock radio format.

THE STARS

The power of radio to attract and maintain audiences has always been vested in human talent. During radio's golden age, the medium's talent rivaled that of the film industry. Today, talent is no less important, with several individuals emerging as not only radio stars, but multimedia stars as well. This section focuses on five of the most famous contemporary radio stars: Howard Stern, Laura Schlesinger, Rush Limbaugh, Larry King, and Casey Kasem.

Howard Stern

Howard Stern is the self-proclaimed "king of all media," and perhaps rightly so. Stern remains one of the most listened to voices in America, and he has successfully parlayed his unique style to other media, including television, film, and books. Stern's nationally syndicated radio program is a blend of talk involving sexuality. society, and politics. The program has become a showcase for freedom of expression because Stern talks-and will talk with his studio family and guests-on just about any topic.

Stern was introduced to the radio industry through his father, who worked as a sound engineer. 11 A 1976 communications graduate from Boston College, Stern's early career was far removed from his later success. As typical with many young radio announcers, Stern moved from job to job and format to format. Eventually, Stern was teamed with his sidekick Robin Ouivers, and his program evolved into more talk and less music.

Stern and Ouivers were fired from WNBC-AM, New York, in 1982 following a dispute with management. By 1985, "The Howard Stern Show" found its home on WXRK-FM, a station owned at the time by Infinity Broadcasting. The program began national syndication the following year.

While Stern's outrageous humor was attractive to his predominantly male audience with references to sex, celebrities, naked women, and an overemphasis on bodily functions, it was not so popular with members of a conservative Federal Communications Commission. The Stern program was levied with over \$2 million in fines, the majority of which were related to indecency. 12 Invoking his First Amendment rights, Stern refused to change his program and Infinity, his employer, continued to support his program and paid the fines.

During the 1990s Howard Stern became a multimedia star. Portions of his daily radio show were taped for later broadcast on the E! cable channel, eventually moving to daily status. Stern's autobiography Private Parts was published in 1993, and became the fastest selling book in the history of Simon and Schuster. 13 The film adaptation of the book was also a box office success, bringing Stern even greater notoriety. A pay-per-view New Year's Eve special became the most watched PPV event in history.

A second book, Miss America, was published in 1995, and reached the top position on many best-seller lists. In 1998, Stern was given the opportunity to have his own national television program when the CBS network gave him the late-night time slot opposite NBC's Saturday Night Live. But the Stern program suffered in the television ratings, and several CBS affiliates dropped the controversial program.¹⁴

Howard Stern is often described as a "shock radio" jock, a title he openly resents in Private Parts because he never intended to shock anybody with his radio

show. 15 Stern writes "what I... set out to do was to talk just as I talk off the air, to talk the way guys talk sitting around a bar." 16 Surprisingly, this bar talk has made Stern a millionaire, and forever changed the way talk radio is perceived by American listeners.

Laura Schlesinger

Dr. Laura Schlesinger is the most listened to woman in America, and, like Howard Stern, has taken her unique brand into other forms of mass media. Like Stern, Schlesinger deals primarily in talk radio, but her expertise is in helping callers who are faced with moral dilemmas. Schlesinger eschews an old-fashioned sense of mores and personal responsibility, and she has been known to yell at and even hang up on whiners. 17

Schlesinger began her radio career in the 1970s, serving first as an expert on human sexuality on another talk show hosted by Bill Balance before landing her own daily program. Her show went into national syndication in 1994, and became immensely popular with listeners for her frank and candid style.

Schlesinger does not have formal training in counseling or sex therapy; in fact her Ph.D. is in physiology from Columbia University. 18 She prefers to be known as "her kid's mom," reflecting her devotion to her son. With each telephone call, Dr. Laura encourages her listeners to do what is morally right, and she is quick to condemn premarital sex, adultery, infidelity, and mistreatment of children.

In addition to hosting her daily radio program, Schlesinger also has a weekly syndicated newspaper column. She has authored several books, including How Could You Do That?, The Abdication of Character, Courage, Conscience; Ten Stupid Things Men Do to Mess Up Their Lives, Ten Stupid Things Women Do to Mess Up Their Lives, and The Ten Commandments: The Significance of God's Laws in Everyday Life.

Schlesinger experienced embarrassment in 1998 when a series of nude photographs of the radio star taken when she was in her twenties appeared on the Internet. 19 Bill Balance, the man who gave Schlesinger her start in radio in 1976. took the photos while the couple was allegedly having an affair. Balance sold the pictures to Internet Entertainment Group for several thousand dollars, which loaded the pictures on their Website. Schlesinger took legal action to stop the postings, but the courts ruled in favor of IEG.

An unauthorized biography was published in 1999, which also turned out to be very unflattering to Dr. Schlesinger.²⁰ Despite these personal setbacks, Schlesinger's popularity continued to grow. She will host a television talk show that will be distributed by Paramount Domestic Television, expected to begin airing during the fall of 2000. Like her radio show, the program is expected to deal with a combination of ethical and moral issues.21

Laura Schlesinger stands alone as the most recognizable female talent in the radio industry. She has successfully found a niche among listeners, and has been able to redirect her content into other media forms. Hopefully, her success will generate even more opportunities for women in radio.

Rush Limbaugh

Rush Limbaugh burst onto the national radio scene in 1988, proclaiming himself as "a man, a legend, a way of life." Rush Limbaugh is the ultimate political conservative, and he spent most of the 1990s bashing liberalism, the Clinton administration, the Democratic Party, feminism, and government bureaucracy on his daily threehour radio talk show.

Limbaugh is credited with revitalizing AM radio, and he certainly has contributed to a resurgent interest in AM as a talk medium. Heard on over 600 AM stations across the country, Limbaugh broadcasts over his "Excellence in Broadcasting" (EIB) network from its Manhattan base.²² His program attracts millions of listeners, ranking him with Stern and Schlesinger as the most listened to voices in America.

Limbaugh's rise to the top of conservative talk radio didn't happen overnight. A native of Cape Girardeau, Missouri, Limbaugh grew up in a Republican household with both of his parents active in the GOP.²³ He began working in radio as a teenager, and like Howard Stern, rotated through a number of stations in different markets. At one point in his career, Limbaugh left radio to work for the Kansas City Royals baseball team in their marketing department.

