Encyclopedia of Radio 3-
Volume Set
The Museum of Broadcast Communications
Encyclopedia of Radio 3-Volume Set

Editor

CHRISTOPHER H. STERLING

Consulting Editor

MICHAEL C. KEITH
CONTENTS

Editor’s Introduction vii
Acknowledgments xii
General Bibliography: A Radio Reference Shelf xiv
Advisers and Contributors xxix
List of Entries xxxvii

Volume 1, entries A–E 1-901

Volume 2, entries F–N 902-1730

Volume 3, entries O–Z 1731-2790

Contributor Affiliations 2628
Index 2647
Radio means many distinct things to different people. For some, radio primarily means the “golden age” of the 1920s through the 1940s when network radio headlined the only broadcast service and provided a variety of programs for all tastes. For such listeners, radio’s importance is in its programs and stars, its role as the on-the-spot recorder of history, and in its carriage of period politics, sports, and talk. (It is this period of old-time radio [OTR] that is hotly collectible—books, program premiums, recordings, magazines, and equipment of the era.) For others radio means the vibrant business of the early 21st century with huge and growing chains of stations under common ownership dependent on syndicated programs and heavy advertising. And for still others “radio” does not mean broadcasting at all, but instead refers to the transmission of voice and data, amateur or “ham” station operators, or even reception of music and talk programs on the internet. Each of these meanings, none mutually exclusive, illustrates part of radio’s pervasive role in society.

Indeed radio has become part of our daily background, there but “not there” for many if not most of us. As I write this, classical music is playing from the local public radio station, for I am one of those who work better with such soothing background. And you need not look farther than the nearest teenager listening with headphones (probably while talking on the phone, monitoring television or a video, and “doing homework” on a computer) to realize how omnipresent yet invisible radio can be. And notice how often you hear radio playing in the workplace, in your car, or through ever-present headphones on public transit—and at all hours.

While most present-day media commentary focuses on television (or, increasingly, the internet), such commentary, whether praise or censure, was first directed at radio, including the fear that violent or suspenseful programs would overly excite children’s imaginations, creating untold effects. Radio also established most elements of present-day electronic media industry structure. Much of what we both enjoy and bemoan today, in other words, was accomplished (or inflicted) by radio long before television arrived.

For example, that American broadcasting would depend on advertising was pretty much decided by the late 1920s, despite several concerted efforts (before and after passage of the benchmark 1934 Communications Act) to open up greater opportunities for other funding options. In turn, advertising support meant that American radio would be primarily a medium of entertainment (to attract the largest possible audience for that advertising) rather than the public or cultural service that developed in nations with other approaches to financial support. That national networks would dominate radio news and entertainment in the years before the coming of television (which would later and very quickly adopt the same pattern) was a fact by the early 1930s, with only minor modifications over the years. That government would have to selectively license broadcaster access to limited spectrum space was obvious by the early 1920s; even so, that process became fully effective only in 1927. And that government would have little
to do with American radio program content (though this has again varied over time) was made clear in the laws of 1927 and 1934, reinforced by numerous court decisions in the years to follow.

On the other hand, most other nations made quite different decisions on how best to implement the promise of radio broadcasting. Certainly best known and most copied is the British Broadcasting Corporation, whose decades of invaluable public service programming were instilled from the beginning by its legendary founding director-general, John Reith. Most other industrial nations, usually copied by their colonies, also adopted a no-advertising, public-service model of radio that relied on public monies or a receiver tax to support operations. These systems became showcases of literature, music, drama, and erudite conversation—but often carrying very little light entertainment comedy, popular music, or serial drama. By 1940, after two decades of radio broadcasting development, such systems largely dominated the world of broadcasting.

When commercial television began in the United States in the 1940s, the video medium was able to develop quickly (despite its higher costs for all concerned) because radio had already established the commercial structure of the industry, the relationship between government and broadcasters, and the wealth of program formats to exploit. Television added pictures and new generations of stars, but the heavy lifting of designing an electronic media system had already been accomplished by radio. When television developed elsewhere in the 1940s and 1950s, it mirrored the public-service model of national radio broadcasting systems, though often accepting advertising to alleviate the visual medium’s higher costs.

Only relatively late in the 20th century did world radio and television systems come to more closely resemble the American model of commercial support and popular-appeal programming. The reasons for this trend were and remain many and varied, though economic pressures were at their core. Because of the growing dominance of American radio program and operational methods worldwide, this encyclopedia emphasizes U.S. radio practices even as it attempts to treat the emergence and development of radio throughout the world.

What Is Included Here

Given radio’s long history, how can any one reference work, even one with more than 1,500 pages and in three volumes, include all of its many roles and meanings? What should be “in” and what must be left out? How much emphasis should be given to technology, economic factors, programs, key personnel, and organizations? How best to demonstrate the many national approaches to radio, often sharply different from practice in the United States?

What you hold in your hands represents our cooperative, compromise answer to such questions. Our approach is international in scope, though with a strong emphasis on the United States and a secondary emphasis on key English-speaking nations including Britain and Canada (volumes such as these could be assembled for many other countries). Other regional entries provide at least brief comparative comment on most other systems.
of and approaches to radio broadcasting. We have tried to provide an ideal “first-stop” reference source for most aspects of American and English-language radio broadcasting, with sufficient coverage of other radio broadcasting traditions to provide context. Our aim has been, within some established limits of space, to be as inclusive as possible.

There are perhaps more topical or subject (as opposed to people and program) entries in this work than appear in the companion three volumes on television published in 1997 (and under revision as this is written). Partly this reflects the interests of those editing and writing both reference works, but the difference is due as well to the fact that we have had far more time to consider radio—especially that so-called “golden age” before television—and its many roles within society. Some of what is described here has been history for a half century or more, plenty of time to develop a broad appreciation of what remains important.

…and What May Seem Not To Be

Our focus in these volumes is entirely on radio broadcasting, we do not cover other applications of the technology. Aside from occasional side references, you will find little here on radio defined more broadly: as, for example, the primary means of transmission for such services as telephone, television, data, and more recent mobile services.

Even within the realm of radio broadcasting, however, we have had to make numerous and often difficult choices on what to include and how. There is a growing number of reference books (among them several other encyclopedias—see the “reference shelf” listing that follows) about radio in the United States and elsewhere; the editors, in consultation with the advisers listed on page xxix, obviously did not wish merely to parallel such works. After the decision to limit our coverage to broadcasting, we agreed to focus substantially on the United States, which has both the oldest and the most extensive radio broadcasting service in the world. But that still left a host of choices to be made: who and what to include and what to leave out or mention only in passing. Our advisory board for this project was invaluable in helping to hone the focus of these volumes. Long discussions both face-to-face and by email helped to further define our direction.

A few examples suffice to illustrate the point. Should we list and discuss a famous comedian under his name or only within his program? It was easy enough to decide in the case of Fred Allen, Jack Benny, or Edgar Bergen where a man’s name (there were far fewer women for much of the period covered here than is the case today) and program title were nearly one and the same, but proved harder with Eddie Cantor or Ed Wynn where program titles varied. We have adopted what seemed the most likely way a user would seek the information, and relied on extensive cross-referencing and our comprehensive index to cover other possibilities. Some types of radio personalities—sportscasters and news commentators, for example—reflect compromises where a few (e.g., Red Barber or Edward R.Murrow) receive their own entries and others (Daniel Schorr, for example) are more briefly covered in paragraphs within larger subject entries. Likewise with radio’s many different formats: we have provided entries on the most
important, but some minor or splinter formats are treated within larger rubrics. Readers are encouraged to consult the index to locate such treatment.

Despite our best efforts, however, we have without a doubt missed some favorites or given insufficient emphasis to others. We welcome comments—though with a bit of trepidation after nearly five years of effort by a lot of folks—and will keep track of suggestions of new topics (and authors) for possible future revisions.

Christopher H. Sterling

*Washington, D.C.*
This page intentionally left blank
ACKNOWLEDGMENTS

As was the case with the companion *Encyclopedia of Television* (1997), many people have helped make the three volumes of the *Encyclopedia of Radio* a viable project. I am grateful first of all to Bruce DuMont, the founder and president of the Museum of Broadcast Communications, for entrusting the overall editorial task to me. He was most persuasive when I expressed concern about the very scope of what he proposed.

In the actual process of designing and editing this project, Michael Keith and Paul Schellinger were absolutely indispensable. Michael C. Keith of Boston College served as our consulting editor and was my comrade in arms on this project, serving as consulting editor throughout, or as he put it, on call 24/7/365—and he was. Mike’s knowledge of all things radio is unsurpassed, and he constantly got us out of scrapes and errors and urged us on. When we needed an author or had to have an essay checked, he was there with useful input and suggestions. Mike and I co-authored several entries, and I learned more from him every time. This is a far better product for Michael’s devotion to it.

Paul Schellinger, the project’s final and most important editor at Fitzroy Dearborn, worked hard during the final two years or more to get the many pieces into final form, following up with authors, keeping the undersigned cool, and seeing the project through to completion. And he did it with grace and diplomacy—which was often required! Just keeping track of who was doing what—or for that matter, not doing what they had promised—was a huge undertaking. The project most certainly could not have been completed without Paul. And he never once had to throw himself on those bamboo beanpoles under his second-story study window because of “just one more” edit or addition—though he got close.

Paul’s predecessor Steve LaRue was another steady rock for much of this multi-year process—and had a sense of humor to boot. He handled all the correspondence and record-keeping without which no such reference work can be assembled. Likewise Carol Burwash, Steve’s predecessor, worked with the undersigned to get the project initially designed and under way. You would not have these books in your hands without the steady efforts of these three Fitzroy Dearborn editors.

Dan Wingate, then an archivist with the MBC staff, played a central role in gathering the many photographs. This involved constant contacts with owners of photographs, obtaining permission to use the selected images and seeking photos we needed and could not find. We also appreciate the help of Chuck Howell and others at the Library of American Broadcasting who helped greatly with photographs and wrote several entries as well.

Our board of advisers was most helpful, especially at the opening stages of the project in 1998 as we first began to design what would be included, how long entries should be, and initial potential authors to contact. Taken as a group, the board had radio knowledge in depth and breadth, many having years of experience dating back to the golden age of American network radio. Several members played special roles, helping to round up
authors for specific categories of entries and then assisting in editing their work. **Graham Mytton** was invaluable as our man in London, gathering authors for virtually all of the British entries. Likewise, **John D. Jackson** assisted greatly with the English and French authors who contributed material on Canada. **Ed Shane** not only assisted as a board member but contributed several important entries himself—as did his spouse. And Ed came back several times offering to do more and to scare up authors—or lean on those who were late. **Michele Hilmes** was especially helpful in suggesting graduate students and other colleagues as contributors. **Peter Orlik** helped a great deal at the very beginning of the process, authoring the first entries that were used as samples for others. **Horace Newcomb** set a high standard to follow with his editorship of the *Encyclopedia of Television*—and helped to train the undersigned when I served on his editorial board.

Finally, we **all** owe thanks to the more than 240 individual authors who have written the 670 essays that make up this radio reference. They undertook all the original research, did the writing, and were generally a patient lot, accepting editorial suggestions and queries and working to tighten up their essays as we neared publication. They have waited a while to see their efforts in print, and I hope they are pleased.

Christopher H. Sterling

*Washington, D.C.*

September 2003
GENERAL BIBLIOGRAPHY: A RADIO REFERENCE SHELF

This listing supplements the many more specific “further reading” references appearing with individual entries. It covers those books, periodicals, and internet web sites that are broad in coverage and could be cited under many different entries. This is by no means a comprehensive listing (which would take a volume in itself), but rather points out some of the more useful reference works, monographs, and other sources relating to the history of radio, emphasizing recent titles. An asterisk (*) before a citation indicates an especially important title.

A. Books

1. Bibliographies, Statistics


Sterling, Christopher H., and George Shiers, History of Telecommunications Technology: An Annotated Bibliography, Lanham, Maryland: Scarecrow Press, 2000. Includes radio (chapter 9) and television and related topics—some 2,500 sources in all.


2. Directories and Yearbooks


Broadcasting and Cable Yearbook, New York: Cahners/Broadcasting, 1935- (annual). One of the industry’s standards, this includes a directory of all radio stations plus some statistics and listings of ancillary parts of the industry (networks, station reps, consultants).

Duncan’s Radio Market Guide, Cincinnati, Ohio: Duncan’s American Radio Inc. (annual). Offers a page or two on each Arbitron radio market with comparative social and business statistics, and information on operating radio stations in each.


M Street Radio Directory, Nashville, Tennessee: M Street Journal (annual). Sections include station listings by state and city of license, alphabetized call letters (both current and former), frequency, and market. Lists nearly 400 radio markets (including a list of the stations serving each market, and their formats and frequencies.

The Radio Power Book, New York: Billboard, 1995- (annual). One of six different Billboard directories, this includes information on major radio stations, specifically music stations, radio program syndicators, and on record labels plus Arbitron information from the top 100 markets.

Radio Yearbook, Chantilly, Virginia: BIA Financial Network (annual). Profiles all 261 Arbitron radio markets and some 10,000 stations, with full directory information on each station. Combines ratings and technical information. Includes metro, ownership, and key station contact information, listing of vendors and service providers.


3. Radio’s Technical Development


Inglis, Andrew F., *Behind The Tube: A History of Broadcasting Technology and Business*, Boston: Focal Press, 1990. Includes chapters on both AM and FM broadcasting, placing the technology of both within the larger context of industry development.


*Barnouw, Erik, *A History of Broadcasting in the United States*, 3 vols., New York: Oxford University Press, 1966–70. Classic and well-written narrative; the first two volumes take the story to 1953 and focus most on radio. These could have been cited as “further readings” in most of the American entries in the encyclopedia.


*Douglas, Susan J., *Inventing American Broadcasting, 1899–1922*, Baltimore: Johns Hopkins University Press, 1987. Readable yet scholarly analysis of the combination of technological innovation, institutional development, and both visions and business realities that led to the radio broadcasting business in the early 1920s. Chapters focus on Marconi as inventor-hero, the inventors’ struggles for technical distinction, wireless telegraphy in the Navy, the ups and downs of wireless as a business, the important role of amateur operators prior to World War I, initial radio regulation, the rise of military and corporate control, and the social construction of broadcasting.


*Landry, Robert J., *This Fascinating Radio Business*, Indianapolis: Bobbs-Merrill, 1946. Broad popular survey of the radio industry just before television entered the scene, written by the editor of the *Variety* trade paper, and including numerous references to history and technical factors.


comprehensive one-volume survey available—arranged by periods and then by topic. Extensive historical tables, technology glossary, and bibliography.


5. Pictorial Histories


6. The American Radio Industry


*Keith, Michael C., The Radio Station*, 5th edition, Boston: Focal Press, 2000. All aspects of operating and programming the modern commercial station sales format, news, research, promotion, traffic and billing, production, engineering and consultants. A standard, this has appeared in several languages.


*State of the Radio Industry*, Fairfax, Virginia: Broadcast Industry Analysis (annual). Focuses on the important trends, regulatory and technological impacts concerning revenue and finance, ownership, top radio ownership groups, and technical changes.

7. American Radio Programming

For specific people, programs, or formats, see references under relevant entries; included here are only those titles that range widely.


DeLong, Thomas A., *The Mighty Music Box*, Los Angeles: Amber Crest Books, 1980. A broad history of all types of music on the air from initial classical pioneers through the various formats of the so-called golden years (into the 1950s).

Dunning, John, *On the Air: The Encyclopedia of Old-Time Radio*, New York: Oxford University Press, 1998. Clearly the definitive directory of American network and major syndicated programs from the 1920s into the 1960s. Often includes full credits and, for important programs, quite lengthy discussion. This is another of the handful of invaluable books that could have been cited in “further reading” for all of the U.S. program entries.


8. **American Radio Journalism**

For particular radio journalists or programs, see relevant entries.


9. **American Radio Audiences and Research**

medium in the 1920s, shortwave broadcasting and listening in the 1930s (“DXing”—the emphasis here), and wartime use of shortwave services.


10. American Radio Regulation


*Warner, Harry P., *Radio and Television Law and Radio and Television Rights*, 2 vols., Albany: Matthew Bender, 1948–53. While originally designed for practicing attorneys, these are now valuable for their very extensive historical material.

11. American Regional and State Radio Histories

For specific station histories see relevant entries.


For radio broadcasting in specific countries or regions, see relevant entries.

Avery, Robert K., *Public Service Broadcasting in a Multichannel Environment: The History and Survival of an Ideal*, New York: Longman, 1993. Useful survey (see also Tracey, below) of how such systems are under pressure in an increasingly commercial age.


Tracey, Michael, *The Decline and Fall of Public Service Broadcasting*, New York: Oxford University Press, 1998. With Avery (see above), this is a fine survey of how decades-old systems are being forced to change.


B. Periodicals

Included here are only titles focused on radio that were currently publishing as of 2003. *Airplay Monitor* (1993-present, weekly). Published in four different versions by the music industry weekly *Billboard*, this is aimed at music stations and offers information on trends, music rotations, and the like. The different editions cover country, Top 40, rock, and urban formats.

*BE Radio* (1995-present, weekly). Covers television and radio technical topics and news, from the publishers of the monthly *Broadcast Engineering*.


*Duncan’s American Radio* (1976-present, quarterly and annual). Provides business information and data on radio stations in the form of market guides, directories, ratings analyses, and revenue reports.

*Gavin* (1958-present, weekly). Focuses on radio station formats, music research, music playlists, and artists.

*Inside Radio* (1975-present, weekly). Includes radio industry news, station sales, management changes, and stock quotations, plus commentary (and hyperbole) by publisher Jerry DelColliano.

*Journal of Radio Studies* (1991-present, biannual). Covers both history and current issues in scholarly journal format—the first and only one devoted to radio.

*M St. Journal* (1984-present, weekly). Offers FCC news and proceedings, station sales, format changes. *M Street Daily* is also a daily fax doing basically the same thing as *Inside Radio* without the commentary. It adds a weekly page of sales tips and a weekly update from Washington and the FCC.

*R&R: Radio & Records* (1971-present, weekly). Radio programmers’ main trade publication includes music charts for specific formats, industry tip sheets and interviews, and parallels for music playlist comparisons.


C. Selected Radio Web Sites

Websites are both useful—for what they offer; and maddening—they disappear too easily. As of Spring 2003, these are some of the more interesting sites, virtually all of which offer many further references.
1. General Reference and Link Sites

Library of American Broadcasting at the University of Maryland
http://www.lib.umd.edu/LAB/
One of the better academic archives of all types of material on radio and television.

Michael Keith’s Broadcast Links
http://www.michaelkeith.com/links.htm
Extensive list, heavily focused on radio both here and abroad, including domestic and international stations, services, periodicals, and radio personalities and programs.

Museum of Broadcast Communications in Chicago
http://www.museum.tv/index.shtml
The sponsor of this encyclopedia, the Museum has extensive displays and listening areas, and houses the Radio Hall of Fame.

2. History of Radio Technology Web Sites

Antique Radio Page by D.J.Adamson
http://members.aol.com/djadamson/arp.html
Designed for those who collect old radios, this includes books, articles, links, classified ads and more.

The Broadcast Archive by Barry Mishkind
http://www.oldradio.com/
Includes equipment and programming sections and links, plus information about the FCC, old stations, and links to other archives and organizations.

United States Early Radio History by Thomas H.White
http://earlyradiohistory.us/
A wonderfully useful site which offers full copy of a variety of pre-1920 articles and documents plus the author’s valuable own research on early radio station list publications, call-letter policies, and the like.

World of Wireless
http://home.luna.nl/~arjan-muil/radio/history.html
A Dutch site (in both English and Dutch), takes the story through World War II and includes details of the owners’ own collection.

3. “Old Radio” Program Web Sites

Virtually any radio entertainment or news program is now the subject of a site or sites of its own—listed here are some more general “master” sites that link to a host of others.

Old Time Radio
http://www.old-time.com/
Includes many logs of program series, links to other sites, information on collecting programs.

Olde Time Radio
http://www.oldetimeradio.com/
Allows one to listen to episodes of about a dozen old radio dramatic programs.

Radio Days
http://www.otr.com/index.shtml
Information on many old network radio programs (including some complete logs), OTR (old time radio) chat room and FAQs and more.

4. Modern Radio Program Sites

There are countless such sites today. What follows are some useful compendium sites allowing access to the many resources, including internet stations, by a variety of means.

Radio-Locator: Formerly MIT List of Radio Stations on the Internet by Theodric Young
http://www.radio-locator.com/
Allows user search by station call letters, format, city, state (or Canadian province), or nation. Including more than 5,000 stations and adding more weekly, this claims to be the most comprehensive such site available.

BRS Web Radio
http://www.web-radio.com/
Similar to the site above.

5. International Radio Sites

This is but a sample of useful English-language sites concerning radio broadcasting in nations other than the United States.

Asian-Pacific Broadcasting Union
Useful gateway to a variety of Asian broadcasting networks and systems, as well as regional broadcast information of all kinds.

Mike’s Radio World: Live Radio on the Web by Mike Dean
http://www.mikesradioworld.com/oceana.html
Arranged by region of the country and then city. The author provides similar sites for New Zealand and some other nations as well.

British Broadcasting Corporation
http://www.bbc.co.uk/
Includes all aspects of the London-based but world-famous broadcaster, including the World Service.

Canadian Broadcasting Corporation
http://cbc.radio-canada.ca/hmen/
The English-language home-page for the Canadian CBC services, including history and other information.

Commonwealth Broadcasting Association
http://www.cba.org.uk/
Organization of public service radio and television broadcasters in the British Commonwealth, useful for a number of African nations especially.

The Offshore Radio Guide
http://www.offshore-radio.de/
Sub-titled “watery wireless websites,” this includes all types of information on past and present pirate (offshore ship-based or artificial-island based) radio stations, with links to many of them.
Virgin Radio
http://www.virginradio.co.uk/
One of the many local commercial radio service providers in Britain.
United States Government International Radio Broadcasting
http://www.ibb.gov/
The opening page for the International Broadcasting Bureau, which is the controlling body for the VOA, RFE, RL, Radio Free Asia, and Radio Marti. Provides gateways to each of the individual services.
This page intentionally left blank
ADVISERS

Stanley R. Alten  
*Syracuse University*

Frank J. Chorba  
*Washburn University*

Lynn A. Christian  
*International Radio Consultant*

Ed Cohen  
*Clear Channel Broadcasters*

Norman Corwin  
*Radio Playwright*

Susan J. Douglas  
*University of Michigan*

James E. Fletcher  
*University of Georgia*

Robert S. Fortner  
*Calvin College*

Stan Freberg  
*Radio Producer*

Donald G. Godfrey  
*Arizona State University*

Marty Halperin  
*Pacific Pioneer Broadcasters*

Gordon H. Hastings  
*Broadcasters’ Foundation*

Robert Henabery  
*Radio Producer*

Robert L. Hilliard
Emerson College

Michele Hilmes
_University of Wisconsin, Madison_

Chuck Howell
_Library of American Broadcasting University of Maryland_

Stanley Hubbard
_Hubbard Communications_

John D. Jackson
_Concordia University_

Jack Mitchell
_University of Wisconsin, Madison_

Graham Mytton
_BBC World Service (ret.)_

Horace Newcomb
_Director, Peabody Awards_
_University of Georgia_

Peter B. Orlik
_Central Michigan University_

Ed Shane
_Shane Media Services_

Marlin R. Taylor
_XM Satellite Radio_
CONTRIBUTORS

Michael H. Adams
Alan B. Albarran
Pierre Albert
Craig Allen
Steven D. Anderson
Larry Appelbaum
Edd Applegate
Sousan Arafeh
John S. Armstrong
Philip J. Auter
Robert K. Avery
Glenda R. Balas
Mary Christine Banwart
Warren Bareiss
Ray Barfield
Kyle S. Barnett
Douglas L. Battema
Mary E. Beadle
Christine Becker
Johnny Beerling
Alan Bell
Louise Benjamin
ElDean Bennett
Marvin Bensman
Jerome S. Berg
Rosemary Bergeron
William L. Bird, Jr.
Howard Blue
A. Joseph Borrell
Douglas A. Boyd
John Bradford
L. Clare Bratten
Mark Braun
Jack Brown
Michael Brown
Robert J. Brown
Donald R. Browne
John H. Bryant
Joseph G. Buchman
James A. Freeman
Elfriede Fürsich
Charles F. Ganzert
Ronald Garay
Philipp Gassert
Judith Gerber
Norman Gilliland
Donald G. Godfrey
Douglas Gomery
Jim Grubbs
Joanne Gula
Paul F. Gullifor
Linwood A. Hagin
Donna L. Halper
Tona J. Hangen
Margot Hardenbergh
Jeffrey D. Harman
Dorinda Hartmann
Gordon H. Hastings
Joy Elizabeth Hayes
John Allen Hendricks
Alexandra Hendriks
Ariana Hernandez-Reguant
Robert L. Hilliard
Jim Hilliker
Michele Hilmes
John Hochheimer
Jack Holgate
Herbert H. Howard
Chuck Howell
Kevin Howley
W. A. Kelly Huff
Peter E. Hunn
John D. Jackson
Randy Jacobs
Glen M. Johnson
Phylis Johnson
Sara Jones
Lynda Lee Kaid
Stephen A. Kallis, Jr.
Steve Kang
Michael C. Keith
Ari Kelman
Colum Kenny
John Michael Kittross
Frederica P. Kushner
Brian T. Pauling
Manjunath Pendakur
Douglas K. Penisten
Stephen D. Perry
Patricia Phalen
Steven Phipps
Joseph R. Piasek
Gregory G. Pitts
Mark Poindexter
Tim Pollard
Robert F. Potter
Alf Pratte
Patricia Joyner Priest
Dennis Randolph
Lawrence N. Redd
David E. Reese
Patton B. Reighard
Andre Richte
Edward A. Riedinger
Terry A. Robertson
Melinda B. Robins
America Rodriguez
Eric W. Rothenbuhler
Richard Rudin
Joseph A. Russomanno
Anne Sanderlin
Erica Scharrer
Steven R. Scherer
Karl Schmid
Clair Schulz
Ed Shane
Pam Shane
Mitchell Shapiro
Jason T. Siegel
Ron Simon
B. R. Smith
Ruth Bayard Smith
Lynn Spangler
David R. Spencer
David Spiceland
Laurie R. Squire
Michael Stamm
Christopher H. Sterling
Will Straw
Michael Streissguth
Mary Kay Switzer
Rick Sykes
Marlin R.Taylor
Matt Taylor
Herbert A.Terry
Richard Tiner
Regis Tucci
David E.Tucker
Don Rodney Vaughan
Mary Vipond
Randall Vogt
Ira Wagman
Andrew Walker
Peter Wallace
Jennifer Hyland Wang
Richard Ward
Mary Ann Watson
Brian West
Gilbert A.Williams
Sonja Williams
Wenmouth Williams, Jr.
Roger Wilmut
Stephen M.Winzenburg
Richard Wolff
Roosevelt “Rick” Wright, Jr.
Edgar B.Wycoff
Thimios Zaharopoulos
LIST OF ENTRIES

Volume I
A.C.Nielsen Company
Adult Contemporary Format
*Adventures in Good Music*
Advertising
Advertising Agencies
Affirmative Action
Africa
Africa No. I
African-Americans in Radio
Album-Oriented Rock Format
*Aldrich Family*
Alexanderson, E.F.W.
All India Radio
All News Format
All Night Radio
*All Things Considered*
Allen, Fred
Allen, Mel
Alternative Format
Amalgamated Broadcasting System
Ameche, Don
American Broadcasting Company
American Broadcasting Station in Europe
*American Family Robinson*
American Federation of Musicians
American Federation of Television and Radio Artists
American School of the Air
American Society of Composers, Authors, and Publishers
American Telephone and Telegraph
American Top 40
American Women in Radio and Television
America’s Town Meeting of the Air
Amos ’n’ Andy
AM Radio
Antenna
Arab World Radio
Arbitron
Archers
Armed Forces Radio Service
Armstrong, Edwin Howard
Asia
Association for Women in Communications
Audience
Audience Research Methods
Audimeter
Audio Processing
Audio Streaming
Audiotape
Auditorium Testing
Australia
Australian Aboriginal Radio
Automation
Automobile Radios
Autry, Gene
Awards and Prizes
Axis Sally
Barber, Red
Barnouw, Erik
Bell Telephone Laboratories
Benny, Jack
*Beulah Show*
Beville, Hugh Malcolm
*Big D Jamboree*
Biondi, Dick
Birch Scarborough Research
Blacklisting
Black-Oriented Radio
Black Radio Networks
Block, Martin
Blore, Chuck
Blue Book
Blue Network
Blues Format
Board for International Broadcasting
*Bob and Ray*
Border Radio
Bose, Amar G.
Brazil
Brice, Fanny
Brinkley, John R.
British Broadcasting Corporation (BBC)
British Broadcasting Corporation: BBC Broadcasting House
British Broadcasting Corporation: BBC Local Radio
British Broadcasting Corporation: BBC Monitoring
British Broadcasting Corporation: BBC Orchestras
British Broadcasting Corporation: BBC Radio Programming
British Broadcasting Corporation: BBC World Service
British Commercial Radio
British Disk Jockeys
British Forces Broadcasting Service
British Pirate Radio
British Radio Journalism
Broadcast Education Association
Broadcast Music Incorporated
Broadcasting Board of Governors
Brokerage in Radio
Brown, Himan
Cable Radio
Call Letters
Can You Top This?
Canada
Canadian Radio Archives
Canadian Radio Policy
Canadian Radio Programming
Canadian Broadcasting Corporation
Canadian Radio and Multiculturalism
Canadian Radio and the Music Industry
Canadian Radio Drama
Canadian Radio Satire
Canadian News and Sports Broadcasting
Canadian Talk Radio
Cantor, Eddie
Capehart Corporation
Capital Radio
Captain Midnight
Car Talk
Cavalcade of America
Censorship
CFCF
CHED
Chenault, Gene
Children’s Novels and Radio
Children’s Programs
CHUM
Churchill, Winston Spencer
Citizen’s Band Radio
CKAC
CKLW
Clandestine Radio
Clark, Dick
Classical Music Format
Classic Rock Format
Clear Channel Communications Inc.
Clear Channel Stations
Cold War Radio
College Radio
Collingwood, Charles
Columbia Broadcasting System
Columnists
Combo
Comedy
Commentators
Commercial Load
Commercial Tests
Communications Act of 1934
Community Radio
CONELRAD
Conrad, Frank
Conrad, William
Consultants
Contemporary Christian Music Format
Contemporary Hit Radio/Top 40 Format
Control Board/Audio Mixer
Controversial Issues
Cooke, Alistair
Cooper, Giles
Cooper, Jack L.
Cooperative Analysis of Broadcasting
Copyright
Corporation for Public Broadcasting
Corwin, Norman
Coughlin, Father Charles
Country Music Format
Cowan, Louis
Critics
Crosby, Bing
Crosley, Powel
Cross, Milton J.
Crutchfield, Charles H.
Crystal Receivers
Cuba
Daly, John Charles
Davis, Elmer
Dees, Rick
De Forest, Lee
Delmar, Kenneth
Demographics
Deregulation of Radio
Desert Island Discs
Developing Nations
Diary
Digital Audio Broadcasting
Digital Recording
Digital Satellite Radio
Dill, Clarence Cleveland
Disk Jockeys
Documentary Programs on U.S. Radio
Dolby Noise Reduction
Donahue, Tom
Don Lee Broadcasting System
Dr. Demento
Drake, Bill
Drake, Galen
Drama on U.S. Radio
Drama Worldwide
Drew, Paul
*Duffy’s Tavern*
Duhamel, Helen
Dunbar, Jim
Dunlap, Orrin E.
Durante, Jimmy
Durham, Richard
DXers/DXing
Early Wireless
*Earplay*
*Easy Aces*
Easy Listening/Beautiful Music Format
*Edgar Bergen and Charlie McCarthy*
Editorializing
Education about Radio
Educational Radio to 1967
Edwards, Bob
Edwards, Ralph
Election Coverage
Ellis, Elmo
Emergencies, Radio’s Role in
Emergency Broadcast System
Emerson Radio
“Equal Time” Rule
European Broadcasting Union
Evangelists/Evangelical Radio
Everett, Kenny
Volume 2

Fadiman, Clifton
Fairness Doctrine

*Family Theater*

Fan Magazines
Far East Broadcasting Company
Farm/Agricultural Radio
Faulk, John Henry
Federal Communications Commission
Federal Radio Commission
Female Radio Personalities and Disk Jockeys
Fessenden, Reginald

*Fibber McGee and Molly*

Film Depictions of Radio
Fireside Chats
First Amendment and Radio
Fleming, Sir John Ambrose

*Flywheel, Shyster, and Flywheel*

FM Radio
FM Trade Associations
Foreign Broadcast Information Service
Formats
France
Freberg, Stan
Frederick, Pauline
Freed, Alan
Freed, Paul
Free Form Format
Frequency Allocation

*Fresh Air*

Friendly, Fred
Fritzsche, Hans
Gabel, Martin
Gambling, John
*Gangbusters*
Gay and Lesbian Radio
General Electric
*George Burns and Gracie Allen Show*
German Wireless Pioneers
Germany
Gillard, Frank
Godfrey, Arthur
*Goldbergs*
Goldsmith, Alfred Norton
*Goon Show*
Gordon, Gale
Gospel Music Format
*Grand Ole Opry*
*Great Gildersleeve*
Greece
*Green Hornet*
Greenwald, James L.
Ground Wave
Group W
*Gunsmoke*
Ham Radio
Harvey, Paul
Hate Radio
*Hear It Now*
Heavy Metal/Active Rock Format
Herrold, Charles D.
Hertz, Heinrich
Hicks, Tom
High Fidelity
Hill, George Washington
Hill, Lewis
Hindenburg Disaster
Hispanic Radio
Hoaxes
Hogan, John V.L. “Jack”
Hollywood and Radio
Hooperatings
Hoover, Herbert
Hope, Bob
Horror Programs
Hottelet, Richard C.
Howe, Quincy
Hulbert, Maurice “Hot Rod” Jr.
Hummer, Frank and Anne
I Love a Mystery
Imus, Don
Infinity Broadcasting
Inner Sanctum Mysteries
Intercollegiate Broadcasting System
International Radio Broadcasting
International Telecommunication Union
Internet Radio
Ireland
Isay, David
Israel
Italy
Jack Armstrong, the All-American Boy
Jamming
Japan
Jazz Format
Jehovah’s Witnesses and Radio
Jepko, Herb
Jewish Radio Programs in the United States
Jingles
Joyner, Tom
Judis, Bernice
Kaltenborn, H.V.
Karmazin, Mel
Kasem, Casey
KCBS/KQW
KCMO
KDKA
Keillor, Garrison
Kent, A.Atwater
Kesten, Paul
KFFA
KFI
KGO
KHJ

*King Biscuit Flower Hour*

King, Larry
King, Nelson
Kirby, Edward M.
Klauber, Edward A.
Kling, William
KMOX
KNX
KOA
KOB
KPFA
KRLA
KSL
KTRH
Kuralt, Charles
KWKH
Kyser, Kay
KYW
Landell de Moura, Father Roberto
Lazarsfeld, Paul F.
*Let’s Pretend*
Lewis, William B.
Liberty Broadcasting System
Licensing
*Lights Out*
Limbaugh, Rush
*Little Orphan Annie*
Localism in Radio
Local Marketing Agreements
Lodge, Oliver J.
London Broadcasting Company
*Lone Ranger*
Long, Huey
Lord Haw-Haw
Lord, Phillips H.
Low-Power Radio/Microradio
*Lum ‘n’ Abner*
*Lux Radio Theater*
Mankiewicz, Frank
*Ma Perkins*
*March of Time*
Marconi, Guglielmo
Market
*Marketplace*
Markle, Fletcher
Maxwell, James Clerk
*Mayflower Decision*
McBride, Mary Margaret
McDonald, Eugene F., Jr.
McGannon, Don
McLaughlin, Edward F.
McLendon, Gordon
McNamee, Graham
McNeill, Don
McPherson, Aimee Semple
Media Rating Council
Mercury Theater of the Air
Metromedia
Metropolitan Opera Broadcasts
Mexico
Middle of the Road Format
Milam, Lorenzo
Minnesota Public Radio
Monitor
Morgan, Henry
Morgan, Robert W.
Mormon Tabernacle Choir
Morning Edition
Morning Programs
Morrow, Bruce “Cousin Brucie”
Motorola
Murray, Lyn
Murray the K
Murrow, Edward R.
Museums and Archives of Radio
Music on Radio
Music Testing
Mutual Broadcasting System
Narrowcasting
National Association of Broadcasters
National Association of Educational Broadcasters
National Association of Educational Broadcasters Tape Network
National Barn Dance
National Broadcasting Company
National Federation of Community Broadcasters
National Public Radio
National Radio Systems Committee
National Religious Broadcasters
National Telecommunications and Information Administration
Native American Radio
Netherlands
Network Monopoly Probe
New Zealand
News
News Agencies
Nightingale, Earl
Non-English-Language Radio in the United States
North American Regional Broadcasting Agreement
Nostalgia Radio

**Volume 3**

Oboler, Arch
Obscenity and Indecency on Radio
Office of Radio Research
Office of War Information
Oldies Format
*One Man’s Family*
Osgood, Charles
Our Miss Brooks
Owens, Gary
Ownership, Mergers, and Acquisitions
Pacifica Foundation
Paley, William S.
Payola
Pay Radio
Peabody Awards and Archive
Perryman, Tom
Philco Radio
Phillips, Irna
Playwrights on Radio
Poetry on Radio
Politics and Radio
Polk, George
Popov, Alexander
Portable Radio Stations
Prairie Home Companion
Premiums
Press-Radio War
Production for Radio
Programming Research
Programming Strategies and Processes
Progressive Rock Format
Promax
Promenade Concerts
Promotion on Radio
Propaganda by Radio
Psychographics
Public Affairs Programming
Public Broadcasting Act of 1967
“Public Interest, Convenience, or Necessity”
Public Radio International
Public Radio Since 1967
Public Service Radio
Pulse Inc.
Pyne, Joe
Quaal, Ward L.
Quiz and Audience Participation Programs
RADAR
Radio Academy
Radio Advertising Bureau
Radio in the American Sector (Berlin)
Radio Authority
Radio City
Radio Corporation of America
Radio Data System
Radio Disney
Radio Free Asia
Radio Free Europe/Radio Liberty
Radio Hall of Fame
Radio Luxembourg
Radio Martí
Radio Monte Carlo
Radio Moscow
Radio Sawa/Middle East Radio Network
Receivers
Recording and Studio Equipment
Recordings and the Radio Industry
Re-Creations of Events
Red Channels
Red Lion Case
Regulation
Reith, John C.W.
Religion on Radio
Renfro Valley Barn Dance
Retro Formats
Rock and Roll Format
Rogers, Will
Rome, Jim
Roosevelt, Eleanor
Russia and Soviet Union
Sarnoff, David
Scandinavia
Schechter, A.A.
Schulke, James
Science Fiction Programs
Sevareid, Eric
“Seven Dirty Words” Case
Shadow
Shaw, Allen
Shepard, John
Shepherd, Jean
Shirer, William L.
Shock Jocks
Shortwave Radio
Siemering, William
Siepmann, Charles A.
Silent Nights
Simon, Scott
Simulcasting
Singers on Radio
Situation Comedy
Skelton, Red
Sklar, Rick
Smith, Kate
Smulyan, Jeffrey H.
Soap Opera
Social Class and Radio
Social and Political Movements
Soft Rock Format
Sound Effects
Soundprint
South America
South Pacific Islands
Sportscaster
Sports on Radio
Stamberg, Susan
Stanton, Frank N.
*Star Wars*
Station Rep Firms
Stereo
Stereotypes on Radio
Stern, Howard
Storer, George
Storz, Todd
Striker, Fran
Subsidiary Communications Authorization
*Suspense*
Sustaining Programs
Swing, Raymond Gram
Syndication
Taishoff, Sol
Talent Raids
Talent Shows
*Talk of the Nation*
Talk Radio
Taylor, Deems
Taylor, Marlin R.
Technical Organizations
Telecommunications Act of 1996
Television Depictions of Radio
Ten-Watt Stations
Terkel, Louis “Studs”
Tesla, Nikola
*Theater Guild on the Air*
*This American Life*
Thomas, Lowell
Thomas, Rufus
Tokyo Rose
Topless Radio
Totenberg, Nina
Tracht, Doug “Greaseman”
Trade Associations
Trade Press
Transistor Radios
Tremayne, Les
Trout, Robert
Underground Radio
United Fruit Company
United Nations Radio
United States
United States Congress and Radio
United States Influences on British Radio
United States Navy and Radio
United States Presidency and Radio
United States Supreme Court and Radio
Urban Contemporary Format
Vallee, Rudy
Variety Shows
Vatican Radio
Vaudeville
Vic and Sade
Violence and Radio
Virtual Radio
Voice of America
Voice of the Listener and Viewer
Vox Pop
WABC
Walkman
War of the Worlds
WBAI
WBAP
WBBM
WBT
WBZ
WCBS
WCCO
WCFL
WDIA
WEAF
Weaver, Sylvester (Pat)
Wertheimer, Linda
Westerns
Westinghouse
Westwood One
WEVD
WGI
WGN
WHA and Wisconsin Public Radio
WHER
White, Paul
White, Wallace H.
Williams, Bruce
Williams, Jerry
Williams, Nat D.
Wilson, Don
Winchell, Walter
WINS
Wire Recording
WJR
WLAC
WLS
WLW
WMAQ
WNBC
WNEW
WNYC
Wolfmanjack
Women in Radio
WOR
World Radiocommunication Conference
World War II and U.S. Radio
WQXR
Wright, Early
WRR
WSB
WSM
WTOP
WWJ
WWL
WWVA
WXYZ
Wynn, Ed
Yankee Network
You Bet Your Life
Your Hit Parade
Yours Truly, Johnny Dollar
Zenith Radio Corporation
A.C.Nielsen Company

Developing Radio Ratings
From 1942, to 1964, the A.C.Nielsen Company was a primary provider of U.S. radio ratings. The company pioneered the commercial use of mechanical and then electronic meter devices to automatically record which stations listeners were tuning their receivers to.

Origins
Arthur C.Nielsen (1897–1980) founded his marketing company in 1923 after serving briefly as a naval officer in World War I and working with two Chicago companies. With six employees and $45,000 in capital from Nielsen’s former fraternity brothers, the company specialized in performance surveys of industrial equipment. The company went bankrupt twice in its early years. A decade later, Nielsen expanded his service by launching a continuous market research service, the Nielsen Drug Index, to chart the retail flow of specific products. The Nielsen Food Index soon followed. Both were based on the same premise (which was later applied successfully to broadcast ratings): carefully develop a sample of stores and visit them periodically to measure unit sales through audits of purchase invoices and shelf stock. When projected regionally or nationally, these data provided a measure of sales that could be related directly to marketing efforts.

Nielsen entered the radio audience measurement business at the request of clients who found the food and drug indexes useful guides and desired the same assistance in purchasing radio advertising time. In 1936 Nielsen acquired the rights to a mechanical device developed by two Massachusetts Institute of Technology professors, Robert Elder and Louis Woodruff. The “Audimeter” made a graphic record on a filmstrip, providing a continuous record of radio receiver use—when it was on and to which station(s) it was tuned—over a month-long period. These early meters were both costly and cumbersome, especially as the tape had to be picked up by Nielsen personnel before the tabulation of results could begin. The tapes were then shipped to a Chicago plant where they were “read” by specially designed machines. After modifications to the meter, their use was subject to intense experimentation for four years in several Midwestern states.
Radio Ratings

The Nielsen Radio Index (NRI) ratings service, based on the meter system, was introduced commercially in December 1942, in competition with the then-dominant “Hooperatings,” which used telephone surveys of sample homes. A key advantage of the Nielsen meter was that its sample (initially just 800 homes in the east-central portion of the U.S.) was not restricted to telephone-owning homes; this was important at a time when upward of a third of homes in some areas lacked the instrument. By 1946 the NRI had expanded service to some 1,100 homes over most of the country. NRI also introduced an improved meter with a mailable tape (it provided measures over two weeks) to speed delivery of the resultant ratings and to render personal staff visits to Nielsen sample homes unnecessary. The streamlined process—which could measure four separate radio receivers—allowed expansion of meter-based ratings to both FM listening and television watching.