Eventually moving back into radio, Limbaugh had the chance to replace the fired Morton Downey, Jr., on a talk show in Sacramento in 1984. His program became very popular, leading to an opportunity to audition for a national talk show with WABC in New York in 1988. From that point forward, the rest is history. Limbaugh's program soared in popularity, with hundreds of stations acquiring the syndicated talk program that airs for three hours every weekday afternoon.

Who listens to Limbaugh? Audience data indicates his audience is almost entirely male, white, with more than half ages 22-54.24 These "dittoheads" as Limbaugh refers to his minions, are conservative citizens who share his concern on topics such as illegal immigrants, the media, environmentalists, feminists, liberals, Democrats, Affirmative Action, and, yes, the Clinton Administration.

Limbaugh is not just a radio celebrity, he is an active public speaker. He developed a half-hour syndicated television program and authored two books: The Way Things Ought to Be, and See, I Told You So. Both books were bestsellers.

Many of Limbaugh's critics expected his popularity to wane by the end of the decade, but it clearly has not happened. Rush Limbaugh will likely be a part of radio well into the millennium. Limbaugh is a product of the medium, and he is extremely skillful at harnessing the power of radio and its ability to impact audiences.

Larry King

Larry King is no longer a fixture on national radio, but deserves mention for his development of the talk radio phenomenon. Born in Brooklyn, New York, King wanted a career in radio as early as age five. King's father died when he was only nine years old, causing the family to become dependent on welfare for its survival.

King first ventured into radio in 1957 as a disc jockey, working long shifts and covering every type of programming, music, news, and sports.²⁵ Early in his career he had the opportunity to conduct interviews, and it was here where King began to build a niche. In 1960, King was working in radio in South Florida, and had the opportunity to do a local television show that also consisted of interviews and debates. King credits Arthur Godfrey on radio and Jackie Gleason on television as two mentors who strongly influenced his young career.26

King lost his jobs in the media during the early 1970s after his involvement with a shady financier was made public. He toiled with various jobs until he was eventually able to return to the air in Miami, where he regained his popularity. In 1978, Larry King began hosting a national talk show on the Mutual Broadcasting System. and it was this forum that gave King his greatest recognition as a masterful interviewer.

In 1985, the fledging Cable News Network offered King the opportunity to host an hour-long live talk program, featuring audience call-ins. It was the first show of its kind in television history, and immediately became CNN's highest rated television program, a position the program still maintains.²⁷ In 1994, Larry King Live became the first talk show to be simulcast on both television and radio.

King has conducted more than 30,000 interviews during his broadcasting career. His guest list features the biggest names in world politics, entertainment, sports, and the media. The popularity of his television show led to King's retirement from radio in 1996.

King is the author of eleven books, and also writes a weekly column entitled Larry King's News & Views every Monday in USA Today. He has also made cameo appearances in a number of feature films. In 1987, King suffered from serious heart problems, leading to quintuple bypass heart surgery. That experience led King to establish the Larry King Cardiac Foundation, which helps heart patients with financial need have the necessary surgery and medical care they need to live. A nonprofit entity, the Foundation is supported by proceeds from the sale of King's books, public speaking engagements, and an annual fundraiser.²⁸

Larry King's contributions to the development of talk radio and the radio interview program is enormous. Through his years on the old Mutual network and his live television show, King demonstrated that talk could not only be interesting, but profitable as well. His ability to simultaneously engage studio guests, call-ins, and audience members set the standard for talk radio personalities.

Casey Kasem

Aside from James Earl Jones, Casey Kasem probably has the most recognized voice in America. A longtime radio and television performer, Kasem is best known as the man who for years has provided a weekly rundown of the country's hottest music on the syndicated program "American Top 40."

Kasem began his radio career in 1950 in his native Detroit at WXYZ performing dramatic roles on The Lone Ranger and Sergeant Preston of the Yukon.²⁹ He worked various jobs in radio at several different stations, and also worked for Armed Forces Radio after he was drafted for service during the Korean War.

In 1970, Kasem and his friend Don Bustany co-created American Top 40, and later American Country Countdown. The program was extremely timely in that many FM stations were starting to adopt music formats that were being abandoned by AM stations. AT40 was the vehicle that made Kasem a star, and the program became one of the most popular weekly syndicated radio shows in the history of the industry. AT40 was syndicated nationally by ABC/Watermark until 1988 when Kasem left over a contract dispute.³⁰ From there the program moved to Westwood One, where it would remain until 1998.

In addition to his work on AT40, Kasem has hosted a number of other countdown programs over the years including Casey's Top 40, Casey's Hot 20, Casey's Biggest Hits, and Casey's Countdown. Kasem's voice can be heard in a number of other forums. Among his credits are a number of cartoon programs, including "Shaggy" on Scooby-Doo, the voice of Robin on The Adventures of Batman and Robin and The All New Super Friends Hour, and Cliffjumper on Transformers. Kasem has also made cameo appearances in several movies and television programs as himself.

In 1998, Kasem angered his former employer, Westwood One, by signing with AMFM Radio Networks to move AT40 to a new forum. A lawsuit followed, with the parties eventually reaching a settlement that allowed Kasem to move to AMFM.³¹

During his long career, Kasem has received numerous honors and awards over the years, including his 1998 induction into the Broadcasting and Cable Hall of Fame. On receiving this honor, Kasem thanked several industry executives, including a mentor in Detroit that was "kind enough... to wait six months to tell me what I was doing wrong so it wouldn't crush my enthusiasm." Kasem called himself "The person trying to live up to the positive image which I hope I've projected over the air all these years."32

THE INNOVATORS

What does the future hold for the radio industry? While no one is entirely certain, there are clear indications that radio continues to adapt and evolve to its changing

environment. Revisions of regulatory policy results in implications for market structure and competition. New technologies push and extend the medium to new levels of presentation and packaging.

The emergence of the Internet has had an enormous impact on traditional broadcasting, especially with the development of streaming media. One company that became an early leader in streaming digital media is Dallas-based Broadcast.com, a company formed in 1995 by Mark Cuban and Todd Wagner.

Cuban and Wagner/Broadcast.com

Mark Cuban and Todd Wagner are the cofounders and innovators behind Broadcast. com, the pioneering company that invented Internet broadcasting. Friends since their days at Indiana University, Cuban combined an entrepreneurial spirit with a zest for technology. Wagner, on the other hand, spent his early career as a corporate attorney working his way through major law firms.