By early 1949, the NRI sample had expanded to cover virtually all of the country except for the Mountain time zone, which was especially expensive to serve. In early 1950 Nielsen purchased the Hooper national radio and fledgling television ratings services (Hooper continued local radio market ratings for several years). By this point, Nielsen’s “methodology, financial position, organization and widespread industry acceptance rendered him nearly invincible” (Beville, 1988). A year later, the NRI sample was up to 1,500 homes—and its charges to advertisers and broadcasters had nearly doubled. But these were national (network) ratings, not local-market measurements.

The Nielsen Station Index (NSI) debuted in 1954 to measure household use of both radio and television on a local market basis. This service was not audimeter based, but rather combined the use of traditional diaries (in which audience members recorded their listening time) with a “Recordimeter” device, which signaled with light flashes and a buzzer when listeners should make a diary entry and at the same time kept a rough measure of when the receiver was on. This crude meter helped to validate the diary information provided. And the diary could provide what no meter then could—demographic information on the gender and age of the person listening. In 1959 computers were first applied to Nielsen ratings processing and analysis. By the early 1960s, NSI was measuring radio listening in more than 200 markets. But its seeming market dominance would be short-lived, for, as Hugh Beville writes,

in 1962 Nielsen discontinued quarter-hour ratings because of declining radio listening levels and the rapidly increasing number of radio stations. This cost many client cancellations, which sparked the NSI decision to abandon radio. Not only was television seriously diminishing prime-time radio audiences, but the advent of automobile and portable receivers, plus many new independent stations, was rapidly changing basic radio listening patterns. In 1963 the local radio service was discontinued (Beville, 1988).

Contributing to the end of Nielsen radio ratings was a series of congressional hearings into the ratings for both radio and television. Nielsen became a central target in those hearings, in part because of methodological questions about some of the company’s
means of ratings data collection. Nielsen’s system measured only home viewing, not portables. The out-of-home audience, as it became known, grew with the movement to the suburbs and the use of the automobile. In response to the changing radio audience, Nielsen created an Audimeter to be installed in automobiles. However, when his clients were unwilling to support the investment costs needed to upgrade, he decided to quit the radio business. The Nielsen Company decided to focus its investment efforts on the greater returns potential from television ratings. The end of Nielsen’s radio services was a key factor leading to development of RADAR national radio ratings.

Later Years

After leaving the radio ratings business, Nielsen continued to develop its national television network and local-market ratings services. It introduced overnight (“instant”) television meters in major markets in the early 1960s and slowly expanded the process to other cities and network ratings. In 1987 Nielsen introduced its still-controversial “people meter,” which could measure TV receiver tuning as well as who was tuning in. With Arbitron’s departure from television ratings in the late 1990s, Nielsen became the only source of both national and local-market television ratings.

When the elder Nielsen retired in 1976, A.C. Nielsen, Jr., became the company’s leader. In 1984 he sold the firm to Dun and Bradstreet, which in 1998 split the marketing and media research aspects of the company. The latter was sold to Lucent Technology and then spun off to a new corporate owner, Cognizant Corporation, in mid-1998. At the end of 1999, Nielsen Media Research was purchased by a Dutch company, VNU NV.

KAREN S. BUZZARD AND CHRISTOPHER H. STERLING

See also Arbitron; Audience Research Methods; Audimeter; Cooperative Analysis of Broadcasting; Hooperatings; RADAR

Further Reading

Nielsen, Arthur Charles, “Two Years of Commercial Operation of the Audimeter and NRI,” Journal of Marketing (January 1944)


**Active Rock Format. See Heavy Metal/Active Rock Format**

**Adult Contemporary Format**

Adult Contemporary (AC) music emphasizes a mixture of modern day (contemporary) and older popular hit singles.

The AC format has its origins in the arrival and eventual permanence of rock and roll as a music form in the United States during the late 1950s. According to Hyatt (1999), radio stations in the United States at that time wanted to keep airing current popular hits, a staple format that had already attracted listeners for decades. However, these stations did not want to play rock and roll and tried to find a way to keep the popular hits genre without having to play songs with a rock beat. Thus, they turned to popular songs that lacked the “heavy” sounds of rock and roll. These tunes became known by those in the radio industry as “easy listening” or “middle of the road.” Hyatt refers to Adult Contemporary as being synonymous with both terms.

Beginning in the 1960s, *Billboard* magazine created a new chart listing the top records considered easy listening and middle of the road, in addition to its pop, rhythm and blues, and country lists of popular songs. *Billboard* gave several names to this chart throughout the 1960s, which listed the top 20 (and during some years the top 15 to 25) singles. These names included “Easy Listening,” “Pop-Standard Singles,” and “Middle-Road Singles.” By 1965 the magazine had settled on “Easy Listening” to describe the chart. Artists listed on this chart included music industry veterans such as Dean Martin, Frank Sinatra, Nat King Cole, and Andy Williams. By the late 1960s, folk artists such as Peter, Paul, and Mary and Simon and Garfunkel had hits on the “Easy Listening” list. The chart also included instrumentals by Herb Alpert and the Tijuana Brass, film composer Henry Mancini, and Mason Williams during the late 1960s and early 1970s. Also during this period, Hyatt notes, “fewer people who considered themselves easy listening fans were requesting previous favorites like Frank Sinatra and Ed Ames.” More notably, crossover between the “Easy Listening” and “Pop” lists started to occur at this time, with artists such as the Carpenters and Bread releasing mellow, rock-type songs that were listed on both charts.
“Easy Listening” music grew in popularity; *Billboard* expanded the chart, lengthening the list from the top 40 singles to the top 50 in 1973. Keith (1987) points out that this genre appealed to the same type of audience who listened to stations featuring soft and mellow rock music. Additionally, during the late 1970s, the number of soft and mellow rock listeners declined as the disco format grew in popularity and as the number of hit music stations increased: “It was out of this flux that the AC format emerged in earnest” (Keith, 1987). *Billboard* renamed the “Easy Listening” chart in 1979, when it became known as “Adult Contemporary.” During the next 14 years, the list’s length fluctuated between 40 and 50 hit singles of the genre. In 1996 the chart came to list the top 25 singles (Hyatt, 1999).

During the 1980s, the AC format became the nation’s most widespread, with its target audience encompassing the 25 to 49 age group, especially women, which made it appealing to advertisers as well. By the time of AC’s maturation, its audience base consisted of adults who had composed the teen listenership of Top 40 radio in the early 1970s. AC, also referred to as lite or soft rock, drew in the thirty-something listener by offering “popular, upbeat music without the harshness that often accompanies rock” (Keith, 1987). Typical artists with top AC hits during the 1980s included Lionel Richie, Billy Joel, Whitney Houston, and Phil Collins. Artists popular during the 1970s also hit the chart, such as Cher, Elton John, Barry Manilow, and Barbra Streisand.

Regarding the programming of the AC format, stations that employ the genre place greater emphasis on the music, thus minimizing disc jockey chatter. AC stations might describe themselves as “soft rockers” or as “hot, soft, lite, bright, mix or variety”; the phrase “continuous soft rock favorites of yesterday and today” serves as a common line in promotional spots (MacFarland, 1997). The music mix itself combines contemporary singles with hits from the past, though these generally do not include true “oldies.” Called “recurrents,” these older songs typically have just left the current chart and are usually between six months and two years old (Howard, Kievman, and Moore, 1994). Halper (1991) contends that AC music directors must keep up with the newest adult pop artists, such as those presented on VH1, the slightly more mature version of MTV, the cable music channel.

AC stations present chart toppers, both current and potential, and recurrents in blocks or sweeps, which can last as long as 28 minutes of uninterrupted music. Announcers usually follow these sweeps with recaps of song titles and artists, and commercials are limited to four or five per cluster (MacFarland, 1997). AC stations also may feature contests, all-request hours, programs that feature hits from a particular decade, and lifestyle-oriented news. As with other music-oriented formats, news takes a secondary position, although it is usually presented during drive time. Some stations feature strong on-air personalities, especially in the morning, and an upbeat delivery style similar to the Contemporary Hits Radio and Top 40 formats.

By the mid-1990s, AC came in second to country as the most popular format in the United States, even though the number of stations featuring this format dropped between 1989 and 1994. Artists with hits on the *Billboard* AC chart during the 1990s included Mariah Carey, Michael Bolton, and previous hitmakers such as Elton John and Eric Clapton. AC hits of the late 1990s exemplified the soft/lite rock, “easy listening” sounds of early AC, a key characterization of this adult-oriented radio format, as embodied in the chart-topping singles of Canadian singer Celine Dion, who headed the list of all artists
with songs spending the most weeks at number one on *Billboard’s* AC chart (65, 19 of which were with one song [Hyatt, 1999]).

ERIKA ENGSTROM

*See also* Contemporary Hit Radio Format/Top 40; Easy Listening/Beautiful Music Format; Middle of the Road Format; Soft Rock Format

**Further Reading**


---

**Adventures in Good Music**

**Classical Music Program**

Created by Karl Haas in 1959, *Adventures in Good Music* is one of the longest running and most widely acclaimed classical music programs in radio broadcast history. *Adventures* is syndicated in more than 200 U.S. cities. The U.S. Armed Forces network beams the program to U.S. bases on all continents, and 37 Australian Broadcasting Corporation stations broadcast the show. The program is translated into Spanish in Mexico City, causing the one-hour program to run an hour and a half. And in Germany, at the request of the South German Broadcasting Corporation (Suddeutscher Rundfunk), *Adventures* is available in German under a specially formatted, select series of presentations. The program is also recorded in French for the Canadian Broadcasting Corporation (CBC).

Since 1970, Cleveland classical radio station WCLV has supervised syndication of *Adventures* through its subsidiary, Seaway Productions. Each new syndicated program—recorded by producer and host Karl Haas in his New York studio—is transmitted via Seaway Productions to a domestic satellite that beams the program to stations across the United States. Elsewhere, stations receive the program on magnetic tape reels that are duplicated at WCLV and mailed in advance of program dates.
Karl Haas began his lifetime involvement with classical music at the age of six in his hometown, Speyer-on-the-Rhine, Germany, where he studied piano under the guidance of his mother. At the age of 12, he was performing in a piano trio with friends. As a young man, Haas studied music at Germany’s University of Heidelberg. At the onset of Nazi tyranny in the 1930s, Haas fled to Detroit, Michigan, where he studied at the famed Netzorg School of Music and commuted from Detroit to New York to study with the legendary pianist Artur Schnabel.

Haas’ radio career began in 1950 at Detroit station WWJ, where he was under contract to host a weekly preview of concerts performed by the Detroit Symphony. His program caught the attention of the CBC, which offered him the position of conducting a chamber orchestra and performing piano recitals for a weekly program. Based on the phenomenal popularity of his Canadian show, CBC requested that Haas incorporate a commentary about his music into the program. Following audiences’ favorable response to his lively narratives, in 1959 Detroit radio station WJR hired Haas to develop his own daily one-hour music-plus-commentary program—and Adventures in Good Music was born.

The format of Adventures has remained nearly the same since its debut. Each program is fashioned around a central theme, punctuated and illustrated with musical selections and enhanced by knowledgeable and often witty commentary originated by Haas. One program may highlight the best of Bach, and yet another may challenge listeners to “Name the Composer” in a musical mystery teaser. Still other programs may seek to understand and explain the impact of humor in music or how music is relevant to current events.

In creating his Adventures calendar, Haas explores both the traditional and the unconventional. A sequence from a typical month commenced with a program honoring the anniversary of Chopin’s birthday. By midweek, “In Every Sense of the Word” offered an exploration of the five senses and their musical equivalents. Haas scheduled a traditional St. Patrick’s Day salute on March 17. Then, he finished off the month’s menu with an unconventional study of “When in Rome...” featuring works by non-Italian composers based on Italian culture.

As an active performer on the recital concert tour circuit, Haas has held a series of biannual “live” Adventures in Good Music programs at New York’s Metropolitan Museum of Art since 1977. Adventures has twice been awarded the coveted George Peabody Award for excellence in broadcasting. Haas has received numerous awards in recognition of his outstanding contributions to radio and for furthering the appreciation of classical music. The French Government presented him with the Officer d’academie and Chevalier de l’ordre des arts et lettres awards. In Germany he received the prestigious First Class Order of Merit. In 1991 Haas was awarded the National Endowment for the Humanities’ Charles Frankel Award. Additionally, Haas was honored with the National Telemedia Award and has received eight honorary doctorates. In March 1995 Haas was the first classical broadcaster to be nominated for induction into the Radio Hall of Fame in Chicago.

Continuing his broadcast effort to educate and entertain listeners to the joys of classical music, Haas authored the refer
Karl Hass, *Adventures in Good Music* Courtesy Karl Haas


ELIZABETH Cox

*See also* Classical Music Format

**Producer/Creator**

Karl Haas

**Programming History**

Syndicated by WCLV, Cleveland, Ohio 1959–

**Further Reading**


Advertising

Advertising specifically refers to paid commercial announcements aired by a radio station. Although commercials may sometimes seem distracting to listeners, radio stations from the earliest days recognized that there had to be a way for a station to pay its operating expenses, and by the late 1920s radio stations in the United States had adopted commercial advertising.

Origins

Advertising on radio began amid controversy, as many public figures and some station operators initially felt the new medium should not depend on advertiser support. Secretary of Commerce Herbert Hoover and others believed radio should not be allowed to let advertising invade listeners’ homes (although newspapers and magazines had been doing just that for decades). But as there was no other practical means of supporting operating costs, advertising on the air gradually attracted greater support.

The American Telephone and Telegraph (AT&T)-operated New York City station WEAF is generally credited with selling the first radio advertisement (what the telephone company owner termed “toll broadcasting”), although other outlets may have made similar sales at about the same time. On 28 August 1922, the Queensboro Corporation spent $100 for a 15-minute commercial message on WEAF touting a new real estate venture. The same message was repeated for five days and again a month later, resulting in many apartment sales. But despite early sales to an oil company and American Express, paid advertising on the station caught on slowly, for too little was known about radio’s sales potential.

The critical turning point came in 1927–28 when several trends combined to increase acceptance of radio as an advertising medium. Among them were the development of national networks (the National Broadcasting Company [NBC] published its first pamphlet touting radio advertising in early 1927); the reduction of interference (thanks to the Federal Radio Commission [FRC]); better and less-expensive radio receivers (which led to growing audiences); the first scientific audience research on radio; the recognition by pioneering advertisers of what radio could accomplish as a sales medium; the growing interest of advertising agencies (the first book on radio advertising was published in 1927); and the general acceptance by the public of advertising as the means to pay for entertainment programming.

Radio Advertising Expands

The Depression brought about an important change in radio advertising. Commercials became more direct, intent on getting listeners to commit to a purchase and focusing on prices. Some program-length advertisements were accepted by stations hard-pressed to stay in business, as was barter advertising (exchange of station time for goods the station or its personnel could use). Advertising agencies began to develop expertise in radio, and
station representative firms began to appear in the early 1930s. Radio’s portion of all advertising grew from about two percent in 1928 to nearly 11 percent in 1932.

By the mid-1930s, advertising agencies were not only selling most of radio network time but were increasingly producing the programs themselves. This control continued into the early years of television. About 60 percent of all radio advertising was placed with networks (primarily NBC-Red and the Columbia Broadcasting System [CBS]) and their owned stations, with the other 40 percent going to regional and local advertising on several hundred other stations. Daytime advertising focused on soap opera audiences, whereas evening or prime-time advertising helped to support the comedy, drama, and variety programs that attracted the largest audiences. Many advertiser names appeared in program titles to emphasize their support (and control). Most advertising revenue went to the most powerful stations in larger cities.

World War II brought great prosperity to radio as advertisers flocked to buy time when newspaper and magazine advertising was limited by paper rationing. Changes in tax laws served to encourage advertising expenditure of funds that would otherwise be taxed up to 90 percent. Such “ten-cent dollars” filled radio’s coffers and led to sharp declines in sustaining (not advertiser-supported) program time. Many companies producing war goods advertised to keep their names before the public, and they often supported highbrow programming with limited (but important) audiences.

Radio’s post-war years were marked by a shift away from network advertising (because of television competition) and a growth of “spot” campaigns, in which advertisers would buy time on key stations in selected markets. By 1952 local radio advertising reached half of the medium’s total time sales. But far more stations were sharing the advertising pie, thus sharply increasing competition. Radio also became a more direct competitor with local newspapers. Despite these trends, overall radio advertising sales increased each year, and, perhaps ironically, helped to support the expansion of television.

FM radio was a minor player in advertising sales for its first several decades. Only in the 1960s did FM outlets begin to see success in their quest for advertisers, thanks to independent programming, stereo, and a growing audience interested in quality sound. One FM station in Los Angeles experimented with an all classified-ad format but quickly failed. By about 1980, FM became the largest radio medium in terms of listeners, and soon among advertisers as well.

Still, the overall growth in radio station numbers meant that many stations were barely surviving, and a substantial proportion actually lost money in many years. Competition among stations, and between radio and other media, became tighter. Listeners noted the gradual increase in time devoted to advertising messages, and “clutter” (multiple messages played consecutively) became an issue.

**Types of Announcements**

In addition to entertainment programming, radio stations generally air commercials, station promotional announcements (promos), non-revenue generating announcements intended to encourage further radio listening, and public service announcements (PSAs), which air in support of not-for-profit organizations (ranging from the American Red
Cross to a local civic group). All four of these categories are generally referred to as spots and range up to 60 seconds in length each.

Commercials are played in blocks or sets sometimes consisting of six or more announcements at a time. Depending on spot lengths, a commercial break might consume five continuous minutes of airtime. More than $19.5 billion was spent on radio advertising in the United States in 2002; about three-fourths of that total was spent on local advertising. When the advertising is sold effectively—based on the station’s listening audience and program approach—a listener may benefit by receiving worthwhile consumer information.

For the potential advertiser, a radio station is in 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. The job of radio advertising is to provide the ears of listeners who will hear the ad buyer’s message and then visit the store or otherwise obtain the product or service advertised.

Sales Department

A sales manager or general sales manager supervises day-to-day station sales operations and helps make revenue projections for the station. The members of the sales staff are usually called account executives (AEs), although some stations may refer to them as marketing executives or marketing consultants.

It is the job of account executives to prospect for potential clients, develop client presentations, secure advertising buys, and service the account. Servicing includes ensuring that ads run when they should, updating ad copy as needed, and, in some smaller markets, collecting payment. Radio account executives are usually paid according to their sales performance. AEs may be paid a straight commission or a percentage of the sales dollars they generate. The latter compensation plan carries a strong incentive for the salesperson to produce results, but it also means the AE has little financial security.

Another approach is to pay the account executive a “draw” against commission. The draw enables the AE to receive minimum compensation based on anticipated sales. Once this minimum is reached, additional compensation is paid through sales commissions. If the AE is paid a commission based on advertising sold—rather than advertising revenue collected from clients—and later has a client who defaults on a bill, the AE 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. For this reason, many stations pay account executives based on advertising revenue collected rather than advertising sold.

As with any electronic medium, the biggest problem stations face is inventory management. For any station, “inventory” refers to the number of commercials the station has available for sale. Advertising time is a perishable commodity. Any commercial inventory not sold 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, nor can stations effectively place additional commercials in their broadcast schedule. Airing more spots may create a short-term revenue increase, but commercial
clutter is cited by listeners as one of the biggest distractions to radio listening. A decline in audience will consequently lessen the station’s effectiveness in selling future advertising time.

The radio industry publication *Duncan’s American Radio* estimates that radio listening in 2000 was at its lowest level in 20 years. *The Wall Street Journal* cited reasons for decreased listening: a survey of 1,071 respondents by Edison Media Research found listener perceptions of increased ad clutter on many stations. Another study found commuters who owned a cell-phone reported less listening to the radio than a year earlier.

**Benefits and Disadvantages of Radio Advertising**

Radio advertising, when compared with television, cable, newspaper, or magazine advertising, offers the advertiser some unique advantages. Over the course of a typical week, nearly everyone listens at least briefly. Radio reaches more than three-fourths of all consumers each day and about 95 percent of all consumers during a typical week. That exceeds the number of newspaper readers and television viewers. The typical person spends about three hours listening to radio on an average weekday, almost always while doing something else (especially driving).

There are, of course, disadvantages to advertising on radio. It is virtually impossible to buy advertising on just one or two radio stations and still meet an advertiser’s marketing needs. The multitude of stations in most markets and their specialized formats (and thus relatively narrow audiences) often mean an advertiser must purchase time on multiple stations in the same market. Radio is sometimes considered a “background” medium. Listeners often tune-out commercials or, even worse, tune to another station when commercials air. Where people listen to the radio—in cars for example—often makes it difficult for consumers to benefit from such information 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 large, a client may think an ad campaign involves overspending for uninterested listeners.

The first job of the sales staff is to help clients understand how effective radio is when compared with competing advertising media. The second and more difficult job is to sell advertising time on a specific station. Proliferation of radio stations and continued fragmentation of audiences has made it vital for stations to market a station brand to both listeners and advertisers. Advertisers are no longer buying based solely on a station’s audience. They are aware of the listener demographic profile and the station’s on-air presence, which includes announcers, music, and promotional events. Listener demographics refers to listener age range, gender, ethnicity, socioeconomic background, consumer spending patterns, and a host of other qualitative variables.

Any advertiser must be concerned with both the formal and the hidden costs of purchasing radio time. The most obvious expense is the stated cost of the time, expressed either as actual dollars charged or in terms of cost per thousand listeners. Hidden cost refers to the quality or nature of the audience an advertiser is buying. How closely does this audience match the advertiser’s customer profile? Significant deviation from those
consumers whom the advertiser needs to reach probably indicates an inefficient advertising purchase.

Radio station owners and the Radio Advertising Bureau, an industry trade group, work to maintain radio’s position as a valuable ad source. Most radio station managers acknowledge that their biggest competitors are not other radio stations in the market playing the same music and attempting to attract the same listener group. The biggest competitors for radio station time sales are usually local newspapers and, to a lesser degree, television stations, billboards, or direct mail. By the turn of the century, radio advertising was accounting for about eight percent of all advertising expenditure—an increase from the medium’s low point from the 1950s into the 1980s, but far below radio’s network heyday of the mid-1940s.

Radio Advertising Clients

Radio stations generally sell advertising to three distinct groups of clients: local, regional (or “national spot”), and national. The percentage of clients in each category varies with market size and the station’s ratings. Small market stations air primarily local ads. Successful stations in large markets command more regional and national advertising. Nearly 80 percent of all dollars spent purchasing radio time are for local advertising.

National advertisers are often involved in local ad sales through cooperative advertising programs. These allow local retailers to share the cost of radio time with a national firm. 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 be used to buy ads to promote both the national brand and the local retailer. National manufacturers may also produce radio commercials that only need the local retailer’s name added as a “local tag” at the end of the ad.

Advertising Effectiveness

The effectiveness of radio advertising 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, whereas frequency refers to the number of times different people hear the ad. Even though virtually all of the population will listen to the radio at some point during the week, it will take multiple ads to ensure that all listener segments hear an ad. Also, radio 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 use suggests that consumers are often engaged in other activities while they listen to radio. To create an impression in the consumer’s mind, repeated exposure to the message (frequency) is typically needed. To increase the likelihood that ads will cause the consumer to take action, frequent exposure to the message is desired. The advertiser might schedule multiple days of advertising with one or more ads per hour during a selected time period to increase frequency.
Radio advertising sales depend on quantitatively and qualitatively identifying the listeners to a particular station. Quantity is measured by radio ratings.

Research helps a radio station further quantify 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. By collecting such listener demographic information, radio advertising effectiveness can be evaluated for specific audience segments, such as women 25 to 49 years of age.

Two of the most common calculations for comparing advertising effectiveness are “Gross Impressions” and “Cost Per Thousand” comparisons. Gross Impressions (GIs) measure the total number of people reached with a given commercial message. GIs are calculated by multiplying the AQH (average quarter hour) persons estimate for the particular daypart by the number of spots to be run in the daypart. The number of listeners or AQH persons is the number of persons listening to the station in a 15-minute period.

Cost Per Thousand provides a way to compare the cost of reaching the targeted audience either on a single station or among multiple stations. Cost per Thousand determines the cost of reaching a thousand station listeners (sometimes referred to as “Listeners Per Dollar”; in some small markets, the calculation could be cost per hundred). 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.

It is important also to consider listener demographics. A listener profile that better matches a product or service may justify paying a higher Cost per Thousand. Another method for calculating Cost per Thousand is to divide the total cost of the ad schedule by the total number of Gross Impressions. “Reverse Cost Per Thousand” enables an account executive to determine the maximum rate per spot that a competing station can charge to remain as cost-effective as his or her own station.

It is also helpful for account executives and advertisers to know a station’s “exclusive cume listeners.” 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 Contemporary Hits Radio 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, and listeners are prone to change stations frequently. On the other hand, the only station in a market will have a smaller exclusive audience or cume.

Optimum Effective Scheduling is a radio ad scheduling strategy that is based on audience turnover. Optimum Effective Scheduling proposes to improve the effectiveness of a client’s ad schedule by calculating the number of spots a client should run. Optimum Effective Scheduling was developed by Steve Marx and Pierre Bouvard to balance the desire for ad frequency and reach while producing an effective commercial schedule. Marx and Bouvard use station turnover or T/O (cume audience divided by AQH) times a constant they created, 3.29, to determine the number of spots an advertiser should schedule each week (see Marx and Bouvard, 1993).

From the standpoint of generating ad revenue for the radio station, stations with low turnover are at a disadvantage when using Optimum Effective Scheduling. Their audience listens longer and thus 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 the station with high listener turnover.

Advertising Rates

Radio station advertising rates were once typically printed out on a rate card. Most rate cards were valid for six months to a year. Cards listed the charges for either programs or spot advertisements at different times of the day (dayparts). The card might also specify a price discount as the client purchased more ads per day or per week. This rate card is sometimes referred to as a quantity card or quantity-discount rate card. The quantity card might be an effective way to reward loyal advertising clients but is a poor technique for managing valuable advertising inventory. The radio station, with a limited inventory of commercial time, is discounting the price of its product. The discount applies, no matter what the available advertising situation is like.

Increasingly replacing formal rate cards is the grid rate card system. Using an inventory tracking software package, the grid allows a radio station to track inventory available for sale. This might mean keeping track of the number of commercial minutes sold or the total number of commercial units (spots) available for sale. The inventory management system also enables the radio station to increase or decrease its ad rate in response to customer demand. When a radio station has sold nearly all the advertising it can effectively schedule, it should be able to charge more for remaining commercial units. A grid rate card enables the station to adjust advertising rates according to the amount of inventory remaining.

Once the station’s sales department has established a record with clients of pricing inventory according to demand, account executives may be more effective in pre-selling advertising time, which should decrease the likelihood of lost ad inventory. When retailers place advertising orders earlier, the station can project revenue more effectively. The longer a client waits to buy commercials, the more likely the available supply of ad time will decrease and the price of the remaining time will increase.

Radio advertising continues to be an important business for station owners. Ownership consolidation has increased sales pressures for account executives, but it has also lessened direct competition by decreasing the number of station owners. Radio’s biggest challenge will be to make sure programming and advertising remain relevant to users who have at their disposal a wider range of substitute products ranging from satellite delivery audio to downloaded and home-burned CDs or MP3 audio files.

GREGORY G. PITTS AND CHRISTOPHER H. STERLING

See also Advertising Agencies; Arbitron; Commercial Load; Demographics; Market; Promotion; Radio Advertising Bureau; Station Rep Firms; WEAF

Further Reading


Advertising Agencies

When radio broadcasting established itself in the United States and United Kingdom in the 1920s, advertising agencies were full-service organizations—planning complete advertising campaigns, producing advertising messages, and placing these messages in various media. In the United States, advertising agencies were initially reluctant to recommend radio advertising to their clients; in time, however, the agencies became supporters of radio advertising and, until the arrival of television, helped build the radio networks. In the United Kingdom, where until 1972 noncommercial radio broadcasting by the British Broadcasting Corporation (BBC) was the rule, advertising agencies lobbied for commercial radio and worked with foreign and pirate radio stations on behalf of clients; however, once commercial radio arrived, UK agencies were slow to embrace it.

Resisting Radio Advertising

The rise of radio advertising in the United States was tentative and slow. Advertising first appeared in 1922 on station WEAF in the form of sponsored time. Other stations gradually accepted sponsored programs, but many broadcasters viewed advertising agencies as competitors and were hesitant to sell them time or allow sponsorships. Anti-advertising rhetoric from listeners, critics, legislators, and regulators fueled opposition as well.

Surprisingly, advertisers and agencies distrusted the notion of radio advertising. Agencies doubted that radio advertisements would work, a sentiment shared by many
advertisers. The advertising industry also believed listeners might resent radio sponsorship and, consequently, reject other forms of advertising by the same advertisers. This was of particular concern to print advertisers and their agencies.

For several years agencies warned their clients against using radio advertising. Advertisers had to produce programs themselves with assistance from station personnel. For example, in 1925 Clicquot, a soda manufacturer, worked directly with WEAF to create the Clicquot Club Eskimos music program because its agency did not believe in radio. There were, however, exceptions.

William H. Rankin of the Rankin advertising agency decided to test radio advertising before recommending it to clients. He bought time on WEAF for a talk about advertising but received only a small number of letters and phone calls in response. One, from a prospective client, Mineralava, led to a contract and more radio advertising. Rankin began recommending radio and another client, the Goodrich Company, sponsored a radio series.

Another early exception was the N.W.Ayer agency, which supervised The Eveready Hour in 1923. Ayer ensured that the show was professional and identified the sponsor in the name. The favorable attention it received attracted other sponsors to radio, with shows such as the Bakelite Hour, The Victor Hour, and The Ray-O-Vac Twins. These shows became models for later network programs.

Although opposition to radio advertising persisted into the mid-1920s, most advertising practitioners were beginning to consider its use. To win them over, the newly formed National Broadcasting Company (NBC) and Columbia Broadcasting System (CBS) radio networks hired promoters to persuade those still skeptical about the effectiveness of radio advertising.

In 1928 NBC initiated a promotional campaign to educate and encourage adoption of radio advertising. The networks targeted leading advertisers and agencies with brochures highlighting radio success stories and emphasizing radio’s ability to build brand awareness and stimulate dealer goodwill. The networks also offered financial incentives by paying agencies commissions even if they were not directly involved in a clientsponsored show.

NBC loaned its employees to leading agencies to help develop radio departments. N.W.Ayer started the first fullscale radio department in 1928 and others soon followed, employing personnel who migrated from radio. The promoters urged the networks to allow agencies to sell broadcast time and produce programs. In turn, agencies recognized how lucrative program development and production could be.

Accepting Radio Advertising

The promoters’ efforts were successful. By the early 1930s agencies were selling time and handling nearly all sponsored network program development and production. Agencies had gained control of prime-time radio listening and achieved great prosperity, and their radio departments became centers of power.

Sponsored radio shows of the 1920s employed “indirect advertising,” simple mentions of the program’s underwriter with no product description or sales pitch. The networks supported this practice with policies against direct advertising. George Washington Hill,
president of the American Tobacco Company, and Albert Lasker, head of the Lord and Thomas agency, pressured the networks to allow explicit advertising messages.

Although Lasker and Hill largely conformed to the indirect advertising requirements when they launched the Lucky Strike Dance Orchestra in 1928, Hill, who believed strongly in intrusive radio advertising with explicit product claims, aggressively pursued this goal by forcing the issue with network executives and supporting Lucky Strike with extravagant budgets. Lord and Thomas controlled a large share of NBC’s business, so Lasker had leverage as well. By 1931 women were being sold Lucky Strikes with mildness claims by opera and film stars and “slimming” messages suggesting that listeners smoke a Lucky Strike instead of eating something sweet.

The 1930s saw advertising agencies crafting selling environments for their clients in the form of elaborate comedy, variety, and dramatic series. Vaudeville came to radio as agencies began to use star talent. Young and Rubicam created The Jack Benny Program for General Foods’ Jell-O. Lord and Thomas produced Bob Hope. J.Walter Thompson produced the Kraft Music Hall with Bing Crosby and The Chase and Sanborn Hour with Edgar Bergen and Charlie McCarthy.

After commercializing prime-time radio, the networks, with agency help, developed a daytime audience of women listeners. The networks developed 15-minute sponsored talks with recurring characters and continuing stories. Soap operas—melodramatic serials typically sponsored by manufacturers of household detergents and cleaners—were born. Most were produced by advertising agencies.

One agency, Blackett, Sample and Hummert, built a reputation for soap opera programming. Glen Sample adapted a 1920s newspaper serial into a radio show, Betty and Bob, sponsored by Gold Medal Flour. Sample also developed the long-running Ma Perkins for Procter and Gamble’s Oxydol. In 1931 Frank and Anne Hummert created a daily NBC serial, Just Plain Bill, for Kolynos toothpaste. The Hummerts became highly prolific soap opera creators, developing nearly half the network soap operas introduced between 1932 and 1937. Soap operas were so successful that daytime radio advertising revenues doubled between 1935 and 1939.

Agencies and radio networks were determined to protect their financial success during the Depression. Indeed, their program decisions uniformly ignored economic and social problems. With the exception of The March of Time, produced for Time magazine by Batten, Barton, Durstine and Osborn, news was all but missing from sponsored programs. Radio’s skilled entertainers kept Americans’ minds off their despair.

The radio and advertising industries experienced continued prosperity during World War II. Agencies encouraged clients to maintain brand awareness, even if they had no products to sell, and radio benefited from such prestigious sponsorships as General Motors’ NBC Symphony Orchestra as well as benefitting from paper shortages that limited newspaper ads. Both industries assisted the Office of War Information with insertions of war effort announcements, earning them favorable government treatment when their wartime revenues came under close scrutiny.
U.S. Postwar Changes

Envious of the power held by advertising agencies, the radio networks decided to regain control of programming. The agencies lost ground to independent producers, but the real threat to radio came from the growing medium of network television. Advertisers and their agencies shifted the system of star-studded, sponsored programs to television. Young and Rubicam found that its programs moved so easily to television that from 1949 to 1950 half of the top 10 TV shows were its productions.

Within a decade, network radio serials and soap operas had all but disappeared, taking with them substantial ad revenue. Whereas in 1931 network advertising constituted 51 percent of total radio advertising revenues, by 1960 that had fallen to just 7 percent. Radio survived by serving local listeners with format programming and attracting local advertising.

U.S. agencies became producers of commercials and buyers of spot radio time. Despite periods of renewed interest in radio and a resurgence of radio networks, for national advertisers and their agencies radio was relegated to the role of support medium.

Lobbying for Commercial Radio in Britain

The BBC’s license forbids it from broadcasting advertising or sponsored programs. Other than English-language radio broadcasts from foreign and pirate stations, commercial radio did not officially exist in the United Kingdom until 1972. Still, from the start of British radio, advertising agencies lobbied for commercial broadcasting, which held out the possibility of more advertising business. Advertising on the BBC and the creation of a parallel commercial radio system were repeatedly ruled out by successive government inquiries.

In 1923 the Sykes Committee on Broadcasting heard advertising agencies’ arguments, but found that radio advertising would unfairly benefit large advertisers, negatively affect the advertising revenues of the press, and lower broadcast program standards. Over a decade later the Ullswater Committee (1935) reaffirmed the Sykes Committee’s conclusions.

Long before commercial radio arrived in the United Kingdom, a well-organized radio advertising industry was promoting products to a large British audience through English-language programming on foreign stations. These broadcasts emanated from many stations, the most well known of which were Radio Luxembourg and Radio Normandie. English-language broadcasting experiments in continental Europe during the 1920s attracted British listeners and sponsors. In 1929 Radio Publicity Limited started organizing English-language programs for record, food, toothpaste, and cigarette manufacturers. A year later the entrepreneurial Captain Leonard Plugge founded the International Broadcasting Company (IBC), also to arrange commercial programs.

Sponsored shows were usually produced and recorded in Britain and shipped to continental stations for transmission. The IBC established itself as a production facility, and leading British advertising agencies such as J.Walter Thompson and the London Press Exchange handled their own program production.
By 1936 radio advertising expenditures exceeded £1 million, and dozens of major advertisers, such as Lever Brothers, MacLeans, Carters Liver Pills, and Cadbury Brothers, were on Radio Luxembourg and Radio Normandie. J.Walter Thompson’s major clients, including Rowntree, Horlicks, Ponds, and Kraft, were also substantially engaged in radio advertising. Between 1936 and 1939 Ponds and Horlicks spent 20 percent and 33 percent of their total advertising budgets, respectively, on radio. Radio advertising was sufficiently established by 1938 that British manufacturers spent over £1.5 million. Agency Mather and Crowther Limited compiled *Facts and Figures of Commercial Broadcasting*, and J.Walter Thompson provided prospective clients with a promotional recording showcasing their radio expertise.

After World War II Radio Luxembourg resumed its service to British advertising agencies and their clients; however, television lured listeners and advertisers away from radio. In 1946 the Institute of Practitioners in Advertising (IPA), an advertising industry association, published *Broadcasting: A Study of the Case for and against Commercial Broadcasting under State Control in the United Kingdom*, which claimed that commercial broadcasting had value to advertisers and the public. The IPA’s recommendation was not to dissolve or create competition for the BBC but to allow commercial broadcasting within the BBC’s existing structure.

The IPA monograph became an important piece of evidence examined by the Beveridge Committee (1949), which considered the introduction of commercial broadcasting. The advertising lobby was active in providing evidence and scrutinizing that of others, with J.Walter Thompson, for instance, helping to prepare materials presented by major advertisers, including Horlicks, Unilever, and Rowntree. The Beveridge Committee decided against commercial broadcasting, but a minority report proposed a system of national and local commercial radio that would later become a reality.

In the mid-1960s pirate radio stations, broadcasting from old forts and ships anchored just outside British territorial waters, afforded advertising agencies and their clients another opportunity to circumvent the United Kingdom’s no-commercial-radio policy. The success of these stations appears to have finally led to officially sanctioned commercial radio. Advertising agencies continued to lobby for commercial radio and helped win Conservative Party support for the 1972 introduction of commercial local radio. Even after commercial radio became a reality, agencies worked to influence BBC policy.

### Agencies and British Commercial Radio

The IPA joined others in 1984 to question the noncommercial future of the BBC. Two large agencies, D’Arcy MacManus Masius and Saatchi and Saatchi, issued reports indicating that advertising would allow the BBC to meet its revenue needs without raising the license fee paid by listeners. Polls indicated that the public was willing to accept this arrangement, but the Peacock Committee, which was considering the issue, rejected this option.
The BBC remains noncommercial and dependent on receiver license fees. Ironically, BBC Radio has established a commercial arm, Radio International, that allows sponsorship and advertising on the programming it markets for overseas consumption.

The 1972 Broadcasting Act established commercial Independent Local Radio in the United Kingdom, opening the door for agencies to offer radio copywriting and time-buying services; however, national advertisers and their agencies were slow to embrace commercial radio for several reasons, including incomplete geographic coverage, which precluded national reach; a lack of credible audience measurement; and restrictive advertising regulations.

In the nearly two decades that these barriers were being addressed, commercial radio struggled, developing a reputation as a “two percent medium,” unable to attract more than two percent of British advertising revenues. By the early 1990s advertising time and sponsorship restrictions were lifted; coverage was essentially complete, with over 130 local broadcasters on air plus a new national station; and a new audience measurement system was in place. Nevertheless, agencies continued to ignore the medium or simply used it as a campaign extension.

A Radio Advertising Bureau marketing campaign targeting agencies and advertisers helped sell advertisers and their agencies on radio. Commercial radio started to shake its reputation in the mid-1990s when a number of blue-chip advertisers first used radio. Foote, Cone, and Belding and Ogilvy and Mather directed Lever Brothers’ brands Surf and Radion, respectively, to the medium. J.Walter Thompson also encouraged Kellogg to test radio in London and Jaguar to launch a promotion for its XJ models.

The number of commercial radio services continued to grow, exceeding 250 by the close of the 1990s. Between 1992 and 2002, commercial radio revenue increased 395 percent and national radio buys were accounting for over 60 percent of radio advertising revenue. Radio was Britain’s fastest-growing medium and its share of advertising revenues exceeded six percent.

RANDY JACOBS

See also Advertising; British Commercial Radio; British Pirate Radio; Radio Advertising Bureau; Radio Luxembourg; WEAF

Further Reading


Affirmative Action

Diversity in Employment, Programs, and Ownership

Affirmative action mandates equal treatment for all people regardless of gender, age, religion, sexual orientation, etc. The need for programs to assure this equal treatment depends on the amount and nature of discrimination; they are solutions to identified problems of discrimination, not processes unto themselves (Hooks, 1987). Applied to radio broadcasting, affirmative action programs have been related to discrimination in: (1) employment, (2) program content, and (3) station ownership. The rationale for affirmative action in radio was based on the desire of the Federal Communications Commission (FCC) to achieve diversity of information, defined as having many voices express opinions on many issues. The Supreme Court affirmed this goal in *Red Lion v FCC* (Honig, 1984).

Employment

Federal concern about employment diversity was initiated in the 1968 *Report of the National Advisory Commission on Civil Disorders*. The FCC, based on the public interest standard, responded with a statement about equal employment opportunity (47 CFR 73.2080, section b). The result was an examination of license renewals to determine whether the racial composition of a station’s staff was similar to the demographic makeup of the community in which the station was licensed (zone of reasonableness). Short-term renewals, fines, and the threat of possible revocations could result from noncompliance. The FCC responded with a model Equal Employment Opportunity (EEO) program in 1975 to eliminate race and gender discrimination. The Supreme Court affirmed the legality of such oversight by independent regulatory agencies in *NAACP v Federal Power Commission* (1976). The FCC was committed to programming fairness and accurate representation of minority group tastes and viewpoints (FCC, 1978).

Congress, in the Cable Television Consumer Protection and Competition Act of 1992, required the FCC to monitor employment statistics for women and minorities in the cable and broadcast industries. The FCC’s first report found that from 1986 to 1993 the number of women in the national workforce increased by 1.1 percent, in the broadcast industry...
2.8 percent, and 3.6 percent in upper-level positions. The number of minorities increased 2.1 percent in the national workforce, 2.2 percent in the broadcast industry, and 2.4 percent in upper-level positions (FCC, 1994).

The FCC’s EEO policies were overturned in *Lutheran Church v FCC* (1998). Essentially, the court found that increasing staff diversity did not necessarily lead to diversity of viewpoints in the marketplace because only a small number of station employees made programming decisions. The policy was also overbroad, much as the Supreme Court found in *Adarand v Pena* (1995). The court’s response to the FCC’s request for a rehearing indicated that its decision did not preclude any policies that encouraged “broad outreach” to a diverse applicant pool. The FCC has responded with a Notice of Proposed Rule Making (NPRM) suggesting that broadcasters, cable operators, and other multi-channel video programming distributors could send job announcements to recruitment organizations or to participate in job fairs, internships, etc. They could also devise their own recruitment process. Annual hiring reports would still be filed with the FCC. These rules were adopted two years later (FCC, 2000).

A portion of these rules were overturned in *DC/MD/DE Broadcasters Association v FCC* (2001). The commission responded with another NPRM suggesting that all media outlets “widely disseminate information about job openings to all segments of the community to ensure that all qualified applicants have sufficient opportunity to compete for jobs in the broadcast industry” (FCC, 2001). These rules were adopted in November 2002. What was once a requirement that media owners represent the diversity of their audiences with equal numbers of minorities on their staffs is now a program that requires them to widely distribute job opening information, attend job fairs, and offer scholarships. Statements by the commissioners decried their inability to be more forceful in this area, but stated that limitations by the courts have greatly diminished the force of regulation. Industry spokespersons were hesitant to support the new rules, saying that EEO has been over-regulated in the past (Greenberg, 2002).