In 1995, Wagner and Cuban were both living in Dallas. Wagner asked Cuban if there was some way to listen to Indiana University basketball games over the Internet. That conversation was the genesis for a company that would eventually be valued at over \$5 billion by 1999.

Cuban used about \$5,000 worth of equipment to create the company, and convinced Dallas radio station KVIL to give them permission to broadcast their signal over the Internet. In a short amount of time, the popularity of the site grew, and the pair realized they had a viable business model. The pair formed a company called AudioNet and began selling Internet distribution to radio stations and sports teams across the country.33

The young company was off to a fast start, with a number of content providers jumping on board. From a strategic standpoint, Cuban and Wagner recognized that if they could control access to the content, it would be much more difficult for competitors to encroach on their market. Thus, AudioNet emerged as an exclusive provider of Internet content for many providers.³⁴

In 1998, AudioNet changed its name to Broadcast.com, to reflect the fact that the company now offered video distribution as well as audio broadcasting. An initial public offering of company stock on July 17, 1998, was one of the most successful in Wall Street history. On that day, the stock of Broadcast.com grew some 249 percent, raising more than \$40 million in operating capital and making Cuban and Wagner and their other investors instant millionaires.³⁵

The company continued to achieve great notoriety, especially with its Internet broadcast of a live Victoria's Secrets fashion show on February 3, 1999.36 The show attracted 1.5 million viewers, but thousands more Internet users were denied access due to network capacity, demonstrating the power of the Internet to attract audiences. More and more businesses began to utilize Broadcast.com for audio and video streaming as interest in the company continued to grow.

The tremendous success of the young company, coupled with Internet euphoria. led to another major financial windfall for Broadcast.com. Yahoo!, the original Internet portal/search engine, announced plans to acquire Broadcast.com for \$5.6 million on April 1, 1999.³⁷ Merging the leading Internet portal with the leading provider of audio/video content on the Web was a natural fit, allowing the merged companies to share synergies and develop new revenue streams. Renamed Yahoo Broadcast Services after the merger, Cuban and Wagner continue to hold important leadership roles with the company.

SUMMARY

This chapter introduced some of the key individuals who have had a significant impact on the radio industry in recent years. We looked at ten individuals divided into three categories: moguls, stars, and innovators. Their contributions have been felt in markets large and small, and across geographic boundaries. No doubt, their presence in the industry will be felt for many years to come.

Radio is a business, but it has always been a business about people. Radio brings people together, whether in the form of audiences, advertisers, talent, or musicians. And it will continue to do so.

Historians have written that the "golden age" of radio occurred in the 1930s and 1940s. Looking back fifty years from now, many may surmise that the last decade of the twentieth century was truly radio's golden age, when innovation and vision collided with technology and forever changed the industry.

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- ³²"The Winner's Circle," Broadcasting & Cable, November 16, 1998, p. 46.
- ³³Richard Murphy, "Mark Cuban and Todd Wagner," Success, May, 1999, p. 54.
- 34Murphy, op cit.
- 35Ibid.
- ³⁶Adam Penenberg, "Informercial.com," Forbes, March 8, 1999, p. 116.
- ³⁷"Yahoo!'s Broadcast Bonanza," Business Week, April 12, 1999, p. 44.

10

Radio and the Twenty-First Century

Trying to assess the future of the radio broadcasting industry is a daunting task, given the numerous twists, turns, and reinventions during the medium's first century. During radio's first hundred years of existence, the medium grew from an experimental system of sending Morse code to a multibillion-dollar entertainment and informational companion. Modes of transmission, programming, and audience uses of the medium have undergone massive shifts over the years.

There are however, trends in the past twenty years that provide at least some direction as to how the radio industry will continue to evolve during the twenty-first century. Our focus in this final chapter will be on four broad categories that, in our view, provide a road map for radio's future. These four categories are: (1) the Business of Radio, (2) Technologies Impacting Radio, (3) Globalization, and (4) Localism.

THE BUSINESS OF RADIO

Radio's resurgence as an intensive cash-flow medium attracted investor attention following the elimination of national ownership caps in the 1996 Telecommunications Act. More than at any time in its history, the radio industry truly was looked on as a business. Here are a few areas that illustrate radio's business environment.

Consolidation

Industry consolidation escalated during the 1990s, with a number of companies gobbled up in the acquisition frenzy. While the industry is dominated by a shrinking number of large companies like Clear Channel and Viacom/CBS, there is still room for further consolidation, especially involving medium and small market stations. Look for further efforts among industry players to consolidate operations, especially with the development of regional station clusters.

As mentioned in Chapter 3, the relaxation on television duopoly ownership rules will produce ripple effects for the radio industry. The new rules allow TV broadcasters to own two television stations in the same market, provided there are eight stations operated by different owners. However, the maximum number of radio stations owned varies. If an owner acquires a second TV station, he or she is limited to owning six radio stations in the market. If he or she only owns one television station, the owner is limited to owning seven radio stations in the market. As TV consolidation continues, there will be spin-off sales to allow companies to meet the new rule requirements.¹

Further ownership regulatory decisions, whether involving the FCC, Congress, or the Courts, may affect radio consolidation in the years ahead. At the time of publication, the Commission was considering further ownership modifications, especially in regards to cross-media ownership involving newspapers and broadcast stations. It is unclear how changes in cross-media ownership might affect further radio consolidation.

Syndication Marketplace

Another likely business trend is the continuing growth of the syndication market for national radio programming. This market revolves around two separate directions: individual syndicated programs and features and 24-hour format services.

In terms of individual programs, popular national talents like Stern, Limbaugh, and Schlesinger have already led to a number of other syndicated talk efforts, involving a number of hosts: Art Bell, Oliver North, G. Gordon Liddy, and others. Talk will remain an AM fixture, built around news, sports, and politics. In addition to the talk format, several morning shows from around the country emerged during the 1990s. In the Southeast, John Boy and Billy found regional success with their blend of Southern-fried humor and interest in auto racing. In the Midwest, Madcow Muller began to syndicate his shock-style morning show. And on the West Coast, KFI-AM (Los Angeles) morning team John and Ken began syndicating their morning show, which emphasizes news and politics.²

Countdown programs, such as American Top 40, American Country Countdown and other radio programming features, have become mainstays of radio programming. New features will continue to be introduced in the years ahead to complement existing formats.