**Program Content**

The public interest resulted in two rules requiring diversity in program content: ascertainment and the fairness doctrine. Ascertainment required stations to determine issues of public importance by surveying listeners and community leaders. The fairness doctrine required that these issues be addressed fairly. These rules, plus a decision by the Supreme Court that gave audiences the right to testify before the FCC, *United Church of Christ v FCC* (1966), resulted in increased minority participation in the 1970s until the FCC began deregulating radio in 1981 (FCC, 1981). Honig and Williams argued that deregulation was the result of a conservative FCC wishing to reduce the workload for radio stations coupled with the loss of influential groups pressuring the FCC about diversity.

Deregulation was necessary because the number of radio stations had increased from 583 in 1941 to 9,000 by the late 1980s, forcing stations to develop specialized formats to attract audiences; radio could no longer provide general services to all of its audiences. The result was the elimination of policy guidelines concerning non-entertainment programming, the ascertainment process, commercial time guidelines, and rigidly
formatted program logs (FCC, 1981). The fairness doctrine was abolished in 1987. The concern for radio format changes ended in 1976 in response to the court decision in cases such as *Citizens Committee to Save WEFM v FCC* (FCC, 1976). Although the FCC was concerned with empowering broadcasters to select entertainment formats that offered the greatest commercial viability in their markets, the results of these policy decisions might have had an impact on programming oriented toward minority audiences.

The end of program content regulation for purposes of increasing diversity and the move away from numerical goals for employment after 1976 spelled the end of employment and program affirmative action policies. The FCC argued that none of these policies actually increased the diversity of information and turned to station ownership diversity as a solution.

**Station Ownership**

Diversity of station ownership was a goal of the FCC that assumed that who owned radio outlets would influence, if not determine, program diversity. The assumption was that increasing minority (women and ethnic minorities) owners would increase programming for such underserved audiences and thus serve the public interest. Further encouraging ownership diversity was a two-day meeting resulting from pressure from the National Black Media Coalition and the National Association of Black-Owned Broadcasters in 1977. The resulting FCC policy statement found that despite the fact that minorities comprised approximately 20 percent of the population, they controlled less than 1 percent of the over 8,500 radio stations. The FCC proposed two solutions to the lack of ownership diversity. First, tax certificates were offered to broadcasters who sold their stations to ownership teams that had a “significant minority interest.” Tax certificates allowed sellers to defer capital gains taxes. Second, “distress sales” were authorized for licensees who were scheduled for revocation hearings before the FCC. The rationale was that broadcasters who would likely lose their licenses in such hearings could sell their properties at a reduced cost to minority ownership teams, producing at least some profit from the sale of the station. The market would benefit by increasing station ownership diversity. The government would also save money because costly hearings would be avoided (FCC, 1978). The result of these two solutions was the sale of 82 radio stations to minority owners between 1978 and 1982. Despite this increase, still only 2 percent of broadcast stations were minority owned (Honig, 1984). Former FCC Chair Kennard decried the lack of stations owned by minorities because only 2.5 percent of all broadcast stations had minority owners in 1997 (McConnell, 1998).

The historical basis for ownership diversity can be found in the *Policy Statement on Comparative Broadcast Hearings* (FCC, 1965). Two criteria stipulated by the FCC as integral to deciding between competing applicants for station licenses were diversification of ownership and integration of ownership/management, defined as station owners living and being active in the communities for which the license was granted. Application of these factors to diversity of station ownership was affirmed in *Citizens Communications Center v FCC* (1974). Direct application to minority owners of broadcast stations was made in *TV 9 Inc. v FCC* (1973).
The FCC was in the process of re-examining its ownership diversity procedures in the late 1980s. As more Republican members of Congress took office, along with conservative Democrats appointed during the Reagan administration, the FCC began to question its proper role in this area. Nevertheless, Congress made clear in budget resolutions that the FCC was not to make any changes.

The Supreme Court affirmed both the enhancement credits (tax certificates) and distress sales as methods for increasing minority ownership. The court’s decision was twofold. First, increasing broadcast diversity was an important government goal. Second, FCC policies of diversifying ownership were determined to be reasonable means of meeting these goals. A substantial amount of data supporting this conclusion was appended to the decision (Metro v FCC).

Similar reasoning was used to support incentives for women to own broadcast stations, but data analyzed by the Court of Appeals failed to meet the second part of the Supreme Court’s decision in Metro: no link could be established between increasing female ownership of broadcast stations and the consequent increase in programming for women. Thus, the ownership preference was held to be unconstitutional (Lamprecht v FCC).

Americans for Radio Diversity reported that minority ownership was up to 3.1 percent before the enactment of the Telecommunications Act of 1996. The removal of many station ownership caps has led to massive radio consolidations, however, and minority ownership has declined to 2.8 percent (2000). The decline was due in part to sharply higher station prices, which was brought about by industry consolidation.

Recent Developments

The FCC, the broadcast industry, and Congress have recently been active in exploring ways to increase diversity of radio station ownership. Then FCC Chair Reed Hundt announced a plan resulting from the standards set by the Supreme Court in Adarand v Pena to give preferences to women and minorities in its auction of personal communications services, originally reserved for small businesses (Jessel, 1995). More recently, FCC commissioners Kennard and Powell challenged the National Association of Broadcasters (NAB) to develop solutions. The result was the Prism Fund, funded by megamedia owners such as CBS and Disney/ABC promising $1 billion to assist minorities and women with the purchase of radio stations. The NAB has also been active, offering $10 million to encourage station purchases by minorities and women (McConnell, 1999). Fox created a vice president of diversity to increase the number of minority actors and broadcast managers (Schlosser, 2000). Congress has also been concerned with affirmative action and station ownership. Senator John McCain (R-AZ) offered a bill to reinstate tax credits for selling media properties to minorities (Albiniak, 1999).

More recently, the Quetzal/Chase Capital Partners announced the first three investments in minority owned enterprises: Blue Chip Broadcasting, Hookt.com, and Urban Box Office Networks, Inc. (J.P.Morgan Partners, 2000)

WENMOUTH WILLIAMS, JR.
See also African-Americans in Radio; Black-Oriented Radio; Deregulation of Radio; Gay and Lesbian Radio; Hispanic Radio; Native American Radio; Ownership, Mergers, and Acquisitions; Red Lion Case; Stereotypes on Radio

Further Reading

Citizens Committee to Save WEFM v Federal Communications Commission, 506 F2d 246 (1974)
Citizens Communications Center v Federal Communications Commission, 447 F2d 1201 (1971)
Federal Communications Commission, Policy Statement on Comparative Broadcast Hearings, 1 FCC 2d 393 (1965)
Federal Communications Commission, Changes in Entertainment Formats of Broadcast Stations, 60 FCC 2d 858 (1976)
J.P.Morgan Partners, “Quetzal/Chase Capital Partners Completes First Three Investments,” News on Quetzal (22 May 2000)
Lutheran Church-Missouri Synod v Federal Communications Commission, 141 F3d 344 (1998)
McConnell, C., “Kennard Pushes for Women, Minorities,” Broadcasting and Cable (8 April 1998)
“Powell Joins Kennard in Pressing for TV-Radio Ownership Diversity,” Broadcasting and Cable (23 February 1998)
Africa

Radio is by far the dominant and most important mass medium in Africa. Its flexibility, low cost, and oral character meet Africa’s situation very well. Yet radio is less developed in Africa than it is anywhere else. There are relatively few radio stations in each of Africa’s 53 nations and fewer radio sets per head of population than anywhere else in the world.

Radio remains the top medium in terms of the number of people that it reaches. Even though television has shown considerable growth (especially in the 1990s) and despite a widespread liberalization of the press over the same period, radio still outstrips both television and the press in reaching most people on the continent. The main exceptions to this are in the far south, in South Africa, where television and the press are both very strong, and in the Arab north, where television is now the dominant medium. South of the Sahara and north of the Limpopo River, radio remains dominant at the start of the 21st century. The internet is developing fast, mainly in urban areas, but its growth is slowed considerably by the very low level of development of telephone systems.

There is much variation between African countries in access to and use of radio. The weekly reach of radio ranges from about 50 percent of adults in the poorer countries to virtually everyone in the more developed ones. But even in some poor countries the reach of radio can be very high. In Tanzania, for example, nearly nine out of ten adults listen to radio in an average week. High figures for radio use contrast sharply with those for India or Pakistan, for example, where less than half the population is reached by radio.

History

There have been three distinct phases in the development of radio since the first South African broadcasts in 1924. The first phase was the colonial or settler period, when radio was primarily a medium brought in to serve the settlers and the interests of the colonial powers. Later (and in many cases not until toward the end of colonial rule) the authorities gradually introduced radio services by and for indigenous people.
The entire continent, south of the Sahara, with the exception of Liberia and Ethiopia, had been colonized by the European powers—France, Britain, Spain, Belgium, Italy, Germany, and Portugal. (At the end of World War I, Germany lost all of its African colonies, and their administration was taken over by France, Britain, and Belgium.) The domestic broadcasting systems of all European powers were at this time state (not government necessarily) monopolies such as the British independent public service model of the British Broadcasting Corporation (BBC) or the French government radio stations. The Portuguese permitted some private broadcasting by colonial settlers in their colonies, but the main picture was one of national state monopolies.

The earliest broadcasts on the continent were in South Africa. In Johannesburg, Cape Town, and Durban, three organizations—a private club, an advertising group, and a local authority—were granted licenses to broadcast. But they all soon incurred large debts and were taken over by an entrepreneur who, after some difficulty, moved the stations toward commercial viability. However, the government decided that a commercial solution would not provide the service that they sought. They looked instead at what had happened in Britain and invited John Reith, the BBC’s first director-general, to come to South Africa in 1934 and help them devise a national public service form of broadcasting. The South African Broadcasting Corporation (SABC) was created in 1936 and maintained a monopoly on broadcasting there for the next 45 years.

The SABC departed from BBC’s way of doing things very soon after its establishment. First, it was never far from political influence and control, both of which increased during the years of apartheid. Second, it soon began commercial services designed to make a profit to supplement license fee income for broadcasting. When neighboring Mozambique was a Portuguese colony, a successful commercial radio station there (Radio Lorenço-Marques) targeted South African audiences with popular music programs. To counter this the SABC began its own commercial service, Springbok Radio, in 1950. For most of this period, the SABC’s programming was dictated by the needs and tastes of its white audiences. Until 1943, it broadcast only in Afrikaans and English, and none of its programs were directed toward African audiences. Even then, broadcasts in African languages formed only a small part of the total output. Broadcasting for Africans was expanded in the 1960s when Radio Bantu was developed during apartheid to reinforce the apartheid ideology of the separation of the races.

Elsewhere in Africa, radio was also developed first to serve European interests—in 1927 in Kenya, in 1932, in Southern Rhodesia (now Zimbabwe), in 1933 in Mozambique, and in 1935 in the French Congo. The earliest radio in British West Africa was not broadcast by wireless transmission but via wired services—subscribers had loudspeakers (linked by wire to the radio station) installed in their homes to receive the service. This was how broadcasting began in Sierra Leone in 1934, Gold Coast (now Ghana) in 1935, and Nigeria in 1936. Unlike the wireless services in Britain’s other colonies, these were created with native African listeners in mind. Then in 1936 the British colonial administration decided to develop radio broadcasting throughout its African colonies as a public service for indigenous people.

In Northern Rhodesia (now Zambia), World War II provided an impetus with major consequences for the development of radio in that territory. A small radio station was established principally with the objective of carrying news (in African languages) of the war’s progress to the families of soldiers fighting with the British forces in Africa and
Asia. Radio also developed rapidly in other parts of Africa due to the war. The free Belgian government, exiled from German-occupied Belgium, set up a shortwave station in Léopoldville (now Kinshasa) for broadcasts to Belgium. The Free French set up their own radio stations in Cameroon and French Congo, and the French Vichy government had its own station in Dakar, Senegal.

**Postwar Developments**

After the war, expansion of broadcasting in most of its African colonies became official British policy. This meant that radio services would be developed principally to educate and inform African listeners. Several experts from the BBC were sent to advise on developmental issues in broadcasting, and some of them stayed to play major roles in establishing services. Most notable among these was Tom Chalmers, a successful BBC radio producer who was involved in the development of radio in Nigeria, Nyasaland (now Malawi), Northern Rhodesia (now Zambia), and Tanganyika (now Tanzania). He was the first director-general of the Tanganyika Broadcasting Corporation. Chalmers and others tried hard to separate broadcasting from government along the lines of the BBC model. But despite the establishment of public corporations in several British territories (Ghana, Nigeria, Malawi, Zambia, Uganda, and Tanganyika, and others had broadcasting corporations modeled on the BBC), the stations were all closely supervised by their respective governments and had little real independence.

The French developed a different policy. Whereas in British territories the emphasis was on broadcasting in African languages to reach the widest possible audiences, nearly all broadcasting in French territories was in the French language. Radio broadcasting was also centralized and, to a large extent, originated in France through the Société de Radio-Diffusion de la France d’Outre-Mer (Society for Radio Transmission to French Overseas Territories) or SORAFOM. As the society’s title suggests, the prevailing philosophy was that the French territories in Africa were actually an extension of France. A series of relay stations across French Equatorial and West Africa carried the same programs. It was not until the French territories were granted independence in 1960 that separate national radio broadcasters were established in Mali, Senegal, Ivory Coast, Niger, Chad, Gabon, and other locations.

By the 1960s (the decade in which most African colonies gained their independence), all territories had radio broadcasting services. In every country they were instruments of government in much the same way as the national armed forces or the police. Broadcasters were civil servants—if not always in name, certainly in their relationships to the rest of the state apparatus. Without exception the new African governments maintained for 30 more years the monopoly of radio broadcasting established by colonial authorities. During this second phase of African broadcasting, which lasted until nearly the end of the 20th century, all 53 African countries had national broadcasting services, mostly dominated by radio. Broadcasting headquarters were generally in the capital or main city of each nation; from there, one or more national radio services were transmitted to reach the whole country. A few local and regional services were developed in Nigeria and South Africa but not many in other areas. Radio in Nigeria developed along different lines than in other African nations, reflecting that country’s ethnic divisions and unique
federal character. Two parallel state systems of state radio developed, often in direct competition with each other. The federal government had its own broadcasting system, and each of Nigeria’s several states had its own system, as well.

Radio broadcasting in much of sub-Saharan Africa still relies heavily on shortwave (the main means of transmission for many years) to reach widely scattered populations over large areas. This is a feature of broadcasting in Africa not often seen elsewhere in the world. In Ghana, for example, all radio transmission until the 1980s was via shortwave. This means of transmission is in many respects ideal for African circumstances, although it can suffer from interference and is subject to fading and distortion. Lack of sufficient resources and infrastructure have meant that developing networks of FM or AM relays usually has not been possible, so the only way to reach an entire territory has been by shortwave. Outside of South Africa (where an FM network was quickly established in the 1960s) and the small island states, all African national broadcasters continued to use shortwave for their main national radio services at the beginning of the 21st century. So most radio receivers sold in Africa (except in South Africa) have shortwave bands on them, and virtually all radio owners outside of South Africa have ready access to international shortwave broadcasters such as the BBC, Voice of America (VOA), Radio France International, Radio Deutsche Welle, and Radio Netherlands. The South African international shortwave station, Channel Africa, is also very popular. Such international broadcasters have become popular for their African-language (Swahili, Hausa, Amharic, and Somali) transmissions and in the widely spoken languages of European origin (French, English, and Portuguese). Africa has the world’s largest audiences for international shortwave radio broadcasts.

Shortwave coverage by Africa’s national broadcasters is rather poor in many cases, and radio transmission remains underdeveloped on a national scale in many countries. The lack of financial resources, frequent breakdowns, power cuts, the scarcity of spare parts and other consequences of the general economic weakness in many African countries have weakened transmission capacity and performance.

Radio pluralism came late to Africa. Before 1987 there were only five or six privately owned radio stations on the entire continent—in Gambia, South Africa, Swaziland, and Liberia. In 1987 a trend to end state monopolies in almost every country began. In December, Horizon FM went on the air in Ouagadougou, the capital of Burkina Faso, launched by a local entrepreneur who announced rather defiantly that the station would have “lots of music, lots of commercials, lots of laughter, but absolutely no politics. People are tired of all that stuff.” A week later the station was forced to close. The revolutionary government was clearly unhappy at this development, which it had not authorized. Horizon FM survived that early dispute and became one of several independent radio stations in Burkina Faso.

**Competition**

The arrival of Horizon FM was of historic significance in that it marked the beginning of the third phase of radio in Africa, one in which the national state radios continue but must compete for audiences with a growing number of independent radios. (The same trend is evident with television, which also was previously almost entirely a state monopoly.)
There are important differences between state and independent radio on the continent. While the state radio services are mostly national in both reach and purpose, the new independent radio stations are mostly based in cities, and their coverage tends to be confined to the urban areas. They have also almost all been FM stations, whereas the national broadcasting stations have relied and continue to rely on a mix of transmission methods—FM, AM medium wave, and shortwave. At the turn of the century there were more than 450 independent radio stations in Africa. Most of them are the result of limited deregulation, which has invited applications for the limited coverage offered by FM. Only five or six independent radio stations existed on the entire continent 20 years earlier.

Independent radio stations in Africa can be categorized into five types. There are fully commercial stations that seek to make a profit from the sale of airtime for advertising or sponsored programs. Religious radio stations (most, but not all, Christian) use radio to communicate their faith and beliefs; some of these may carry some advertising, but most are financially supported by their sponsoring organizations and some with support from outside. The third category, comprised of community radio stations, is probably the fastest growing sector. There has been strong support in some countries for the development of very local, generally low-powered FM stations broadcasting in a community’s indigenous languages or dialects. These are often staffed by volunteer helpers, are run at very low cost, and are supported by outside agencies (various non-government organizations have supported some for developmental reasons). By the year 2000 there were more than 70 community radio stations in South Africa and about 100 in West Africa, several in rural areas.

The fourth and fifth categories each emerged as the result of political and ethnic or other conflicts. Factional radio stations (some referred to as “clandestines”) are used to promote a particular faction in a conflict. Somalia, a country without a government for the last decade of the 20th century, has several such stations, each supporting one of the warlords who control different parts of the country. There are similar clandestines in Sudan and Ethiopia. Some of these operate from neighboring countries rather than from within their nations of origin, for obvious reasons. Occasionally they may even broadcast from further afield. The factional radio category also includes the so-called hate radio stations. The most notorious of these was the Radio des Mille Collines (Radio of a Thousand Hills) in Rwanda. Broadcasting from within Rwanda (and almost certainly with the government’s approval if not its backing), it was widely held to be responsible for promoting ethnic hatred and killings during the 1994 genocide.

The fifth category, humanitarian radio stations, came as a counter to the influence of factional radio. The power of radio in Africa has led various aid and relief agencies, including the United Nations, to support the establishment of humanitarian radio stations that promote peace, harmony, and democracy. Such radio stations have operated in Rwanda, Somalia, Liberia, the Democratic Republic of the Congo and the Central African Republic. One organization that has been prominent in supporting humanitarian radio has been the Fondation Hirondelle (Swallow Foundation) in Switzerland. It has backed radio stations in areas of conflict for limited periods in countries such as Liberia, the Central African Republic, Somalia, and Rwanda.
Programs

Radio programming in Africa has suffered from the economic realities present there. It has been hampered to an even greater degree by the often heavy hand of government. Many broadcasters in state radio stations are government or civil servants, and the civil service does not lend itself to creativity, imagination, and entertainment. Much of the output of state radio stations has been dominated by government propaganda. In the early days of national independence there was a heavy emphasis on messages about nation building, with exhortations to hard work and discipline. Much of this was rather boring. A high proportion of news bulletins on radio featured heads of state visiting projects or speaking at events. Broadcasts would usually focus on what was said and who was there—sometimes remarkably uninteresting speeches would be carried in full on the radio. When the head of state visited several different projects and said more or less the same things at each appearance, subsequent broadcasts would repeat the same details. Other stories were similar—ministers and other state officials making speeches or announcements, visiting state institutions, opening schools or hospitals, and so on. Each event would be reported with the main focus on what the official said and little on any other aspect of the story.

But it would be wrong to categorize all African state radio in this way. Much of it has been entertaining and even innovative. Ad-lib or unscripted drama has often flourished, especially in Ghana, Nigeria, and Zambia; poetry and storytelling have become popular features in many countries. Local music is now a major part of the programming in many states with an emphasis on local talent in such countries as Mali, Senegal, Ghana, the two Congos, and Tanzania. Many of Africa’s very successful popular music stars began their careers on radio. There have been radio stars since the early days, as the media thrive on more than mere news. Most of the time the media, radio especially, are used for entertainment. Although a cautious approach generally has been seen in news and newsmorelated programs, this is not always the case in other creative areas.

African radio stations have been important patrons of music and, in some countries, of poetry and oral literature. In the 1970s many radio stations made regular program collection safaris into remote parts of the country to record songs, drama, poetry, and other indigenous material for later broadcast. However, in recent years these activities have been curbed by financial restrictions. Similarly, the studios of many national radio stations were once a focus for much new music, but this happens less now, largely because many state-run radio stations have stopped most payments to artists.

African radio once played a major role in popular music and still does play a role, but mainly by playing commercial records. Many African musicians find that they do better financially by marketing their own cassettes through street sellers. But copyright laws are not widely used, and few African artists are members of rights societies. Financial pressures have also slowed the growth of (and sometimes even reduced the amount of) original indigenous drama and other spoken word programs on both radio and television. The economic weakness of many states has meant that talented artists had to stop working in state radio because they were not paid adequately (sometimes not at all). The growth of successful commercial radio may change this.
Private Stations

More freedom has generally been given to the printed press in Africa than to the radio industry. Independent newspapers have been permitted to operate in most African countries, and many of them have been permitted some degree of freedom to criticize, oppose, and challenge the existing political order. The same has not been true of radio. Many African governments have been slow and reluctant to change laws and allow private broadcasting stations. Those that have legislated for independent radio have in many cases imposed restrictions on the degree to which independent stations can report news.

The reluctance to allow private radio arises in part from fear of the power of the medium. It is known that radio reaches many more people in Africa than any other single medium. Government officials may be legitimately concerned about misuse of the medium by rival political, religious, or ethnic factions, particularly when they have a shaky hold on power or rule in countries lacking in infrastructure, with weak institutions of control, and where there may be several regional, ethnic, and linguistic divisions. It is significant that there has been much greater reluctance to grant freedom to radio than to other media.

In Ethiopia, new laws to permit private broadcasters were delayed by fears that private electronic media would be critical of the government, as the private press has been. In Kenya several applications to run private radio stations were delayed for several months in 1998 and 1999, probably due to similar fears. But a major press group in the country opened its first commercial radio in Nairobi in 1999, the first example outside South Africa of major commercial press involvement in radio in Africa. In Tanzania gentle pressure has been put on the private radio stations to carry national news from the state radio station; in Zambia, the few licensed independent radio stations are not permitted to make their own news bulletins. Even after several years under new laws permitting independent broadcasts, there were still only one private commercial radio station and three private religious stations at the beginning of 2001, although the election of a new president at the end of that year led to change during 2002, and the emergence of several new independent broadcasters.

The development of independent radio should not be seen only in political terms, however. Its commercial and cultural impact and function are almost certainly of equal and perhaps greater significance. Music has always played a major part in African radio, but when the stations were almost entirely owned and paid for by the state, entertainment often took second place to other requirements. On many occasions radio schedules would be cleared for major political events. Speeches of political leaders and commentaries on national events would be given extensive coverage, with state political and administrative requirements taking precedence. With deregulation and the licensing of independent and particularly commercial stations, listeners are no longer compelled to listen to long and often tedious political broadcasts. At the same time, radio has become a much more attractive medium for advertisers, who can develop media campaigns in line with different stations’ formats and content. The new and often very successful commercial stations have adopted musical policies that define their places in the market, just as their counterparts are free to do in Europe, the United States, and other parts of the world where the industry is not controlled by government. It is significant that in the African
states once ruled by France, one of the most successful of the new commercial radio stations, Radio Nostalgie, is affiliated with a major French radio group of the same name. In 1999 it was reaching about 60 percent of all adults in Dakar, the capital of Senegal, and Abidjan, the capital of Ivory Coast.

In Ghana, the new commercial stations have been so successful that they have pushed the government’s Ghana Broadcasting Corporation out of its place as one of the top eight stations in the country. Private, independent, commercial radio stations in Uganda and Nigeria, mostly broadcasting popular music, outstrip the state radio services in audience reach and share.

The reason for the success of many private stations is easy to understand. Competition from other domestic broadcasters was entirely absent in the broadcast media until their arrival, so program producers had never worried about attracting audiences or advertisers. Now this has changed in many countries (although not yet all), and there is lively competition for audiences. On the whole, radio in these countries has become livelier and more attractive. However, there has been a downside also. Whereas state radio put a strong emphasis on education and development, featuring many programs that promoted better health or provided other forms of education and improvement for the general population, competition for commercial revenue tends to push these programs out or to marginalize them. Moreover, national and state radios have broadcast programs in local minority languages for many years, which is not usually a feature of commercial stations. Community stations may increase their use of local languages and dialects in response to this shift, however.

Radio’s contribution to national education and development will probably continue to be of major importance. Many developmental agencies strongly favor the use of radio in campaigns for better health, as in the campaign against AIDS and such diseases as trachoma, malaria, tuberculosis, polio, and leprosy. In the past, many broadcasts of this type were worthy but very dull. In recent years, however, there has been a welcome growth in the imaginative and entertaining use of radio to encourage development in such areas. One of the best examples is the soap opera Twende na Wakati (Let Us Go with the Times) in Tanzania. This regular drama features the daily lives of ordinary people, and within its entertaining story line are messages about family planning, infant nutrition, other health issues, and the changing role of women. A regular program in Senegal, Radio Gune Yi, made entirely by and for children, promotes the rights of children and the equal rights of girls and boys.

Technology

Radio has played a major nation-building role in Africa. This arose from an interesting and very important historical coincidence. The invention (in 1948) and commercial development of the transistor (in the 1950s and 1960s) led to very large numbers of cheap battery-operated transistor radios coming into Africa at the same time that about 40 nation-states gained their independence in the 1960s. The transistor made radios portable and cheap, liberating them from reliance on a supply of electricity, which most African homes did not have at the time. Radio rapidly became the most widespread medium in Africa, and this had important consequences for Africa’s cultural and political life. It was
the medium by which many, if not most, Africans gained day-to-day knowledge of their new national and international status.

At the beginning of the 21st century, new technology has arrived in the form of direct broadcasting by satellite. WorldSpace, a company based in Washington, D.C. and headed by an Ethiopian, Noah Samara, launched the first digital radio service by satellite in 1999. The technology makes very good sense in a continent where the establishment of FM relays has been so difficult due to the costs involved and problems with maintenance and security. The WorldSpace service provides several high quality radio services that can be picked up with ease and clarity anywhere on the continent. The service is being used by some African and international radio stations, and it also offers some broadcasts of its own. The main question about the satellite service is whether it will establish itself sufficiently to be commercially viable in the long term. Use of the system requires the purchase of special receivers that are currently too expensive for most African listeners. It is, however, an example of a new technology that seems to meet an African need. (It is also notable as one of the first technologies ever introduced in Africa before it became available to the rest of the world.)

Another new technology that may overtake WorldSpace is digital shortwave. The major international radio broadcasters (the BBC, VOA, Radio Deutsche Welle, and others) have joined together in a consortium, Digital Radio Mondiale, and have successfully developed a new means of shortwave transmission that employs digital coding, which vastly improves reception. If African radio stations take up this new technology (and already many are showing an active interest), it will revolutionize transmission in Africa, making high quality reception available throughout the continent.

GRAHAM MYTTON

See also Africa No. I; Arab World Radio; Developing Nations

Further Reading


Africa No. I

Africa’s First Transnational Commercial Radio Station

Africa No. I is a private, commercial, French language radio station based in Libreville, Gabon, in Central Africa. When it was launched in 1981, Africa No. I was the first pan-African commercial radio station. Its main audience is in a swath of territory stretching from Congo in Central Africa to Senegal in the West. This area covers the territory of the former colonial French Equatorial Africa and today contains most of the French-speaking countries of the continent. However, with its powerful shortwave transmitters and satellite broadcasts, Africa No. I covers Africa, North America, the Middle East, and South America. The majority shareholders (60 percent) of Africa No. I are Africans, and the rest of the capital is split between a French government investment group, Société de Financement de Radiodiffusion (SOFIRAD), and two French companies, Havas and Sofrea.

Africa No. I and the Realities of Broadcasting in Africa in the 1980s

When it started service, Africa No. I was a breath of fresh French air over the African continent for several reasons: it was not directly controlled by any government; it offered African listeners new, exciting music and cultural programming; and it broadcast uncensored, in-depth news and analyses of African and world issues. This was a dramatic departure from the boring, doctrinal, and paternalistic programming that was broadcast on tightly controlled government radio and television stations in Africa. In effect, Africa No. I was the first African radio station to break with the tenets of African-style development communication—a series of African government policies that required all organs of the mass media, which were for the most part controlled by the governments, to disseminate information and messages that would help improve agricultural production, health, education, national security, and other vital areas.

When African countries gained independence in the late 1950s and early 1960s, their mass media policies originated from Western countries in general and from the United States in particular. As early as 1958, when most sub-Saharan African countries were still under colonial rule, the General Assembly of the United Nations called for the building of mass media facilities in countries that were in the process of economic and social development. This led to the United Nations’ application, through its Educational Scientific and Cultural Organization (UNESCO), of the concept of development communication.

As formulated in its early stages by Western experts, the development communication perspective postulated that developing countries did not have the resources to indulge in the luxury of the liberal, watchdog journalistic model of the Western countries.
Therefore, the mass media were to concentrate on the task of disseminating information and messages that would help improve agricultural production, health, education, and national security. It was believed that strategic use of information would lead to nation building and provide a “climate” for national development. Most African politicians argued that in situations of poverty, where the bare necessities were absent, having mass media that concentrated on checking government action and criticizing it was a misuse of resources.

However, the consequence of this policy was that most governments, often one-party regimes, soon had a monopoly on information dissemination. In the name of development communication, the mass media reported only news that promoted the ideological positions and interests of the governments and ruling elite of the day. Dissenting journalists were either censored, censured, or worse. The arrival of Africa No. I on the broadcast scene provided an alternative voice to that of the government.

**Programming on Africa No. I**

For a commercial station, Africa No. I has a unique program format that is a mix of music, sports, and cultural documentaries. The service broke the stranglehold of African governments on news and information. The station programs a lot of African popular music, to be sure, but it also broadcasts indepth news and information that is not heard on government radio stations. It also airs the views of dissident politicians and journalists and tells the world about the persecution of journalists and members of the opposition in African countries. Furthermore, its programming actively promotes African music, culture, and sports. The station plays mostly African music and has released compact disc compilations of the most influential music in post-independence Africa. It has also carried live broadcasts of Africa’s major sporting events. Its wellresearched documentaries cover African political, cultural, and historical topics.

**Africa No. I and Liberalization of the African Airwaves**

The fall of the Berlin Wall in 1989 and the end of the Cold War triggered a hurricane of instability over the African continent. Popular uprisings, strikes, sit-ins, and demands for political freedom and better standards of living broke out all over the map. In response, leader after leader, seeing that their superpower benefactors were no longer willing or able to provide unconditional support, legalized opposition parties and allowed the press more freedom. Portable transistor radios, satellites, and popular music had neutralized the power, if not the zeal, of the censor. The much-muzzled African mass media suddenly found their voices.

One of the consequences of political liberalization was the opening up of the airwaves. Press laws have been liberalized across the continent, and private radio stations broadcasting in several African and European languages are springing up in most regions of the continent. By 2,000, no fewer than 21 African countries had allowed independent or alternative radio or television broadcasting facilities. This trend is quite a change from
just five years earlier. Divergent voices are being heard, and many more people have access to the mass media.

All this has meant competition for Africa No. I from Africa and abroad. In addition to competing with African commercial stations, Africa No. I is experiencing increasing competition from international broadcasters such as the British Broadcasting Corporation (BBC), the Voice of America, Radio France International (RFI), Radio Deutsche Welle (Voice of Germany), and others broadcasting in English, French, Arabic, Portuguese, and several African languages. Since the liberalization of the media began in Africa in the early 1990s, several of these international broadcasters, who used to broadcast only on shortwave radio to Africa, have been allowed by a number of countries to broadcast directly to African audiences on FM frequencies. In addition, many of them have expanded their African services to include direct broadcasting by satellites and have signed rebroadcast agreements with several private African radio stations. The African audience is now splintered.

In the face of such stiff competition, Africa No. I has repositioned itself as the only station that is African 24 hours a day. It has also diversified its broadcast outlets and acquired FM frequencies in at least 15 African countries. Furthermore, it has obtained broadcast licenses in France, where it broadcasts on two FM frequencies from Paris. Nevertheless, Africa No. I’s expansion into the African FM market has not been all that smooth. According to the Paris-based African magazine, *Jeune Afrique*, Africa No. I’s expansion into the competitive but lucrative FM market in Abidjan was held up by the Ivorian government and by local shareholders who wanted to control the programming of the station. A compromise was reached whereby the station was not allowed to cover the local news in Abidjan. The news is broadcast from Libreville, Gabon, Africa No. I’s home station. In effect, all local news from Abidjan has to be sent to Libreville, from where it is broadcast to Abidjan and the rest of the African continent.

Besides its shortwave and FM frequencies, Africa No. I broadcasts on four direct broadcast satellite channels and on the internet. In addition to its broadcast activities, Africa No. I also serves as a rebroadcaster for such international broadcasters as RFI, the Japanese Broadcasting Corporation, and Radio Swiss International. These broadcasters send their programs to Africa No. I’s transmission center in Moyabi, Gabon, where it is rebroadcast to the rest of the continent, to South America, or to the Middle East.

**Controversy**

Africa No. I has not been without controversy. Controversies have arisen over tobacco advertising on the station and over alleged political interference in its programming. As a commercial station, Africa No. I survives on advertising, mostly from multinational companies doing or wishing to do business in Africa. The station made a controversial decision to accept tobacco advertising. Even as the dangers of smoking became known and Western countries banned tobacco advertising on radio and television, multinational tobacco companies were buying airtime on Africa No. I. The station soon became known as much for the slick Marlboro and Benson and Hedges cigarette advertisements punctuating its programs as for its music and documentaries.
Despite its generally good track record, Africa No. 1, like government stations in Zaire and elsewhere, did not escape the violence that came with political liberalization in Africa in the 1990s. Africa No. 1’s studios in Libreville, Gabon, were attacked by mobs who accused the station of covering up the misdeeds and corruption of the government of Gabon. Some members of the African public claimed that Africa No. 1 was not as critical of the government of Gabon as it was of other governments, because president Omar Bongo was a shareholder of the station. Because the station is private, that claim cannot be confirmed. Nevertheless, it is true that Africa No. 1 has not given as much attention to Gabonese dissidents and members of the opposition as it has given to dissidents and members of the opposition of other African countries. In addition, dissident groups from Congo (Brazzaville) claimed, in 1999, that Africa No. 1 had given in to political pressure and fired three journalists of Congolese origin who had reported on ethnic massacres in Congo’s civil war.

**Conclusion**

Africa No.1 is a pioneering radio station that has, in its 20 years of existence, greatly influenced Africa’s political and media landscape. It has been an effective promoter of freedom of speech and expression. Its news and programming broke the monopoly of government-controlled stations over information in French-speaking Africa. Today, Africa No. 1 is the model upon which many new, independent African stations pattern their programming.

*See also* Africa; Developing Nations

**Further Reading**


African-Americans in Radio

African-Americans have played an important part in American radio broadcasting from the beginnings of the medium. From early experimenters to pioneer radio performers, blacks contributed to the cultural, economic, and technical development of radio broadcasting. Though shackled by discrimination, blacks enthusiastically used their talents on radio during World War II to help America display a united domestic front. The half-century since has seen African-Americans help to change the face of American culture through radio and other media.

Origins

One of the most notable of the pioneering electricity experts was Lewis H. Latimer (1848–1928), son of an enslaved African escapee, who prepared Alexander Graham Bell’s telephone patent drawings that afterwards assisted the Boston speech and hearing therapist to actually invent his device. Telephone parts were later used by others to demonstrate the wireless transmission of human speech. Talladega College, a black institution known for its solid science curriculum, provided the educational foundation that inspired Lee de Forest to become an inventor who contributed much to perfecting modern radio broadcasting.

Before World War I, some African-Americans enrolled in those YMCA radio classes that were then available to them in a number of cities, and they gained even greater access to radio technology during the war as part of the war effort. Howard University in Washington, D.C., for example, offered electrical and radio technology classes under contract with the U.S. military.

A number of African-Americans conducted radio experiments after the war by establishing amateur radio-training organizations. Members could learn how to build and repair radio transmitters and receiver sets, how to send Morse code, and how to obtain an amateur operator’s license. Miles Hardy established his Pioneer Radio Society in 1921 in New York City. A year later Roland Carrington founded the Banneker Radio Club in Baltimore. One of the most active areas for black ham operators was the midwest. Operators in Ohio, Michigan, Indiana, and Kentucky can be traced to Everett Renfroe who passed his ham operator’s examination in Chicago in the early 1920s. (The operators formally initiated an organization, OMIK, in the early 1950s to protect members against racism when they traveled throughout the nation.)

Early Broadcasting

Many African-American musicians took advantage of opportunities to appear on early radio broadcasts. There is evidence that the “father of the blues,” W.C. Handy, performed on the Memphis ham radio station of a white amateur, Victor Laughter, as early as 1914. The “Fisk Jubilee Singers” of Fisk University and the “Hampton Singers” of Hampton College are known to have performed live on radio in the early 1920s to raise funds for
their financially strapped schools. Morehouse College was repeatedly featured on radio in Atlanta. The common bond among African-American performers was a desire to display their abilities in a manner that proved black people were equal to others in society.

As American radio developed in the 1920s, the contribution of African-American musicians also increased across the country. Fletcher Henderson’s music was broadcast from New Orleans in 1921. The Plantation Club in Los Angeles broadcast Kid Ory’s Sunshine Orchestra in 1922. Further up the West Coast, vaudevillian George Dewey Washington made an appearance on Seattle’s KFC. Clarence Jones and His Wonder Orchestra were guests on KYW in Chicago. The Symphonium Serenaders entertained KDKA listeners from Pittsburgh. On New York’s WJZ, the Melrose Quartet was featured regularly, and Clarence Williams accompanied a variety of black artists for the station. Eubie Blake and Noble Sissle showcased their cast from “Shuffle Along” on Boston’s WNAC during the Boston Radio Exposition of 1922; a year later, they were on the air at KYW in Chicago. “Shuffle Along” later became so popular on Broadway that Sissle and Noble were able to book cast appearances on New York’s WJZ, WEAF, and WHN. For its opening ceremonies, WBBM in Chicago included Jimmie Wade’s Moulin Rouge Orchestra. WSBC in Chicago featured remote broadcasts by Frankie “Half Pint” Jaxon, and Hughie Swift’s band was heard nightly in Chicago on the same station.

Duke Ellington first performed on radio over New York’s WDT and then WHN in 1923. Bessie Smith, “Empress of the Blues,” was heard performing live throughout the southwest in 1923 from Memphis station WMC. In Nashville, Deford Bailey, the legendary harmonica player, was featured on WSM. He appeared regularly on radio from 1926 to 1941 and helped establish the great musical tradition of the Grand Ole Opry.

New York City was a beehive of African-American radio experimentation during this period. Fletcher Henderson’s band, performing at the Roseland, was broadcast remotely on a regular basis. Shows from the Plantation Club in New York, another jazz center for black bands, were broadcast five nights a week. Club Alabam contracted with several different stations to remotely broadcast 47 of its shows. Remote broadcasts from the Savoy Ballroom increased to eight per week. WHN carried a program featuring the great Florence Mills in celebration of her joining the Greenwich Village Follies. A blues marathon show was programmed on WDT. Other New York stations brought in such top entertainers as Antoinette Gaines, LeRoy Smith, Sam Wooding, Revella Hughes, and Eva “The Dixie Nightingale” Taylor. From St. George’s Episcopal Church, vocalist Harry T.Burleigh was heard on WJZ and proclaimed “the leading creative genius of the Negro race.”

Local Radio in the 1930s

What is known of African-Americans in and on local radio is still evolving. The paucity of information may be due to the fact that much historical attention has focused on network radio. Some researchers have found, however, that a few Northern stations had begun to observe what was then called “Negro history week,” inviting guest speakers to discuss black achievements. Certain important black newsmakers occasionally spoke on a public affairs show, as labor leader A. Phillip Randolph did in 1931. By the mid-1930s, local stations in Baltimore and Philadelphia had at least one weekly program aimed at a
black audience. The Museum of the City of San Francisco has discovered that Henry Starr, an African-American, was the leading pianist on KFRC’s *Edna Fischer Show*, a variety program in that city during the late 1920s and early 1930s.

The Depression may have created opportunities for African-Americans in many markets during the early 1930s: African-American music was often cheaper than white music for local stations to broadcast because the licensing agency ASCAP had signed few contracts with African-American publishers and writers. A station could thus play recordings by African-Americans and not incur ASCAP fees. Although as early as 1930 there were efforts by black businessmen to purchase a radio station, such efforts would not succeed until 1949.

Strong and continuous local programs by African-Americans began with those of Jack L. Cooper in Chicago during the 1930s. Many scholars credit Cooper as being the patriarch of black radio. His newsboy experience in Cincinnati and later his professional song and dance work on stage may have helped turn his career toward communication: he became an entertainment writer for the *Chicago Defender*. While on assignment in Washington in 1925, Cooper began writing, producing, and starring in his own black vaudeville show on WCAP. Washington’s racial laws, however, soon forced Cooper’s return to Chicago. There, station WSBC operated successfully by brokering time to various immigrant groups and was receptive to Cooper’s desire to produce and air *The All Negro Hour* in 1929. One of Cooper’s live broadcasts was threatened in 1932 when the key performer abruptly quit over a pay dispute. Cooper creatively set up a phonograph, placed a microphone in front of it, and played recorded music to maintain the show’s broadcast schedule and continuity thereafter. Inadvertently, he had become the first African-American disc jockey. By 1938 Cooper was brokering up to 20 hours of time on WSBC and programming church services on Sundays. Eventually he bought time on several other Chicago stations, replicated his record show, and produced news and public affairs programs that utilized his journalism skills. He also launched the first black advertising agency and radio production company.

Chicago became a focal point for broadcasting recorded black music—a mix of jazz, blues, spirituals, and hymns—when in the early 1940s Al Benson bought time on WGES and complemented Cooper’s “time blocks” with his own set of programs. Cooper and Benson each organized training programs and taught young aspirants about radio. They bought and sold time, conducted market research, and wrote and produced advertisements.

The “time block” purchase method and the recorded music program also appear to have been popular among local African-American entrepreneurs in other parts of the country in the late 1930s and early 1940s. In Seattle, Bass Harris appeared on KING; in Washington, D.C., Hal Jackson was on WOOK; in Detroit, Ed Baker was featured on WJLB, while Van Douglas appeared on WJBK; in Hammond, Indiana, Eddie Honesty was on WJOB; and in New York, Joe Bostic appeared on both WCNN and WMAC. As with Cooper and Benson, most early African-American radio personalities were college educated, trained by veteran professionals, or they were experienced entrepreneurs who understood the radio business.
Network Radio and Minstrelsy

With programs such as the hugely popular *Amos 'n' Andy* featuring white performers playing black roles, one must look at the stereotypic roles played by early black performers to understand the kinds of jobs generally available to African-American actors on network radio during the 1930s. For example, Ernest Whitman was employed as Awful for *The Gibson Family*. The role of Gardenia, a humorous character, was played by Georgia Burke on the *Betty and Bob* soap opera. Even Academy Award winner Hattie McDaniel (*Gone With The Wind*) was hired to portray a mammy on the network radio series *Showboat*. McDaniel also played a more endearing role as the lead on the network series *Beulah*—but only after the role had originally been played by a white man.