Satellite-delivered formats are extremely popular among radio managers for their ability to deliver strong talent and quality programming, while reducing overhead and local personnel costs. ABC Radio Networks, based in Dallas, Texas, is the leading provider of 24-hour radio formats in the country, offering ten different formats targeted to specific demographic groups. The rise of newer radio services, such as ESPN Radio and Radio Disney, both extensions of existing national brands, have also been very successful innovations. The StarSystem, another programming service located in the South and Southeast, has targeted smaller and medium-size cities to deliver programming.³

In summary, the syndication marketplace for radio is stronger than ever, with more content available for station programmers than can be utilized by any one station. The growth in programming material in turn has made radio even more marketable, especially as an advertising medium.

Radio Marketing

Growing clusters of powerful stations offering quality programming generate sizeable audiences that can be effectively marketed to national, regional, and local advertisers. The consolidation of radio ownership will give the industry greater leverage in negotiating with national advertisers. 4 Still, with the price of all advertising mediums rising, radio remains an affordable and targeted advertising vehicle.

Building on its strength as an advertising medium, the radio industry is well positioned to maximize and expand its advertising base. During the 1990s, annual radio advertising exhibited strong double-digit growth from 1993-1998.⁵ Although data for 1999 was not available prior to publication, it was anticipated that the industry would continue to experience increases averaging around 10 to 13 percent on an annual basis. During the 1990s, radio advertising increased at a higher annual rate than advertising in newspapers and television.

But the radio industry will need to continue to emphasize its marketing strengths to advertisers at all levels. Television, newspapers, magazines, and other mediums compete for the same ad dollars as radio, along with the Internet. Not surprisingly, the Internet has quietly skipped past radio in terms of national advertising.6 Paradoxically, radio has become a preferred advertising medium for many Web startups as a fast and reliable way to build audiences. For the radio industry, the local market will remain the most efficient and lucrative category for advertising revenues.

Marketing will need to involve strong promotion efforts as well. Aside from traditional AM and FM stations, listeners now have hundreds of Internet radio stations promoting niche formats and trying to lure audiences and advertisers.8 New satellite-delivered radio services (e.g., DARS) are also trying to capture the same listeners. At a time when the potential of the radio medium is so great, the competitive marketing challenges have never been greater.

TECHNOLOGIES IMPACTING RADIO

Radio's technological capabilities in the twenty-first century are numerous, and will no doubt impact the direction of the medium. Today, radio programming can reach audiences via a number of distribution options. Traditional AM and FM broadcasting continue to be the primary avenues, but new distribution technologies have emerged. In this section of the chapter, we will focus on two areas: the Internet and the deployment of satellite-delivered digital radio services.

The Internet

Like many forms of existing media, radio stations embraced the Internet early in its diffusion. Radio stations recognized that a complementary Web page would enable the stations to extend their brand, and help in the marketing and promotion of the stations. Soon, station personnel recognized that the Web page could aid in providing another form of audience research, as well as continuous interaction with the audience through electronic mail.

The advent of streaming media provided another revolution in Internet capability. As discussed in Chapter 9, broadcast.com (now a part of Yahoo!), located in Dallas, Texas, began live Internet broadcasting with radio station KLIF. The trend caught on quickly with other radio stations, domestically and around the world. Now it was possible for anyone with an Internet connection to listen to a station anywhere in the world. And because the transmission involved only an audio channel, most household computer modems could easily reproduce the originating station's signal with little difficulty. Live Internet broadcasting became a way to extend a station's listener base, and allow for out-of-home listening for travelers as well as people living in another country wanting to listen to their "home" stations.

But Internet broadcasting would not be confined to delivering programming from existing radio stations. The Internet offered an outlet for anyone who wanted to broadcast, leading to the creation of thousands of Internet-only radio stations.9 Cyber-radio stations utilize a server with a high-speed connection and software capable of streaming audio files. The user simply needs speakers or headphones and a media player that can be downloaded for free for any home computer.

Internet-only radio stations recognize that in order to be unique, they must differentiate themselves from stations on the Web. One service, GoGaGa, epitomizes this trend. The service displays a list of all the music they play, with each song linked to an online retailer like Amazon.com, enabling the listener to purchase a song seamlessly while listening. 10 Listeners also are fed advertisements on login, something broadcast stations can't offer.

The latest innovation in Internet-related broadcasting is the development of personal radio. 11 The personal radio service utilizes thousands of digital music cuts stored on a server. In a personal radio system, the user first sets up a listener profile through an existing service. The user enters his or her music preferences, either

using a genre or selecting individual artists. By adding a zip code to the profile, the listener can also access local weather. Eventually, the services plan to offer traffic and local news information.

Internet-only radio stations and the continuing development of personal radio may attract some listeners from traditional radio stations, especially those who are male, younger, and more technologically oriented. It is unlikely these new startups will impact radio advertising in any measurable way in the immediate future. At the least, the Internet has given radio broadcasting a whole new perspective—and more possible competitors than one could imagine.

Satellite-Delivered Radio Services

Satellite-delivered radio services, labeled as DARS (Digital Audio Radio Services). have been in development for several years. Two services, Sirius Satellite Radio and XM Satellite Radio, are set to debut in 2000. Originally licensed in 1995 by the FCC, DARS has the ability to deliver CD-quality audio to either the home or the automobile via a special receiver. 12 Offered as a subscription-based service, companies licensed to provide the DARS service will offer a number of music formats for a monthly fee.

Terrestrial broadcasters fought unsuccessfully against the establishment of DARS, fearing the new services would erode local audiences. Plagued by regulatory hurdles and financing, the services are expected to debut over the next few years.

Will DARS be successful? That will ultimately be up to consumers to decide. Some argue that DARS will provide the same content available on radio for free, while others claim the superior sound quality will make the service preferable to standard radio receivers. DARS will finally enter the radio marketplace, but its longterm ability to survive remains in question.

The development of new communication technologies will continue to affect the radio industry. Eventually, radio will move to distribution in a totally digital environment, meaning broadcasters will be known as datacasters, with content being repurposed in a number of unenvisioned means. Radio has shown its ability to adapt and survive during its first century of existence. If the past is prologue to the future, we can expect radio to continue to adapt and evolve as technology requires.

GLOBALIZATION

The globalization of the media industries continues at an unprecedented pace. Exactly how globalization may affect the United States domestic radio industry remains to be seen. What is much more concrete is the influence of U.S. radio companies abroad.

During the 1990s, several radio companies began limited investment in foreign companies. In most cases, ownership interests were of a minority interest (less than 50% ownership). Clear Channel Communications has been particularly aggressive, with ownership interests in twenty-eight different countries, primarily in Western and Eastern Europe and countries in the Pacific Rim. In the case of Clear Channel, holdings include a number of outdoor (billboard) advertising companies, as well as radio operations.¹³

While it is unlikely that a U.S. "Westernization" of radio will take place around the globe, there is little doubt that the United States has influenced other countries with its development of commercial radio. Even the stoic British Broadcasting Corporation (BBC) is restructuring itself along the lines of U.S. broadcast companies. And, in the United Kingdom, commercial radio stations have doubled since the country passed a 1990 Act that provided more permissive licensing. 15

Domestic radio companies will continue to look for good investment potential in other regions of the world. While business opportunities will drive such actions, one concern is that U.S. radio's influence will result in a lack of diversity of program offerings. Ownership concentration, whether at domestic or international levels, tends to lead to homogeneous products, especially where media oligopolies exist. ¹⁶ Policymakers in other countries will no doubt monitor U.S. investment and ownership in their native countries in order to limit undue concentration.

Given the relaxation in radio ownership rules in the United States, is increased foreign ownership of U.S. radio stations likely in the twenty-first century? Currently, foreign ownership of domestic stations is limited to a minority interest. Other media industries have significant foreign ownership including newspapers, film studios, recording companies, and book and magazine publishers. If U.S. companies can invest in radio in other countries, shouldn't foreign companies be allowed to invest in radio stations operating within the United States?

Ultimately, the Congress, courts, and the FCC may tackle the emotional issue of foreign ownership of U.S. broadcast interests. Given the increasing globalization of the media industries, revamped foreign investment and ownership may become a reality in the years ahead.

LOCALISM

As discussed in Chapter 2, the advent of television in the 1950s forced radio to reposition itself as a local rather than national medium. Today, the radio broadcasting industry offers localism as its greatest asset. In the future, localism will continue to be one of the primary ingredients driving the success of the medium.

In order to exhibit a strong sense of localism, radio stations will have to establish a clear identity in their respective markets. Strong branding and promotion will be the cornerstones of building a local identity, along with good programming and sophisticated and varied research efforts. An editorial in *Broadcasting & Cable* offered sage advice on the topic of localism: "Broadcaster's edge is localism and tailoring programming to individual markets and listeners." Programming will

remain music-centered on FM. AM will continue to market talk, sports, and ethnic/ niche formats.

Regardless of the type of transmission, radio must deliver enough information needed by the respective audience to maintain listeners. Over the years, many stations abandoned news in order to reach the growing baby boomer audience. As baby boomers mature, look for more news and information to flow back into radio formats during drive times, especially those geared toward an audience age forty and higher.

During the 1980s and 1990s, many music-formatted radio stations adopted a formula radio approach. Such a format consisted of several sets of music interspersed with blocks of radio commercials, along with traffic, weather, and minimal news and information. Regardless of the type of music (e.g., country, rock, Top 40) the presentation remained the same. Formula radio meant that stations in San Francisco sounded like stations in Houston, which sounded like stations in Chicago. Missing from the medium was much in the way of creativity. Even contests sounded the same from market to market.

While imitation is the ultimate form of flattery, the most successful radio stations in the future will be those that once again find creative ways to reach and retain listeners in their local markets. This will mean constant interaction with the community, using any and all available means, such as the station's Web page, research, and even personal appearances by talent. It will mean being responsive to listener wants and needs. And it will require consistent analysis and innovation.

Even in a world of instantaneous communication and personal radio, no medium has the power to reach millions of daily commuters and office personnel like the radio. When a change in the weather is approaching people most often turn to radio. Traffic information is also easily found on the radio. And for the first bit of important news or information on a breaking story, radio is, for many people, the first stop. Why? Radio is ubiquitous, reliable, and local.

X SUMMARY

The competitive challenges facing the radio industry are numerous. Today there are more entertainment and information options available to consumers than at any point in media history. How will radio respond as an industry? Will the radio industry continue to hold an important role in society? Or will new technologies and the Internet push radio into the dreaded category referred to as "old media"?

At this particular stage in history, the radio industry finds itself financially strong and rather secure. A strong national economy coupled with low unemployment and inflation rates has also stimulated local economies, resulting in a high demand for advertising and positive cash flows. But we know the business cycle doesn't continue indefinitely on a high note. The financial good times for radio may pass. Still, the industry is in a good position to reinvest in itself, to again draw on the

innovation and creative spirit that led to the founding of radio as we know it nearly a century ago.

As the first electronic medium, radio holds a special place in the lives of its listeners. If the medium continues to develop and appreciate its relationship to its audience and the community it serves, there is no reason to think the radio industry won't be around for many more decades. The first century of radio has been colorful and remarkable. Many in the industry think the best is yet to come.

NOTES

¹See "FCC Revises Local Television Ownership Rules," available online at http://www.fcc.gov/Bureaus/Mass_Media/News_Releases/1999/nrmm9019.html

²Donna Petrozello, "Expanding Horizons," Broadcasting & Cable, June 9, 1997, p. 26.

³Katherine Yung, "New Wave," Dallas Morning News, January 10, 1999, pp. 1H, 6H.

⁴Katheryn Kranhold, "Clear Channel Deal to Further Reduce Radio Options," Wall Street Journal, October 5, 1999, p. B8.

⁵See Media Facts, available online at http://www.rab.com/station/mediafact/medfcts99/mfradio.html

6"Online Ad Spending . . ." Wall Street Journal, August 12, 1999, p. B5.

⁷Suen L. Hwang, "Old Media Get a Web Windfall," Wall Street Journal, September 17, 1999, p. B1, B4.