Positive portrayals of blacks in network drama were rare but not absent entirely. In 1933 Juano Hernandez starred in the CBS series *John Henry, Black River Boat Giant*. Rose McClendon, Dorothy Caul, and Jack McDowell also were cast members. John Henry was portrayed as a powerful but bad ladies’ man. More frequently, African-Americans were cast in stereotypical roles on network vaudeville programs including the *Eddie Cantor Show*, *Saturday Night Sewing Club*, and the *Rudy Vallee Show*. Cantor also hired a black female vocalist, Thelma Carpenter, for a regular spot on his show. “Rochester,” on *The Jack Benny Program*, was another black stereotype, but much of the humor came from Rochester’s “bettering” his white boss.

Performers such as the Golden Gate Quartet, Southernaires, Wings Over Jordan, CBS Trumpeteers, Ethel Waters, Andy Razaf, and Paul Robeson were able to showcase their professional skills nationally at one time or another. The Mills Brothers were especially popular on radio, Duke Ellington had his own network radio show by 1936, and Marion Anderson is legendary if only for her 1939 appearance at the Lincoln Memorial in Washington, which was broadcast nationally.

World War II

With its entry into the war, however, the United States was forced to begin confronting its “Jim Crow” treatment of black people, including the paucity and negative portrayal of African-Americans on radio: the country badly needed racial tranquility at home and among its military servicemen. To help accomplish its objective, the government produced or supported network radio programs that projected African-Americans in a positive light. *Men o’ War* was an all-black patriotic musical program series featuring naval personnel; it was broadcast regularly for two years over the CBS radio network. *Freedom’s People*, an eight-part program on NBC, highlighted African-American achievements and featured Count Basie, Cab Callaway, George Washington Carver, W.C.Handy, Joe Louis, Jessie Owens, and other outstanding African-Americans. African-Americans portraying positive characters were also written into such network soap operas as *Our Gal Sunday* and *The Romance of Helen Trent*.

A special radio documentary, “Open Letter On Race Hatred,” was broadcast on CBS in response to the 1943 Detroit, Michigan, race riot that left 35 dead. In addition, a series of discussion and public affairs programs that addressed black issues and featured black leaders aired nationally on radio networks. Ann Tanneyhill produced a show for CBS in
1943 about black women, called *Heroines in Bronze*. NBC aired programs such as *America’s Town Meeting* (which, although it discussed racial issues, did so with white speakers), *The Army Hour, Too Long America*, and others. CBS broadcast *People’s Platform, The Negro in the War*, and *They Call Me, Joe*, among others.

Many programs carried by the Armed Forces Radio Service (AFRS) encouraged good race relations among troops. Many programs featured black announcers, recorded music, and live bands. One AFRS station, located at the Blytheville Army Air Corps Base in Arkansas, programmed black local news, events, and recorded music in both the early morning and mid-afternoon that was listened to faithfully by African-American civilians throughout Mississippi County.

**Postwar African-American Radio**

After the war, African-American men and women began performing live on radio throughout America. Early Lee Wright became the South’s first recognized black announcer in 1947 on WROX in Clarksdale, Mississippi. The Delta Rhythm Boys, a local gospel group from the same town, could be heard on records. The famous *King Biscuit Time*, featuring blues men Sonny Boy Williamson and Robert Lockwood, was broadcast on KFFA in Helena, Arkansas. WLAC in Nashville had begun to play a mix of black-oriented music on a nightly basis, even though they still used white announcers.

Magazine reports about the success of African-American disc jockeys began to persuade some white owners of unsuccessful radio stations to begin full-time programming of rhythm and blues music. WDIA in Memphis, Tennessee, was the first such white station to do so. It was the second new station (after KWAM in 1946), to go on the air in Memphis after the war and found survival in the new competitive market very difficult. John Pepper, one of the WDIA owners, was ready to quit. In 1948 the station’s general manager and co-owner, Bert Ferguson, read a magazine article about the economic success of programming to African-Americans. Probably he was reading about Jack L. Cooper or Al Benson in Chicago. Shortly afterwards Ferguson hired Nat D. Williams to create a block of black-oriented programming in the afternoon. Williams’ afternoon program soon brought financial success to WDIA and enabled Ferguson to add another time block that featured Maurice “Hot Rod” Hulbert, then A.C. “Mooha” Williams and others until WDIA’s entire schedule was completely filled with various black blocks of rhythm-and-blues and gospel music programming. Fulltime black-oriented radio was born.

By the early 1950s, there were reportedly more than 500 blacks working in radio throughout the nation, playing mostly rhythm-and-blues, and working part-time on stations that otherwise provided programming for white listeners. This sudden expansion in the number of black announcers had been driven by the popularity of rhythm and blues music. The sounds conveyed joy and hope in a language that reflected the postwar vision of freedom. The men and women who played the music on radio shared the same hope for the future and spoke the same rhythmic language. The rhyme-language style popular among blacks was used in a variety of situations such as “signifying” contests or when compliments were paid on clothing styles. Al Benson used it on radio, but Jack L. Cooper did not. It was used for laudatory salutes among MCs on the black entertainment
“chittlin’ circuit” when introducing performers and working the audience. Some scholars trace the rhyme’s origin back to Africa. It certainly found its way into the lyrics of Louis Jordan’s “Beware” recorded in the mid-1940s. Nat D. Williams was associated with rhyme on Beale Street and later on WDIA. Maurice “Hot Rod” Hulbert, entertainer turned Memphis disc jockey, moved to Baltimore radio and popularized the style. Doug “Jocko” Henderson, a Hulbert admirer, put his signature on the style in Philadelphia and syndicated his Rocket Ship Show to five other East Coast markets. Radio personalities such as Jack Gibson and Daddy-O Daily developed rhyme styles mutually exclusive of the Memphis linkage.


African-American performers and rhythm-and-blues music were adopted by white people and by broadcast institutions at an increasing rate. Among those who championed the new sound were Alan Freed in Cleveland, Dick Clark in Philadelphia, George Lorenz in Buffalo, and Robert “Wolfman Jack” Smith near Del Rio, Texas. Collectively, recorded rhythm-and-blues performances and the accolades awarded black disc jockeys had made their impression. Imitation by white broadcasters was a respectful cultural compliment.

Station Ownership and Activism

Andrew “Skip” Carter bought KPRS of Kansas City, Missouri, a defunct operation, in early 1949: he became the first AfricanAmerican to own a commercial radio license. Later that same year, J.B. Blayton purchased WERD in Atlanta. Dr. Haley Bell in Detroit was the first black person to construct a new radio station—WCHB first aired in 1956.

African-American disc jockeys during the 1950s found it necessary to organize professionally in order to help each other improve salaries, working conditions, equal rights, and employment. They formed the National Jazz, Rhythm-andBlues Disc Jockey Association and attracted national attention in 1956 when members met to defend rhythm-and-blues music against its critics—those who believed that because rhythm-and-blues had black origins it was dangerous for white people to listen to. The group later changed its name to the National Association of Radio and Television Announcers (NATRA).

In the mid-1960s, managing and owning stations moved to the top of the black broadcasters’ agenda. The entire black staff of disc jockeys at WVOL in Nashville went on strike in 1964 and helped head salesman, Noble Blackwell, move into the vacated general manager’s job. In Chicago, Lucky Cordell was appointed manager at WVON. These moves were seen as milestone achievements within the larger civil rights movement.
Dr. Martin Luther King addressed the 1967 NATRA convention and publicly thanked its members for their valuable support of the civil rights movement. He praised the contributions of African-American announcers in general for using radio to popularize rhythm-and-blues internationally. Commentators have since praised the role played by African-American broadcasters in calming fears in the midst of the urban rebellions in the 1960s. Yet many emphasized the need for radio to open its doors even wider. African-Americans in the mid-1960s still held perhaps only one percent of the 60,000 jobs in commercial radio, and only five of 5,500 licensed radio stations were black-owned.

Pressure from activist groups and changes in federal policy brought sweeping change in the 1970s. NATRA declined as a result of growing conflict within and outside its own ranks over its priorities. Yet the organization’s agenda, to promote ownership of radio stations by blacks, advanced by Del Shields and others, had won support from FCC Commissioner Nicholas Johnson and was also supported by other organizations such as Black Efforts in Soul Television, led by Bill Wright, and subsequently The National Black Media Coalition under Pluria Marshall. The predominately white National Association of Broadcasters along with the National Congressional Black Caucus also lent their efforts to addressing the ownership problem. The first black FCC Commissioner, Benjamin Hooks, was appointed by President Richard Nixon. Overall, this activism led to a modest increase in station ownership and the establishment of The National Association of Black Owned Broadcasters.

Dr. Haley Bell’s acquisition of a second Detroit license in the 1960s (to operate WCHD-FM) made him the first African American to own more than one station. James Brown’s two Augusta, Georgia, stations and Percy Sutton’s Inner Broadcasting, Inc., based in New York, soon followed. Dorothy Brunson’s acquisition of Brown’s stations made her the first African American woman to become a station owner. Cathy Hughes of Radio, Inc. emerged as a legendary figure in radio-station financing, acquisitions, and operations. Hughes had honed her skills in advertising and sales by serving as a radio volunteer in Omaha. In 1971 she began to teach advertising at Howard University, and was soon managing WHUR-FM, owned by the university. By 1980 she had purchased Washington’s WOL and added another station to her list in 1987. Deregulation helped Hughes: in the early 1990s she founded Radio One, Inc., and by 2001 her company held 48 radio station licenses and was the main reason African-Americans now owned more than 200 stations. But in many markets deregulation hurt the black goal of owning more stations. The 1996 Telecommunications Act allowed unlimited groups of radio stations (as well as multiple stations in any single market) to be owned by a single entity: this relaxation of former rules had the effect of pushing up station prices. Often unable to raise the inflated purchase prices—and with existing black-owned stations bought out by the owners of the growing radio chains—black station owners were unable to compete: the number of black-owned stations stagnated then slowly begin to decline. The only bright note was that at the turn of the century, blacks William Kennard and then Michael Powell were successive chairmen of the FCC.
Networks and Wider Distribution

The first African-American network was the short-lived National Negro Network founded by black entrepreneur W. Leonard Evans in 1954. The network signed up 40 affiliates and promised good programming: among its best were a radio drama *The Story of Ruby Valentine* and variety shows hosted by Cab Callaway and Ethel Waters. But lack of advertiser support caused the network’s demise after only a few months. Two decades later two networks, the Mutual Black Network and the National Black Network, began providing news and public affairs programming to black-oriented radio stations. Together these networks reached millions of listeners.

Ronald R. Davenport, a former dean of the Duquesne University School of Law, raised enough money to purchase the struggling white-owned Mutual Black Network and assumed management of the company. In the late 1970s MBN became the Sheridan Broadcasting Company. In 1991 Sheridan Broadcasting Network and National Black Network joined forces to operate as equals in a general partnership under a new name, American Urban Radio Networks. The AURN distributes a variety of news and public affairs programming to 250 African-American-oriented radio stations. It ranks as one of broadcasting’s most successful firms.

A number of highly visible existing African-American operations have made use of such newer technologies as communication satellites and the internet. For years radio personality Tom Joyner had worked in both Dallas and Chicago simultaneously. He became known as the “fly jock” for his daily commutes between the two cities. Finally he converted to uplinking his broadcast signal to satellite from his Dallas location and syndicating his program to all radio stations. His popular show is now heard coast to coast by millions of listeners daily via the ABC Radio Network’s satellite system. He is not alone. Others have purchased satellite time and are thus linked to hundreds of outlets nationally. Examples include Walt “Baby” Love, for Walt “Baby” Love Productions, Lee Bailey for Bailey Broadcasting, and American Urban Radio Networks. Darnell’s *Black Radio Guide* maintains a growing list of internet-only black radio stations. The heart of the human resource chain is Black College Radio whose stated purpose is to provide an annual forum for black college broadcasters, professional broadcasters, and members of the music industry to meet and discuss ways to increase minority participation in the broadcasting industry.

Although the playing field for African-Americans has seldom been level, many have persisted and mastered the skills essential for successful leadership. The number of African Americans who worked in radio between 1920 and 2000 was comparatively small. The quality of their contribution to achieve equity is more significant to radio when culture is placed into a perspective that stretches from Latimer, Gosden, and Correll, to recorded music used in modern programming. The magnitude of African-American presence in radio through jazz, rhythm and blues (or rock and roll), blues, reggae, gospel, salsa, and rap, regardless of the performer’s race, is incalculable. According to folk legend Pete Seeger, American music is Africanized music.

LAWRENCE N. REDD

See also Affirmative Action; Amos ‘n’ Andy; Beulah Show; Black-Oriented Radio; Black Radio Networks; Durham, Richard; Hulbert, Maurice “Hot Rod”; Joyner, Tom; KFFA; Stereotypes on Radio; WDIA; Williams, Nat D.; Wright, Early
Further Reading


Agricultural Radio. See Farm/Agricultural Radio

**Album-Oriented Rock Format**

Album-Oriented Rock (AOR) originally referred to 33 1/3 rpm LP vinyl recordings, which distinguished it from the “single” 45 RPM recordings played on the Top-40 format.

AOR’s initial popularity in the 1970s signaled the arrival of 1960s counterculture tastes into the American popular music mainstream. But far from embracing the progressive politics, lifestyle, and artistry that gave counterculture music its relevance, AOR programmers capitalized on the increasing popularity of progressive radio incubating in the antiwar, Woodstock-era FM underground by appropriating its unique characteristics. AOR programming consultants replaced the DJ-programmer with a system of cue cards and playlists, turned thematic sets into music “sweeps” designed for Arbitron’s ratings methodology, and handed FM station owners a homogeneous and more manageable format. AOR radio, by stripping rock and roll of its rhythm and blues heritage and rejecting its subversive possibilities, significantly contributed to branding rock as a marketable commodity. It also helped move most radio listeners from AM to FM by the end of the 1970s. Although the AOR format prospered at the expense of the radio radicals who inspired it, some went on to run AOR stations or form broadcast consultancies, while others remained reactionary by joining in less mainstream forms of radio, typically noncommercial in nature.

The AOR playlist is comprised of selected tracks from rock albums, chosen to attract a target audience. Radio stations utilizing the AOR format skew their playlists to position the station competitively. For example, AOR stations targeting an older audience may include rock from the late 1960s and early 1970s; lighter rock tracks often attract more women; and emphasis on contemporary albums may appeal to a cosmopolitan audience.
Such refinements of the AOR format have led to Classic Rock, Soft Rock, and some Alternative formats. Other Alternative formats have developed as antithetical to AOR.

JOSEPH R. PIASEK

See also Alternative Format; Arbitron; Classic Rock Format; Progressive Rock Format; Soft Rock Format; Underground Radio

Further Reading


The Aldrich Family

Situation Comedy Program

The 20th century may not have invented teenagers, but it supplied the most memorable examples. From 1939 to 1953, the character Henry Aldrich and his imitators defined the standard crises, all poignant yet laughable. Although Henry’s stage origin was unpromising, his radio personality carried on the Tom Sawyer/Penrod Schofield/Andy Hardy tradition of a good-hearted innocent who unintentionally causes mischief. Clifford Goldsmith’s 1937 play *What a Life!* confined him in the principal’s office, accused of stealing band instruments when he had merely cheated on a test in order to attend the dance. Henry’s world grew when Rudy Vallee and Kate Smith commissioned sketches for their shows. By 1939 the vignettes expanded to a 30-minute series on the National Broadcasting Company’s (NBC) Blue network. Sponsored by Jell-O and introduced by the rousing tune “This Is It,” *The Aldrich Family* mingled humor, nostalgia, and complicated plots.

The opening routinely stressed the universality of Henry’s zany experiences. For example, the announcer led in to the episode “The Tuxedo” by saying, “Whatever and whenever the Golden Age was, it is less important to most people than the teen age—a time of life made notable by typical American boys like Henry Aldrich and all their mishaps.” Adolescence normally involves a tension between conformity and individuation, but Henry’s awkward attempts to be a dutiful son/student/friend/worker as well as an independent individual seldom seem rooted in common experience. Unlike his listeners, he never matured beyond 16. Certainly he honored his parents: the show began with the memorable call from mother Alice (“Hen-ry! Hen-ry Aldrich!”), which Henry answers with an obedient, “Coming, Mother.” Talking to father, lawyer Sam Aldrich, Henry resorts to elaborate but ungrammatical politeness: “Do you wish to speak to I, Father?” He tries to carry out their wishes by not leaving doors open, by cooperating with
his sister Mary, and by babysitting a rambunctious tyke. Yet he inevitably upsets family order. Once Sam borrows Henry’s bicycle and thoughtfully leaves a note on the rake with which his son had promised to beautify the yard. As usual, Henry forgets the leaves, doesn’t see the note, and, assuming someone has stolen the bike, calls the police. By the show’s end, friends, neighbors, and strangers share his teenage turmoil.

School situations likewise do little to develop Henry as a character. He once masters the Latin pluperfect subjunctive; most other times, his academic milestones mark unpredictable gaffes: when he spills glue on the shop floor and sees his teacher lose his shoe in the mess, or when he is caught on a fire escape by the principal as he tries in vain to return a teacher’s grade book that his pal mistakenly picked up because it resembled a mystery story. Friendship and romance also seemed to change before Henry could understand them. A note from a girl in the next town flatters him so that he rents a costume, intending to escort her to a dance. After seeing her picture, he fobs her off on a rival who also takes his costume. The urge to make money, too, is thwarted by poor information. He buys a furnace-starting concession. The seller neglects to tell him that the owners are in Florida, a fact Henry learns from a postcard sent by the owners to his family. Unfortunately, he has already wrecked the furnace, restarted mail and milk deliveries, and burned a box of the owner’s papers. Although Henry mishandles his duties, his good will eventually moderates any possibilities for serious harm.

The plots often center on Henry’s quest to acquire some object: a misplaced watch given by his aunt Harriet, who wants to see it again; a tuxedo so he can attend the prom; a straw hat; an antique toy to replace the one he broke in his girlfriend Kathleen’s home; a motor scooter that he will receive if he can pass his history test. His cravings for material goods parallel those of the normative middle-class citizen, but his missteps lighten greed with humor. Popular formulas for success often mislead Henry. He thinks he might get rich raising rabbits; he imitates the generosity he’s seen in a film and, like the hero of Thornton Wilder’s *Heaven’s My Destination*, creates chaos; he writes to a Charles Atlas-type muscle developer but misplaces the letter that details his puny dimensions. Henry’s ambitions do not liberate him; rather, they entangle others. His father spends some uncomfortable hours trapped in a phone booth; a friend crouches miserably in a basement cubbyhole; his chum Homer Brown, unwittingly engaged to Agnes, finds that Henry’s solution is worse than commitment.

Although *The Aldrich Family* provided lasting memories, the cast changed frequently. At least three mothers, seven sisters, seven directors, and three fathers appeared. House Jameson, barely in charge as would-be patriarch Sam, had more authority as *Renfrew of the Mounted*. Ezra Stone was the bestknown Henry—his reedy voice captured the nearly out-of-control mood that characterized each program. After Stone was called to military service from 1941 to 1944, Norman Tokar, Raymond Ives, Bobby Ellis, and Dickie Jones filled in until his return. Clifford Goldsmith relied on seven other writers, but his benign vision of adolescence still shaped their versions. Only Jackie Kelk remained consistent, playing Homer (a role that was a shift for Kelk, who had played the self-confident Terry on *Terry and the Pirates* and helpful Jimmy Olson on *Superman*).

Several shows copied the Aldrich formula of a well-meaning youngster who inadvertently confounds normalcy: *Archie Andrews* and *That Brewster Boy* echoed the male adolescent’s turmoil; *Junior Miss*, *A Date with Judy*, *Maudie’s Diary*, and *Meet Corliss Archer* presented the female version. A series of 11 Henry Aldrich movies
between 1939 and 1944 made visual his arrested adolescence, but the film versions employed other actors (Jackie Cooper in the first, Jimmy Lydon in the rest). Likewise, the 1949–53 television program used five Henrys (most notably Bobby Ellis), though it retained Jameson as father, Kelk as Homer, and Leona Powers as Mrs. Brown.

See also Comedy; Situation Comedy

Cast

Henry Aldrich
- Ezra Stone (1939–42; 1945–52), Norman Tokar (1942–43), Dickie Jones (1943–44), Raymond Ives (mid 1945), Bobby Ellis (1952–53)

Sam Aldrich
- House Jameson, Clyde Fillmore, Tom Shirley

Alice Aldrich
- Katharine Raht, Lea Penman, Regina Wallace

Mary Aldrich
- Betty Field, Patricia Peardon, Charita Bauer, Ann Lincoln, Jone Allison, Mary Mason, Mary Rolfe, Mary Shipp

Homer Brown

Will Brown
- Ed Begley, Arthur Vinton, Howard Smith

Homer’s Mother
- Agnes Moorehead, Leona Powers

Kathleen Anderson
- Mary Shipp, Ethel Blume, Jean Gillespie, Ann Lincoln

Dizzy Stevens
- Eddie Bracken

George Bigelow
- Charles Powers

Toby Smith
- Dick Van Patten

Mrs. Anderson
- Alice Yourman

Willie Marshall
- Norman Tokar

Aunt Harriet
- Ethel Wilson

Announcers
- Harry Von Zell, Dwight Weist, George Bryan, Dan Seymour, Ralph Paul

Creator/Writer

Clifford Goldsmith
Programming History

NBC  July 1939-July 1944; September 1946-April 1953
CBS  September 1944–August 1946

Further Reading

Beers, Dale, “The Aldrich Family Log Website,”
Goldsmith, Clifford, “Radio Oddities,” Tune In 4 (August 1946)

Alexanderson, E.F.W. 1878–1975

U.S. (Swiss-Born) Radio Engineer and Inventor

Employed for 45 years by the General Electric Company as an electrical engineer, E.F.W. Alexanderson was involved in early research and development of radio-related technology. He is associated primarily with the development of alternators that first made reliable long-distance radio transmission possible.

Ernst Alexanderson was born in Uppsala, Sweden. After graduating from the Royal Institute of Technology in Stockholm in 1900 and then studying electrical engineering for a year in Germany, Alexanderson emigrated to the United States. Shortly thereafter, in 1902, he found employment at General Electric. Alexanderson was involved in a number of projects during his first years at General Electric, until the work of Reginald Fessenden brought Alexanderson into radio research.

Fessenden was attempting to achieve transoceanic voice transmission through a radio wave. Up to that time, radio transmission had been based on Guglielmo Marconi’s sparkgap system, which sent out an interrupted wave, thus creating a series of dots and dashes for Morse code. To achieve the ability to transmit a continuous wave on which a voice could be superimposed, Fessenden contracted with General Electric to construct a special alternating-current generator that could be used as the transmitter. This project was assigned to Alexanderson. After several years of design and development, in December 1906 the alternator was delivered to Fessenden, who proceeded that Christmas Eve to present the first radio voice transmission.
In the following years, Alexanderson continued to work on and refine the alternator for General Electric, incorporating many of his own engineering ideas into its design. This General Electric alternator was commonly called the Alexanderson alternator. The design of this large machine was very similar to that of a power plant’s generator, though it rotated much faster. Such high-speed rotations created complex mechanical problems that Alexanderson had to solve.

During World War I, the Alexanderson alternator began to receive much favorable attention in scientific and industrial circles when General Electric used it for transmission tests of a new vacuum tube the company had developed. Alexanderson was now concentrating on creating a 50,000-watt version of the alternator. By early 1915, developmental work on this device had reached the point where tentative plans were
made to install one at an American Marconi radio transmitting station in New Brunswick, New Jersey, for field tests. While he was in the United States in 1915, Marconi visited General Electric’s Schenectady, New York, laboratory to examine the alternator. He saw it as a key component in developing reliable transoceanic communication. Shortly after Marconi’s visit, representatives of Marconi and of General Electric discussed a deal whereby Marconi companies would have exclusive use of the Alexanderson alternator, with General Electric retaining exclusive manufacturing rights. The agreement was not completed because Marconi was suddenly called back to Europe by the Italian government.

Although the negotiations with Marconi were on hold, General Electric proceeded with its plan to install a 50,000 watt alternator at the American Marconi New Brunswick site, and an alternator was delivered in 1917. Because of World War I, the U.S. Navy had been authorized to take over all high-powered radio transmission stations, and it soon took over American Marconi’s New Brunswick facility. Using the call letters NFF, the navy used this alternator and a subsequent 200,000 -watt alternator—also designed by Alexanderson and delivered to New Brunswick—to transmit propaganda and information by radio throughout Europe. In January 1918, President Woodrow Wilson’s Fourteen Points message was delivered to Europe via this facility, as was a later appeal from Wilson to the German people to remove their Kaiser. For this latter message, Alexanderson himself was at the transmitter site.

After the war ended, Marconi again approached General Electric with a proposal to obtain the exclusive right to buy the Alexanderson alternator, for by that time the alternator was the best long-distance transmitter available. If General Electric had accepted Marconi’s proposal, a foreign company would have gained a monopoly over American radio communications with Europe. When General Electric approached the navy for its view of the proposed contract with Marconi, navy officials expressed strong opposition. Knowing that the government preferred an American company to control the country’s international radio communications, General Electric instead bought a controlling interest in American Marconi, which led to the eventual formation of the Radio Corporation of American (RCA) in 1919. Control over Alexanderson’s alternator technology was one factor that led to the creation of RCA.

Alexanderson was appointed RCA’s first chief engineer. General Electric, as a founder and major shareholder of RCA, loaned Alexanderson to the new company while also keeping his services at General Electric on a shared-time basis. Alexanderson stayed at RCA for four years and then returned full time to General Electric to continue research. He concentrated on antenna design and television research, demonstrating a mechanical scanning television receiver as early as 1927.

Alexanderson retired from General Electric in 1948, but he stayed active for the next 27 years by consulting for several companies, including RCA. In these later years, Alexanderson was viewed in the scientific community as one of the pioneers of electrical engineering and early radio technology. He died in Schenectady, New York, in 1975, just two years after his final patent had been awarded.

RANDALL VOGT

See also Fessenden, Reginald; General Electric; Radio Corporation of America


Further Reading


All India Radio

India presents huge challenges to any broadcasting institution that aspires to serve the whole nation. All India Radio (AIR), the state-run monopoly, was expected to take these challenges on and help build a modern nation state with an egalitarian social democracy. More than a billion people, nearly half of them living below the poverty line, are spread over a land mass of 1.27 million square miles. Although urbanization and industrialization are the hallmarks of postcolonial India, nearly 75 percent of the population still lives in 55,000 villages, eking out a living from farming. About 10 percent are employed in industries in urban areas. India’s religious, cultural, and regional diversity is striking, with 83 percent of the population claiming Hinduism as their religion and Muslims, Christians, Sikhs, Buddhists, and Jains accounting for the rest. Fourteen officially recognized languages and hundreds of dialects coexist with English. Hindi, the official language of modern India, is slowly gaining a foothold with the masses. Uneven development characterizes India; cities such as Bangalore claim a place in the global computer industry as the “Silicon Valley of India,” whereas villages have extremely bad roads and lack clean drinking water, medical facilities, and schools. Significant advances have been made in literacy rates since independence in 1947, but a mere 52 percent are functionally literate. Social inequity such as caste, class, and gender inequality can be found in urban and rural parts of the country. Untouchability is still practiced against nearly 170 million people who are cast aside in near-apartheid conditions.
Origins

Enthusiasts in India’s big cities pioneered radio by organizing amateur radio clubs in the early 1920s. Their efforts, and the successful growth of radio in Europe and the United States, gave impetus to a group of Indian entrepreneurs who established the Indian Broadcasting Company on 23 July 1927. Nevertheless, by 1930 their pioneering effort to launch privately owned radio ran into trouble because of lack of revenues. Broadcasting from their two stations, located in Bombay and Calcutta, they catered to the small European community and Westernized Indians while ignoring the masses. The colonial government was faced with the rising tide of anti-imperialist sentiment in the country; being interested in the propaganda potential of broadcasting, it bought the assets of the Indian Broadcasting Company and renamed it the Indian State Broadcasting Service (ISBS).

In 1935 the colonial government took another decisive step by inviting the BBC to help develop radio; one of the BBC’s senior producers, Lionel Fielden, was sent. Fielden is credited with having the name of the organization changed to All India Radio and for laying the foundations for public service broadcasting with the goal of providing information and education. He returned to England in 1940. By 1947, the year of India’s independence, the AIR network had grown to 11 stations with 248,000 radio licenses.

AIR Today

AIR’s growth and reach have been phenomenal in the last 50 years. There are 333 transmitters today, including 146 medium wave, 54 shortwave, and 133 FM. Some 210 radio stations cover 90 percent of India and reach 98 percent of the population. AIR claims a listenership of approximately 284 million who tune in on 111 million radio sets. Although controlled by the central government, AIR introduced advertising in 1967 and earns 808 million rupees a year (US$1=48 rupees). The government makes up any deficit in its operating expenses.

AIR broadcasts in 24 languages and 146 dialects for domestic audiences and in 24 languages for international audiences. Approximately 303 news bulletins are aired daily, of which 93 are intended for national listeners, whereas regional stations originate 135 news bulletins daily. In addition, there are special bulletins on sports, youth, and other major events, such as the annual Haj to Mecca by Muslims or the Kumbh Mela in Allahabad. More than 80 stations in the AIR network broadcast radio dramas in various languages. Forty percent of the broadcast time, however, is set aside for classical, light, folk, and film music. The External Service, set up to act as a cultural ambassador, airs 65 news bulletins in 16 foreign and eight Indian languages. In addition, magazine programs on sports and literature; talk shows on sociopolitical-economic issues; and classical, folk, and modern Indian music from different regions of the country are broadcast.

AIR employs well over 16,000 persons. Approximately 13,000 are regular government servants; the rest are contract employees. They are transferable every three years, and so these employees seldom come to know the community in which they work. Such a huge organization cannot escape a hierarchical structure and the formal nature of appointments, promotions, retirements, and codes of conduct. Instead of demanding
commitment to listeners, the organization requires its employees to adhere to the rules and procedures of a large government department. Because the employees have very little functional freedom, creativity and innovation are sacrificed. Lethargy, apathy, and favoritism unfortunately permeate the organization.

**Regulation and Autonomy**

Broadcasting is a regulated monopoly of the central government. The Indian Telegraph Act of 1885 was later amended to vest the exclusive right to “establish, maintain and work” wireless apparatus in the Government of India. Consequently, AIR has functioned as an arm of the central government ever since its inception. The Ministry of Information and Broadcasting is the policy-making body for the entire broadcasting system. Generalist officers drawn from the civil service manage the ministry. The director general heads the AIR and executes policy. The government has held that any member of the elite Indian Administrative Services can function as head of AIR with equal disinterest. Hence the director general is a bureaucrat who may or may not be interested or qualified in radio.

National television grew under the umbrella of AIR and in 1976 was given a separate structure called Doordarshan, literally meaning viewing from a distance. As one would view a deity in a temple, TV audiences regularly gain a glimpse of the political establishment via Doordarshan’s newscasts. With a mandate similar to radio’s, television has also seen remarkable expansion and reach in the country in the last three decades. With the rise of privately controlled satellite delivery services, India now has a mixed system of public and private enterprises in television, whereas radio has clearly remained a government monopoly.

The credibility of AIR news has always been in question, however, not only because it is a government department but also because of well-reported instances of interference by the prime minister’s office, irrespective of who is in power. There has been considerable pressure from private and public institutions as well as from intellectuals in the country to create an arms-length relationship between the government and the broadcast institutions ever since the National Emergency in 1975. Suspending certain articles of the constitution, the prime minister unleashed a reign of terror, which lasted almost 19 months. To silence dissent, the government engaged in mass arrests of prominent political leaders, trade unionists, human rights activists, communists, and students. There were widespread reports of torture and sterilization, especially of the poor. While the judiciary was not abolished, the ruling party in the Parliament passed certain amendments to the constitution to put the prime minister and her party loyalists above the nation’s laws. The privately controlled press and cinema were subjected to intense censorship, and journalists at AIR were instructed to abandon even the pretense of journalistic fairness and balance in their coverage of events. Prominent journalists went underground to avoid arrest. The government restructured the news agencies in the country to “clean out” anyone who was not favorable to the prime minister and denied advertising in newspapers that would not change the tone of coverage of the regime. A dark moment in the history of the nation, the national emergency exemplified the extent to which the executive branch of the government could misuse its power over the media.
The debate on autonomy for broadcasting has finally resulted in Parliament passing the Prasar Bharati Act of 1990, which seeks to free radio and television from the direct control of the government and place it in the hands of an autonomous corporation that would be managed by a board. That board would be required under the law to be accountable to a broadcasting council and in turn to a statutory parliamentary committee with various powers reserved to the government. The act has not been implemented, however.

Promises Versus Reality

AIR’s heavily bureaucratic ways have been the major impediment to innovation and creativity. In a highly pluralistic society with incredible linguistic, caste, and class differences, AIR has attempted not to offend any group. Controversial social and community welfare issues take a back seat while popular film music dominates. Regional language radio stations beam programs to the whole state in a formal dialect, which renders it stiff and official. As a consequence, most people find AIR boring. Radio, as a mass medium, is particularly suited to communicate in the local dialect and idiom, thereby establishing a personal connection between the broadcaster and the listener. That has not, however, been achieved in India because of the bureaucratic stranglehold on radio.

The model of a centralized national radio service with many regional and local stations intended to achieve the vision of unifying the nation was well intentioned but expensive and difficult to deliver. For development purposes, more localized micro radio operations based in community and educational institutions would have been more cost efficient and credible with audiences. The distance between the program creators and listeners would have been reduced, which in turn would have enhanced radio’s credibility with the rural masses. Perhaps radio might then have met local needs better. Until recently, the government has guarded the frequencies as though they were its property and has only reluctantly allowed private program producers some space on the government-controlled stations. This may lead to licensing of private FM stations that will, in all likelihood, be urban-centered. All India Radio’s local outlets around the country often are criticized for their low levels of involvement on the part of local groups. Partly in response, the Indian government began to license private radio stations in 2000, and the first of them came on air in July 2001. As of 2002 a few community radio stations had begun to appear.

AIR’s long-held policy of broadcasting classical music meant that it should have developed an extensive collection of recordings by some of India’s greatest performers. Lacking resources and vision, many station directors simply did not save such precious recordings. For a few rupees more, the artists would have let AIR keep the recordings and later release them in the burgeoning cassette market. Recently, AIR seems to have realized its folly, and cassette tapes of speeches by leaders such as Gandhi and Nehru are being released to the public.

Competition to radio has grown steadily from film and television. Doordarshan, with its national reach and through its regional stations, and the privately controlled satellite TV channels have stolen radio audiences. They offer similar programs of music, talk, and other shows with the power of visuals. The enormously popular film music from India’s
own gigantic film industry became widely available on cassettes by the mid 1970s and even penetrated rural areas in the following decade. Satellite audio services and on-line radio, operated by private companies, will be the next frontier on which AIR will have to compete.

AIR needs bold new directions in this age of the internet and FM broadcasting. What seems to be in store is an added layer of bureaucracy in the name of autonomy and higher pressure on AIR to earn more revenues and become self-sufficient. Those signs do not offer much hope for an institution with the national purpose of employing the power of the medium for social change.

MANJUNATH PENDAKUR

See also Developing World

Further Reading

Luthra, H.R., Indian Broadcasting, New Delhi: Ministry of Information and Broadcasting, 1986
Manuel, Peter Lamarche, Cassette Culture: Popular Music and Technology in North India, Chicago: University of Chicago Press, 1993
Masani, Mehra, Broadcasting and the People, New Delhi: National Book Trust, India, 1976

All News Format

All news is a programming format that continuously provides listeners with the latest news, sports, weather, time, and, in many cases, reports on driving conditions. This format’s appeal is directed to a revolving audience continuously tuning in and out.

Radio news traces its origins to KDKA’s broadcast of the 1920 presidential election returns. The station announcer requested that listeners mail postcards to the station confirming that they had heard the broadcast. By 1930 NBC and CBS were
simultaneously broadcasting *Lowell Thomas and the News*, sponsored by *Literary Digest*. The unusual simulcast, in which NBC broadcast the program to the eastern half of the country and CBS to the western half, became solely the property of NBC within a year. Americans grew accustomed to turning on their radios for the latest news during the late 1930s. By the end of the decade, as social unrest increased in Europe, the voices of radio correspondents William L. Shirer, George Hicks, and Edward R. Murrow became as familiar as those of friends and neighbors. Radio was establishing itself as the leader in reporting events as they were occurring. In 1940 Americans told pollsters for the first time that they preferred radio to newspapers as their primary news source. Coverage of World War II cemented the relationship between radio and its audience across the United States as listeners followed the progress of American troops in Europe and the Pacific.

With the end of World War II and the development of television, radio’s role once again shifted. During the 1950s, radio’s entertainment programming, including dramas and soap operas, moved steadily to television. Music gradually became the dominant form of programming on radio; at many stations, news was shifted to five minutes at the top of the hour.

In the 1960s radio management took another look at news programming. The trade magazine *Sponsor* described radio at that time as the “new king of the news beat” and attributed its change in status to improvements in technology, increased numbers of experienced news reporters, and recognition that newsmakers were more important than newscasters. Four radio networks were providing regular newscasts to their affiliates: ABC, NBC, and Mutual Broadcasting System (MBS) produced two newscasts hourly, and CBS, with 20 news bureaus worldwide, had nearly 50 correspondents contributing to their news programs.

The first all-news radio format in the United States was used at KFAX in San Francisco on 16 May 1960. General manager J.G. Paltridge and sales manager Ray Rhodes called the new format “newsradio.” As was common at the time, KFAX (owned by Argonaut Broadcasting) sold advertisers announcements but no sponsorships of shows. Compared to today’s heavy commercial schedule, spots were few, with one commercial per five minutes of news and also at station breaks. The first 25 minutes of an hour consisted of hard news followed by business news, sports, and special features. “Newsradio” died after four months due to its lack of advertisers.

In 1961 Gordon McLendon started the first commercially successful all-news radio station, X-TRA. Located in Tijuana, Mexico, it beamed its powerful signal across the border to southern California. A station promotional announcement trumpeted, “no waiting for hourly newscasts or skimpy headlines on X-TRA NEWS, the world’s first and only all-news radio station. In the air everywhere over Los Angeles.”

Los Angeles broadcasters were critical of the Mexican station’s identification with their city, as the only address announcers mentioned was that of the sales office in Los Angeles. The station’s official on-air identification, required by law, was made in Spanish and followed by Mexican music and a description of Mexican tourist attractions. The Southern California Broadcasters Association called this an unethical attempt to camouflage a Mexican station as one located in Los Angeles.

In the early days, X-TRA used “rip and read” reports (stories torn straight from wire service machines and read live on the air). The station was served by the Los Angeles City Wire Service, the Associated Press (AP), and United Press International (UPI). X-
TRA also subscribed to a clipping service that provided stories from newspapers in all major U.S. cities and international capitals around the world. No one rewrote the wire copy, and there were no station reporters gathering news or conducting interviews. Newscasters alternated as anchors every 15 minutes, with a half hour in between to prepare for the next news stint. The content was somewhat repetitive, as programmers assumed that the audience would switch to a music station after hearing the most recent news. All newscasters read their copy with the sound (often recorded) of wire service teletype machines in the background, as a report in Sponsor magazine described it, “to suggest a newsroom setting.”

McLendon brought the all-news format to WNUS (pronounced “W-news”) in Chicago in 1964. He advised radio programmers considering the format not to attempt to enliven it with features and “actualities” (sound bites), suggesting that listeners wanted nothing but news. WINS, New York’s first allnews radio station, ignored that advice when it switched to round-the-clock news in 1965. Owned by Westinghouse, WINS expanded the McLendon design, emphasizing on-the-scene reports and actualities. Fourteen newscasters, rotating in 30-minute shifts, anchored the newscasts. Mobile units provided live and taped reports from the five boroughs and the outskirts of the metropolitan area. A staff of more than 40 produced the news summaries, sports reports, financial news, and weather reports, plus time and traffic reports. They relied on wire service from AP and UPI and the resources of Westinghouse stations and news bureaus across the country and overseas. Despite the personnel-intensive expense of the operation, WINS started turning a profit six months into its all-news operation.

In 1966 Broadcasting reported that all news was a viable, profitable choice for a programming format. There were then four U.S. stations concentrating on news: WINS (New York), KYW (Philadelphia), WNUS (Chicago), and WAVA (Arlington, Virginia), and the Mexican station X-TRA in Tijuana, which also had an audience in the United States. Despite reaching the profit-making point after nine months, WNUS never gained a dominant share of the market, so management changed its program format back to music in 1968. Westinghouse, however, went on to program all news in its stations in Los Angeles and Philadelphia.

CBS’s flagship station in New York, WCBS, shifted to all news in 1967, but with its own innovations and significant financial support. WCBS used helicopters for traffic reports and its own weather forecasters. It had more reporters and produced more features than other all-news stations of the period, and it had access to the resources of the respected CBS network news. Among its reporters were Ed Bradley and Charles Osgood, who would make national names for themselves and eventually shift to television news. CBS brass liked the results, and all-news formats were put into place at other CBS owned-and-operated stations in Boston, Chicago, Los Angeles, Philadelphia, and San Francisco.

NBC broke into all-news radio in 1975, introducing News and Information Service (NIS), the first national all-news service. Subscribers paid as little as $750 or as much as $15,000, depending on their market size. Stations would pay for world and national news plus sports and features, all provided by NBC anchors in New York. They broadcast for 47 minutes out of every hour with the format constructed so that subscribers could take the whole 47 minutes or as little as 23 minutes of the hourly format. Unlike traditional affiliations in which a network paid its affiliates or traded commercial availabilities, NIS
had to be purchased from NBC. With the network producing the majority of the programming, the all-news format looked financially feasible for medium and small markets for the first time.

Despite the positive appearances, the all-news concept was not successful for NBC. After 18 months NBC had only 62 subscribers, significantly fewer than the projected 150 stations. Industry insiders suggested that the NBC network’s unwillingness to commit its owned-and-operated stations contributed to the demise of NIS (only one adopted the all-news format). Audience numbers never reached expectations, resulting in disappointing advertising sales. All news was expensive to produce and simply was not bringing in the necessary income, so NIS went off the air two years after it began. Although it had cost $20 million, its impact on the future of all-news radio had been significant during its short life. After its demise, a number of other all-news stations continued, affiliating with other networks, including CBS. So NBC contributed to the all-news format’s expansion from the top ten markets to the medium-sized markets, despite the failure of NIS.

From NBC, CBS, and Westinghouse, three basic models developed for the all-news format, all based on the “format clock.” A circle divided into pie-shaped slices indicates specific times during the hour on an analog clock. News, weather, traffic reports, and features are designated on the pie slices. Today’s “weather on the fours” or “traffic on the eights” are segments that appear every four and eight minutes within each hour span, based on the traditional format clock.

The Westinghouse model is based on a 20- to 22-minute cycle with short, crisp stories and repetition. This is generally a hard-news approach with headlines, weather, time checks, and traffic reports. For instance, Philadelphia’s KYW is famous for announcing, “Give us 22 minutes and we’ll give you the world.” The CBS model tends to be more informal, with hard news, features, and commentary, having initially used dual anchors and less repetition to establish its format. NBC created a more impersonal sound with the NIS model because it was producing news for all areas of the country rather than tailored for a specific market.