⁸See William M. Bulkeley, "Radio Stations Make Waves on the Web," Wall Street Journal, July 23, 1998, p. B1.

⁹Thomas E. Weber, "Web Radio: No Antenna Required," Wall Street Journal, July 28, 1999, pp. B1, B4.

¹⁰Weber, p. B4.

¹¹William M. Bulkeley, "Start-Up Wants Web Surfers to Play Tunes," Wall Street Journal, September 9, 1999, p. B8.

¹²Lynne Gross, *Telecommunications: An Introduction to Electronic Media* (New York: McGraw-Hill, 2000), p. 32.

¹³See the Clear Channel Website for current ownership information, available online at http://www.clearchannel.com

14"The New-look BBC," Economist, August 29, 1998, p. 53.

¹⁵"Commercial Radio. Switched on," available online at http://www.economist.com/archive, accessed August 11, 1999.

¹⁶See Alan B. Albarran, Media Economics: Understanding Markets, Industries and Concepts (Ames, IA: Iowa State University Press, 1996), p. 36.

¹⁷"Size Matters," Broadcasting & Cable, October 11, 1999, p. 110.

Glossary

- account executives (AES) The sales staff of a radio station. They are responsible for identifying potential clients, qualifying the clients, developing sales presentations, closing the sale, and servicing the account. AEs are also known as marketing executives or marketing consultants.
- advertising agencies The contact source for account executives who want to sell advertising time to larger retailers or manufacturers. The advertising agency may serve as a creative development center for the client by devising the marketing approach and advertising campaign for the client as well as coordinating advertising placement among various media including radio, television, and newspapers.
- amplitude modulation (AM) The modulation process for AM stations that results in variation of the amplitude or height of the carrier wave; also, the first system of broadcasting technology to develop.
- Arbitron Research The most widely used supplier of radio ratings information. The company uses a personal, seven-day diary to measure radio listening in 260 markets, with 94 markets being measured year-round.
- auditorium testing A type of programming research done by radio stations to test audience reactions and preferences for different types of music. Auditorium testing is done with a large group of subjects in a single location.
- average quarter hour (AQH) Radio listening is tracked using 15-minute increments called Average Quarter Hour (AQH); it measures an estimate of the number of people listening to a particular station during any five-minute interval in a particular daypart. Audience estimates can be expressed as AQH rating percentages or as AQH actual listener estimates in hundreds or thousands.

- Billboard A trade industry publication that tracks music sales and radio station song airplay. Available online at http://www.billboard.com/. Billboard Online & Yahoo! Broadcast.com provide a weekly audio show featuring The Billboard Hot 100 on Billboard Radio. The site allows listeners to hear the week's most popular singles and tracks as compiled from a national sample of Broadcast Data Systems radio playlists, retail store, mass merchant, and Internet sales reports.
- **brand** An umbrella term used to refer to radio station formats and their accompanying promotional images. Brand has also been used to equate station listening (usage) with preferences consumers have for other goods or services.
- call out research A type of programming research used to collect listener preferences for different types of music; it uses professional interviews to collect data from eligible respondents.
- carrier wave The frequency on which the station operates. The station's programming is placed on the carrier wave through modulation and then broadcast through the air for listener reception.
- cash flow The amount of cash that "flows" through a radio station. Cash flow is the revenues of a radio station minus expenses, taxes, depreciation, and interest. Cash flow is often used to estimate the value of a station.
- **charge back** Requiring an account executive to repay any previously paid commission in the event a client fails to pay for ad time already run and for which the account executive has already been paid.
- continuity book A list of the introductory and closing comments for any program or broadcast aired on the station; it provides background material to the announcers as well. It is not as likely to be seen today in a radio station, but stations may make programming reference material available via computer files.
- cooperative advertising or co-op advertising A shared-cost ad program involving local retailers and national manufacturers or distributors. The national company provides an advertising allowance to the local retailer, usually determined by the dollar value of the inventory purchased from the national company. This advertising allowance can then be used to buy ads to promote the national brand and the local retailer.
- cost per gross rating point The average cost for one GRP in an ad schedule; it is calculated by dividing the total cost of the schedule by the total number of GRPs.
- cost per thousand (CPM) A figure that compares the cost of reaching the targeted audience either on a single station or across different media. The simplest way to calculate cost per thousand is to divide the cost of the ad by the number of listeners (in thousands) who are expected to hear the ad.
- cume listeners A shortening that stands for *cumulative audience*, an estimate of the total number of listeners reached by a radio station during a typical week. Cume estimates indicate the level of reach or penetration in a market. Rather

- than count listeners multiple times during the day, this calculation allows the station to know how many different people listen to the station during a day.
- daypart Divisions of the broadcast day created to track radio listening and aid in program scheduling. Dayparts include morning drive, midday, afternoon drive, nighttime, and overnight. Dayparting can also refer to slight variations in the music played on the station at various times of the day.
- demand marketing As applied to radio, an audience analysis that enables station owners to determine the product listeners wanted. As television replaced radio in the 1950s as the nation's dominant entertainment medium, radio operators were forced to pay attention to what a potential listening audience segment might want to hear on the radio.
- demographics A term used to describe the characteristics of radio audience in terms of gender and age. Adults 18-49, W 18-35, M 25-54 are examples of demographic categories.
- **designated market area (DMA)** A term used by Nielsen and Arbitron to indicate concentration of listeners in a geographical market.
- diary A long-standing method of collecting audience listening data; each respondent fills out a diary (log) of daily listening for a one-week period. Diaries are collected and tabulated and used to produce a ratings report.
- digital audio radio services (DARS) A new technology enabling the distribution of satellite-delivered audio services to consumers for a monthly fee. The FCC authorized DARS service in 1995.
- **Duncan's American Radio** A radio industry research group that tracks station trading and radio listenership, and provides individual radio market reports of station ratings and revenue performance throughout the United States.
- **duopoly** Prior to 1996, regulations prevented one owner from owning another station of the same type or class within the same market. This provision was known as the "duopoly rule."
- ear leasing Radio stations' use of their programming to attract listeners and then sell access to these listeners to advertising clients. Effectively, the ad client is paying the radio station rent in order to have station listeners hear a commercial about the client's products or services.
- economies of scale A term used by economists to describe efficiencies in production and ownership. In radio, economies of scale have been realized due to consolidation, where fixed costs can be reduced by combining operations.
- **electromagnetic spectrum** Invisible rays of light. The various frequencies used by radio, television, and other means of wireless communications are part of the electromagnetic spectrum.
- Electronic Media Ratings Council (EMRC) An independent council that monitors and verifies standards for audience research methods used in the broadcasting industry.
- Emergency Broadcast System (EBS)/Emergency Alert System (EAS) A system designed to utilize the country's airwaves to deliver warnings related to

- weather, threats of war, and other catastrophes. The EAS replaced the old EBS in 1997. All radio stations are required to have working EAS equipment.
- external promotions Promotional efforts that make use of media or promotional channels other than direct on-the-air promotion. Two common forms of external radio promotion include billboard advertising and bumper stickers.
- Fairness Doctrine Repealed by the FCC in 1987, the doctrine required broadcasters to cover controversial matters of public importance and to present both sides of an issue. Failure to do so could result in a challenge to the license. Broadcasters argued that the doctrine stifled the presentation of such material rather than encouraging its presentation.
- Federal Communications Commission (FCC) The Communications Act of 1934 established the FCC to replace the Federal Radio Commission as the primary regulatory body for radio and television. The Mass Media Bureau (MMB) within the FCC regulates the television and radio stations. The Bureau issues broadcast licenses specifying the community of license, the channel, and operating power of the station. FCC rules generally do not govern the selection of programming; exceptions are: restrictions on indecent programming, limits on the number of commercials aired during children's programming, and rules involving candidates for public office.
- Federal Radio Commission (FRC) The Radio Act of 1927 established the Federal Radio Commission, the forerunner of the FCC. The FRC was given responsibility to regulate the radio industry.
- **focus groups** A type of qualitative research method; focus groups involve six to twelve subjects led by a group facilitator. Focus groups offer richer, more detailed information in contrast to survey research.
- **format** The general term used to refer to the programming aired by a radio station. Usually, the term *format* refers to music programming though all news, all talk, or all sports are common nonmusic formats.
- **formula radio** A term used to describe radio formats that cluster music together in blocks separated by commercial or promotional announcements.
- **frequency** The number of times different people hear the sales advertising message.
- **frequency modulation (FM)** The modulation process for FM stations that varies the frequency of the carrier wave.
- **general manager (GM)** A person responsible for total station operation and performance; the GM normally reports to the station's owners.
- general sales manager (GSM) A person responsible for advertising sales at a station; the GSM's staff consists of local account executives and, in some markets, national sales executives.
- gross impressions (GI) A quantitative way to compare the ad exposures delivered by a proposed ad schedule or station with another schedule or station; the actual number of impressions an ad schedule will deliver. GIs are calculated by multi-

- plying the AQH persons estimate for the particular daypart by the number of spots to be run in the daypart.
- gross ratings points (GRPs) The number of ratings points a schedule will deliver. GRPs may be calculated by dividing the Gross Impressions of an ad schedule by the market population. Another variation is to multiply the number of ratings delivered in a time period by the total number of spots to be aired in that time period.
- grossed up Adding an advertising agency commission to the cost of media advertising. To add the typical 15 percent agency commission, the constant 1.1765 is multiplied by the dollar value of the advertising purchased. The net revenue to the station is arrived at by deducting the 15 percent commission from the product.
- hot clock A pie chart showing a visual representation of one hour of the station's programming. Shown on the hot clock are approximate times when commercial breaks are taken, when particular types of songs are to be played (a current hit, new song, or oldie), and perhaps when the announcer should talk on-air (and with the help of liner phrases or positioning statements, what the announcer should say). The hot clock ensures format consistency by providing the announcer with a visual representation of the elements the listener is to hear.
- indecency A category of speech that is protected by the First Amendment. The Pacifica case defined indecent speech as that which "depicts or describes, in terms patently offensive as measured by contemporary community standards for the broadcast medium, sexual or excretory activities or organs." Over the years the FCC has issued numerous fines to stations broadcasting indecent material.
- intercept research A type of research conducted at a shopping mall or other public venue; eligible respondents are "intercepted" by researchers and asked to answer a short series of questions.
- **inventory** The commercial ad time for sale by a broadcast station. Advertising time is an absolutely perishable commodity. Unsold commercial time cannot be put into storage for sale at a later time. Failing to sell ad time means the station has forever given up the potential revenue available from its sale.
- legal identification (ID) This is required for every radio station; a legal station identification consists of call letters followed by the city of license. A station must identify itself as close to the top of the hour as possible.
- **listener demographics** A station's listener age range, gender, ethnicity, socioeconomic background, consumer spending patterns, plus a host of other qualitative variables.
- local marketing agreements (LMAs) In an LMA, one station in the market takes over the operation of another station, especially in regard to advertising sales and programming. LMAs do not involve a transfer of station ownership.
- localism The idea that stations best serve their listening audience by providing unique locally based programming that reflects the specific community of

- licensing. Ideally, *localism* means that the station is actively involved in local news coverage and in covering various issues of important public concern.
- **lowest unit charge (LUC)** The amount a radio station must charge a legally qualified candidate for public office for radio advertising.
- market Geographic coverage area that may contain several different communities or counties and even carry across state lines. This area, as covered by the signals of several radio stations and identified by a ratings service, such as Arbitron, is referred to as a "market."
- **metro** A ratings term used by Arbitron to reflect the concentration of radio listeners in a given market.
- microradio A new class of radio stations approved by the FCC. Microradio stations would operate at reduced power of 10 or 100 watts. Commercial stations aggressively oppose microradio.
- **modulation** The process by which a broadcast station's programming is added to the carrier wave. AM stations use *amplitude modulation* and FM stations use *frequency modulation*.
- **multitasking** A term used to describe multiple managerial duties that are often done in a simultaneous fashion.
- music hook A term used in radio programming research; subjects listen to different segments or hooks of music and are asked to indicate their preferences regarding likes and dislikes.
- music library Recordings available for on-air playback by a radio station. Generally, stations attempt to limit the number of songs that may appear on-air by conducting listener tests to determine which selections appeal most favorably to their listeners.
- music log A computer-generated listing of the material to be played on the radio station during a 24-hour period. The music log is prepared from the available recordings in the station's music library. Music-scheduling software can be used to categorize selections by tempo, sex of performer, age of recording, or other factors.
- **music utility** The idea that a radio station only serves as a jukebox or source for music to listeners. Music utility cannot produce a viable radio station.
- noncommercial radio Stations, primarily FM, operating between 88.1 and 91.9 MHz. These stations are prohibited by the FCC from airing commercial ads though many noncommercial stations do air underwriting announcements.
- **obscenity** Speech that is not protected by the First Amendment. In *Miller vs. California*, the Supreme Court defined obscene material using three criteria: (1) The average person, applying contemporary community standards, would find that the material appeals to the prurient interest; (2) the material describes or depicts sexual conduct in a patently offensive manner; and (3) taken as a whole, the material lacks serious literary, artistic, political, or scientific value.
- **office manager** An umbrella title for the person who handles a variety of administrative responsibilities for a radio station. The office manager usually oversees the reception and secretarial positions and assists with accounting functions.