All news was one of the fastest growing formats in the 1970s, but the number of all-news stations started dropping in the 1980s as the news format was combined with a less expensive format that was growing in popularity: talk. The number of news-talk stations increased as all news declined. By 1990 there were only 28 all-news stations in the United States.

In 1994 the Associated Press started a 24-hour all-news radio network to serve news and news-talk stations. AP was already providing a newswire service to 5,000 radio stations and 750 TV stations. It also provided an audio network, AP Radio, that offered stations four brief news segments per hour. Industry insiders looked back 15 years to NBC’s NIS and said that new technology and changes in the radio business made AP’s network likely to succeed, predicting that it would reinvigorate local radio news.

By 1995 the ubiquity of the all-news radio format was evident with the introduction of a new television sitcom, NBC’s NewsRadio, set in an all-news radio station in Manhattan. Like previous sitcoms that had used the broadcast news business as a framework (The Mary Tyler Moore Show, WKRP in Cincinnati, and Murphy Brown), NewsRadio had little to do with news and much to do with workplace relationships. It was canceled after five seasons.
The number of genuine news-radio operations in the United States grew dramatically to 836 all-news stations in 1999: 387 AM stations and 449 FM. Of these, 451 were commercial stations and 385 were noncommercial. In Canada there were 32 all-news stations: 15 AM, 17 FM (29 commercial, and three noncommercial).

All-news formats are carefully designed for specific markets—what works in Atlanta may not be successful in Los Angeles or Minneapolis. Listening patterns, including how long a listener will stay with the station and how often, vary from market to market. The larger the population in a station’s market, the more the station can afford to have frequent turnover in its audience. Smaller-market stations try to keep listeners for longer periods.

Four decades after the introduction of all-news radio, it is a stable and profitable format. Advertisers are willing to pay all-news stations top rates to reach the population segment that is attracted to news. In the United States, all-news listeners tend to be older (35-plus), better educated, and have more money than the average consumer. Because of the repetitive nature of the format, they stay with the station only a short time. But while they listen, they tend to give much closer attention to the broadcast than they give to music programming, and all-news stations tend to carry more commercials than music stations.

Despite the increased attention to news overall—international, national, business and sports—some critics and listeners in the United States have expressed concern about the reduction in local news on radio. A number of stations, recognizing that local news continues to be a labor-intensive, expensive process, are finding it economically viable to reduce their local news content and increase reliance on news services that provide more lifestyle, sports, and entertainment news. As a result, some stations that identify themselves as news-radio stations depend on syndicated services and employ few, if any, reporters to gather news. Some even label talk-show programs featuring hosts such as Don Imus, G.Gordon Liddy, Oliver North, and Howard Stern as newscasts. Other types of nonnews broadcasts may also be mislabeled; for example, the magazine *Smart Money* warned its readers about “investment pros” who buy radio time to promote stocks and investment services but masquerade as business news.

At the beginning of the 21st century there are more news resources available to U.S. radio stations than ever before. AP provides audio and text to almost 4,000 stations with a variety of program formats. National syndicator Westwood One distributes CBS Radio News, Fox News Radio, and NBC Radio Network; it also owns Shadow Broadcast Services and Metro Networks, which offer a variety of news options and traffic reports. ABC provides radio service to some 3,200 affiliates. Business news has become a hot commodity with Bloomberg Business News Network and CNBC Business Radio, among others. Sports news is provided by ESPN, which has 650 affiliates in its radio network. One historical news organization dropped out of the broadcast news business in 1999, however, when UPI (which started its newswire service for broadcast stations in 1958) sold its remaining radio and TV accounts to the Associated Press. The venerable news service announced that its future plans were to focus on internet-delivered news.

By 2,000 the popularity of all-news radio was spreading around the globe. Canada’s largest cable company, Rogers Communications, switched its country music station in Vancouver to all news in early 1996. A spokesman described the company as “fully committed” to the format. Scandinavia’s first all-news operation started in Norway in
1997. *Alltid Nyheter* (Always News) was begun by a Norwegian public service station, NRK. In addition to news gathered by its own staff, *Alltid Nyheter* uses material from CNN, Swedish Radio, Danish Radio, and BBC World Service. In France, the main all-news radio station is France-Info. After ten years without an all-news station, Montreal’s 940 News (English language) and Info690 (French) went on the air in December 1999. Quebec’s Metromedia radio chain plans to invest $40 million in the first five years of these stations’ operation. In England, listeners can tune in news from News Direct, London’s all-news radio station.

Despite the variety of news sources available (newspapers, the internet, all-news cable networks, and local television), all-news radio continues to build a loyal following of listeners in the United States and abroad. Working people once got their news from television at home in the evening, but today’s professionals often work longer hours. They listen to the news when it’s most convenient—on the radio as they drive to and from work.

SANDRA L. ELLIS

*See also* Canadian News and Sports; KYW; News; News Agencies; Talk Radio; WCBS; Westwood One; WINS

**Further Reading**


**All Night Radio**

All-night radio programming has been a staple of the industry since the 1920s, when stations such as WDAF in Kansas City remained on the air far into the night to accommodate listeners who wanted to hear distant signals. Late-night programs began appearing more widely in the 1930s as the networks scheduled live big band shows, which typically played dance music into the wee small hours (often 2:00 or 3:00 A.M.). Although it is difficult to say which station first offered a regular schedule of all-night broadcasts, certainly one of the pioneers was WNEW-AM in New York. It premiered
Milkman’s Matinee (first broadcast midnight to 6 A.M. and later from 2 A.M. to 6 A.M.) on 6 August 1935, and the program remained on the air until 1992. During the same period, many major-market radio stations experimented with extended hours, with some confining their late-night programs to specific days of the week.

World War II led to a sharp increase in all-night radio programming. Feeling it their patriotic duty, many stations (among them WNAC and WEEI in Boston, WNEW and WOR in New York, WKBW in Buffalo, KDKA in Pittsburgh, WCAU in Philadelphia, and WRVA in Richmond) offered broadcasts for those legions of Americans working graveyard shifts in defense plants and factories.

After the war, all-night talk shows began to appear. Regarded by many as the father of the overnight call-in show, Barry Gray launched his program in New York City in 1945, and his “graveyard gab-a-thons” would remain among the most popular forms of this radio programming daypart. In the 1970s, all-night talk was given a significant boost with the debut of national call-in shows hosted by personalities such as Larry King and other extremely popular and sometimes controversial talkmasters. The use of toll-free 800 numbers enhanced the attraction of this format.

The primary appeal of overnight radio broadcasting lies in its companionability. A 1968 National Association of Broadcasters survey concluded that 60 percent of the all-night audience tunes in to keep from being lonely. All-night radio is also where the subcultures and countercultures tune to stay connected at an hour when the mainstream world is asleep. Insomniacs and third-shift workers, among them bakers, policemen, cab drivers, and convenience store clerks, constitute a substantial part of the loyal listenership of all-night radio. For aspiring disc jockeys and talk hosts, the overnight shift frequently serves as a training ground. It is where stations often put their most inexperienced on-air people to allow them the chance to build their skills. However, for some seasoned professionals, especially those in larger markets, the overnight shift is a preferred slot, because it is a segment of the program clock when rigid compliance to format strictures may be some what relaxed, thus providing them with greater opportunity to experiment and flex their creative muscles.

The program content of all-night radio tends to be eclectic. However, since the 1980s there has been a significant rise in the number of stations airing overnight talk shows, often syndicated programs, and canned programming is widely employed to fill the time slot. This period of the broadcast schedule has become famous for an often bizarre mix of program offerings. Psychics, paranormalists, conspiracy theorists, love therapists—to mention a few—are among the unique array of those who hold court over the night-time airwaves at hundreds of radio stations.

Outlets programming music over nights are frequently equally divergent in their approaches. In fact, music stations that feature a primary or single format during the day may shift gears to another, albeit complementary, form of music for their overnight hours. One quality many all-night music stations share in common is their tendency to soften or mellow their sounds to create a mood and atmosphere consonant with the nocturnal landscape. Jazz, blues, folk, and classical music are frequently given more airplay at night than during the day. Of course, not all stations vary or reconfigure their program clocks or playlists between midnight and 6 A.M. In fact, most actually mirror the programming they offer throughout the day and early evenings.
No programming ingredient has been more responsible for establishing loyal overnight followings than the radio personality; many of these have served their audiences for decades. The list of popular all-night hosts is long, if not endless. A partial list would certainly include Jean Shepherd, Norm Nathan, Franklin Hobbs, Joey Reynolds, Larry King, Henry Morgan, Jerry Williams, Jim Bohannon, Joe Franklin, Barry Farber, Larry Glick, Alison Steele, Ira Fistell, Ray Briem, Herb Jepko, Jean King, Larry Regan, Raechel Donahue, Long John Nebel, Wolfman Jack, Barry Gray, Mary Turner, Eddie Schwartz, John Luther, Mel Lindsay, Rollye James, Stan Shaw, Art Dineen, Hunter Hancock, Doug Stephan, Yvonne Daniels, Al Collins, Don Sainte John, Tom Snyder, Dave Wiken, and Art Ford. Every late-night listener has his or her favorite personality. Perhaps no all-night figure was more popular than Art Bell at the turn of the millennium. Broadcasting from a remote locale (near the infamous “Area 51”) in the Nevada desert, Bell attracted an audience that consistently numbered in the millions from coast to coast.

Since 1988, Arbitron has rated overnight time slots at the behest of outlets in markets with potentially large listenerships during this segment of the broadcast schedule. Although allnight hours are not typically viewed as profit centers (in fact, they are more often thought of as “giveaway” zones), many stations have been successful enough in generating revenues to want audience statistics to help promote increased levels of advertising. In fact, the value of all-night radio as an advertising medium has risen in a world that has become increasingly 24-hour oriented.

With the predicted continuation of station consolidation and an even greater bottom-line emphasis, live and local allnight programming is expected to decline in the future. It is not unusual to find stations rebroadcasting daytime programs during their overnight hours, and the rise in bartered and syndicated shows is significant. Although the prospects for all-night radio are far from bleak, its growth will likely be influenced, if not substantially inhibited, by ongoing industry downsizing and the increasing reliance of the listening public on new forms of electronic media, such as the internet and digital audio on demand. Meanwhile, the program fare (politics and other hotbutton issues) that has attracted all-night listeners for so many years appears to be on the wane, increasingly replaced by features that are far less provocative and controversial and thus more salable to advertisers.

MICHAEL C. KEITH

See also Jepko, Herb; King, Larry; Shepherd, Jean; Talk Radio; Williams, Jerry; Wolfman Jack

Further Reading


Shepherd, Jean, *In God We Trust: All Others Pay Cash*, Garden City, New York: Doubleday, 1966
**All Talk Format. See Talk Radio**

**All Things Considered**

**Public-Affairs Program**

The seminal program of National Public Radio (NPR) first aired from an improvised studio in a run-down Washington, D.C., office building at 5:00 P.M. EDT on Monday, 3 May 1971. *All Things Considered (ATC)* marked the beginning of public radio as we know it. It also marked the culmination of more than a year of soul-searching about the purposes of this new enterprise. The task of defining public radio fell to the initial board of directors of NPR—a collection of managers from the largely moribund world of educational radio—and in particular to board member William Siemering, who declared NPR’s first priority to be the creation of “an identifiable daily product which is consistent and reflects the highest standards of broadcast journalism.” His report continued:

This may contain some hard news, but the primary emphasis would be on interpretation, investigative reporting on public affairs, the world of ideas and the arts. The program would be well paced, flexible, and a service primarily for a general audience. It would not, however, substitute superficial blandness for genuine diversity of regions, values, and cultural and ethnic minorities which comprise American society; it would speak with many voices and many dialects.

The editorial attitude would be that of inquiry, curiosity, concern for the quality of life, critical, problemsolving, and life loving. The listener should come to rely upon it as a source of information of consequence; that having listened has made a difference in his attitude toward his environment and himself.

There may be regular features on consumer information, views of the world from poets, men and women of ideas and interpretive comments from scholars. Using inputs from affiliate stations, for the first time the intellectual resources of colleges and universities will be applied to daily affairs on a national scale.

National Public Radio will not regard its audience as a “market” or in terms of its disposable income, but as curious, complex individuals who are looking for some understanding, meaning and joy in the human experience.

In the early 1970s, radio news remained a serious enterprise at commercial radio networks. The aura of Edward R.Murrow still surrounded Columbia Broadcasting System (CBS) News. CBS provided ten-minute newscasts on the top of the hour around the clock. The commercial networks maintained extensive staffs of correspondents around the world. It was against that staid but responsible incarnation of commercial radio news
that NPR sought to define an “alternative.” It needed to separate itself as well from the equally staid and responsible style of traditional educational radio. Although it was located in Washington, D.C., just blocks from the White House, NPR saw itself in an outsider role and took pride in not attending the news conferences to which members of the mainstream media flocked. Siemering asked, “Why do we always think that what the President did today is so important? Maybe it is more important that some unemployed person found a job today? Maybe that should lead our program?”

Siemering urged NPR to distinguish itself from commercial radio and its own past by “advancing the art of the audio medium.” That mandate ultimately translated into a distinctive production style that took listeners to the scene of an event or into the lives of ordinary people instead of just talking about them. Producers would use microphones the way television reporters and documentarians used cameras. This was a new approach to radio journalism, because although listeners might recall the sounds of Murrow on the streets of London in World War II or the burning of the dirigible Hindenburg, these were the exceptions in radio news reporting before NPR. For the most part, radio news had meant reporters reading scripts. NPR sought to pioneer the regular use of sound in its reporting, drawing mental images more vivid than the pictures seen on television.

Even the titles of its programs suggested open-ended possibilities rather than a well-defined concept. Public radio’s initial news program would be called not The NPR Nightly News but All Things Considered, suggesting both the unlimited range of its interests and the careful consideration it would give to all issues it tackled.

Siemering drafted the program’s purposes as a member of the initial board. He then took on the task of implementing them as NPR’s first director of programming. In the six months between his arrival at NPR’s temporary facilities in Washington in November of 1970 and the program’s debut the following May, Siemering took great care in hiring individuals who resonated with his vision statement. Concern with shared vision and personal compatibility outweighed more traditional standards, such as experience. In a sense, anyone with deep experience in traditional broadcasting and journalism had the wrong experience for what was to be a totally new departure. Symbolizing the priority of innovation over traditional broadcast standards, Siemering turned down an offer from the Ford Foundation to fund the salary of veteran news analyst Edward P. Morgan to anchor the new program. Siemering did not question Morgan’s competence. He simply wanted something fresh.

All Things Considered’s first anchor and “managing editor,” then, was not Edward P. Morgan but a relatively obscure former reporter for The New York Times and National Broadcasting Company (NBC) Television named Robert Conley. Conley brought with him one of his former editors at The Times, Cleve Matthews, who would direct the news operations. Josh Darsa, formerly of CBS Television, gave NPR another experienced hand and another staff member over the age of 30. In contrast to Conley, Matthews, and Darsa, however, a motley group of young, idealistic, creative, energetic men and women more comfortable with the counterculture than conventional journalism dominated the initial staff of ATC and formed its distinctive personality. Men still dominated broadcasting and journalism in 1971, and affirmative action was not yet the law of the land, but Siemering hired as many women as men for the initial staff and insisted on minority representation. Only a staff representative of the whole population, he felt, could produce a program that really served the needs and interests of the whole population.
True to the spirit of the times, the character of the staff, and Siemering’s own instincts, the program operated as something of a commune during its first nine months. No one was in charge. Three different individuals hosted the program during that time. The program’s vision was open ended, its implementation unreliable, and the working conditions chaotic. NPR management told Siemering he would lose his job if he did not give someone operating authority over the staff and program. After consulting members of “the commune,” Siemering gave the task to one of the “senior” members of the staff, 30-year-old Jack Mitchell, who imposed a structure on the previously free format and sought to develop a more consistent personality for the show. He changed the theme music from a playful little tune composed by Don Voegeli (a veteran musician at WHA in Madison, Wisconsin) to a more forceful “news” version of Voegeli’s basic melody. He broke the program into three half-hour segments, fixed newscasts at the top of each hour, and organized each half hour to move from “hard news” to softer features. Commentaries by “real people” from across the country were an attempt to realize Siemering’s democratic vision of radio. Commentaries by immortal broadcasters such as Goodman Ace, John Henry Faulk, and Henry Morgan provided a link to radio’s golden age. Key to the program’s evolving personality, however, would be two program hosts, a man and a woman, who would conduct their own interviews in addition to introducing produced reports. Siemering had described the hosting role as a neutral, unobtrusive “picture frame” that never called attention to itself; Mitchell moved the hosts into the picture.
ATC’s first hosting team paired Mike Waters, a man with a warm voice and a natural ability to tell engaging stories, with Susan Stamberg, an enthusiastic interviewer willing to laugh out loud and reveal the emotions of a real human being. Stamberg was the first female co-anchor of a major national nightly news program, as NPR pointed out in newspaper ads when American Broadcasting Company (ABC) Television touted its appointment of Barbara Walters to co-anchor its evening network newscast as a “first.” As much as her gender, Stamberg’s New York accent and brash personality polarized listeners, stations, and the NPR management. When she talked on the air about her son Josh or gave her famous recipe for cranberry relish each Thanksgiving, Stamberg provided a human identity that told the world that this program was different from anything else on the air. Susan Stamberg came to personify All Things Considered, NPR, and public radio as a whole. Neither Waters nor Stamberg considered themselves journalists. Neither was especially interested in “news.” Indeed, their ability to identify with the lay listener, posing “uninformed” questions that any reasonably intelligent non-expert might ask about complex issues, may have been part of their appeal.

In 1974 ATC expanded into the weekend. Waters took over the weekend assignment and was replaced on weekdays by Bob Edwards, another fine voice and excellent reader who, like Waters, provided a calming counterpoint to Stamberg’s exuberance and who, unlike Waters, cared deeply about news. Many believe that Stamberg and Edwards set the standard for NPR hosting during their five years together, a period in which listeners in large numbers discovered the program and bonded with the cohosts and the institution they represented. This “perfect” combination split in 1979, when Edwards moved to host NPR’s second major news effort, Morning Edition.

Morning Edition grew out of the example of All Things Considered, drawing its values, approach, and even its host from the older program. At the same time, however, Morning Edition changed All Things Considered. It broke up the team of Stamberg and Edwards, of course, but more important, Morning Edition turned NPR into a 24-hour-a-day news operation and forced the network to drastically increase its news-gathering capacity. Future ABC News star Cokie Roberts began her broadcasting career at NPR at about that time, joining the indomitable Nina Totenberg, who had come to NPR four years earlier, to become two of Washington’s most prominent and respected news reporters. Although Siemering had written that NPR’s daily magazine would include “some hard news,” the program instead evolved into a primary vehicle for breaking news coverage. NPR transformed itself into a competitive news organization, eventually filling the void for quality journalism created by the decline of serious news reporting and analysis on commercial radio and the simultaneous reduction of foreign news-gathering capacity by those networks. All Things Considered became more serious in its approach to news, constantly raising its journalistic standards and focusing increasingly on international news as commercial radio abandoned these interests. The “alternative” to traditional broadcast journalism became the bastion of journalistic standards. The hard news squeezed, but never eliminated, the softer elements of the program that had distinguished ATC in its early years.

Sanford Unger, a print reporter with a journalistic résumé far stronger than that of any previous NPR host, symbolized ATC’s evolving role as a serious player in the world of Washington journalism when he took over Edward’s seat next to Stamberg. Unfortunately, Unger’s on-air persona did not match his journalistic prowess. He moved
on, to be replaced in 1983 by Noah Adams, who, like Mike Waters, was an “unknown” from within the NPR staff who had a soothing voice, a near-magical sense of radio, and only a marginal interest in hard news.

Tiring of the daily grind and not quite comfortable with the hardening of ATC’s news values, both Stamberg and Adams left the program four years later in 1987–Stamberg to host the new Weekend Edition Sunday, a feature-oriented program that would better suit her interests, and Adams to Minnesota to take over the Saturday night slot vacated by Garrison Keillor when Keillor moved to Denmark to live with his new wife.

Thus, in a sense, All Things Considered started over in 1987 with a harder journalistic edge. News Vice President Robert Siegel decided to give up his big office for the chance to anchor All Things Considered. Reporter Rene Montaigne joined him as cohost for one year. At the end of that year, Gar rison Keillor was back on Saturday night, and Noah Adams was back at NPR. The news-oriented Siegel and the feature-oriented Adams might have made an outstanding complementary team had they not both been men. NPR solved the dilemma by adding political and congressional correspondent Linda Wertheimer to the mix as a third host. Siegel, Adams, and Wertheimer would share the hosting duties, and each would have time to do some reporting as well. That arrangement served the interests of the three hosts and the philosophy of NPR’s president, Doug Bennet, who chose to downplay individual personalities in favor of NPR’s institutional identity as a news organization. Three interchangeable hosts on All Things Considered symbolized the interchangeability of reporters and other staff in an organization whose success and credibility should transcend that of any individual.

NPR’s next president, Delano Lewis, expanded All Things Considered from 90 minutes to two hours in 1995 and moved the program forward by one hour to 4:00 P.M. EDT, to better fit peak afternoon drive-time listening. At the same time, breaks were added within each half hour, dividing the program into shorter segments similar to its companion program, Morning Edition. The extra time allowed All Things Considered to do more “soft” material among the “hard news.”

Beginning with its first Peabody Award in 1973 for its “distinctive approach to broadcast journalism,” All Things Considered has won virtually every award for broadcast journalism excellence.

JACK MITCHELL

See also Easy Aces; Edwards, Bob; Faulk, John Henry; Morgan, Henry; Morning Edition; National Public Radio; Peabody Awards; Public Radio since 1967; Siemering, William; Simon, Scott; Stamberg, Susan; Totenberg, Nina; Wertheimer, Linda

Hosts

Programming History
National Public Radio 1971–present

Further Reading
Stamberg, Susan, Every Night at Five: Susan Stamberg's All Things Considered Book, New York: Pantheon, 1982
Wertheimer, Linda, editor, Listening to America: Twenty-Five Years in the Life of a Nation, As Heard on National Public Radio, Boston: Houghton Mifflin, 1995

Allen, Fred 1894–1956

U.S. Radio Comedian
Fred Allen was one of the most successful radio personalities during the 1930s and 1940s. Allen’s forte was topical humor. He was a satirist, drawing much of his material from the day’s events. While he occasionally commented on the headlines, he more often zeroed in on the smaller “filler” items that graced the newspapers. Even though his greatest appeal was to the “thinking” audience, Allen also enjoyed enormous popular appeal. Author John Steinbeck once called Allen “unquestionably the best humorist of our time.” Among his many fans were Groucho Marx, Jack Benny, and George Burns. By the end of his career Fred Allen became one of the country’s leading authorities on humor.

Origins
Fred Allen was born John Florence on 31 May 1894 in Cambridge, Massachusetts. His mother died when he was very young and his father died when he was 15. After their father’s death, he and his brother, Bob, lived with their aunt. At 18 he began performing on the “amateur night” circuit of vaudeville around Boston. His ability to juggle led to a hokey comedy routine. He was billed as Paul Huckle, European Entertainer, for his first appearance. He later became Fred St. James, the juggler. He soon changed his name to Freddie James and billed himself as the world’s worst juggler. As time went on, the juggling became a smaller part of his act and the comedy became more prominent; he eventually abandoned juggling altogether.
In 1914 he left for New York City to try to break into bigtime vaudeville. Not finding much success, in 1916 he left for a tour of Australia. While there, he polished his act and returned to the United States a year later. Upon his return he joined the New England vaudeville circuit. By 1920 he was an established vaudeville headliner, now known as Fred Allen. In 1922 Allen took his act to Broadway and there met his future wife, Portland Hoffa.

Radio

By the early 1930s radio had established itself as an important venue for many of vaudeville’s top talent; by the fall of 1932 most vaudeville acts had made the switch to radio. Among the medium’s new performers were singers Bing Crosby, Al Jolson, and Paul Robeson and comedians Jack Benny, Ed Wynn, the Marx Brothers, George Burns and Gracie Allen, and Fred Allen. Allen’s first radio program The Linit Bath Club Revue, premiered on the Columbia Broadcasting System (CBS), Sunday night, 23 October 1932. Allen put his all into the weekly show, regularly working 80-hour weeks to prepare each week’s program. The Linit show was heavily influenced by the vaudeville style—stiff stage comedy and stand-up patter backed by music. His show changed its sponsors and its name three times during the next year, first to The Salad Bowl Revue then to The Sal Hepatica Revue, then to The Hour of Smiles. Finally in 1934 Allen’s show became famous as Town Hall Tonight.

Like most programs of the era, Allen’s followed a formula from the beginning. In his earlier series each episode would be built around a different occupation. One week he would play a plumber, the next week a banker, then a druggist, etc. By the time Town Hall Tonight emerged, the formula had evolved to what is now commonly known as the “comedy variety” format. This format includes different comedic skits or monologues interspersed with music. Another feature of Town Hall Tonight was a regular amateur talent segment. In fact, almost half of each episode was devoted to amateur talent. Like the other elements of the program, the amateur segment was extremely popular with the audience. It was also popular with the sponsor and the network because it was very inexpensive to produce. In fact, the amateur talent segment proved so popular that it spawned a number of amateur talent programs, the most notable being The Original Amateur Hour of Major Bowes. Some of the amateur talent that was discovered on Allen’s program included comic, and later radio and TV host,
Garry Moore, actress Ann Sheridan, and a young Frank Sinatra.

It was on *Town Hall Tonight* on the evening of 30 December 1936 that Allen started his famous on-air “feud” with Jack Benny. The feud began inadvertently when Allen ad-libbed a joke about Benny’s inability to play the violin well. The following week Jack Benny responded to this remark on his own program and the feud was on. The feud played on over the next three months. In March 1937 on *The Jack Benny Program* a mock fistfight, called “the battle of the century” was staged to resolve the feud once and for all. The fight was to have taken place in the ballroom of the Hotel Pierre on March 14. There was no actual winner of this contrived fistfight, and both men returned from the boxing ring tattered but friends. This was all in good fun, of course, because Allen and Benny had always been and continued to be the best of friends off the air. Although the
fistfight was to have been the end of this feud, the public enjoyed it so much that Allen continued it until he left the air in 1949.

After a six-year run, *Town Hall Tonight* ended in 1939 and became simply *The Fred Allen Show*. The new weekly program contained musical numbers, a feature comedy skit by the newly created Mighty Allen Art Players (a device that was so successful it was paid homage to many years later on television by Johnny Carson in the form of the Mighty Carson Art Players), and a “News of the Day Newsreel.” The newsreel was typically a satire about some obscure recent event. Harry Von Zell was the announcer and Peter Van Steeden was the musical conductor on the program.

In the fall of 1940 Allen returned to CBS and his program was renamed *The Texaco Star Theatre*, after its sponsor Texaco Gasoline. The CBS version was initially scaled down to 30 minutes; in 1941 it went back to an hour-long format for a year, but in 1942 the program returned to the 30-minute format that it would retain until its end; the show was aired on Sunday nights.

**Allen’s Alley**

The 1940s brought change to radio. Old-style vaudeville comedy had lost its appeal. The public was becoming more sophisticated and thus expected its comedy to be more sophisticated as well. During the early 1940s “Allen’s Alley” emerged. The Alley was not your typical street. In fact, it might have been the most atypical street anywhere. The actual description of the Alley was always left to the imagination of the listener. Very few details about its appearance were ever offered. The residents of “Allen’s Alley” became household names, and were among the best-known characters of radio’s golden age. On “Allen’s Alley,” Fred often visited the Brooklyn tenement of Mrs. Nussbaum (Minerva Pious). Mrs. Nussbaum was always relating her weekly problems with her husband Pierre. The network executives were concerned that Mrs. Nussbaum’s thick Jewish accent might offend some listeners, but the overwhelming reaction by the audience was favorable. Also on the Alley were the farmhouse of Titus Moody (Parker Fennelly), the shack where Ajax Cassidy (Peter Donald) lived, and the antebellum mansion of southern Senator Beauregard Claghorn (Kenny Delmar). Moody was one of the funniest characters on the show, always greeting Allen with the friendly “Howdy, Bub.” Cassidy, the loudmouth Irishman, was probably the least popular character on “Allen’s Alley,” while Senator Claghorn became the star of the Alley. His famous refrain “that’s a joke, son” became part of the popular lexicon of the day.

There were other characters that became audience favorites—Senator Bloat; John Doe, the angry average citizen; and poets Falstaff Openshaw, Humphrey Titter, and, of course, Thorndyle Swinburne, the poet laureate of Boston Post Road. In addition to the appearances of his regular characters, some of Allen’s most memorable moments came when he would spoof musicals. On one program in the early 1940s he and Orson Welles did a hilarious five-minute version of “Les Miserables.” A few years later, his parody of Gilbert and Sullivan’s “The Mikado,” called “The Radio Mikado,” was a smash with the audience and still remains a classic.

Throughout the 1940s Allen was frequently at odds with network officials. His battles with the networks usually involved the content of his remarks, which were often
derogatory about network officials. Although ordered to stop these remarks, Allen continued. As a result he was required to submit verbatim scripts to the networks before air for their approval. The network often required him to change or delete items. Allen eventually started to include items in the script that he had no intention of using on air, so that he could use those items as bargaining chips; he would agree to cut one of those items in exchange for keeping something else. In addition Allen would often ad-lib material. As radio programs were broadcast almost live (there was a delay of a few seconds), the audience would sometimes hear a bleep in place of a word or phrase. On 20 April 1947 his show had 30 seconds of dead air because he refused to delete a controversial joke. Finally an angry public forced the bleeping to stop. Sometimes Allen’s shows ran overtime and were cut off. Once a show ended in the middle of a skit. The following week Allen began the show with the remainder of the skit and an angry, but witty, tirade against the network for being so fussy about staying to a regular schedule.

Demise

Allen left the air for health reasons (high blood pressure) in 1944. In 1945 he returned and the title of his program returned to The Fred Allen Show, which it kept until its cancellation in 1949. A young Arthur Godfrey served briefly as Allen’s announcer during the program’s later years. Airing under different titles, The Fred Allen Show had a very successful 17-year run on network radio. Allen’s final radio show was on 26 June 1949 and, fittingly, his last guest was Jack Benny. The program finally ended owing to a combination of competition (Stop the Music) and an unchanging format that had begun to wear as radio gave way to television.

Although Fred Allen was the driving force on the air and behind the scenes, many people contributed to the success of Allen’s programs throughout its long run. Some of the more prominent were writers Nat Hiken, Larry Marks, and Herman Wouk; announcers Kenny Delmar, Jimmy Wallington, and Harry Von Zell; directors Vick Knight and Howard Reilly; and musical directors Al Goodman, Ferde Grofe, Lennie Hayton, Lou Katzman, and Peter Van Steeden. The most prominent sponsors during Allen’s run included Bluebonnett Margarine, the Ford Motor Company, Hellmann’s Mayonnaise, Ipana and Sal Hepatica, Shefford’s Cheese, Tenderleaf Tea, Texaco Gasoline, and V-8 Vegetable Juice. Allen’s long-standing theme song was “Smile, Darn Ya, Smile.”

Like many radio personalities of the day, Fred Allen tried to make the transition to television. Unlike many of his contemporaries, the transition was difficult for Allen, because he had an inherent distrust of television. He once said of television, “They call it a medium because nothing on it is ever well done.” In the same vein, he once quipped “Television is a triumph of equipment over people, and the minds that control it are so small that you could put them in the navel of a flea and still have enough room beside them for a network vice president’s heart.”

Allen’s first venture into television was on NBC as one of the rotating hosts, along with Eddie Cantor and the team of Dean Martin and Jerry Lewis, of The Colgate Comedy Hour. The program debuted in September 1950 and ran for a number of years, but Allen
was dropped from the rotation after only three months. His next venture was also as a rotating host (along with Bob Hope and Jerry Lester) of NBC’s *Chesterfield Sound Off Time* in October 1951. The program lasted just three months. In 1952 he was to start another TV series when his first heart attack forced him into retirement. He came back in the fall of 1953 to host an NBC quiz show called *Judge For Yourself*. The program was cancelled after one season. Finally, in 1954 Allen took a panelist spot alongside Bennett Cerf, Arlene Francis, and Dorothy Kilgallen on the successful CBS quiz program *What’s My Line?* Allen remained on *What’s My Line?* until his death on 17 March 1956.

MITCHELL SHAPIRO

*See also* Benny, Jack; Comedy; Vaudeville


### Radio Series

<table>
<thead>
<tr>
<th>Year</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>1932–33</td>
<td><em>The Linit Bath Club Revue</em></td>
</tr>
<tr>
<td>1933</td>
<td><em>The Salad Bowl Revue</em></td>
</tr>
<tr>
<td>1934</td>
<td><em>The Sal Hepatica Revue</em></td>
</tr>
<tr>
<td>1934</td>
<td><em>Hour of Smiles</em></td>
</tr>
<tr>
<td>1934–39</td>
<td><em>Town Hall Tonight</em></td>
</tr>
<tr>
<td>1939–40</td>
<td><em>The Fred Allen Show</em></td>
</tr>
<tr>
<td>1940–44</td>
<td><em>The Texaco Star Theatre</em></td>
</tr>
<tr>
<td>1945–49</td>
<td><em>The Fred Allen Show</em></td>
</tr>
</tbody>
</table>

### Television Series

*The Colgate Comedy Hour*, 1950; *Chesterfield Sound Off Time*, 1951–52; *Judge For Yourself*, 1953–54; *What’s My Line?*, 1954–56
Allen, Mel 1913–1996

U.S. Sportscaster

Mel Allen was the mellifluous “Voice of the New York Yankees” for 25 years, announcing during the era when that baseball team was regularly the World Series champion. Closely identified with the Yankees during the decades when baseball dominated U.S. sports, and a legend himself in his lifetime, Allen created heroes and dreams for radio listeners during the post-World War II period. Allen was a Yankee partisan, cheering for every hit and strikeout, and his impact was so great that he had more fans of his own than any other announcer. During the 1960s, he also represented tradition and constancy in a period of great social turmoil.

Yankee Years

Allen got his first part-time broadcasting job in 1933 as the voice of the University of Alabama’s “Crimson Tide” on CBS’s Birmingham affiliate. After completing law school, he was hired by CBS in 1937 and became the New York Yankee broadcaster in 1940. After army service in World War II, Allen returned to the Yankees.

The Yankees became the first professional baseball team to air all its games live, ending studio recreations of away games and giving Allen a bigger canvas to fill with stories of baseball life. For a time, as the Yankees’ premiere announcer, he was joined by the equally legendary Red Barber, and as a team they were considered the best in radio.
Beginning in 1941, as both a team and network broadcaster, Allen announced 20 World Series and did play-by-play for 24 All-Star Games, more than any of his contemporaries; he also called 20 college bowl games, including numerous Rose Bowls. From 1939 to 1943, Allen broadcast the New York Giants baseball games as well. One of the world’s most widely recognized voices in the two decades after World War II, he narrated over 2000 Fox Movietone newsreels as well as hundreds of short film subjects for 20th Century Fox. An enormously valued advertising spokesperson, he sold millions of dollars of Ballantine beer to Yankee baseball fans.

Allen broadcast nearly every major Yankees event from Joe DiMaggio’s 56-game hitting streak in 1941 to Don Larsen’s historic perfect game in the 1956 World Series to Roger Maris’ record-breaking 61 home runs in 1961. Allen also handled sad farewells. On 4 July 1939, he introduced Lou Gehrig (who was then dying of what is now called Lou Gehrig’s disease) to a packed Yankee Stadium before Gehrig’s gripping farewell speech, “Today, I am the luckiest man in the world.” In 1948 Allen also introduced a dying Babe Ruth at Yankee Stadium.

Allen was a truly gifted storyteller, sometimes carrying on long monologues that enchanted fans during slow games. He was widely admired for his comprehensive knowledge of baseball and his affection for the home team (expressed in such trademark phrases as “How about that!” and “Going, going, gone!”). Allen’s authoritative words were spoken in an Alabama twang that was instantly recognizable (“Hello everybody. This is Mel Allen.”). He rarely misspoke or made outright errors, and when he did, he passed them off lightly and fans forgave him. During his years with the Yankees, he created such enduring nicknames as “Joltin’ Joe” DiMaggio, “Old Reliable” Tommy Henrich, and “The Scooter” Phil Rizzuto. During the Yankees’ heyday, his inimitable voice was found on the radios of almost every taxi in New York City.

In an ebullient style markedly differing from Barber’s detached precision, Allen peppered his broadcasts with enthusiasm for the home team, but both men were intense and focused on baseball—Allen especially so because he never married or had a family. Because he saw athletes as idols and role models for children, he felt that educating new fans about baseball was an important part of his job. This led to criticism that Allen talked too much during games, explaining rules that most fans knew quite well. But his explanations were for the new fans, he always claimed, insisting that his detailed descriptions of events viewers could see for themselves (in the television years) helped heighten the excitement. He tended to magnify the players’ admirable attributes in his stories. Beyond DiMaggio’s memorable home runs and outstanding batting averages, for example, Allen especially admired DiMaggio’s team leadership and often drew attention to it during broadcasts. Allen was such a great favorite with both those who attended games and those who heard them over the radio that, in 1950, Yankee fans held a Mel Allen Day celebration. It raised money that he donated to the Lou Gehrig Scholarship Fund and the Babe Ruth Scholarship at the University of Alabama.

Later Career

To widespread surprise at the time, Allen was inexplicably fired by the Yankees in 1964. After a hiatus, Allen became the voice of the syndicated This Week in Baseball in 1977.
and remained so for nearly all of the next 20 years. In 1985 he once again became the voice for Yankee games on cable television. Allen was a pioneer broadcaster with a magnetic personality and great personal charm. Those who knew him usually loved him (unless they were Yankee-haters), and thousands of fans,

\[Image\]

\textbf{Mel Allen}

\textit{Courtesy CBS Photo Archive}

scores of baseball players, and his broadcasting peers considered him the most unforgettable sportscaster. Hall of Fame sportscaster Lindsey Nelson called him “the best sports broadcaster of my time.”

Among innumerable awards and honors, such as selection as the nation's top sportscaster for 14 consecutive years (a feat matched by none), Allen was inducted into the National Sportscasters and Sportswriters Hall of Fame in 1972, and along with Red Barber, received the first Ford C.Frick award in 1978 (placing him in the sportscaster section of the Cooperstown Baseball Hall of Fame). He was selected for the American Sportscaster Hall of Fame in 1985 and the Radio Hall of Fame in 1988. In 1992 he received the Bill Slocum Award for long and meritorious service to baseball. Allen died in 1996 at age 83.

\textsc{Susan Tyler Eastman}

\textit{See also} Sports; Sportscasters

Selected Publications

*You Can't Beat the Hours: A Long, Loving Look at Big League Baseball, Including Some Yankees I Have Known* (with Ed Fitzgerald), 1964

*It Takes Heart* (with Frank Graham, Jr.), 1959

Further Reading


Alternative Format

Responding to a perceived lack of inventiveness on rock music stations, some musicians and modern rock fans embraced a more experimental, less packaged, alternative sound in the 1990s. Compared to the mainstream rock primarily played on Album-Oriented Rock (AOR) stations, alternative was unpolished and unabashed; its lyrics spoke of both idealism and disenfranchisement. Radio programmers, recognizing a new trend with counter-programming potential, added alternative tracks to their playlists, developing what became known as the alternative format. For advertisers and record labels seeking to expand their reach, commercial alternative formats provide a highly targeted and efficient medium similar to the alternative press.

The alternative format has been implemented in a variety of ways. The hard edged modern rock version may include talkups, sounders, and contesting similar to Contemporary Hit Radio (CHR). Adult Alternative Album (AAA) is essentially an album-oriented rock format, but with an alternative playlist. College alternative radio, where much of the sound found its original support, often takes an eclectic approach. Other variants may include shock jocks, techno music, or music with urban appeal.

Although the alternative radio movement emerged in the 1990s, its lineage extends back through the punk rock/new wave movement of the late 1970s and progressive radio of the late 1960s to rebellious rock and roll radio of the 1950s. Each of these movements emerged from a fervent subculture demonstrating a certain disdain for what was perceived as popular music at the time. Characterized by garage bands, small venue live performances, and low budget recordings distributed by independent labels, alternative’s back-to-basics approach, rejection of glitzy production, and youthful self-expression have paradoxically had popular appeal as Music Television (MTV), college radio, and rock promoters began successfully packaging and selling the new musical genre to an increasingly fragmented market. Commercial radio success, initially in the San Francisco and Seattle areas, the popularity of alternative music on college campuses, and digital
distribution—including MP3 audio files on the internet—have all contributed to the vibrancy of the alternative format.

Alternative has also been known as the anti-format, associated with independent, community stations focused on political issues and social change, such as those operated in the U.S. by the Pacifica group. It may also refer to those global broadcasters with alternative worldviews and alternative means of distribution, such as the internet.

JOSEPH R.PIASEK

See also Album-Oriented Rock Format; Contemporary Hit Radio Format/Top 40; Pacifica Foundation; Progressive Rock Format

Further Reading


Amalgamated Broadcasting System

U.S. Radio Network

The Amalgamated Broadcasting System, which survived as a corporation for 13 months but operated as an actual radio network for a mere five weeks, is better known for the myths surrounding it than for the facts of its brief existence. Despite the claims of many so-called “old-time radio” scholars, Amalgamated was never associated with station WNEW in New York (which did not exist until after the network fell into bankruptcy) and the EW in that call sign did not derive from the initials of Amalgamated’s founder, comedian Ed Wynn.

Origins

Amalgamated was founded in the fall of 1932, as a program production agency. Wynn’s partners in the venture were Broadway producers Arthur Hopkins and T.W. Richardson, and Hungarian-born violinist and promoter Ota Gygi. Initial press releases hinted that Irving Berlin and Daniel Frohman were interested in the project and that more than a million dollars had been committed by two nationally known agencies.
Despite these claims, nothing further was heard of the venture until January 1933 when George W. Trendle, president of the newly formed All-Michigan Network, announced his alliance with the Wynn group. The New York flagship of the network would be made up of an amalgamation of three small time-sharing stations controlled by Walter Whetstone’s Standard-Cahill Corporation: WBNX, WCDA, and WMSG. This would be the first step, declared Trendle, toward building a nationwide chain of low-powered regional stations. Trendle claimed, without naming names, that five Detroit millionaires were backing the venture and that Wynn had enlisted the support of practically every theatrical man of note and 13 prominent authors.

The next five months were filled with promises but little substance. Wynn went into detail in the trade press describing the policy of the new network, declaring that it would limit advertising to indirect messages at the beginning and end of each program and that he himself planned to appear occasionally on the network once his National Broadcasting Company-Texaco contract expired. Studio space was prepared in a newly constructed building at 501 Madison Avenue in New York City, arrangements were made with Western Union for network lines, and several dates were announced for the start of broadcasting, only to be postponed at the last minute.

The industry was fast losing patience with Wynn’s stalling. In the 1 June 1933 issue of Broadcasting, editor Sol Taishoff portrayed Amalgamated as an amateurish, slipshod operation, run entirely by show people who were decidedly naive about the realities of the broadcasting business. There was no longer any mention of Detroit millionaires and, even though the son-in-law of President Roosevelt, Curtis B. Dall, joined the company in August as chairman of the board, it was becoming evident to observers that the network’s money was coming primarily out of Ed Wynn’s pocket.

**Operations**

The Amalgamated network finally went on the air on the evening of 25 September 1933. Thirteen small Eastern stations carried the initial program—flagship WBNX; WCNW in Brooklyn, New York; WPEN in Philadelphia, Pennsylvania; WDEL in Wilmington, Delaware; WCBM in Baltimore, Maryland; WOL in Washington, D.C.; WCAP in Asbury Park, New Jersey; WHDH in Boston, Massachusetts; WCAX in Burlington, Vermont; WPRO in Providence, Rhode Island; WNBH in New Bedford, Massachusetts; WSAR in Fall River, Massachusetts; and WFAS in White Plains, New York. Despite claims that the network would soon span the continent, no additional stations were ever added.

Critic Ben Gross described the inaugural broadcast as chaotic, but a surviving recording reveals that it was in reality a dull hodgepodge of mediocre talent, the major exception being an appearance by the dynamic Broadway vocalist Jules Bledsoe. There were no commercial announcements, but on-air credits were quietly slipped into the program for the firms that provided the bar for the guests and the beer they were served. Although Gross claimed that there were hundreds of complaints from listeners unable to hear the broadcast because the noise from the rowdy studio audience drowned out the performers, the recording makes it clear that this was a fabrication. The only complaints noted in a post-broadcast article in Broadcasting were from technicians, who suggested
that the Western Union telegraph network lines were somewhat noisier than AT&T telephone circuits. Wynn himself was not present for the inaugural, because he was occupied with motion-picture duties in Hollywood and had left Gygi in full charge of the network in his absence.

**Collapse**

The story of Amalgamated has a beginning and an end, but no middle. No sponsorships were ever sold. During October, a 15-hour-a-day schedule of music and talk was fed to the small eastern hookup that had taken the opening broadcast, but clearance of these sustaining programs (programs not paid for by advertising) proved difficult when affiliates insisted on carrying their own local, sponsored features.

Curtis Dall resigned as chairman of Amalgamated in early October. Ed Wynn returned to New York in mid-October and soon realized the futility of the venture. He resigned on 23 October, claiming to have spent $250,000 on the project with no hope of any return. Subsequent investigation by receivers revealed that Wynn’s out-of-pocket investment was closer to $125,000.

At midnight on 1 November the network halted service to its 12 affiliates. On 3 November creditors foreclosed and Amalgamated passed into the hands of the Irving Trust Company. Liabilities totaled $38,000, with $10,000 owed in salaries to the company’s 200 employees.

The assets of the network were sold at auction on 18 December, raising $10,841 toward the settlement of outstanding claims. The studio equipment was purchased for $9,800 by advertising executive Milton Biow for use in his new station in Newark, WNEW. WNEW would subsequently lease the former Amalgamated studio space at 501 Madison Avenue for its New York studio.

Ed Wynn resolved to settle all of the network’s remaining debts. The stresses involved in the Amalgamated venture contributed to the failure of his marriage in 1937 and ultimately to a nervous breakdown. Ever the promoter, Ota Gygi spent much of 1934 trying to form yet another “new network” among stations in the Midwest, but he had lost all credibility. Several former Amalgamated stations became part of George Storer’s American Broadcasting System.

**See also** Wynn, Ed

**Further Reading**

“ABS Auction Sale Raises Back Pay,” *Broadcasting* (1 January 1934)

“ABS Bankrupt As Comedian Is Blamed,” *Broadcasting* (15 November 1933)

“ABS Chain Makes Debut,” *The Billboard* (30 September 1933)

“ABS Swan Song,” *Broadcasting* (15 November 1933)

“Amalgamated Net Gets Started,” *Broadcasting* (1 October 1933)

“Creative Radio Program Service Headed by Ed Wynn,” *Broadcasting* (1 October 1932)

“Ed Wynn Resigns Amalgamated Post,” *Broadcasting* (1 November 1933)
Ameche, Don 1908–1993

U.S. Radio, Film, and Television Performer

As a versatile singer, actor, and host, Don Ameche was one of radio’s earliest male stars and one of the medium’s most popular figures in the 1930s and 1940s. He was also a relatively rare example of a star who maintained his radio career despite a period of significant Hollywood film success.

Ameche was born Dominic Amici in Kenosha, Wisconsin, in 1908. His Italian immigrant father changed the family name to Ameche shortly thereafter, and his fellow grade school students in Kenosha transformed the name Dom into Don. After a few years of grade school in Kenosha, Ameche left for a boarding school in Marion, Iowa. He remained in Iowa to attend high school, where he developed his dramatic talents under the tutelage of Father I.J. Semper, the school’s drama coach. However, his parents had hoped for a lawyer in the family, not an actor, so Ameche enrolled in prelaw at Iowa’s Columbia College. He had trouble staying focused on his studies, however, and as a result, he skipped around to different schools, including Marquette University and Georgetown University, before finally ending up at the University of Wisconsin, Madison, in 1928.

Acting continued to draw his interest, and he occasionally starred in campus plays with the campus’s University Players. Like most successful entertainers of the period, his first steps to stardom included a mythical moment of discovery: Ameche went to see a road company play on campus one evening, but one of the leading actors had been hurt in a car accident earlier that day. Ameche arrived at the theater to purchase his ticket, and at the ticket booth, the manager of the theater recognized Ameche from his previous plays and asked him if he would fill in for the injured actor. Ameche agreed and in fact ended up staying with the stock company for the rest of the season, thereby forgoing his future career as a lawyer.

Emboldened by this success, Ameche moved to New York in 1929 and tried to foster an acting career on stage and in radio. But after an unsuccessful audition in 1930 as a singer for WMCA, he returned to Kenosha in the early 1930s. Ameche then moved to nearby Chicago at the suggestion of a friend, who told Ameche of the burgeoning opportunities for radio singers and actors in that city. After an audition with NBC Blue in 1930, Ameche was hired for a number of NBC dramas in Chicago, including Rin Tin Tin and The Empire Builders. He subsequently received a role in the show that launched him to stardom, The First Nighter.
The First Nighter was a 30-minute anthology drama, and the show’s format fostered the illusion that listeners were hearing a Broadway play on opening night, despite its Chicago origin. As the male lead in plays for the show’s first six years, Ameche was especially popular with audiences, and he quickly developed into radio’s first sex symbol. In 1932 he parlayed this status into a lead role on a daily soap opera, Betty and Bob, the first of many daytime serials from Frank and Anne Hummert. Betty and Bob presented Ameche and Elizabeth Reller as a pair of seemingly incompatible newlyweds. Betty was a working-class secretary, and Bob was an urbane heir to a vast fortune. Arguments and jealousies abounded, as Bob had to accept Betty’s workaday world, and she had to tolerate his dashing personality and friendliness with other women. As one can imagine, this role served to further cement Ameche’s status as a radio heartthrob. Ameche also occasionally appeared on a juvenile adventure series, Jack Armstrong, All American Boy, with his brother Jim.

Ameche’s radio success and suave persona inevitably captured Hollywood’s attention. A talent scout arranged an audition with MGM, but the studio declined to sign him. After a subsequent audition with Twentieth Century Fox, Ameche signed with that studio in 1935. He then appeared in a spate of films throughout the 1930s, reaching his height of fame with The Story of Alexander Graham Bell in 1939. Known for the “young-man-about-town” role, Ameche was said to be second only to Shirley Temple in status at the Fox studios. Despite this Hollywood fame, Ameche continued his radio career, a choice that underscored his appreciation for the aural medium. Most notably, he starred periodically on The Edgar Bergen-Charlie McCarthy Show. Among other skits for this program, Ameche appeared in a regular segment called The Bickersons, portraying half of a quarrelsome married couple.

In the 1940s, with his film career dwindling, Ameche hosted a series of half-hour comedy-variety shows, such as What’s New? and The Drene Time Show, which featured musical selections, dramatic skits, and comedy sketches, including The Bickersons. On his programs, Ameche offered listeners many guest stars from the film world, including Dorothy Lamour, Herbert Marshall, and Fred Astaire, illustrating the benefits to radio of his lingering connection to Hollywood. He also hosted a talent program called Your Lucky Strike, on which unknowns competed each week, with their talents being judged by three random housewives who voted over their telephones. In addition to his hosting duties, Ameche appeared on Lux Radio Theater 21 times, among the most appearances of any actor, and he guest-starred regularly on The Jimmy Durante Show.

In 1950 Ameche moved to New York and shifted his broadcasting career to television, beginning with hosting a quiz program, Take a Chance (1950). For the rest of the decade, he mainly hosted television variety shows, and he also appeared periodically on Broadway, most notably in Cole Porter’s Silk Stockings in 1955. In 1958 Ameche returned to radio for a final time, hosting Don Ameche’s Real Life Stories, a serial drama airing every day in half-hour installments, providing one complete narrative per week. After only occasional film and television appearances throughout the subsequent decades, Ameche made a comeback in the 1980s, winning an Academy Award for his supporting role in Cocoon (1985). He died in 1993, leaving behind a unique legacy as both a pioneering radio star and a successful film actor.

CHRISTINE BECKER
See also Comedy; Edgar Bergen and Charlie McCarthy Show; Jack Armstrong, All American Boy


**Radio Series**

<table>
<thead>
<tr>
<th>Year</th>
<th>Series</th>
</tr>
</thead>
<tbody>
<tr>
<td>1930–31</td>
<td><em>Empire Builders</em>, <em>Rin Tin Tin</em></td>
</tr>
<tr>
<td>1930–36</td>
<td><em>The First Nighter</em></td>
</tr>
<tr>
<td>1932–35</td>
<td><em>Betty and Bob</em></td>
</tr>
<tr>
<td>1943–44</td>
<td><em>What’s New?</em></td>
</tr>
<tr>
<td>1946–47</td>
<td><em>The Drene Time Show</em></td>
</tr>
<tr>
<td>1947–48</td>
<td><em>The Old Gold Show</em></td>
</tr>
<tr>
<td>1948–49</td>
<td><em>Your Lucky Strike</em></td>
</tr>
<tr>
<td>1958</td>
<td><em>Don Ameche’s Real Life Stories</em></td>
</tr>
</tbody>
</table>

**Television Series**


**Films**

American Broadcasting Company

The American Broadcasting Company (ABC) came late to the radio game, appearing as an independent network only in 1945. As such, it was a weak player until the 1960s, when ABC was in the vanguard of an attempt to revive and reshape network radio in the age of television.

Origins

ABC—as a network and an owner of major radio stations—was created in the 1940s, when the Federal Communications Commission and the Department of Justice forced the National Broadcasting Company’s (NBC) owner, the Radio Corporation of America (RCA), to spin off one of NBC’s two radio networks. In 1943 Edward J. Noble, who had made his fortune creating, manufacturing, and selling Life Savers candy, bought NBC’s Blue network and three owned and operated stations for $8 million. In 1945 Noble renamed Blue the American Broadcasting Company and began to build ABC. In 1946, for example, he acquired WXYZ-AM in Detroit from King Trendle Broadcasting for slightly less than $3 million.

The Blue network carried a number of popular shows—including Just Plain Bill, Easy Aces, Inner Sanctum Mystery, and Lum ’n’ Abner. But generally ABC shows drew last place in ratings in all of Golden Age radio’s categories of programming. In the variety category, for example, ABC’s The Alan Young Show earned but a seventh of the ratings of NBC’s Bob Hope Program, which broadcast later the same night. The Andrews Sisters program drew a third of the ratings of Your Hit Parade on the Columbia Broadcasting System (CBS), and Ted Mack’s Original Amateur Hour always finished far behind Arthur Godfrey’s Talent Scouts.

Still, Drew Pearson attracted vast audiences with his reports of the goings-on in the nation’s capital, and the dramatic and controversial re-creations of the March of Time were popular as well, helped by the movie newsreel of the same name and by the
program’s connection with *Time* magazine. On the prestige side, ABC’s regular Saturday matinee broadcasts of the Metropolitan Opera added some class to ABC’s image.

It was not that Edward Noble was not willing to acquire top talent. During the late 1940s, Noble and his managers tried to add new shows, such as *Professor Quiz, Break the Bank, This Is Your FBI, Lone Ranger, Gillette Fights*, and *Gangbusters*. For example, when ABC bought WXYZ-AM, it acquired *Lone Ranger* and *Green Hornet*. A far more temporary triumph came with the hiring of Milton Berle, for this comic appeared on the ABC radio network for only one year before, looking for a showcase better suited to his visual style, he moved to NBC television and became a national sensation.

There were two notable exceptions. In 1946 Bing Crosby moved to the ABC radio network for reasons of convenience and technical change. Crosby, who was then at the very height of his popularity as a singer and movie star, agreed to move to ABC because NBC was forcing him to broadcast his show live twice, once for the eastern and central time zones and then a second time for stations based in the mountain and pacific time zones. Crosby wanted to use audiotape to record his show at his convenience. ABC executives were more than willing to permit Crosby to use the then new audiotape technology to record his show ahead of time and then hit the links when listeners thought he was in the studio broadcasting to them.

During summer 1946, Crosby shocked the industry when he announced he was leaving NBC and long-time sponsor Kraft to sign with Philco, maker of radio sets, and appear on ABC. His weekly salary was announced at a staggering $7,500. Because Philco and ABC permitted Crosby to prerecord his *Philco Radio Time*, he was nowhere near the studio when his show debuted on Wednesday night, 16 October 1946. The Philco show proved a major ratings triumph. Because of its success, three years later, when CBS chief William S. Paley was in the midst of his celebrated “talent raids,” he lured Crosby away from his three-year run on ABC. *Philco Radio Time* last ran on ABC on 1 June 1949.

The other exception to ABC’s normal ratings mediocrity started in March 1948 when *Stop the Music!* premiered. Listeners quickly embraced this giant jackpot quiz show. With master of ceremonies Bert Parks as its host, musical selections were played by the Harry Salter Orchestra or sung by vocalists Kay Armen and Dick Brown. While a song was played, a telephone call was placed to a home somewhere in the United States, and when the caller answered, Parks called out “stop the music.” If the person at home could name the tune, he or she won up to $20,000.

Listeners flocked to ABC on Sunday nights, and by the summer ABC truly had a hit, doubling the audience reached by Fred Allen at NBC and *Sam Spade* on CBS. With ratings high from the beginning, sponsors lined up, and ABC selected Old Gold cigarettes and Spiedel jewelry as the main advertisers. During summer 1948, demand for tickets was so high that the producers moved the show to the 4,000-seat Capitol Theater in the heart of Times Square. But ABC could not sustain the hit, and by 1952 the radio version was off the air. The fledgling ABC television network kept it on the tube—originally as just a simulcast—until 1956.

As the Golden Age in radio was ending, ABC certainly matched Mutual as a radio network, but it was rarely as successful as NBC and CBS. Building ABC as a radio network was always a struggle, yet from a network with 168 owned or affiliated stations as of the October 1943 purchase date, Noble and his managers doubled affiliations within a decade. Indeed, owning and operating radio stations and a network was lucrative
enough that Noble—with the help of a $5 million loan from the Prudential Insurance Company of America—was able to launch the ABC television network. By the beginning of the 1950s, ABC not only owned a radio network and the maximum allowable number of AM and FM radio stations, but had also reached the legal limit on television stations as well—five. So successful was ABC that Noble began to attract bidders for his enterprise.

The United Paramount Takeover

In 1951, in what was up to that point the biggest transaction in broadcasting history, United Paramount (the chain of movie houses formerly owned by Paramount Pictures) paid $25 million to add ABC’s five television stations, six FM radio stations, and six AM radio stations to its 644 theaters in nearly 300 cities across the United States. The FCC took two years to finally approve the deal. ABC would never have become a modern radio and television corporate powerhouse had it not been acquired by United Paramount, greatly adding to its financial resources. Leonard H. Goldenson, head of United Paramount, began to sell theaters and real estate to generate the cash necessary to build up ABC television first and ABC radio second.

On the radio side, Goldenson faced a challenge. Most of ABC’s radio affiliates were lower-power stations in smaller cities. When forced to divest RCA of the Blue network a decade earlier, RCA had stacked the deck, making sure that what he transferred with Blue represented the least valuable of NBC’s stations. To generate income, ABC radio management, headed by Robert Kintner, allowed advertising for products considered inappropriate by the mighty NBC and CBS, such as deodorants and laxatives. But in 1953 Goldenson felt radio would need to change as television became America’s top mass medium. With AM radio now standard equipment on most new cars, and with the innovation of the inexpensive portable radio set, Goldenson reasoned that a radio market would always exist, but in a different form than had worked in the past. The question for ABC—and for all of radio in 1953—was how best to exploit the changing radio medium.

Goldenson realized that while United Paramount had gained a network with the ABC purchase, more important were the stations located in some of the nation’s largest markets. The flagship station in New York City—WJZ-AM—was his most valuable radio asset, worth more than the then struggling ABC radio network. Still, whereas WNBC-AM had studios at Radio City, WJZ-AM broadcast from a modest renovated building at 7 West 66th Street, one block west of Central Park. On 1 May 1953—six and a half years after the rival network’s stations were named WNBC-AM and WCBS-AM in honor of their respective parent companies—Goldenson renamed his New York City outlet WABC-AM and worked to make this 50,000-watt powerhouse a metropolitan fixture at “77” on the AM band.

Programming proved harder to change, so Goldenson stuck with what was working for the time being. In the mid 1950s that meant shows such as American Safety Razor’s Walter Winchell on Sunday nights; Anheuser-Busch’s Bill Stern’s Sports Reports at 6:30 P.M. three times a week; General Mills’ Lone Ranger at 7:30 P.M. on Mondays, Wednesdays, and Fridays; and Mutual of Omaha’s Breakfast Club in the mornings. Goldenson’s innovation was to hire local personalities to develop followings only within the New York City metropolitan market. For WABC-AM, this meant in time Peter Lind
Hayes and Mary Healy, Martin Block, Ernie Kovacs, Howard Cosell (and his sports reports), commentators John Daly and Edward P. Morgan, and rock disc jockey sensation Alan Freed.

The transition of WABC-AM to the highest-rated rock station in the United States began modestly with Martin Block’s *Make Believe Ballroom*, which Goldenson bought in 1954. But it was the June 1958 hiring of Alan Freed that would signal the future of WABC-AM as a Top 40 profit-generating powerhouse. Freed would soon burn out in the payola scandals, but WABC disc jockeys “Cousin Brucie,” “Big Dan Ingram,” and others replaced him, and by the arrival of the Beatles in early 1964, WABC-AM had become one of the nation’s most listened-to radio stations.

Goldenson’s management team rebuilt the other owned and operated ABC radio stations: WLS-AM in Chicago, WXYZAM in Detroit, KABC-AM (formerly KECA-AM) in Hollywood, KQV-AM in Pittsburgh, and KGO-AM in San Francisco. Each would soon take its place among the top-rated stations in its metropolitan area. Each also beefed up an FM license that had been underutilized.

For example, Chicago’s clear channel WLS-AM was transformed from a major-market network affiliate to a rock and roll pioneer, beaming Top 40 hits across the Midwestern states. As the 1960s commenced, WLS-AM had joined the Top 40 elite and was being built up by a number of local disc jockey stars—none hotter, or more famous, than Larry Lujack. For a generation of listeners in the 1960s and 1970s, Lujack created and defined rock and roll.

Similar histories could be traced for all of ABC’s major radio stations. In Detroit, for example, WXYZ-AM was also transformed into a radio powerhouse, and by Goldenson’s own calculations it functioned as ABC’s most profitable radio outlet during the 1950s and 1960s. If the selling of United Paramount’s theaters and valuable real estate is properly credited with underwriting ABC television network deals with Hollywood’s Walt Disney and Warner Brothers Companies, one must also credit the revenues generated by profitable radio stations such as WXYZ-AM. Indeed, the rebuilding of AM radio stations was going so well that in 1957 Goldenson separated the television side (which required fashioning alliances with Hollywood) from the radio side (which needed to transform existing properties into local hot spots, station by station) of the business. With this separation, Goldenson emphasized that television and radio management required quite different skills.

**Leonard Goldenson’s Radio Network Innovations**

Although Leonard H. Goldenson has never been labeled as one of radio’s top leaders—in the league with NBC’s David Sarnoff or CBS’s William S. Paley—many consider that he ought to be. Despite all the hiring and firing of radio talent during the 1950s and 1960s, ABC management at the top varied little as Goldenson and his small set of advisers built ABC radio (and television) into highly profitable media institutions. By 1985, when he stepped down, Goldenson had created a modern media conglomerate. This small-town poor boy from Pennsylvania, who managed to graduate from Harvard Law School, learned the mass entertainment business at Paramount Pictures and took over its divested theater division in 1950. He already had some experience in television from Paramount’s
owned and operated television station in Chicago, WBKB-TV. He had no experience in radio, but he knew of its success as an entertainment medium in cities where Paramount operated theaters.

Although most kudos for Goldenson go to his development of the ABC television network, media historians also recognize his reinvention of network radio. By refashioning a single all-things-to-all-audiences network into four—and later more—specialized radio networks in the late 1960s, Leonard Goldenson earned his place as a radio pioneer. ABC was transformed from a single radio network into the American Contemporary Network, the American Information Network, the American Entertainment Network, and the American FM Network. This specialization would set the model for network radio for the next three decades.

However, Goldenson’s most significant innovation almost did not come to be. By the early 1960s Goldenson thought he had built up and milked his major-market stations for as much as he could, and he considered abandoning network radio altogether. He seriously entertained bids to sell the ABC radio network—plus all its valuable stations—to Westinghouse for a price reported to be $50 million. But once he got over the shock of the unexpected size of Westinghouse’s offer, Goldenson figured that this substantial bid by Westinghouse’s experienced executives did not signal the end of the Top 40 radio era; rather, new forms of radio broadcasting did have a future. He turned down Westinghouse and successfully continued to build his own radio empire as part of what was (and is) often incorrectly considered simply a television network business operation.

At the time, breaking with the mold of a single network was considered a risky proposition. The executives directly responsible for the network radio turnaround were Hal Neal and Ralph Beaudin, who had made their reputations by turning ABC-owned and -operated stations into rock and roll powerhouses. The four networks were patterned from formats of the day. The American Contemporary Network stressed middle-of-the-road music and soft-spoken middle-aged disc jockeys. The American Information Network was all news and talk, patterned after the all-news local stations that CBS and Westinghouse were then pioneering. The American Entertainment Network was a piped-in Top 40 feed, and the FM network was a grab bag, because no one honestly knew the future of FM at that point.

In planning the four networks, Goldenson, who was already paying American Telephone and Telegraph (AT&T) for transmission by land lines, figured that four would cost only a bit more than one transmission for facilities that were being underutilized. Talent could be drawn from owned and operated stations. By late 1966 the plan for the four networks was in place, and Goldenson gave notice to all advertisers and affiliated stations that the year 1967 would be the final year for ABC as a single radio network. During summer 1967, ABC began heavy promotion of the four-network idea, and quadruple feeds commenced on the first day of 1968 to 500 affiliates.

In the first year of four-network operation, 1968, Goldenson was criticized because ABC lost $8 million. But just four years later the radio division alone was making more than $4 million annually. But by 1972, the network radio division was making $4 million profit per year. As the 1970s ended, ABC’s network radio division had 1,500 affiliates and was making $17 million profit per year. In the late 1970s, ABC Contemporary had about 400 affiliates, and the American Information Network had almost 500 affiliates, as did the American Entertainment Network; however, the American FM Network never
moved past 200 affiliates. The recasting and specializing of network radio worked for AM stations, but FM gradually found musical niches that would make them the leaders in radio ratings in most markets by 1980.

Goldenson continued to tinker with the format profile of both ABC’s owned and operated stations and its growing number of networks. The advertising community applauded Goldenson’s adaptation of focused demographics. In August 1970 ABC separated management of AM from FM owned and operated radio stations, and with the progressive rock format ABC began to remake FM outlets, which had long merely simulcast AM.

Takeovers

As the 1980s commenced, Goldenson began to slow down. In 1980 his ABC television network ranked number one, and he was able to tout ABC’s radio stations as among the most popular in the nation. For example, WABC-AM in New York abandoned Top 40—after 22 years—and soon made even more money with “talk.”

Goldenson needed to find a suitable successor. He wanted to pass “his” company to someone who had the skills to consistently and profitably run a mature multibillion-dollar media empire. After much looking and interviewing, Goldenson met Thomas Murphy, head of Capital Cities Broadcasting, a 30-year-old media company that as the 1980s began owned 7 television stations, 12 radio stations, an assortment of daily and weekly newspapers, and an additional assortment of magazines. Capital Cities was a Wall Street high flyer, known for its efficient management by Murphy and Dan Burke. Goldenson decided that Capital Cities was the logical successor to take over the ABC radio and television networks he had created.

At the time the deal was announced, in March 1985, it was the largest non-oil merger ever, at $3.5 billion. But although headlines warned of vast changes and ominous negative implications for news and entertainment, none ever really materialized. Murphy, Burke, and their Capital Cities executives simply merged the two media companies, sold off some duplicative properties, and then continued the process of fashioning an even more profitable, even larger media enterprise than Goldenson had created—one that encompassed forms of mass media from print to television and from film-making to radio network and station operation.

In radio, Murphy, Burke, and company changed almost nothing. They tinkered on the margins as they tried to follow (not set) trends. They smoothly and efficiently managed format makeovers as Top 40 rock and roll gave way to other formats of pop music. In general, Murphy and Burke transformed ABC’s large-city AM powerhouse stations, often to middle of the road talk-format operations. Consider the example of Chicago’s WLS-AM, symbol of the Top 40 era. When Murphy and Burke took over, its ratings were slipping, and so they worked to reformat WLS-AM again, even as FM was draining away listeners. By the early 1990s, WLS-AM became news-plus-talk radio 890, with no “hot jock,” but instead the ramblings of Dr. Laura Schlessinger and Rush Limbaugh. Such transformations took place throughout the matrix of ABC stations, as radio continued to provide core profits to the company now known as Capital Cities/ABC.
In 1996 Murphy and Burke themselves neared retirement age, and, as Goldenson had done, they sought an alliance with a company to continue ABC. In 1996 the biggest merger in media history was announced when the Walt Disney Company acquired Capital Cities/ABC. Overnight, Disney, far more famous for its movie making and theme parks, became one of the top competitors in the world of radio.

When Disney announced its takeover of Capital Cities/ABC at the end of July 1996, the headlines blared about vast potential synergies of a Hollywood studio and a television network. Radio was considered an afterthought. Still, with New York City flagship station WABC-AM leading the list, Disney now had important radio promotional outlets in a half-dozen other top-ten media markets: in media market 2 Los Angeles (three stations), in market 3 Chicago (two stations), in market 4 San Francisco (two stations), in market 6 Detroit (three stations), in market 7 Dallas (two stations), and in market 8 Washington, D.C. (three stations).

Disney concentrated on these big cities, but its radio holdings paled in comparison to rival radio powers of the late 20th century such as CBS and Clear Channel. Yet Disney’s station reach always remained vast. Disney head Michael Eisner then looked and applied synergies to these urban radio stations. He sold off Capital Cities/ABC’s newspapers and other print operations but kept radio—even expanding Disney into more radio with the September 1997 launch of a new network, the ESPN radio network, with its exclusive rights for Major League Baseball for five years. Eisner also rolled out Radio Disney, a live network for families and children under age 12 with a select playlist of special music, much of it from Disney movies and television programs.

Although radio is a relatively small division at Disney, Disney management certainly recognizes radio’s contribution to Disney profit accumulation. As the 21st century commenced, ABC radio networks programmed ten services, including American Gold, Flashback, Moneytalk, Business Week Report, Rock & Roll’s Greatest, and Yesterday...Live!—as well as ABC News Network and ABC Sports radio. Stars included canonical Paul Harvey (by the year 2000 one of the longest-running voices in radio history), the controversial “news commentator” Matt Drudge, and noted sports commentators Tony Kornheiser and Dan Patrick. ESPN offered sports news and talk, based on its companion cable television network, and ABC News expanded its long-running network services with shows spun off from television favorites such as This Week with Sam Donaldson and Cokie Roberts. ABC News also offered on the radio America’s Journal, World News This Week, Hal Bruno’s Washington Perspective, and Newscall. Disney bragged that its Radio Disney network was reaching 1.6 million children and 600,000 moms per week, while American Gold, starring Dick Bartley for four hours per week, offered the most-listened-to nationally syndicated oldies countdown show in the year 2000, in competition with Dick Clark, as a lure for aging baby boomers. Surely, these services—and a multitude of others—will be changed and reinvented as ABC Radio networks continue to refocus vital services.

DOUGLAS GOMERY AND CHUCK HOWELL

See also Crosby, Bing; Freed, Alan; Harvey, Paul; McNeill, Don; Network Monopoly Probe; Radio Disney; Talent Raids; WABC; WLS; WXYZ
Further Reading

Rhoads, B. Eric, Blast from the Past: A Pictorial History of Radio’s First 75 Years, West Palm Beach, Florida: Streamline, 1996
“Special Report on ABC’s Twenty-Fifth Anniversary,” Broadcasting (13 February 1978)
Thomas, Bob, Winchell, Garden City, New York: Doubleday, 1971
Williams, Huntington, Beyond Control: ABC and the Fate of the Networks, New York: Atheneum, 1989

American Broadcasting Station in Europe

Office of War Information Station, 1944–1945
The American Broadcasting Station in Europe (ABSIE) was created and operated by the U.S. Office of War Information (OWI) to support the Allied invasion of Europe during World War II. The station carried news, entertainment, coded messages, propaganda, and instructions for European populations between 30 April 1944 and 4 July 1945. It broadcast from its London studios in English, French, German, Norwegian, Danish, and Dutch and offered over 42 hours of weekly programming featuring exiled statesmen, military leaders, and popular musicians. The list of prominent individuals who broadcast for the station included King Haakon of Norway; King Peter of Yugoslavia; Foreign Minister Jan Masaryk of Czechoslovakia; General Dwight D. Eisenhower; Charles DeGaulle; and entertainers Glenn Miller, Dinah Shore, and Bing Crosby.

Although the idea of an American station transmitting from Great Britain was conceived as early as the attack on Pearl Harbor in 1941, OWI did not initiate concrete planning for two and a half years. By that time, the government’s widespread radio propaganda activities included shortwave broadcasts to Japan; the operation of stations in Tunis, Algiers, and Italy; and the transmission of a large number of Voice of America (VOA) programs via shortwave radio. Nevertheless, the scarcity of shortwave receivers on the continent and the Nazis’ increasingly effective efforts to jam broadcasts convinced OWI officials to build a station near enough to the front that its signal could reach European listeners.

Brewster Morgan, ABSIE’s first director, and Richard Condon, its engineer, started work on the station in 1942, only to have their efforts postponed when OWI assigned them to set up the Armed Forces Network to broadcast to Allied troops. By 1943 they were back on the job, ordering equipment in the summer and recruiting staff in the fall. The following period of intense activity at the station coincided with heavy air raids in London. One evening German bombs narrowly missed the headquarters that ABSIE shared with Gaumont Films and destroyed the neighboring building. Shaken, the staff continued working; by early April, they had started rehearsing programs in anticipation of the inaugural broadcast of 30 April. Listeners to that program heard OWI’s European director, Robert Sherwood, caution resistance forces to avoid premature action and to await word from Allied radio before striking the enemy. Sherwood also stated that an American voice could now be heard that was committed to “telling the truth of the War” to America’s friends and enemies.

To ensure that this voice was received, ABSIE broadcast using four medium wave transmitters built by the Radio Corporation of America (RCA) and six powerful shortwave transmitters leased from the British Broadcasting Corporation (BBC). Its configuration allowed listeners to tune to ABSIE on several frequencies while forcing Nazi propagandists to dedicate an increased number of transmitters to jamming. Captured German records reveal that ABSIE’s efforts to counter jamming were successful enough that most of the station’s broadcasts were received. A more formidable tactic than jamming was the Nazis’ ban, under penalty of death, on listening to Allied radio. Postwar surveys revealed, however, that German civilians and soldiers had listened to ABSIE’s programming despite the potential consequences and that stories reported on ABSIE had circulated widely by word of mouth.

ABSIE’s organization mirrored that of a commercial station, an unsurprising fact given that it recruited key personnel from commercial stations and networks. Director Brewster Morgan had been a director and producer for the Columbia Broadcasting
System (CBS). Station Manager Robert Saudek had worked at the National Broadcasting Company (NBC) Blue network in New York. The chief of the German language desk, Robert Bauer, had been an employee of WLWO Cincinnati prior to the war. Even William Paley, the head of CBS, helped ABSIE with planning and equipment procurement. Commercial radio’s willingness to contribute staff to ABSIE reflected both its support for U.S. involvement in World War II and its conciliatory approach toward the government during the war years. Such attitudes also explain the networks’ willing self-censorship at home.

OWI’s U.S. offices, particularly those of its Overseas Branch in New York, provided another major source for ABSIE’s staff. Phil Cohen, Morgan’s successor as ABSIE’s director, had been chief of OWI’s Domestic Bureau in Washington. ABSIE’s language desks drew heavily from the OWI’s New York offices. Pierre Lazareff, previously chief of the French radio section in New York, became chief of the French desk. Jom Embretsen, chief of ABSIE’s Norwegian desk, had headed OWI’s Radio Program Bureau in New York. Robert Bauer, Alfred Puhan, and George Hanfmann, the three successive chiefs of the German desk, all came from New York as well.

ABSIE’s language desks were central to its operation. They translated key news items while tailoring programming to specific national audiences. Lazareff made sure the French desk established close working ties with the French government in exile and aired many speeches of its officials. A popular Norwegian program prompted a deluge of audience mail when it broadcast messages from Norwegian members of the armed forces for their friends and relatives at home. The English section was specifically designed to appeal to European listeners who, saturated with overly direct propaganda in their native languages, were more trusting of English language broadcasts. Most of its programming was news, supplemented by frontline commentary.

In general, news accounted for the largest share of ABSIE’s time, although special programs and rebroadcasts of BBC and VOA programs figured prominently on the daily schedule as well. Broadcasts generally avoided the most overt propaganda appeals in favor of carefully selected but usually truthful reports. This “white” propaganda contrasted with the Office of Strategic Services’ use of such “black” propaganda as the invention of a revolutionary party in Germany devoted to the overthrow of the Nazis. More typical of ABSIE’s approach was the news coverage in 1945, which juxtaposed stories of chaos in Nazi-occupied regions of Germany with reports of orderly conditions and fair treatment in the Allied zones. One program broadcast interviews with German prisoners of war in hopes that their families would tune in. On another broadcast, Bing Crosby performed after reading a phonetically written German script that projected a vision of the increased freedom Germans could expect after the Nazis were defeated.

ABSIE’s final broadcast aired on 4 July 1945 and featured a statement by OWI director Elmer Davis asserting that ABSIE had successfully completed its mission but that the VOA and BBC would continue in its place.

BRYAN CORNELL

See also Armed Forces Radio Service; Office of War Information; Propaganda by Radio
Further Reading

American Family Robinson

Soap Opera Adventure Program
The National Association of Manufacturers (NAM) raised the character concept to an art with the soap opera adventure *American Family Robinson*. Syndicated by the World Broadcasting System from late 1934 to 1940, the 15-minute transcribed episodic drama was an anomaly among the NAM’s nearly exclusive investment in printed public and political relations material. The NAM’s politics, like its print-oriented publicity, were underwritten by the nation’s largest industrial corporations, who were *Robinson* sponsors.

Provoked by the prolabor clauses of the New Deal’s National Industrial Recovery Act (NRA), in 1933 the NAM embarked on a campaign of employer opposition that forestalled the imposition of collective bargaining in the steel, chemical, and auto industries. Announcing an “active campaign of education” in September of that year, Association President Robert L.Lund explained that NRA Section 7(a) posed a special threat to employers, given the “untruthful or misleading statements about the law” made by the American Federation of Labor and “communistic groups promoting union organization.” Lund concluded that the American public would become favorably disposed toward business’s traditional prerogatives and institutional choices if only business leaders would “tell its story.”

Drawing upon the “home service personality” expertise of its packaged goods producers, the NAM led the way in radio with the episodic adventures of the *American Family Robinson*. The program appears to have been proposed by Harry A. Bullis, General Mills vice president and chairman of NAM’s public relations committee. The *American Family Robinson’s* drop-dead attacks on the New Deal reflected the print-oriented focus of the NAM’s traditional publicity techniques. The interjection of editorial comment into the *Robinson’s* soap opera plot reduced series protagonist Luke Robinson, “the sanely philosophical editor of the Centerville Herald,” to a caricature of the factory town newspaper editor that the NAM assiduously cultivated with an open-ended supply of pro-industry preprinted mats, columns, and tracts.

Editor Robinson, the program’s repository of sound thinking and common sense, is beset by social schemers and panacea peddlers. Some are threatening and even criminal,
but most are simply misguided. Among the latter is Robinson’s brother-in-law, William Winkle, also known as “Windy” Bill, the itinerant inventor of the “housecar.” Bill’s meddlesome and uninformed political ideas are as unexpected as his unannounced visits with the Robinsons. More menacing is Professor Monroe Broadbelt, the “professional organizer of the Arcadians, a group using the Depression as a lever to pry money from converts to radical economic theories” (from American Family Robinson, cited in MacDonald, 1979).

The story line of the American Family Robinson revolves around the resolution of political conflict in the home and immediate community through the application of “time-tested principles.” The Robinsons are shocked when their daughter Betty falls under the oratorical spell of Professor Broadbelt, a common criminal whose turn of phrase suggests a certain Hyde Park, New York, upbringing. Complications attend Betty’s engagement to the Arcadians’ charismatic leader, whose first consideration is his chosen mission: “The upliftment of mankind.” Broadbelt’s motives, however, are neither idealistic nor romantic. In the next episode, Luke Robinson helps apprehend Broadbelt, who has skipped town with the Arcadians’ treasury. Returning to Centerville, Robinson presides over the liquidation of the Arcadian movement by publicly refunding the contributions of its confused and misguided members, including his daughter’s.

In certain households, interest in the American Family Robinson undoubtedly did exist. The program attracted an articulate audience that appreciated and responded to the NAM’s send-ups of New Deal liberalism. From fan mail the NAM learned that listeners responded enthusiastically to Luke Robinson’s comic foil “Windy” Bill. Written into the script as an incidental character, “Windy” soon returned to Centerville with a role expanded to include yet more meddlesome and annoying business. Other changes occurred as characters changed careers and took on new responsibilities. In 1935 Luke Robinson left the editorship of the Centerville Herald to become the assistant manager of the local furniture factory. Although Robinson remained the series’ protagonist, a new character, “Gus Olsen,” a janitor who had made the best of his lot in life, assumed Robinson’s place as the managing editor and owner of the Herald. A tabloid “Herald” mailed to listeners from “Centerville” announced the changes and included photographs of the “Robinsons” reading their fan mail along with the paper’s articles, editorials, cartoon, and crossword puzzle.

When introduced to New York City listeners in 1935, the American Family Robinson appeared five days a week until it changed to its regular twice-a-week schedule. In 1940, the last year of broadcast, the series appeared twice a week on 255 stations. NAM specialists considered midafternoon the optimum time for broadcasts. According to NAM Vice President for Public Relations James P. Selvage, tests showed that when scheduled between 2:00 and 3:00 P.M., the program had an excellent chance “to reach not only housewives but other members of the family.” The American Family Robinson, Selvage wrote, presented “industry’s effective answer to the Utopian promises of theorists and demagogues at present reaching such vast audiences via radio.”

From the outset, Selvage had hoped to interest the National Broadcasting Company (NBC) or the Columbia Broadcasting System (CBS) in broadcasting the American Family Robinson on a sustaining basis. Neither was interested, and the series ended up in transcription, recorded and circulated to individual stations by the World Broadcasting System. A review of scripts submitted to NBC in October 1934 resulted in the program’s
banishment from the network’s owned and operated stations as well. Reviewing the series’ first three episodes, NBC script editor L.H. Titterton hardly knew what to make of the Robinsons, or the direction the story might take. An outline for the rest of the series and a script of the last episode received three days later confirmed Titterton’s suspicion. After meeting with Selvage and Douglas Silver, the scripts’ author, Titterton reported that the American Family Robinson proposed “to take on a definitely anti-Rooseveltian tendency.” “You would probably not find in the entire series any specific sentence that could be censored,” Titterton wrote to his network superiors, “but the definite intention and implication of each episode is to conduct certain propaganda against the New Deal and all its work.”

WILLIAM L. BIRD JR.

Cast

Luke Robinson
  The Baron
Miss Twink Pennybacker/Gloriana Day
Windy Bill
Cousin Monty, the Crooner
Professor Broadbelt
Myra
Aunt Agatha
Emmy Lou
Elsie
Mr. Popplemeyer
Letitia Holsome
Gus (Luke’s assistant)
Pudgie

Producer/Creator

Harry A. Bullis

Programming History

National Industrial Council syndication, Orthacoustic transcription 1935–1940

Further Reading

American Federation of Musicians

The American Federation of Musicians (AFM) represents some 150,000 members in nearly 400 local unions throughout the United States and Canada. The AFM became infamous during and after World War II under its fiery leader James Caesar Petrillo, who fought tirelessly to preserve the jobs of professional musicians at stations and networks. Petrillo defied President Roosevelt and Congress until the latter passed legislation limiting his right to pressure broadcast stations.

Origins

After several earlier attempts at organization, the AFM was founded in Indianapolis in 1896 following an invitation from Samuel Gompers, president of the American Federation of Labor (AFL), to organize and charter a musicians’ trade union. Delegates from various musician organizations, representing some 3,000 musicians, created a charter stating that “any musician who receives pay for his musical services shall be considered a professional musician.” The union added the phrase “of the United States and Canada” to its title in 1900. At the St. Louis World’s Fair four years later, the AFM discouraged the hiring of foreign bands. It also achieved the first minimum wage scale for traveling orchestras.

The economic impact of World War I and the growing popularity of recorded music led to epic high unemployment of musicians. Prohibition was closing beer halls where musicians had worked, and by the late 1920s and early 1930s, sound-on-film technology had displaced theater orchestras. The 22,000 musicians providing in-theater musical background for silent movies were replaced with only a few hundred jobs for musicians recording sound tracks. As might be expected, the New York, Chicago, and Los Angeles AFM locals were the largest during this period, with about 25 percent of the total membership in the three cities.
AFM members initially looked to radio as a godsend, assuming that it would provide for more employment opportunities for members. And indeed larger stations did create or hire individual musicians or even orchestras. But stations in smaller markets relied on recordings or shared (networked) broadcasts of national orchestras to fill their airtime, so music was getting wider circulation, but musicians usually were not.

Development of electrical transcription around 1930 (and sound quality improvements in records sold to consumers) made the problem worse, as it was now easier for stations to produce recorded programs that sounded nearly as good as live performances. After many years of indecision, in 1937 AFM President James Petrillo originated the “standby” approach, pressuring Chicago stations to employ AFM members if recorded music was played, as backup musicians or even as “platter turners” in place of regular on-air personnel. This “featherbedding” tactic (hiring more employees than needed) was adopted by the union and expanded to other areas of the nation in the years before the U.S. entry into World War II. That the standby process originated in Chicago is central to the AFM story, for Chicago became the base of strong AFM leadership for several decades.

A onetime trumpet player (“If I was a good trumpet player I wouldn’t be here. I got desperate. I hadda look for a job. I went in the union business,” *New York Times*, 14 June 1956), James Caesar Petrillo joined the AFM in 1917 from a rival group. He became head of the Chicago AFM local in 1922 and kept that post for over four decades, in part due to the lack of secret ballot elections and members’ fear of him. In 1928 Petrillo had demanded that radio stations in the Chicago market pay musicians for performing on the air, which ironically forced many to use recorded music. The “standby” approach followed wherein musicians were retained but often not used by broadcasters.

By 1940 Petrillo had been elected national AFM president, a post he would hold until 1958, all the while retaining his local power base (and title) with the Chicago local. He quickly expanded the union’s standby tactic, requiring stations across the country that played records (as most did by that time) to hire AFM members as standby players. With strong AFM pressure, by 1944 the practice had spread across the nation, employing some 2000 musicians.

Petrillo and the union drew negative public attention, however, by demanding that the NBC radio broadcast from the National Music Camp at Interlochen, Michigan, be canceled in 1942. (Some of the camp’s final performances each season had traditionally been broadcast.) A year later, the camp’s leader, Joseph E. Maddy, lost his AFM membership because he was playing with non-members. The camp proved unable to get another broadcast outlet for its concerts, though ironically most could not have joined the union in any case because they were too young.