- on-air promotions These can be as simple as announcer-delivered commentary about the station or as complex as a multitrack audio production complete with a variety of sound effects, music segments, and radio production techniques. Stations commonly use on-air promotion to encourage listeners to keep listening for longer periods of time.
- optimum effective scheduling (OES) An ad scheduling strategy based on audience turnover. A calculation that uses station turnover (T/O) (cume audience + AQH) times a constant, 3.29, to determine the number of spots an advertiser should schedule each week.
- payola Illegal compensation, usually offered to program directors or radio announcers, to make sure certain recordings are played over the air. Payola was a widespread practice in radio during the 1950s.
- **personal interviews** A type of radio research that involves individual, in-person interviewing. It provides rich data, but is tedious to gather and analyze.
- **personal radio** A term used to describe Internet capability of creating a listener's ideal radio station by selecting type of music, artists, and other information.
- persons using radio (PUR) An estimate of the number of people in a given market who have their radio sets turned on.
- **plugola** An employee's promotion over the air of a particular product or service in which the employee has a direct or indirect interest. Plugola is a violation of the sponsorship identification requirement.
- preset listeners Radio listeners who identify six to eight "favorite" stations and set the preset buttons on the radio to these stations. While one or two of the presets may garner most of the listener's attention, when those stations are no longer airing programming the listener wants, the listener may select another preset station.
- program log A computer-generated listing of all the programs and commercials to be aired each day on the radio station. The program log is normally produced by the radio station's traffic department, which handles commercial billing and related business transactions. Announcers are responsible for airing the scheduled commercials and programs during their shift. The program log may take the form of a printed document or it may appear only as an electronic file on a computer screen.
- public radio The identifier used primarily by noncommercial affiliates of National Public Radio to position their programming with listeners and the general public. All AM and FM radio broadcasts in the United States are noncoded signals and can be received by listeners without paying a listener or receiver license fee. In this respect, all U.S. radio stations are public.
- Radio Advertising Bureau (RAB) An industry organization that provides research and other resources to member radio stations to help in the marketing and selling of radio advertising.
- Radio All-Dimensional Audience Ratings (RADAR) The service that provides ratings estimates for national radio networks and syndicated national radio programming.

- Radio and Records A trade publication specializing in business, regulatory, and programming news of the radio industry. Available online at http://www.rronline.com/
- rate card The list or schedule of ad charges for a radio station, television station, or other media outlet. Rate cards can be quantity-based cards, offering a price discount for increasing the number of ads purchased, or grid cards, which base ad price according to client demand for a diminishing inventory of ad time.
- rating An estimate of the number of people listening to a radio station at a given time, based on the total population of people with radio sets.
- reach The number of different people who are exposed to an advertisement or who have an opportunity to hear the spot.
- reverse cost per thousand The maximum rate per spot that a competing station can charge to remain as cost-effective as a competitor.
- reverse gross impressions A term used when calculating the number of spots needed on a competing station to match another's Gross Impressions. To calculate, divide the station's Gross Impressions by the AQH Persons on a competing station.
- sample Subjects selected for a research study; in a ratings period the sample consists of those listeners provided with a diary to record radio listening.
- scanner listeners Radio listeners who jump from one station to the next. Rather than being loyal to a group of preset stations, these listeners hit the scan or seek button on their radio whenever they hear objectionable programming. They are less concerned with who (what station) they are listening to and more concerned with what (music or other programming) they are listening to. The music utility of radio plays a more prominent part in their listening habits.
- scarcity The concept on which early broadcast regulation was based. Because there were initially few frequencies available for broadcasting, coupled with many who sought a license, regulation was needed to ensure that broadcasters would operate to serve the public interest, convenience, or necessity.
- **share** An estimate of the number of people listening to a radio station at a given time, based on the total population of people using radio (PUR).
- shortwave broadcasting Broadcast services that use the high-frequency portion of the electromagnetic spectrum. Shortwave signals can cover vast geographic areas during both daytime and nighttime broadcasts. Often, shortwave signals provide government radio programming through external broadcasting services, and such programming is intended to be listened to by people outside of the home country. Voice of America (VOA) and British Broadcasting Corporation World Service (BBC World Service) are examples of external broadcasters.
- simulcasting Simultaneously airing the same programming on more than one station owned by an individual or station group. Historically, simulcasting meant airing the same programming on an FM station and an AM station. Once FM gained listener dominance, the situation often was reversed.

- **spot** Any announcement, commercial, station promo, or public service announcement that is scheduled for airplay.
- station manager Person responsible for the overall operation of the organization; reports directly to the general manager. In smaller markets, the duties of the station manager and general manager are often combined into a single position.
- time spent listening (TSL) An estimate of the amount of time a listener spends with a given station; the higher the TSL the more loyal the listener is to a station.
- total survey area (TSA) The term used by Arbitron to represent the total market area surveyed for a ratings report. The TSA is the largest geographical area, followed by the DMA and the Metro.
- value-added selling The practice of marketing a client's products through on-air giveaways, remote broadcasts, or other creative approaches that join the client brand with the station brand/image, in addition to airing a traditional flight of spot ads.
- War of the Worlds The 1938 CBS Mercury Theater of the Air broadcast on Halloween night that many listeners believed was an attack by the planet Mars. Directed and performed in part by Orson Welles, the broadcast demonstrated the power of radio drama and led to a public apology by CBS.



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