Petrillo did not seem to be concerned with public opinion. The height of his “public be damned” mode came in August 1942, when he pulled AFM members from all recording sessions with the big record companies until they agreed to his pension and related demands. The resulting 27-month ban continued until late 1944 despite orders by the War Labor Board, pleas from President Roosevelt, and loud complaints in Congress that the AFM leader was not being supportive of the war effort. He stood his ground, and in November 1944, the last of the major recording companies (RCA Victor and Columbia)
gave in to AFM demands. AFM gained the payment of 1.5–2 cents from each record sold; the money went into what became a huge performance trust fund. (The fund still helps to support popular free concerts in what is now the Petrillo Band Shell in Grant Park in Chicago.) Growth of the recording business after the war and the increasing number of jukeboxes prompted the AFM to threaten another recording musicians strike in 1948, but the parties involved settled, agreeing to continue paying AFM fees to the performance fund.

Concerned about the developing new media and what impact they might have on musicians, Petrillo in 1945 banned AFM members from performing on television or on FM dual broadcasts with AM unless standby musicians were hired. These bans were lifted only after stations again agreed to his demands for payments to musicians who were often not used at all. He also banned foreign music broadcasts except those from Canada, whose players were often AFM members. Although some of the membership grumbled, Petrillo and his supporters were all-powerful in the union and held sway. Indeed, his supporters reveled in the poor press their president achieved, publishing a booklet of negative cartoons depicting the feisty leader.

Lea Act

But pressure from broadcasters who felt blackmailed into accepting employees they did not need led Congress to take action limiting the union’s power. In 1946 Clarence Lea, a Republican from California, introduced legislation to revise the Communications Act by adding a revised Section 506 concerning “coercive practices affecting broadcasting.” Passed by overwhelming margins in the House and Senate and quickly signed by President Harry Truman, the Lea Act banned pressure on licensees to employ or make payments for “any person or persons in excess of the number of employees needed by such licensee to perform actual services,” or “to pay or agree to pay more than once for services performed.” Pre-existing contracts were allowed to stand, but renewals would have to agree with provisions of the new law.

In his usual pugnacious approach, Petrillo appealed the new legislation, using WAAF in Chicago as a test case, and promised a nationwide strike against radio if the Lea Act was found unconstitutional. The Supreme Court, however, held the act to be constitutional and thus enforceable, and the AFM lost some of its power. Petrillo remained president of the AFM for another decade, but the union gradually slipped out of news headlines.

CHRISTOPHER H. STERLING

See also Columbia Broadcasting System; Copyright; Music; Radio Corporation of America

Further Reading

American Federation of Musicians: A Brief History of the AFM
<file://D:/input/2000ae99/www.afm.org/about/about.htm?history>
American Federation of Television and Radio Artists

The American Federation of Television and Radio Artists (AFTRA) is the national labor union or “guild” for talent in television, radio, and sound recordings. It was originally founded on 30 July 1937 as the American Federation of Radio Artists (AFRA), part of the American Federation of Labor (AFL). By 2000, AFTRA had 36 local offices throughout the United States, with a total of 80,000 members, representing performers at over 300 radio and television stations nationwide, and a workforce collectively earning over $1 billion annually under work contracts by the union. The union is still affiliated with the AFL-CIO and is headquartered in New York City.

AFTRA’s membership represents four areas of broadcast employment: news and broadcasting; commercials and nonbroadcast, industrial, or educational media; entertainment programming; and the recording business. Members include announcers, actors, newscasters, sportscasters, disc jockeys, talk show hosts, professional singers (including background singers and “royalty artists”), dancers, and talent working in new technologies such as CD-ROM and interactive programming. The union also franchises talent agents who represent AFTRA performers, stipulating talent agency commission fees as well as other regulations regarding the representation of performers in the union’s jurisdiction.

AFTRA is party to about 400 collective bargaining agreements nationwide. These agreements generally regulate salaries and working conditions and include binding arbitration procedures for unresolved labor disputes. Union rules require AFTRA members to work only for “signatories” (employers who have signed AFTRA contracts), and members are asked to verify the signatory status of an employer before accepting a job. AFTRA was also the first industry union to establish employer-paid health insurance
benefits and portable retirement plans. Any performer who has worked or plans to work in an area covered by AFTRA contracts is eligible for membership. Member dues are based on a performer’s previous year’s AFTRA earnings. Currently, dues and initiation fees are set by each local office, but the union has plans to implement a uniform national schedule of dues.

The union is governed by volunteer member representatives on both local and national boards of directors. National delegates are elected on a proportional basis from the locals at the union’s biannual national convention. The national office publishes basic rates for the national freelance agreements for entertainment programming, commercials, sound recordings (both singing and speaking, such as for talking books), industrials (video- and audiotapes for corporate, educational, and other off-air use), and new technologies. Local AFTRA offices publish local talent guides and offer special services designed to meet local member needs, including skill development seminars, casting hot lines and bulletin boards, and credit unions and tax clinics. Local offices handle staff employment for broadcasters and newspersons at over 300 radio and television stations nationally. Because each signatory station’s collective bargaining agreement is negotiated separately, it is up to the local AFTRA office to monitor and distribute information about specific station agreements. Local offices also track rates and conditions of employment for freelance work in each market, including rates for local or regional commercials and programs.

Presently, membership in AFTRA does not guarantee work or membership in other performer guilds, such as the Screen Actors Guild (SAG) or Actors Equity, although in general, both SAG and Actors Equity credit AFTRA membership and employment when evaluating applications. About 40,000 performers are members of both unions, and consequently, AFTRA and SAG have discussed a merger for several years. In 1995 the boards of directors of the two organizations approved a merger that would have created a larger union, given the combined membership of 123,000. Proponents of the merger cited the value of being able to present a united front when negotiating with an industry that was undergoing vast changes. Opponents were uneasy about the merging of the unions’ health insurance and pension plans and about higher proposed dues and were said to be nervous about increasing employment pressure on the 80 percent of SAG members already earning less than $10,000 annually from acting. In early 1999 the merger got only about 50 percent of SAG voter approval, far less than the 60 percent level of approval required by the SAG constitution, although the merger was approved by two-thirds of AFTRA voters.

Following the defeat of the proposed merger between AFTRA and SAG, AFTRA’s leadership continued to work toward a restructuring of the union. Between 1990 and 1993, an outside consulting agency had been commissioned to study changes affecting the industries under AFTRA jurisdiction. The study concluded with recommendations that AFTRA strengthen its national office and foster coordination among its historically strong locals. The consultants also recommended that AFTRA become more sophisticated in its use of both internal and external resources in order to match the resources of the companies with which it negotiated. Finally, it recommended that AFTRA provide more benefits and services for members and that the union find ways to involve its membership more fully in decision making and other union activity. Although the study maintained that AFTRA had “under financed” itself for many years by charging
member dues that were among the lowest of any union in the broadcasting industry, the union decided it could not increase dues before first improving its services. Consequently, AFTRA reallocated its dues revenues in a series of internal changes that enabled AFTRA to add to its national staff by 36 percent to provide for better legal, financial, negotiating, and organizing services. The union also worked to enforce its existing contracts more vigorously, started a new research department, and worked to increase its lobbying presence in Washington. As of December 2002 AFTRA and SAG engaged in joint contract negotiations as an attempt to coordinate efforts in the face of continuing media (employer) consolidation.

AFTRA has a long history of supporting equal employment opportunities for women and minorities, and all AFTRA contracts include provisions for diversity and hiring fairness. AFTRA has a scholarship fund for members and dependents called the AFTRA Heller Memorial Foundation, and the union also set up the AFTRA Foundation, a tax-exempt organization funded by voluntary contributions to support educational and charitable causes.

See also Commentators; Disk Jockeys; Female Radio Personalities; Singers on Radio; Sportscasters; Technical Organizations; Trade Associations

**Further Reading**

Madigan, Nick, “SAG: Merging or Diverging?” *Variety* (25 January 1999)

**American School of the Air**

**U.S. Educational Radio Program**

First aired on 4 February 1930, with an 18-year run that ended on 30 April 1948, this Columbia Broadcasting System (CBS) half-hour educational series drew from top radio and educational talent to bring programs to U.S. and international schools and radio listeners.

The show was sponsored for a brief time by the GrisbyGrunow Company to support radio sales, and then CBS chose to retain *American School of the Air* as a sustaining “Columbia Educational Feature” overseen by the network’s department of education. In
1940 the program was adapted and expanded to international educational markets in Canada and Latin America and the Philippines under the names School of the Air of the Americas, Radio Escuela de las Americas, and International School of the Air. Beginning in 1942, the School of the Air of the Americas was officially sponsored by the U.S. Office of War Information (OWI). In 1943 the program was deemed the “official channel for news, information, and instructions” by the OWI (CBS Program Guide, Winter 1943). In 1944 programs were also broadcast over the 400 stations of the Armed Forces Radio Service. The program was discontinued in 1948.

A number of educational organizations and individuals lent their names and expertise to the American School of the Air. Top-level national educators, such as William C. Bagley of the Teachers’ College at Columbia University and U.S. Commissioner of Education John W. Studebaker, served on the national board of consultants, and educational consultants were also involved at the state and local levels. National organizations also offered conceptual and resource support to the program.

Each American School of the Air season ran from October through April, taking a break for the summer out-of-school months. Typically, the series offered five subseries—one for each day of the week—with titles such as Frontiers of Democracy, The Music of America, This Living World, New Horizons, Lives between the Lines, Tales from Far and Near, Americans at Work, Wellsprings of Music, Science at Work, Music on a Holiday, Science Frontiers, Gateways to Music, Story of America, March of Science, World Neighbors, Tales of Adventure, Opinion Please, and Liberty Road. Program topics included U.S. and international history and current events; music and literature; science and geography; vocational guidance and social studies; biographies; and many other topics. In 1940 CBS reported that the American School of the Air programs were received by more than 150,000 classrooms throughout all 48 states, reaching more than 200,000 teachers and 8 million pupils.

Some radio historians typically argue that the American School of the Air was part of a political strategy in early struggles over broadcast regulation. In the 1920s and early 1930s, noncommercial and citizen organizations proposed regulation, including frequency reallocation and nonprofit channel and program set-asides”, to ensure that the United States’ burgeoning broadcast system would remain, on some level, competitive and in the public’s hands. The outcry against establishing a wholly commercial broadcast system compelled the networks to present a clear public-interest face, replete with educational, religious, and labor programming, in order to stave off binding regulation that might compromise network program time and control. CBS’s American School of the Air was a premier effort of this type.

Educational scholars offer an alternative account of the American School of the Air. They focus on the program’s role and function as an example of early educational technology and see the program as one of the first concerted experiments in education by radio, complete with supplemental classroom materials, teachers’ manuals, and program guides.

Sousan Arafeh

See also Columbia Broadcasting System; Educational Radio to 1967
Cast


Program Directors

Lyman Bryson, Sterling Fisher, and Leon Levine

Musical Directors

Alan Lomax, Dorothy Gordon, Channon Collinge

Writers

Hans Christian Adamson, Edward Mabley, Howard Rodman, A.Murray Dyer, Robert Aura Smith, and others

Announcers

Robert Trout, John Reed King, and others

Programming History

CBS February 1930-April 1948

Further Reading

Atkinson, Carroll, Radio Network Contributions to Education, Boston: Meador, 1942
American Society of Composers, Authors, and Publishers

Established in 1914, the American Society of Composers, Authors, and Publishers (ASCAP) is the oldest music performance rights organization in the United States and the only U.S. performing rights organization whose board of directors (elected by the membership) consists entirely of member composers, songwriters, and music publishers. For almost two decades, it also was the only national organization providing copyright clearance for the broadcasting of music.

Origins

The legal foundation for ASCAP was established in the 1909 copyright law that required permission from the copyright holder in order to perform music for profit in public. With no rights clearinghouse in place, however, copyright holders faced the impossible job of individually monitoring performances of songs to which each held title. Not many years later, composer Victor Herbert was conducting performances of one of his operettas at a New York theater. At dinner one evening in a nearby restaurant, he heard the establishment’s house musicians performing his composition “Sweethearts.” Herbert became upset that people were paying to hear his melodies in the theater while restaurant patrons were listening to them without paying anything. He brought suit under the 1909 law. A lower court initially ruled against him because the restaurant had charged no admission fee. But the United States Supreme Court reversed the lower court in its 1917 Herbert v Shanley decision. In upholding the composer’s claim, justice Oliver Wendell Holmes and his colleagues stated that it did not matter whether or not the performance actually resulted in a profit. The fact that it was employed as part of a profit-seeking endeavor was enough.

In 1914, before the main legal battle began, Herbert gathered eight composers, publishers’ representatives, and lyricists for a meeting that ultimately would result in the establishment of ASCAP as their collection agent. In addition to Herbert, charter member composers included Irving Berlin and Rudolph Friml. Buoyed by Herbert’s legal triumph three years later, ASCAP expanded its fee-seeking horizons beyond theaters and dance halls to any place where performance for profit took place. These proceeds then were distributed among ASCAP members via a sliding scale based on the number of compositions to which each held title and the musical prestige (not necessarily popularity) of each work.

ASCAP and Radio

By 1923 some radio stations had become profit-seeking (and a very few actually profit-making) enterprises that made widespread use of popular music. ASCAP therefore turned its attention to broadcasting, selecting WEAF, American Telephone and Telegraph’s
(AT&T) powerful New York outlet, as its test case. An aggressive protector of its own license and property rights, AT&T was not in a position to oppose ASCAP and settled on a one-year license of $500 in payment for all of the ASCAP-licensed music WEAF chose to air. This blanket license arrangement would become the industry standard. ASCAP followed this breakthrough by winning a lawsuit against station WOR in Newark, New Jersey, for the unlicensed broadcast of Francis A. McNamara’s ballad “Mother Machree.” Because ASCAP-affiliated composers were then the creators of virtually all popular music, stations faced the prospect of either paying up or ceasing to play the tunes that listeners expected to hear.

Perceiving themselves to be at ASCAP’s mercy, major-market station owners formed the National Association of Broadcasters (NAB) in 1923 to do battle with the licensing organization. Station radio concerts were far less appealing without the melodies ASCAP controlled, but the annual license fees, which escalated upward from an initial $2.50, were seen as too high for many stations to pay. (Few of them had much revenue, let alone profits, at this point.) In subsequent years, ASCAP used its near-monopoly position in the music industry to charge broadcasters ever-higher rates. Continuous legal skirmishes, congressional hearings, and even frequent NAB-inspired Justice Department antitrust probes of ASCAP served only to raise the financial stakes and intensify the antagonistic relationship between NAB and ASCAP.

In 1931, for instance, ASCAP boosted its overall fees to stations by 300 percent, charging five percent of each outlet’s gross income. It then broke off dealings with the NAB and began negotiations with individual broadcasters, offering three-year contracts at three percent of net income for the first year, four percent for the second, and the full five percent by the third year. By 1936 it was demanding five-year licenses.

**Formation of a Competitor**

When ASCAP announced yet another large increase in license fees for 1939, broadcasters took action and by the following year had established their own licensing organization, Broadcast Music Incorporated (BMI). On 1 January 1941, as BMI labored to build a catalog, most stations stopped paying their ASCAP fees and restricted their music broadcasts to airing songs with expired copyrights and folk songs that had always been in the public domain. Stephen Foster melodies, such as “Jeanie with the Light Brown Hair,” became radio staples.

To ASCAP’s chagrin, no groundswell of indignation arose from the radio audience. Further, singers and instrumentalists also replaced much of their repertoire with non-ASCAP material in order to keep their lucrative and visibility-enhancing radio bookings. Many performers switched from playing tunes by George Gershwin, Cole Porter, and Irving Berlin to using non-ASCAP music from South America—a key factor behind the sudden 1940s popularity of the rumba, samba, and tango. Combined with government antitrust pressure, these factors resulted in ASCAP’s agreeing to offer per-program fees as well as blanket license fees and the rollback of rates to about half of what they had been collecting.

By the mid-1950s, the number of BMI tunes played over U.S. radio stations had come to parity with those licensed by ASCAP. Most of BMI’s success was attributable to the
explosion of rock and roll—a pulsating blend of rhythm and blues, country, and gospel music penned by songwriters outside of ASCAP’s traditional constituency. BMI scooped up these composers and rode the rock and roll wave to dominance on many Top 40 format stations.

**ASCAP and the Payola Scandal**

In 1959 the payola scandal shook the radio industry to its core. Many disc jockeys were accused of taking unreported gifts from record promoters in exchange for “riding” (heavily playing) certain songs (payola). ASCAP added fuel to the fire when its spokespersons maintained that rock and roll, largely the creative product of BMI-affiliated composers, would never have gotten off the ground without payola. ASCAP claimed that 75 percent of the Top 50 tunes owed their success to payola—a charge meant as much to indict BMI as the practice of payola. With the subsequent passage of amendments to the 1934 Communications Act making payola a criminal offense, the radio industry moved beyond the crisis—but the resulting ASCAP-BMI animosity took a much longer time to cool.

**Negotiating Music Rights**

As it has for decades, ASCAP negotiates with radio stations mainly through the Radio Music License Committee (RMLC), a select group of broadcasters appointed by the NAB. Although stations technically could negotiate on their own, virtually all rely on the committee to carve out acceptable blanket and per-program license fee structures. For the period through the year 2002, blanket license fees for commercial radio stations were pegged at 1.615 percent for stations with an annual gross revenue over $150,000 or a minimum of 1 percent of adjusted gross income. For stations billing less than $150,000 per year, a flat fee schedule ranges from $450 to $1,800 depending on income. Noncommercial stations pay an annual fee determined by the U.S. Copyright Office. In 2003 this was pegged at $245 for educationally owned facilities and $460 for all other noncommercial outlets.

ASCAP determines the amount of airplay garnered by each ASCAP-member song via three methods: electronic logging information from Broadcast Data Systems (BDS), periodic logging by the radio stations themselves, and ASCAP taping of station broadcasts.

PETER B. ORLIK

*See also* Broadcast Music Inc.; Copyright; Licensing; National Association of Broadcasters; Payola; United States Supreme Court and Radio; WEAF
Further Reading

ASCAP website, <file:///D:/input/2000ae99/www.ascap.com>

American Telephone and Telegraph

American Telephone and Telegraph Company (AT&T) was a major contributor to the development of early broadcasting technology and radio networking. As a result of its refinements in vacuum tube technology and the ensuing patent disputes, AT&T became a founding shareholder in the powerful Radio Corporation of America (RCA), built the first commercial radio station (WEAF), and perfected the technology for network broadcasting. Over the years, AT&T’s Bell Laboratories has pioneered many technologies used in radio.

Audion and Patent Concerns

Parent company of the Bell Telephone System, AT&T recognized the potential of de Forest’s Audion tube as an amplifier for telephone circuits and secured rights to the device. Although the Audion could not be used in radio circuits due to a suit by the Marconi Company alleging patent infringements, AT&T licensed its use for telephone circuitry, quickly refining the technology and thus making transcontinental telephony a reality. AT&T also used vacuum tubes to pursue development of continuous wave transmitters necessary for voice communication as ancillary devices supporting telephone services. At the outbreak of World War I, the U.S. Navy took control of all radio patents, accelerating the development of wireless and radio receiver technology. At the end of the war, large electronic manufacturers such as AT&T, Westinghouse, and General Electric reclaimed their patents.

After the war, U.S. government officials expressed their desire to settle the patent problem quickly in order to keep key radio technology in the hands of a U.S. company. In 1919 RCA was formed as a way to pool the patents and cross-license the various technologies, making the large-scale manufacture of radio vacuum tubes possible. Under the agreement, AT&T’s manufacturing arm, Western Electric, gained exclusive rights to produce long-distance transmitters and other key technology used in conjunction with
wired communications. By 1922 Western Electric transmitters were powering 30 of America’s pioneering radio stations, including such legendary stations as WOR in Newark, New Jersey, WHAM in Rochester, New York, and WSB in Atlanta, Georgia. AT&T soon came to realize, however, that the sale of transmitters to others conflicted with the company’s strategy of beginning a nationwide commercial broadcasting service.

Birth of Radio Networking

Beginning in 1877 AT&T started experimenting with the use of telephone lines for transmission of music and entertainment. These experiments used telephones or public address systems to carry program material such as music or speeches. By 1919 AT&T had refined vacuum tube technology to the point where large, elaborate auditorium demonstrations were possible. With the advent of broadcasting, however, the need for high quality connections to bring live events to radio stations became apparent. Soon AT&T undertook experiments to test public acceptance of broadcasting.

In January 1922 AT&T began construction of its own broadcasting facilities. AT&T vice president Walter S. Gifford outlined the commercial “toll” concept of broadcasting, calling for the creation of a channel through which anyone could send out his or her own programs. AT&T originally contemplated building 38 “radiotelephone” stations linked together by the company’s Long Lines division. The first two stations were constructed in New York: WBAY was erected atop the AT&T Long Lines building on Walker Street and WEAF was constructed at Western Electric’s Labs on West Street. WBAY signed on to 360 meters (830 kHz) on 3 August 1922. When signal coverage from WBAY proved unsatisfactory due to the steel construction of the Walker Street building, WEAF became the company’s principal transmitting facility. In 1923 WCAP, Washington, D.C., was added to AT&T’s station lineup.

Both RCA and AT&T started experimenting with interconnecting stations, but RCA was limited to using Western Union telegraph lines, and these proved to be unsuitable for the transmission of high-quality voice and music. The first AT&T network experiment started on 4 January 1923, when engineers connected WEAF in New York, New York, with WNAC in Boston, Massachusetts. Soon after, Colonial H.R. Green, owner of station WMAF, convinced AT&T to provide a link from WEAF to his station in South Dartmouth, Massachusetts. Green agreed to pay AT&T $60,000 for a permanent connection, and WMAF began retransmitting WEAF programming. This arrangement gave AT&T engineers a full-time connection, which they used to experiment with transmission equipment. Other networking experiments followed. On 7 June 1923, WGY in Schenectady, New York, KDKA in Pittsburgh, Pennsylvania, and KYW in Chicago, Illinois, were connected to WEAF. AT&T used the term chain to refer to interconnection of radio stations. Later chain broadcasting became the term commonly applied to radio network broadcasting.

Using Long Lines Division’s capabilities, WEAF undertook a series of spectacular remote broadcasts that generated great interest among radio listeners and gave WEAF a programming advantage over other stations. Sporting events such as the Princeton-Chicago and Harvard-Yale football games, the Dempsey-Tunney boxing match, and recitals from the Capitol Theater demonstrated that coverage of live events was of great
interest to Americans. At the same time, AT&T held control over the capability to provide remote broadcasts via its telephone lines, and it began to refuse to provide hookups to other rival stations owned by RCA’s radio group.

In 1924 AT&T connected radio stations in 12 major cities from Boston to Kansas City, Missouri, for special broadcasts of the Republican and Democratic national conventions. One year later, it used its circuits in the first coast-to-coast demonstration. As these experiments continued into 1925, radio network connections regularly linked WEAF and other stations in cities throughout the East and Midwest. AT&T executives began to rethink the company’s involvement in broadcasting, however, as disagreements with RCA over the cross-licensing arrangements increased. Finally, in 1926 AT&T decided to discontinue broadcasting operations and sold WEAF to RCA.

RCA created the National Broadcasting Company (NBC) to operate WEAF, WJZ, and its own radio stations. Under the terms of the WEAF sale, NBC was required to lease AT&T lines for network connections whenever possible. NBC decided to form two separate networks to handle stations where there was duplication in coverage area. AT&T Long Lines engineers used red and blue pencils to trace the connection paths for NBC’s new networks and NBC adopted the colors as designations for the two networks. The Red Network, with WEAF as the flagship station, was the larger and more important of the two with 25 stations; the Blue Network began with only 5 stations.

**Growth of the Chains**

America’s growing interest in high-quality programs spurred further AT&T development of networking capabilities. As public interest in high-quality programming grew, many local stations joined one of the two NBC radio networks, but the NBC monopoly in network broadcasting was not to last for long. A small upstart, United Independent Broadcasters, was formed when Arthur Judson decided to establish a new radio network. In early 1927 Judson tried to secure telephone lines for the newly formed network, but AT&T refused to provide connections because it had signed an exclusivity agreement with RCA. By mid-1927 AT&T, under pressure from the Federal Trade Commission, agreed to provide network connections to the new network. That fall the newly named Columbia Broadcasting System (CBS) began operations with 12 affiliated stations. Soon, chain broadcasting revolutionized radio in the United States.

AT&T played a pivotal role in making network broadcasting a success. Long Lines Division developed elaborate specialized network capabilities that served both full-time networks such as NBC and CBS and specialized regional networks, such as the Don Lee Network in California and the Liberty Broadcasting System in the Southwest.

By 1928 AT&T maintained four broadcast network interconnection systems (called Red, Blue, Orange, and Purple) linking 69 radio stations together with more than 28,000 miles of wire. New York served as the central distribution point for stations in the East and South, while Chicago, Illinois, and Cincinnati, Ohio, served Midwest stations. San Francisco, California, became a switching point for the West Coast. Both telegraph and voice circuits were used to provide affiliates with networking information and programming channel feeds.
AT&T used an elaborate series of repeater stations to route high-quality audio transmissions across the nation. Special Long Lines operators provided maintenance for the system and switching for network programs. Stations that normally carried Red network programming needed to be manually switched by AT&T personnel when they wanted to carry Blue network programs. Important switching stations, such as Washington, D.C., could switch as many as 30,000 programs each year. To facilitate network quality testing, broadcasters provided musical programming for the Long Lines operators. NBC maintained a legendary jukebox at Radio City that played music whenever either of the networks was not transmitting a program. The jukebox selections provided AT&T engineers with a constant audio source to verify network quality. This practice continued through the mid-1980s, when satellites finally replaced land lines. Broadcasters worked with Bell Labs to develop equipment to interconnect broadcast stations with the telephone network. The VU meter, a visual gauge for measuring audio, was an outgrowth of that cooperation, and special terminology such as **nonemanating outputs**, (NEMO) **terminal block**, and **mults** entered broadcast parlance as a result of this relationship.

The cost of renting AT&T broadcast lines was often too high to allow local radio stations to provide live coverage of sporting events. Announcers such as Red Barber and Ronald “Dutch” Reagan—and later Gordon McLendon—made names for themselves recreating games by using sparse information provided by telegraph operators at ball games.

As broadcasting networks grew in power and size throughout the 1930s, AT&T expanded its special services. By 1939 more than 53,000 miles of special circuit wires were used to provide network services. The number of specialized networks maintained by AT&T expanded to 21 just before World War II. Network designations continued to be based on the original engineering color schemes, with NBC having its Red and Blue networks and CBS using ivory, black, pink, scarlet, and other specialized broadcast facilities. Broadcast network operations represented approximately 15 percent of AT&T’s $23 million in gross revenue for Private Line Services in 1933. By 1935 broadcasters were spending more than $10 million a year for telephone lines to link their networks. Some estimate that in 1950 nearly 40 percent of AT&T’s $53 million in private network gross revenues represented broadcast services. Revenues generated from broadcasting and other special private services rose throughout the golden age of radio networks, providing AT&T with substantial profits.

With the introduction of television, the decline in network radio led to a decline in AT&T’s involvement in linking up network stations. Special services provided by Long Lines during this time were used to create a nationwide television network system for the growing number of television network affiliates. Long Lines continued to provide network connections for radio until the mid-1980s, when domestic communication satellites replaced land lines. The competition from satellite distribution and FCC deregulation in telecommunication services made general land line distribution of radio unprofitable.
Technical Developments

Bell Telephone Laboratories, created by AT&T in 1925, pioneered many technologies that have expanded the capability of modern radio broadcasters. In the 1930s AT&T invented stereophonic sound systems and microwave transmission, both essential technologies for today’s high-quality radio programming. In the late 1940s Bell Labs invented the transistor, the forerunner of modern solid-state electronics, spawning both the transistor radio and solid-state computer era. Other key developments include the communication satellite, the light emitting diode (LED), and the laser. Today’s advanced audio technology is partially an outgrowth of the basic scientific research undertaken by AT&T.

Fritz Messere

See also Columbia Broadcasting System; De Forest, Lee; National Broadcasting Company; Network Monopoly Probe; Radio Corporation of America; Stereo; WEAF

Further Reading


American Top 40

Popular Music Program

American Top 40 (AT40) is the longest running national music countdown broadcast on American radio during the rock era. In its 30-year history, the show has undergone a series of personnel and ownership changes. The first AT40 show aired with veteran disc jockey Casey Kasem during the week of 4 July 1970 and was distributed in only seven U.S. markets. By 1980 the show could be heard in nearly 500 markets across the United States.

The original AT40 program concept was created by Ron Jacobs, who with Tom Rounds founded Watermark in 1969. The program grew out of collaboration between Jacobs and K-B Productions owners Casey Kasem and Don Bustany, who sold Jacobs on the idea of a national music countdown. Despite the initial downturn in the Top 40 music format as the rapid proliferation of new FM stations popularized album oriented rock in the early 1970s, AT40 soon found a loyal audience.
AT40 was the first program to turn the popular local Top 40 countdown into a national syndicated show. The three-hour show was distributed weekly on records to radio stations across the United States, using the Billboard Top 100 as the source for the countdown. AT40 was distributed as a boxed record set each week. Records played 30 minutes of the show per side, and the set contained cue sheets allowing stations to integrate local station breaks into the AT40 program format. The records had to be played in the right order for the countdown to progress correctly. Program segments opened or ended with jingles identifying the program and the program host. By 1978 the general length of popular songs had increased, causing AT40 to increase its program length from three to four hours per show. Today the show is distributed on compact discs.

One of the reasons for AT40’s success was the charismatic, personal voice style of Casey Kasem, the show’s longest-serving host. The format initially called for a fast-paced delivery with minimal talk and a quick turnover from song to song. As the program gained momentum, Kasem’s knowledge of popular music and his ability to create a sense of intimacy added interest for listeners. As the show expanded its time and found a loyal audience, special features such as the “Long Distance Dedication” became popular segments. Kasem’s classic signoff, “Keep your feet on the ground and keep reaching for the stars” became the show’s trademark.

AT40’s success was challenged in 1979 with the introduction of The Weekly Top 30 hosted by Mark Elliot and in 1980 with Dick Clark’s National Music Survey. Both of these shows were aimed at slightly different demographics than AT40. The Weekly Top 30 ended in 1982, and in 1983, Rick Dees’ Weekly Top 40 aired based on the popular music chart listings in Cashbox magazine.

In 1988 American Broadcasting Companies (ABC) Radio Networks, which had acquired Watermark, and Kasem were unable to agree to terms for a renewal contract. By this time AT40 had grown to become the most successful American radio program and was the sixth largest syndicated broadcasting program with an estimated 2.4 million listeners worldwide. The show boasted nearly 1,000 outlets around the world. In July 1988 ABC introduced Shadoe Stevens as the new host of AT40. ABC heavily promoted the transition and introduced various new features to distinguish the new show host and keep the format fresh. Stevens hosted the show until 1995. Several broadcasting companies vied for Kasem’s talents, and in 1989 he signed a multimillion-dollar, multiyear contract with Westwood One to start a competing program called “Casey’s Top 40.”

The early 1990s saw a substantial change in popular music. In November 1991 Billboard changed the way it tabulated the Hot 100. Billboard’s new methodology led to a substantial increase in rap and other nontraditional pop music genres in the chart, causing many older loyal listeners to tune out. The traditional Top 40 format splintered into derivative formats. In addition, the continuing success of Rick Dees’s Weekly Top 40 and Casey’s Top 40 splintered the market for Top 40. By 1992 AT40 had fewer than 275 stations carrying the program in the United States, although it still held the predominant position among overseas listeners.

In 1994 ABC Radio Networks acquired the Westwood One network and ownership of AT40. ABC now owned both the Rick Dees countdown and AT40. On 24 June 1994, ABC announced that it would cancel the American version of AT40, and the last program aired in January 1995. ABC’s rights to the program terminated in 1998, and the show
reverted back to Kasem and Bustany, the owners of K-B Productions. *AT40* was revived with Kasem as the host in March 1998 under the ownership of AMFM Networks. In addition to the Top 40 format, there is also an American Top 20 based on the hot adult contemporary format and another geared toward adult contemporary listeners. Even though the format of the new *AT40* is very similar to the original, the chart list is now based on the Mediabase 24/7 hit music charts.

In 2003, the distribution of the program changed to Premiere Radio Networks. American Top 40 was at that time heard on 127 U.S. stations and 14 outlets internationally.

*See also* Kasem, Casey

**Hosts**


**Creator**

Ron Jacobs

**Executive Producer**

Tom Rounds

**Programming History**

- Watermark Syndication, 1970–88
- ABC, 1988–95
- Radio Express, 1998–2002
- Premiere Radio Network, 2003

**Further Reading**

American Women in Radio and Television

Women have taken part in the business of radio broadcasting from the earliest days of the industry. Although their advancement was often slower than that of their male counterparts, they were able to contribute greatly to the development of radio. As in many professions, women organized groups to provide mutual support in their efforts for advancement and recognition. American Women in Radio and Television (AWRT) is one such organization.

Origins

On 8 April 1951, AWRT held its organizing convention at the Astor hotel in New York. According to the trade publication Broadcasting and Telecasting, 250 women from the fields of radio and television attended this event. They elected Edyth Meserand, assistant director of news and special features at WOR-AM-TV in New York, as the first AWRT president. Appropriately, the keynote speaker at the conference was Frieda Hennock, the first woman to be appointed a commissioner at the Federal Communications Commission (FCC).

Since 1951 AWRT has pursued its stated mission: “to advance the impact of women in the electronic media and allied fields, by educating, advocating, and acting as a resource to our members and the industry.” Logically, the majority of members are women, but many men also choose to participate in this effort. The organization carries out its work through more than 30 chapters nationwide.

Function

AWRT provides professional development activities, mentoring, and job-search assistance for its members. The organization sponsors awards for excellence in the profession and publishes information resources, in print and on-line, for members and nonmembers alike. Through its lobbying efforts, AWRT has been an advocate for many causes, including better opportunities for women who aspire to own media organizations and stricter enforcement of equal employment opportunity requirements at television and radio stations. It has argued in favor of a proposal that would require broadcast organizations to keep statistics on minority and female employees, and it has taken a lead role in educating professionals about sexual harassment. At times, AWRT speaks out on behalf of general policy options that its members consider relevant to its mission. For example, the group argued against using auctions to determine spectrum ownership. The basis for this argument was the belief that auctioning broadcast frequencies would work against preserving a diversity of voices in the media marketplace.

One of the most important services AWRT provides is facilitating networking opportunities for its members. At its annual convention, professionals from all areas of electronic media discuss key issues affecting the field as well as more specific topics that are most likely to concern women. Throughout the year, AWRT serves all types of
organizations by providing speakers on such topics as promoting diversity in the workplace and managing a diverse workforce.

In addition to these services, AWRT recognizes excellence in electronic media by presenting awards to individuals and companies. These awards are given for outstanding achievements in electronic media, for commitment to the issues and concerns of women, and for achievements in strengthening the role of women in the industry and contributing to the betterment of the community. Its annual Gracie awards, named in honor of broadcast pioneer Gracie Allen, recognize realistic portrayals of women in radio and television programming. Several awards are given each year to commend media contributions “by women, for women or about women.” The Silver Satellite awards recognize the outstanding contributions of an individual to the broadcast industry. Among the former winners of this prestigious award are Bob Hope, who won the first Silver Satellite award in 1968, Vincent Wasilewski, former head of the National Association of Broadcasters, Mary Tyler Moore, Barbara Walters, and Pauline Frederick. Other honors given by the organization include the Star Awards, which honor individuals and companies who have shown a commitment to the concerns of women, and the Achievement Awards, which recognize a member who has both strengthened the role of women and contributed to the betterment of the community.

In 1960 the AWRT Educational Foundation was chartered to promote charitable programs, educational services, scholarships, and projects to benefit the community and the mass media. This support not only provides assistance to community organizations in need of funding, it also provides an opportunity for AWRT members and others to become actively involved in serving their communities.

PATRICIA PHALEN

See also Association for Women in Communication; Female Radio Personalities and Disk Jockeys; Women in Radio

Further Reading

America’s Town Meeting of the Air

Public Affairs Program
For much of its 21-year run, America’s Town Meeting of the Air (1935–56) was a Thursday evening staple in many radio homes. As part of a trend toward panel discussion shows in the 1930s, this series as well as American Forum of the Air, People’s Platform, University of Chicago Roundtable, Northwestern Reviewing Stand, and High School Town Meeting of the Air were sustaining (commercial-free) programs devoted to in-depth political and social discussion. Although America’s Town Meeting of the Air was not the first of these panel discussion programs on the air, it was the first radio program to offer debate and active audience participation.

The first panel discussion program, University of Chicago Roundtable (1931–55), was a more reserved, scholarly program featuring University of Chicago professors debating contemporary issues. American Forum of the Air (1934–56) developed an adversary format, with two opponents on either side of a controversial issue, which became a popular feature of later panel discussion programs. America’s Town Meeting of the Air’s innovation was its inclusion of the live audience by using unscreened audience questions as an essential part of the discussion. Because audience members challenged guest speakers and their views, America’s Town Meeting of the Air was an often volatile and unpredictable hour of radio programming. This serious-minded and popular program recognized the power of audience participation and influenced the format of later public-affairs programs and talk shows.

America’s Town Meeting of the Air was the brainchild of George V. Denny, Jr., a former drama teacher and lecture manager. Denny was associate director of the League of Political Education, a New York-based political group founded in 1894 by suffragists that held town meetings to discuss contemporary issues. Legend has it that Denny, shocked by a neighbor’s refusal to listen to President Roosevelt because he disagreed with him, sought to raise the level of political discussion in the country. He believed that a radio program could be produced that would mirror the New England town meetings of early America and promote democratic debate. Denny mentioned his idea to the director of the League of Political Education, Mrs. Richard Patterson, who brought the idea to her husband, National Broadcasting Company (NBC) Vice President Richard Patterson. Richard Patterson helped Denny develop the show and gave the hour-long program a six-week trial run in 1935 on the NBC Blue network. Inexpensive and easy to produce, America’s Town Meeting of the Air was an efficient and effective sustaining program for NBC. From its initial airing over 18 stations on the NBC Blue network, the show reached more than 20 million listeners through more than 225 stations by 1947. The successful program found its home on the NBC Blue (later American Broadcasting Companies [ABC]) network for its entire run.

For most of its life on radio, the program refused to accept sponsors, fearing that commercial interests would interfere with the show’s controversial content. For only one year, America’s Town Meeting of the Air accepted the sponsorship of Reader’s Digest. In its later years (1947–55), the program accepted multiple sponsors. ABC tried to simulcast the program (somewhat unsuccessfully) on television and radio in 1948–49 and again in 1952, but the program did not translate well to television. After an internal dispute,
Denny, the originator of the series, was removed from the program in 1952. Despite the loss of its creator, the program lasted four more years.

*America’s Town Meeting of the Air* welcomed listeners each week with the sound of a town crier’s bell and Denny’s voice calling, “Good evening, neighbors.” Broadcasting from Town Hall (123 West 43rd Street in New York City), Denny assembled a live studio audience of nearly 1,800 to participate in the broadcast. Before these witnesses, the show featured two or more opponents on a controversial issue. To build suspense, each guest would have the opportunity to state his or her position and would then field unscreened questions from the live studio audience and from listeners who sent questions via tele-gram before the program’s broadcast. The program’s format was designed by Denny to present a diversity of political and social views and to bring those views into conflict before a live and often raucous studio audience.

The program’s commitment to public affairs and controversial issues was established from its first broadcast on 30 May 1935. The topic for the first program was “Which Way for America—Communism, Fascism, Socialism, or Democracy?” Raymond Moley (an adviser to President Roosevelt) defended democracy, Norman Thomas made the case for socialism, A.J. Muste argued for the importance of communism, and Lawrence Dennis explained the benefits of fascism. The show was remarkable for the breadth and depth of the issues debated publicly. *America's Town Meeting of the Air* frequently addressed foreign policy or international disputes (e.g., “How Can We Advance Democracy in Asia?” or “What Kind of World Order Do We Want?” featuring a debate between H.G.Wells and Dr. Hu Shih, the Chinese ambassador to the United States) as well as domestic issues (e.g., “Does Our National Debt Imperil America’s Future?” “How Essential Is Religion to Democracy?” or “Can We Depend upon Youth to Follow the American Way?”). *America’s Town Meeting of the Air* also tackled the racial conflicts of the period, featuring prominent African-American scholars and writers such as Richard Wright. One of its most popular shows was the 1944 broadcast entitled “Let’s Face the Race Question,” with Langston Hughes, Carey McWilliams, John Temple Graves, and James Shepard. Whether discussing the detention of Japanese Americans during World War II, debating immigration restrictions, or confronting the racial divide in the 20th century, *America’s Town Meeting of the Air* offered listeners the opportunity to debate topics that were suppressed or marginalized elsewhere on radio.

In the 1930s and 1940s, prestigious panel discussion programs such as *America’s Town Meeting of the Air* were sterling examples of the networks’ devotion to public service. Such shows were used by the networks to fulfill their public-interest obligations to the community and to stave off government regulation in early radio. As discussed by Barbara Savage (1999), *America’s Town Meeting of the Air* conducted an extensive public outreach campaign to incorporate the listening audience into the program and to increase its public profile.

According to a 1940 sales brochure, NBC supported the development of debate and discussion groups. NBC viewed the program as “a real force of public enlightenment” and an example of the network’s “unexampled public service to the men and women of America.” Transcripts of broadcasts were published by Columbia University Press. The program encouraged the use of transcripts in schools and sponsored editorial cartoon and essay contests on subjects such as “What Does American Democracy Mean to Me?” Despite the fact that *America’s Town Meeting of the Air* originated from New York City,
the program also worked carefully to promote regional interest in the program. For six months out of the year, the program traveled around the country, sponsored by local universities and civic groups.

*America’s Town Meeting of the Air* was one of the most popular national public-affairs programs on radio. Nearly 1,000 debate groups were officially formed, and thousands more listened each week in barber shops and community centers around the country. In the 1938–39 season, nearly 250,000 program transcripts were requested; the show typically received 4,000 letters a week. The program was also critically acclaimed for its public service. *America’s Town Meeting of the Air* was a multiple winner of the Peabody Award and was also recognized by the Women’s National Radio Committee, the Institute for Education by Radio, and the Women’s Press Bloc, among other organizations, for its educational qualities and its discussion of economic, political, and international problems.

JENNIFER HYLAND WANG

*See also* Public Affairs Programming

**Moderator**

George V. Denny, Jr.

**Announcers**

Howard Claney, Milton Cross, Ben Grauer, George Gunn, Ed Herlihy, Gene Kirby

**Producer**

Marian Carter

**Directors**

Wylie Adams, Leonard Blair, Richard Ritter

**Programming History**

<table>
<thead>
<tr>
<th>Network</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBC Blue</td>
<td>1935–42.</td>
</tr>
<tr>
<td>NBC Blue/ABC</td>
<td>1942–56</td>
</tr>
</tbody>
</table>
Further Reading


Amos ’n’ Andy

U.S. Serial (1928–1943); Situation Comedy (1943–1955); Hosted Recorded Music (1954–1960)

Amos ’n’ Andy, which began as a nightly serial telling the story of Amos Jones and Andy Brown, two Georgia-born black men seeking their fortunes in the North, dominated American radio during the Depression. Combining character-driven humor with melodramatic plots, the series established the viability in broadcasting of continuing characters in a continued story and, from both a business and creative perspective, proved the most influential radio program of its era, inspiring the creation of the broadcast syndication industry and serving as the fountainhead of both the situation comedy and the soap opera. At its peak in 1930–31, the program’s nightly audience exceeded 40 million people.

After 15 years and more than 4,000 episodes, the serial gave way to a weekly situation comedy and the characterizations grew more exaggerated. Today, the original Amos ’n’ Andy is almost completely forgotten—its substance overshadowed by the unacceptability of white actors portraying African-American characters and lost to the memory of the broadly played sitcom that replaced it. Nevertheless, Amos ’n’ Andy remains a landmark in U.S. broadcasting history.

Origins

Amos ’n’ Andy grew out of Sam ’n’ Henry, created by Freeman F. Gosden and Charles J. Correll, two former producers of home-talent revues who had begun their careers as a comic harmony team on Chicago radio in 1925. They had been asked by the management of station WGN to adapt the popular comic strip “The Gumps” for broadcasting, but were intimidated by its middle-class setting. Instead, they suggested a “radio comic strip” about two black men from the South moving to the North, characterizations that would draw on Gosden’s familiarity since childhood with African-American dialect, and that would enable the performers to remain anonymous—an important consideration if the program should fail.
Sam ’n’ Henry premiered on 12 January 1926 as the first nightly serial program on American radio, combining black dialect with certain character traits and storytelling themes from “The Gumps.” The early episodes were often crude, but Gosden and Correll gradually learned how to tell involving stories and to create complex human characterizations.

By the spring of 1926 the performers had begun recording Sam ’n’ Henry sketches for Victor, and the success of these records suggested to the performers that live broadcasting need not be their only course. Accordingly, the partners suggested to WGN that their programs be recorded and the recordings leased to other stations. WGN rejected the proposal, citing its ownership of the series and its characters. Gosden and Correll left WGN in December 1927, moving to station WMAQ, owned by the Chicago Daily News, and negotiated an agreement that included syndication rights. Arrangements were made for advance recordings of each episode on 12” 78 rpm discs that would be distributed to subscribing stations for airing in synchronization with the live broadcast from WMAQ. Correll and Gosden called this a “chainless chain” and, realizing the value of the concept, attempted to secure a patent, but were unable to do so; however, by the early 1930s their idea had formed the basis for the broadcast syndication industry.

Transition

The WMAQ series introduced Amos Jones and Andy Brown as hired hands on a farm outside Atlanta, looking ahead to their planned move to Chicago. Amos was plagued by self-doubts and worried about finding work in the North, whereas the swaggering Andy was quick to insist that he had the answers to everything.

Amos and Andy struggled until they met Sylvester, a softspoken, intelligent teenager patterned after the black youth who had been Gosden’s closest childhood friend. Sylvester helped Amos and Andy start their own business, the Fresh Air Taxicab Company, and introduced them to a cultured, successful, middle-class businessman named William Taylor and his bright, attractive daughter Ruby, who soon became Amos’ fiancée. They also met the potentate of a local fraternity, George “Kingfish” Stevens, a smooth-talking hustler who insinuated himself and his constant moneymaking schemes into their lives.

Chainless Chain to Network

Within a few months Amos ’n’ Andy had attracted a national following and the attention of the Pepsodent Company, which negotiated to bring the serial to the coast-to-coast NBC Blue network in the summer of 1929. Amos, Andy, and the Kingfish relocated from Chicago to Harlem at the start of the network run, but otherwise the storyline continued unchanged.

At first, the program was heard at 11 P.M. Eastern time, but Pepsodent sought an earlier time slot for Eastern listeners and NBC was able to clear time at 7 P.M. As soon as the
change was announced, thousands of listeners in the Midwest and West wrote to complain about the move and within a week Correll and Gosden had agreed to broadcast twice nightly. This dual-broadcast plan would be widely adopted by other national sponsors as a solution to the time-zone dilemma.

The outcry over the time change offered just a hint of what was to come. By the spring of 1930 theater owners in many cities were being forced to stop the movie playing in order to present *Amos ’n’ Andy* over their sound systems to hold an evening audience—dramatic evidence of an unprecedented craze that would endure for nearly two years.
Impact

As a result of its extraordinary popularity, *Amos ’n’ Andy* profoundly influenced the development of dramatic radio. Working alone in a small studio, Correll and Gosden created an intimate, understated acting style—a technique requiring careful modulation of the voice, especially in the portrayal of multiple characters—that differed sharply from the broad manner of stage actors. The performers pioneered the technique of varying both the distance and the angle of their approach to the microphone to create the illusion of a group of characters. Listeners could easily imagine that they were in the taxicab office, listening in on the conversation of close friends. The result was a uniquely absorbing experience for listeners who, in radio’s short history, had never heard anything quite like *Amos ’n’ Andy*.

Although minstrel-style wordplay humor was common in the formative years of the program, it was used less often as the series developed, giving way to a more sophisticated approach to characterization. Correll and Gosden were fascinated by human nature, and their approach to both comedy and drama drew from their observations of the traits and motivations that drive the actions of all people; although they often overlapped popular stereotypes of African-Americans, there was at the same time a universality to their characters that transcended race.

Central to the program was the tension between the lead characters. Amos stood as an “Everyman” figure: a sympathetic, occasionally heroic individual who combined practical intelligence and a gritty determination to succeed with deep compassion—along with a caustic sense of humor and a tendency to repress his anger until it suddenly exploded. Andy, by contrast, was a pretentious braggart, obsessed with the symbols of success but unwilling to put forth the effort required to earn them. Although Andy’s overweening vanity proved his greatest weakness, he was at heart a poignant, vulnerable character, his bombast masking deep insecurity and a desperate need for approval and affection. The Kingfish was presented as a shrewd, resourceful man who might have succeeded in any career, had he applied himself, but who preferred the freedom of living by his wits.

Other characters displayed a broad range of human foibles: the rigid, hard-working Brother Crawford, the social climber Henry Van Porter, the arrogant Frederick Montgomery Gwindell, the slow-moving but honest Lightning, the flamboyant Madam Queen. Still other characters stood as bold repudiations of stereotypes: the graceful, college-educated Ruby Taylor; her quietly dignified father, the self-made millionaire Roland Weber; and the capable and effective lawyers, doctors, and bankers who advised Amos and Andy in times of crisis. Beneath the dialect and racial imagery, the series celebrated the virtues of friendship, persistence, hard work, and common sense and, as the years passed and the characterizations were refined, *Amos ’n’ Andy* achieved an emotional depth rivaled by few other radio programs of the 1930s.

Above all, Correll and Gosden were gifted dramatists. Their plots flowed gradually from one into the next, with minor subplots building in importance until they took over the narrative and then receding to give way to the next major sequence; seeds for future storylines were often planted months in advance. It was this complex method of story construction that kept the program fresh and enabled Correll and Gosden to keep their audience in a constant state of suspense. The technique they developed for radio from
that of the narrative comic strip endures to the present day as the standard method of storytelling in serial drama.

Storylines in *Amos ’n’ Andy* usually revolved around themes of money and romance—Amos’ progress toward the goal of marrying his beloved Ruby Taylor stood in contrast to Andy’s romantic fumblings—with the daily challenge of making ends meet forming a constant backdrop. The taxicab company remained the foundation of Amos and Andy’s enterprises, but the partners constantly explored other ventures, including a lunchroom, a hotel, a grocery, a filling station, and a 500-acre housing development. Andy invariably claimed the executive titles, while Amos shouldered the majority of the work, until Amos’ temper finally blazed and Andy was forced to carry his share of the load.

The moneymaking adventures of the Kingfish moved in and out of these plotlines, and through the Depression era *Amos ’n’ Andy* offered a pointed allegory for what had happened to America itself in the 1920s: Amos represented traditional economic values, believing that wealth had to be earned, whereas the Kingfish embodied the Wall Street lure of easy money, and Andy stood in the middle, the investor torn between prudence and greed.

Although *Amos ’n’ Andy’s* ratings gradually declined from the peak years of the early 1930s, it remained the most popular program in its time slot until 1941. Correll and Gosden and their characters had become a seemingly permanent part of the American scene.

The early 1930s saw criticism of the dialect and lower-class characterizations in the series by some African Americans, but *Amos ’n’ Andy* also had black supporters who saw the series as a humanizing influence on the portrayal of blacks in the popular media. A campaign against the program by the Pittsburgh *Courier* in mid-1931 represented the most visible black opposition the radio series would receive—and, although the paper claimed to have gathered hundreds of thousands of signatures against the series, the campaign was abruptly abandoned after six months of publicity failed to generate a clear consensus. Throughout *Amos ’n’ Andy’s* run, African-American opinion remained divided on the interpretation of the complex, often contradictory racial images portrayed in the program.

### A New Direction

On 19 February 1943 Correll and Gosden broadcast the final episode of the original *Amos ’n’ Andy*. In a busy wartime world, the era of the early-evening comedy-drama serial was drawing to an end.

Correll and Gosden returned to the air that fall in a radically different format. The gentle, contemplative mood of the serial was replaced by a brassy Hollywoodized production, complete with studio audience, a full cast of supporting actors (most of them African-American) and a team of writers hired to translate Amos, Andy, the Kingfish, and their friends into full-fledged comedy stars. The new *Amos ’n’ Andy Show* endured for the next 12 years as one of the most popular weekly programs on the air.

The sitcom initially stuck close to the flavor of the original series; with Amos having settled down to family life, the storylines in the last years of the serial had focused on Andy’s romantic entanglements and on his business dealings with the Kingfish. At first
the half-hour series continued in this pattern, emphasizing plots that could be wrapped up with an O. Henry-like surprise twist at the end. By 1946, however, the Kingfish had moved to the forefront, driving the plots through his eternal quest for fast money and his endless battles with his no-nonsense wife Sapphire. The subtle blend of self-importance, guilelessness, and vulnerability that had characterized Andy was gradually replaced by simple gullibility, and for the Kingfish’s increasingly outlandish schemes to work, Andy had to become not just gullible but more than a little stupid. Amos receded further into the background, his presence reduced to that of a brief walk-on, in which he would tip Andy off that the Kingfish had again played him for a fool. The relaxed intimacy of the original series had been replaced by an increasing emphasis on verbal slapstick. The subtlety of the original characterizations was lost in a barrage of one-liners. At the same time, however, the new series offered African-American performers a doorway into mainstream radio, in both comedic and nondialect, nonstereotyped supporting roles.

In 1948 Correll and Gosden sold the program to the Columbia Broadcasting System (CBS), initiating a chain of events that led directly to William Paley’s “Talent Raid,” and the network immediately began plans to bring the series to television with an all African-American cast. The TV version of The Amos ’n’ Andy Show was dogged by controversy as CBS took the characters even further down the path of broad comedy, culminating in a formal protest of the TV series by the National Association for the Advancement of Colored People (NAACP) in 1951. The TV series was cancelled in 1953, but remained in rerun syndication until 1966.

The radio version of The Amos ’n’ Andy Show was not mentioned in the NAACP protest. Radio was a dying medium, however, and when the weekly show ended in May 1955 the performers had already begun their next series, The Amos ’n’ Andy Music Hall, a nightly feature of recorded music sandwiched between prerecorded bits of dialogue. Coasting on the familiarity of the characters, this final series ran for more than six years.

On 25 November 1960 CBS aired the final broadcast of The Amos ’n’ Andy Music Hall. After a brief comeback—in which they provided voices for the 1961–62 American Broadcast Company-TV animated series Calvin and the Colonel, which reworked Amos ’n’ Andy Show plots into funny-animal stories—Correll and Gosden slipped quietly into retirement.

Although audio recordings of most of the situation comedy episodes exist, most of the serial survives only as archival scripts, stored at the University of Southern California and the Library of Congress. Modern discussions of Amos ’n’ Andy commonly focus more on deconstruction of its racial subtext than on examination of the original program—often obscuring the seminal role Freeman Gosden and Charles Correll played in the development of American broadcasting.

ELIZABETH MCLEOD

See also African-Americans in Radio; Situation Comedy; Stereotypes on Radio; Syndication; Talent Raids
### Cast

<table>
<thead>
<tr>
<th>Character</th>
<th>Voice Actor(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amos Jones</td>
<td>Freeman Gosden</td>
</tr>
<tr>
<td>Andrew H. Brown</td>
<td>Charles Correll</td>
</tr>
<tr>
<td>George “Kingfish” Stevens</td>
<td>Freeman Gosden</td>
</tr>
<tr>
<td>John “Brother” Crawford</td>
<td>Freeman Gosden</td>
</tr>
<tr>
<td>Willie “Lightning” Jefferson</td>
<td>Freeman Gosden, Frederick Montgomery Gwindell</td>
</tr>
<tr>
<td>Prince Ali Bendo</td>
<td>Freeman Gosden</td>
</tr>
<tr>
<td>Flukey Harris</td>
<td>Freeman Gosden</td>
</tr>
<tr>
<td>Roland Weber</td>
<td>Freeman Gosden</td>
</tr>
<tr>
<td>William Lewis Taylor</td>
<td>Freeman Gosden</td>
</tr>
<tr>
<td>Sylvester</td>
<td>Freeman Gosden</td>
</tr>
<tr>
<td>Madam Queen</td>
<td>Freeman Gosden (1931–32), Lillian Randolph (1944, 1952–53)</td>
</tr>
<tr>
<td>Henry Van Porter</td>
<td>Charles Correll</td>
</tr>
<tr>
<td>Pat Pending</td>
<td>Charles Correll</td>
</tr>
<tr>
<td>The Landlord</td>
<td>Charles Correll</td>
</tr>
<tr>
<td>Honest Joe thePawnbroker</td>
<td>Charles Correll</td>
</tr>
<tr>
<td>Lawyer Collins</td>
<td>Charles Correll</td>
</tr>
<tr>
<td>Henrietta Johnson</td>
<td>Harriette Widmer (1935)</td>
</tr>
<tr>
<td>Ruby Taylor Jones</td>
<td>Elinor Harriot (1935–55)</td>
</tr>
<tr>
<td>Sapphire Stevens</td>
<td>Elinor Harriot (1937–38), Ernestine Wade (1939–55)</td>
</tr>
<tr>
<td>Mrs. Van Porter</td>
<td>Elinor Harriot (1936–38), Ernestine Wade (1939–44)</td>
</tr>
<tr>
<td>Mrs. C.F. Van DeTweezer</td>
<td>Elinor Harriot (1936)</td>
</tr>
<tr>
<td>Harriet Lily Crawford</td>
<td>Edith Davis (1935)</td>
</tr>
<tr>
<td>Pun’kin</td>
<td>Terry Howard (1936–37), Elinor Harriot (1937)</td>
</tr>
<tr>
<td>Arbadella Jones</td>
<td>Elinor Harriot (1936–39), Barbara Jean Wong (1940–54)</td>
</tr>
<tr>
<td>Genevieve Blue</td>
<td>Madaline Lee (1937–44)</td>
</tr>
<tr>
<td>Dorothy Blue</td>
<td>Madaline Lee (1937–38)</td>
</tr>
<tr>
<td>Valada Green</td>
<td>Ernestine Wade (1939)</td>
</tr>
</tbody>
</table>
Sara Fletcher  Ernestine Wade (1940–43)
Widow Armbruster  Ernestine Wade (1941–42)
Shorty Simpson  Lou Lubin (1944–1950)
Gabby Gibson  James Baskett (1944–1947)
Reverend Johnson  Ernest Whitman (1944–45)
LaGuardia Stonewall  Eddie Green (1947–49)
Algonquin J.Calhoun  Johnny Lee (1949–54)
Leroy Smith  Jester Hairston (1944–55)
Sadie Blake  Ruby Dandridge (1944)
Ramona “Mama” Smith  Amanda Randolph (1951–54)

Announcers


Writers (serial)

Freeman Gosden and Charles Correll (1928–43)

Writers (sitcom)

Bob Ross, Joe Connolly and Bob Mosher, with contributions from others

Creative Producer

Freeman Gosden

Programming History (various networks)

1928–43  Amos ‘n’ Andy
1943–55  The Amos ‘n’ Andy Show
1954–60  Amos ‘n’ Andy Music Hall
Further Reading

Alexander, H.B., “Negro Opinion and Amos and Andy,” *Sociology and Social Research* 16 (March–April 1932)

“Amos ‘n’ Andy,” *Time* (3 March 1930)

“Amos ’n’ Andy: The Air’s First Comic Strip,” *Literary Digest* (19 April 1930)


Crosby, John, “Amos ’n’ Andy: Ain’t Dat Sumpin’!” *Colliers* (16 October 1948)

Crowell, James, “Amos ’n’ Andy Tell Their Own Story in Their Own Way,” *American Magazine* 109 (April 1930)


“On The Air: Amos ’n’ Andy,” *The New Yorker* (22 March 1930)

Quest, Mark, “Amos ’n’ Andy Backstage at WMAQ,” *Radio Digest* 24 (March 1930)

Roberts, Harlow P., “A Key to One Sponsor’s Success in Radio,” *Broadcasting* (15 April 1932)


---

**AM Radio**

Amplitude modulated (AM) or “standard” radio broadcasting (as the Federal Communications Commission [FCC] referred to AM until 1978) was the first broadcast service. AM dominated American commercial radio through the 1970s, provided the basis for most electronic media regulatory policies, and was the medium for which programs and the programming process were first developed. After decades of growth, however, the AM business is in decline.
AM Basics

AM transmitters modulate (or vary) a carrier wave (the basic signal used to “carry” the sidebands that contain the program information) by its amplitude (loudness) rather than its frequency, and do so many thousands of times per second. Seen diagrammatically, AM waves vary in height, indicating power changes in accordance with the signal being transmitted, rather than frequency, as in FM radio. Electronic static, most of which is amplitude modulated in its natural state, cannot be separated from the desired signal, though engineers spent years attempting to do so.

In the United States, AM channels are 10 kHz wide, whereas in much of the rest of the world by the 1990s, stations were licensed to use 9 kHz (a move to do the same in the United States was defeated by industry pressure in the early 1980s). With careful monitoring, an AM station can transmit from 5,000 to 7,000 cycles per second, which is sufficient for voice and some music, but misses the overtones of true high fidelity sound. On the other hand, AM channels, being narrower, allow far more stations to be accommodated per kHz than is the case with FM.

In most countries, AM operates on the medium wave frequencies (in the United States, 535 to 1705 kHz). Such a spectrum location means that signals are propagated along and sometimes just beneath the ground (day and night), and by sky waves bouncing off the ionosphere (nighttime only). This process has its benefits and drawbacks. The former comes from the extreme distances a powerful AM signal may travel on a cold, clear, winter evening—1,000 miles and often more. Unfortunately, such transmissions can never be exactly predicted; this leads to frustration in tuning distant stations, and more importantly, interference with other outlets, even though they may be closer to the listener. Further, ground waves and sky waves arrive at the same tuning (listening) point at different times (the sky waves having traveled much greater distances), which also causes interference.

Because of the sky wave problem, more than half of all U.S. AM stations are licensed for daytime operation only (the FCC stopped issuing new daytime-only licenses in 1987). Virtually all remaining stations reduce power in the evening hours as a condition of their licenses. This greatly reduces, but does not eliminate, the sky wave problem. Because so many AM stations were crowded on the air in the half century after World War II, most now must use directional antennas to “steer” their signals away from other stations.

All of these issues make AM engineering very complex. Because of this situation and the fact that more than 500 stations were on the air when effective regulation was established in 1927, there are no allotted channels in AM, as there are with FM and television services. When applying for a license, a new station must convince the FCC that it will not cause intolerable interference to others in the same or nearby markets—a very difficult and expensive thing to prove.

In an attempt to reduce interference and add stability to licensing, the Federal Radio Commission (FRC) in 1928 established three different types of AM radio channels: clear, regional, and local (in descending order of power and coverage area). There were few clear and regional channels and hundreds of local ones. Powerful (50,000 watts) clear channel stations were designed to serve large rural regions about 750 miles across and were located at great distances from one another (at first there were no other stations on clear channels at night—hence the term “clear”). Regional stations were less powerful
and covered smaller areas; these stations naturally increased as channels were reused by stations in different areas. Finally, local stations reached only 10 or 20 miles, were separated by a few hundred miles, and soon became the most common type of AM outlet, often using lower power at night, with many operating on the same channel in different areas. The system was simplified in the 1980s.

**Short History**

AM radio broadcasting originated from the early 20th-century radio telephony experiments of Frank Conrad, Lee de Forest, Reginald Fessenden, Charles Herrold, and others. Early radio broadcast transmitters in the 1920s were manufactured by hand, were hard to adjust and maintain, and delivered uneven and sometimes unpredictable performance. This led to considerable detail in the regulatory requirements established by the FRC after 1927. Stations required a full-time engineer for all the modifications and monitoring required. By 1941 the quality of AM technical equipment was considerably improved.

Until 1941 all U.S. commercial stations—about 600 to 700 at any one time—operated only with AM transmission and competed only with other AM outlets. The radio industry at this time was small and friendly. While by 1941 the largest cities had a dozen stations, many smaller towns had but one or two and large parts of the country had no local radio service at night. Radio networks dominated programming and advertising with relatively few stations surviving as independent operations. By 1941 there were only a handful of educational stations on the air.

AM faced its first competition when the Federal Communications Commission (FCC) approved the creation of FM stations at the beginning of 1941; television arrived by the middle of the same year. The U.S. involvement in World War II limited growth of the new services so that most people could only tune in to AM for the duration of the war. After the war, AM grew from about 900 stations in 1945 to some 2,500 by the early 1950s—a frenetic rate of growth that illustrated public interest in and demand for more local radio service. By the 1960s, the FCC initiated two different freezes on further AM licenses, steering new applicants to the FM band instead. Any town of any size had a full complement of AM stations with no room for more.

AM stations dominated the industry through these four decades: there were more of them, they earned the vast majority of radio industry income, and they reached most of the audience most of the time. Most program developments were focused on AM stations, especially the arrival in the 1950s of top-40 rock stations and their many spin-offs in the years that followed. AM station owners controlled broadcast trade associations and saw FM as merely an expansion of what they already offered.

By 1980, however, AM’s competitive situation had changed dramatically. The year before, more people tuned to FM stations for the first time, and the gap continued to widen for the next two decades as FM’s higher fidelity won over listeners. FM was expanding faster as well. By the turn of the century, only a quarter to a third of the radio audience regularly tuned to AM outlets. In many cases, AM stations shifted to news and talk formats, abandoning music to higher-fidelity FM. Long dominant, AM had become a minor partner in a still expanding radio business. The number of AM outlets was actually
in decline by the 1990s as stations left the air unable to attract sufficient listeners and thus to make a case to advertisers. The AM business was in trouble.

**Improving AM**

Faced with signs of this decline, the industry manufacturers and the FCC pressed for relief by improving AM’s limited technical capabilities. The first debate concerned stereo transmission, which many in the business thought held great potential for competing with FM. From 1977 to 1980 the AM industry sought to develop an agreed-upon standard for such a service that could be recommended to the FCC. Unable to make a decision among a half dozen mutually incompatible systems by as many companies, in March 1982 the FCC announced that AM broadcasters were expected to establish their own technical standard, although anti-trust laws made it impossible for the industry to overtly collaborate on such a decision. Given this confused situation, few manufacturers built receivers, few stations installed AM stereo transmission capability (about 10 percent of all AM stations on the air), and listeners were never given a reasonable opportunity to accept or reject the technology. By 1992 the AM stereo “experiment” was clearly a failure, with two systems (Kahn and Motorola) still contending to be the final choice. Under a congressional mandate to finally make a choice, the FCC in late 1993 picked the Motorola system as a de facto standard. By then it was largely too late—too few stations (and fewer listeners) cared.

That AM still needed technical improvement in order to compete remained obvious. The FCC asked the National Radio Systems Committee (NRSC), an industry group acting in an advisory capacity to the commission, to aid in the effort, admitting it was “dealing with no less an issue than the survival of the AM service.” Heavily criticized for the AM stereo debacle, the FCC appeared eager to demonstrate a real commitment to AM. In a series of decisions, it adopted NRSC-1 and NRSC-2 standards, which would help to reduce AM interference and encourage manufacturers to create improved receivers.

One AM problem had always been insufficient spectrum space. Despite post-World War II growth, the AM band remained unchanged since 1952. After the International Telecommunication Union approved a recommendation for Western Hemisphere nations to add to their AM radio bands in 1979, the FCC began to shift existing services out of the affected frequencies, and in 1990 began to actively plan for AM station use of the new band (1605–1705 kHz). Most of the new band was allocated to the United States, although both Mexico and Canada received use of some frequencies as well. After deciding not to license new stations (which would merely exacerbate existing interference), in a series of decisions the FCC selected existing AM outlets (based largely on how much interference they caused or received) to shift from lower frequencies into the new space. Assignments began in 1997 and the first station, WCMZ in Miami, was operating in the new frequencies by late that year. However, the newly relocated stations often reached far smaller audiences as older receivers could not tune the new frequencies. Only time and new sets would slowly change this problem.

At the same time the United States did not adopt another proposal—to narrow AM channels from 10 kHz to 9 kHz, a decision that would have allowed hundreds of new
stations on the air. Touted in the late 1970s to help bring U.S. standards in line with those of the rest of the world, the idea was shot down by industry arguments that such spacing would increase interference and would make most digital receivers obsolete, as they were calibrated for 10 kHz channels. Not as overtly stated was a strong industry belief that the last thing AM radio needed was more competing stations.

When all was said and done, however, the fact remained that AM was an older technology with an inferior sound to FM and could not accommodate developing digital formats. It could not compete on an equal basis with its newer competitors, and had not been able to for the last two decades of the 20th century, although the seeds of its decline dated back further. To a considerable degree, however, all of these technical “fixes” were band-aid approaches to a fundamental problem that could not be viably addressed without converting AM stations into digital operations.

**AM Outside the U.S.**

AM radio appeared in other industrial nations in the 1920s and early 1930s, and somewhat later in several of their colonies. Through World War II, AM and shortwave were the primary radio transmission choices available for broadcasting (there were some longwave stations in operation). Most nations had far fewer stations than the United States because they were smaller and didn’t need as many to cover a more limited area, because they lacked advertising revenues to develop and support further stations, and because they often allocated fewer frequencies for broadcasting.

In tropical regions especially, static (often from thunderstorms) proved a substantial challenge as there was no way to carve the noise away from the desired voice or music signal. Radio stations were often clustered in the national capital and other major cities, with little radio service available in rural regions. In colonial areas, service was aimed primarily at the expatriates of the mother country rather than at indigenous peoples. Indeed, radio was used primarily to help tie the colony to the mother country.

Well into the 1970s, most foreign radio systems were typically of the public-service type, operated directly by governments or a governmentally supported independent operation (such as Britain’s British Broadcasting Corporation [BBC]), and supported by fees assessed on receiver sales or ownership. Few carried advertising, and thus entertainment programming was less dominant than in the United States. On the other hand, cultural, experimental, and educational programs of all kinds were far more common on most non-U.S. radio systems.

Since the 1980s, AM’s star has dimmed in Europe for the same reasons the medium became less important in the United States. The benefits of FM (called VHF in most other nations because of the spectrum it uses) radio became more widely understood and adopted, allowing foreign systems to experience greater diversity of content and far more entertainment (typically popular music) formats than had been possible with a handful of AM outlets. Expansion of FM radio and the much greater cost of television so increased overall system costs that most nations modified their AM-based public service systems to allow advertising (either on separate stations, parallel radio systems, or the formerly government-operated outlets). For all of these reasons, radio in other countries sounded
far more like radio in the United States by the beginning of the 21st century than it had just a few decades earlier.

W.A.KELLY HUFF AND CHRISTOPHER H.STERLING

See also Clear Channel Stations; Federal Communications Commission; FM Radio; Frequency Allocation; International Telecommunication Union; National Radio System Committee; Stereo; United States

Further Reading


Special Reports on American Broadcasting, 1932–1947, New York: Arno Press, 1974 (reprints of four Federal Communications Committee reports)

Antenna

An antenna is a device designed to either radiate (“send”) or intercept (“receive”) radio signals in an efficient fashion. Antenna types differ according to the frequency used, the radio service involved, and the specific task at hand. Antenna size and location are important factors in their efficiency. Transmission towers for antennas that send radio signals are nearly always manufactured of steel and are either in the form of self-supporting towers or are supported with guy wires (the latter structure is less expensive but requires more ground); in the United States, they are built to national standards set in 1959 by what is now called the Electronic Industries Alliance. Tower structures are typically either square or triangular in cross-section.

Origins

Washington, D.C. dentist and wireless inventor Mahlan Loomis may have been the first user of an antenna with his experiments in the Blue Ridge Mountains west of the capital city in the late 1860s. Loomis’ antenna consisted of a wire suspended beneath a high-flying kite. The real inception of modern radio antennas came decades later with Marconi’s understanding of the need for a high aerial or antenna to aid in receiving wireless telegraphy signals over large distances. He and other wireless pioneers
experimented with many often highly complex antenna designs before settling on the use of three or four wooden (later steel) transmission towers at a given transmitter site.

The design of antenna structures rapidly improved in the years before and after World War 1. The spread of broadcasting after 1920 and the use of higher frequencies for radio services prompted development of transmission antennas with greater efficiency. Radio receivers had improved by the late 1920s to the point that they no longer always required external antennas for effective operation, thus making them easier to use and less expensive. The first transmission antennas that could propagate signals in a given direction or pattern (dubbed directional antennas) were developed in the 1930s, allowing a station to transmit its signal to a more specific area and thus help avoid interference with other stations. World War II saw the development and refinement of microwave transmission and special antennas for that service. Much was learned about how the careful location of an antenna tower could have substantial impact on its efficiency. Post-war antenna improvements included substantial refinements in methods of both transmission and reception.

AM Radio

AM radio station antennas make use of the entire transmission tower as a radiating element. To achieve the most efficient radiation, an AM antenna tower’s height should equal about half the length of the radio waves being transmitted. For example, an AM station on 833 kHz, where wavelengths are about 360 meters long, should ideally use an antenna tower that is some 180 meters or about 590 feet tall (nearly the length of two football fields). Additionally, because AM makes use of ground waves to distribute its signal, the tower is usually merely the visible part of a complex system that extends under and through the ground. As good ground contact is essential for an efficient ground wave, AM antennas often feature an extensive web of copper cables radiating out from the tower location and buried just below ground level. AM antennas are sometimes located in damp or moist locales (such as swamps or marshes) to aid in ground wave conduction.

Both to help reduce interference and to focus signals where most listeners are, the vast majority of the country’s AM stations transmit a directional signal. Rather than the circular coverage pattern that would result from a standard antenna (assuming flat terrain), most AM stations use two or more antenna towers to transmit signals in a pattern away from another station, or away from a body of water or some other physical feature with few listeners, and toward population centers. Multiple AM towers for different stations are often clustered together in antenna “farms” to keep potential obstructions to airplanes at a minimum. In some locations, FM antenna towers and towers for television stations are located within the same antenna farms.

FM Radio

Unlike AM antennas, where the entire tower can assist in radiating the signal, in FM broadcasting the antenna is a relatively small device mounted on top of the transmission tower. This is because the wavelengths in the VHF spectrum used by FM radio are far
shorter than in the medium wave spectrum used by AM stations. An FM outlet licensed to operate at 100 MHz, where the wavelengths are about three meters long, only requires an antenna about 1.5 meters (about five feet) in length. Since FM stations rarely need a directional pattern, multiple FM antennas for a single station are uncommon. A taller transmission tower allows the antenna element to be mounted higher above average terrain, thus extending this line-of-sight service’s coverage.

FM antennas can be polarized in three different ways, each affecting how the signal will be received. Horizontal polarization was long the FM standard in the United States, but most stations now employ circular polarization for better service to car radio antennas of different types. A third type, vertical polarization, is generally restricted to public FM stations seeking to avoid adjacent channel interference with television channel six (which occupies 82–88 MHz, immediately below the lowest frequencies of the FM band).

**Other Types: Shortwave and Microwave**

Shortwave radio station antennas are very complex because of the many different shortwave bands that may be in use during a typical broadcast period. Extensive antenna arrays of different sizes, often covering a large ground area, help to sharpen reception.

On many transmission towers across the country one can observe various ancillary dishes or horn-shaped antennas, sometimes mounted on the top of a tower, but often attached to its sides. These are nearly always for microwave transmission links, some used for voice or data links, and some for sending television signals for use by distant cable television systems.

All radio antennas in the United States must be built and operated within strict licensing and tower marking requirements. A tower’s location, height, and other characteristics are specifically defined in a station’s license from the Federal Communications Commission. Generally speaking, a higher antenna will help to extend a station’s coverage area, although this is more true for FM than AM services. All transmission towers must be painted in wide bands of red and white to make them more visible in low light conditions, and must be electrically highlighted at night. Jurisdiction over these requirements (as well as locating towers as far away from airports as possible) is shared with the Federal Aviation Administration.

**Reception Antennas**

Antennas to receive AM or FM signals are rarely seen by consumers as they are increasingly built into radio receivers. Some home stereo systems, for example, come with a plastic-and-wire loop antenna for improved AM reception indoors. Likewise an FM antenna, usually a long wire with a “T” shaped ending, can be attached for better indoor reception.

With the inception of satellite communication in the 1960s, large dish-shaped antennas dubbed “earth stations” were built in several locations around the world. Often huge dishes up to 200 feet in diameter, they were designed to gather in weak satellite signals and boost them to an audible range. Also used to receive satellite-delivered audio signals
are back-yard or building-top dishes typically called “television receive-only” (“TVRO”) antennas. Direct-to-home reception of audio and video signals can now take place using small dishes of a foot or 18 inches in diameter.

CHRISTOPHER H. STERLING

See also Audio Processing; Frequency Allocation; Ground Wave, Shortwave Radio

Further Reading

“Antennas and Propagation,” in Proceedings of the Institute of Radio Engineers (May 1962)

Arab World Radio

There are several definitions of what makes one an Arab, but the most widely accepted one is that an Arab is someone who speaks Arabic as his/her mother tongue. The Islamic faith is also an important part of defining Arabness, but there are Christian minorities in some areas of the Levant, Egypt, and the Sudan. The Arab world stretches from Oman in the south of the Arabian Peninsula to Syria in the east, and to Morocco in the extreme west of North Africa.

The development of radio in the Arab world is almost unique. The geography, political and colonial history, language, and culture have exerted profound influences on the medium in the region.

Radio’s development in the Arab world has moved through several stages. First there was the colonial period, when Italy and Britain began international broadcasting in Arabic. Also during this phase, the British and French created local stations in Palestine and in Lebanon/North Africa, respectively. Then there was a period of hostile radio propaganda, starting shortly after the Egyptian revolution in the early 1950s. Next, there was the creation in Jordan and in the Gulf states of the first radio production and transmission capabilities established by Arab nations to defend themselves against hostile Egyptian, Syrian, and later Iraqi broadcasts that called for the overthrow of governments headed by families in Jordan and the Arabian Gulf states. (For the Gulf states, the oil-rich years after the 1974 fourfold oil-price increase had made the new and expanded
electronic media infrastructure affordable.) Finally, there are the contemporary radio systems.

**Early Radio Broadcasting**

The Arab world was targeted for the first Western broadcasts (before 1945) to a developing area with the goal of influencing its people. Italy began broadcasting across the Mediterranean in Arabic through its international radio service, Radio Bari, in 1934. The specific motivation for this effort is unclear, as there were few radio receivers in the Middle East at the time. (Receivers needed electricity, which was then available only in larger urban areas. In the 1920s and early 1930s, there were only a few low-power, privately owned stations in Egypt.) In that same year, the Egyptian government contracted with a British company to start an official radio station. At first the Italian Arabic programs had a virtual monopoly on the Middle East frequency spectrum, causing concern on the part of British diplomats serving in Egypt, Palestine, Trans-Jordan, and the Arabian Gulf sheikhdoms. The British Foreign and Dominions Office was alerted to the potential effects of such broadcasts, but reports from the field generally concluded that the programs were not effective in swaying public opinion.

Despite the measured British diplomatic response to Radio Bari broadcasts, reports circulated both unofficially and in the British press that Italy’s increasingly anti-British programs had found a receptive audience and were effective in promoting Italian interests. Some of these reports came from those who understood the oral culture and the potential power of carefully crafted spoken Arabic that reached a primarily illiterate audience. Further, some well-informed Westerners in the Arab world knew about the male custom of frequenting coffee houses in the evening, drinking coffee and tea, and discussing politics. The following scene is the type of listening pattern about which some in British government grew increasingly concerned:

> When the day’s work was done both the *fellaheen* (peasants) and the city dwellers would betake themselves to their favorite cafes, huddle together under a fuming oil lamp, and stolidly smoking their water pipes play game after game of backgammon until the communal loudspeakers gave forth the voice of the Bari announcer (C.J. Rolo, *Radio Goes to War*, 1941).

By 1937 the British government realized the potential danger of international armed conflict, particularly in Europe. At the time, the British Broadcasting Corporation (BBC) had a monopoly on broadcasting within the United Kingdom. Its external transmissions for British abroad, known then as the Empire Service, started in 1932 essentially as an extension of its English-only domestic service. The United Kingdom was studying the possibility of starting foreign-language broadcasts. In 1936 the British Foreign and Dominions Office asked diplomats around the world their reaction to the possibility of beginning BBC foreign-language broadcasts. The results were mixed, but posts in the Middle East were unanimous in recommending that an Arabic service be added. On 3 January 1938, the Empire Service officially started transmitting in Arabic, its first
foreign-language broadcast. This event marked the beginning of the first international radio war over a developing region.

In the 1930s, the British had a strong political presence in the Arab world. BBC advisors were employed to help establish the new Egyptian radio service. Once the BBC started its Arabic service, it was decided that this should be of exceptionally high quality, as Britain had the resources, talent, and experience in the Arab world to ensure that this goal was met. The BBC hired Egyptian announcers and sought to bring to its London microphones prominent Arab leaders as well as singers and musicians, resulting in what must have been an appealing radio offering. Radio Bari’s Arabic broadcasts attempted to meet the British radio challenge by increasing the strident, vituperative nature of their political commentary.

By 1938 radio ownership was becoming more common in urban homes and public coffee houses. The so-called radio war between Britain and Italy was, in fact, only a brief contest for listeners in the Arab world. Lasting from January to April 1938, verbal hostilities ended officially on 16 April 1938 with the signing of an Anglo-Italian pact. However, Nazi Germany started transmitting in Arabic for the first time in April 1938, just as the pact came into force. In 1939 both the Soviet Union and France began broadcasting in Arabic. The French, with interests then in North Africa, Lebanon, and Syria, had the advantage of either possessing medium wave facilities there for local programming or influencing domestic schedules, making possible local relays of Paris-based Arabic programming. The British had a similar advantage with their Palestine Broadcasting Service (PBS) in Jerusalem. During World War II, the main international broadcasters to the Arab world were Germany and the United Kingdom. These two countries encouraged the development of some rather strong and distinctive on-air radio personalities. The Nazi Arabic Service employed an Iraqi by the name of Yunus al-Bahri, who may have been the most gifted Arabic-language broadcaster ever to speak from Europe. However, the BBC also had popular announcers during the war. Isa Sabbagh, a broadcaster with a considerable Arab world following, was a Palestinian who later became a U.S. citizen and worked as a foreign service officer for the U.S. Information Agency.

**Modern Broadcasting**

Each Arab state is unique, but from a radio broadcaster’s perspective, a common language (especially the modern standard Arabic that was actually fostered by radio broadcasting), a common religion for the vast majority of Arabic listeners, a common history, and similar political interests ensure a large radio audience for international and domestic broadcasts. A large number of broadcasters from outside the area continue to transmit Arabic programming via radio to the Arab world. These organizations have attracted relatively large audiences for several reasons, in addition to those noted above: in the Arab world, only Lebanon has a system that permits private radio broadcasting, and the major international broadcasters (such as the BBC, Voice of America, and French-government-owned Radio Monte Carlo Middle East) transmit to the area via powerful medium wave facilities. Conversely, the majority of Arab states have 1- or 2-million-watt medium wave transmitters that send a domestic service or special programs
throughout the Arab world. Saudi Arabia, for example, has six medium wave transmitters (2 million watts each). Every Arab country has some shortwave transmission capability. Iraq had the most powerful shortwave transmission complexes in the Middle East until Allied air forces destroyed the French-built facility in January 1991 during the brief Gulf War.

Perhaps the greatest influence on the development of Arab radio are the governments (through their Ministries of Information) that operate them. Competition—from innovative radio programmers in the Arab world, international broadcasters from the West, videocassette recorders, and traditional as well as satellite television—has convinced Arab governments that they must be responsive to listener preferences. Previously they generally refused to acknowledge these, but even the scant survey research in existence showed the need to offer listeners more than just what the government wanted them to hear, both in the areas of entertainment and Ministry of Information-mandated news. Before this realization, most radio news in the Arab world had essentially rebroadcast the government’s views on a variety of social, political, and economic issues.

Increasingly, listeners want high-quality local FM stations, especially for music listening. But radio will continue to evolve from North Africa to the Gulf states as both international and local broadcasts face competition for traditional audiences, who can now turn to over 100 satellite signals receivable at home with a $200 dish and converter.

DOUGLAS A.BOYD

See also BBC World Service; Propaganda by Radio; Radio Sawa/Middle East Radio Network

Further Reading

“Arabic Broadcasts from London,” Great Britain and the East (13 January 1938)


“Il Segretario di Radazione, Direzione Servizi Giornalistici e Programmi per l’Estero,” Radiotelevisione italiana (19 October 1979)


Rolo, Charles James, Radio Goes to War: The Fourth Front, New York: Putnam, 1942; London: Faber, 1943
Arbitron

International Media Research Firm
The Arbitron Company is a media research firm that provides information used to develop the local marketing strategies of electronic media, their advertisers, and agencies. Arbitron has three core businesses: measuring radio audiences in local markets across the United States; surveying the retail, media, and product patterns of the local market consumers; and providing survey research consulting and methodological services to the cable, telecommunication, direct broadcast satellite, on-line, and new media industries. Although begun as an audience measurement service for television, it is currently diversified into a complete service marketing firm.

As radio evolved into quite a different medium after the introduction of television, Arbitron was best able to provide a relatively inexpensive method, the personal diary, for measuring radio’s listening audience. Radio stations strove to provide a continuous, distinctive sound, composed largely of music but also including news, talk, sports, and community bulletin information. As radio became more portable and available in cars, more of its audience was away from home.

Arbitron splits the field of radio measurement with Statistical Research Incorporated, whose RADAR service measures radio networks. Thomas Birch’s Radio Marketing Research provided major competition for the radio marketplace before Birch left the field in 1991. Arbitron measures 276 local radio markets today by means of an open-ended mail-in personal diary developed by James Seiler (originally an improvement over C.E. Hooper’s multimedia diaries). Each member of a household who is over 12 years of age receives a personal diary with a page for each day of the week without printed time divisions.

Origins
Begun by James W. Seiler in Washington, D.C., in 1949 as both a national and local television ratings service, the American Research Bureau (ARB; now known as Arbitron) succeeded because of the inexpensive method—the viewer diary—that it used to measure radio and television audiences. The diary method pioneered by Seiler met broadcasters’, advertisers’, and agencies’ needs for more comprehensive information about the television audience, especially viewer demographics.

Seiler realized that the Federal Communications Commission freeze (1948–52) had artificially restricted television development to East Coast cities and that when the freeze was lifted, stations and the need for measurement would spread to the West Coast. On a trip to the West Coast, Seiler discovered a local service, Tele-Que, that also used a diary method to measure one-week periods. Rather than duplicating the Tele-Que service, Seiler offered to consolidate, and ARB merged with Tele-Que in 1951, which put ARB in a strong position on both coasts. Known for a time as ARB Tele-Que, by 1954 the company was known simply as the American Research Bureau.

Like all services during that period, ARB originally tailored its methods to the nuclear family, which served as the target for enormous volumes of merchandise from
manufacturers and advertisers. At that time, the entire household was used as the unit of measurement. Both the diary and the meter were tailored to a lifestyle in which the family gathered around a single console radio or television and listened or watched en masse. Only one diary (called a household diary or set diary) was sent to each family, and the assumption was that the housewife would record listening for the entire family. In an era before multiple sets, only the family room console required a meter, and it generated what were known as household ratings. Diaries allowed other information desired by advertisers and broadcasters to be included, such as the number of color television sets and whether the sets had ultrahigh-frequency receivers.

ARB’s first major success was with national television reports, introduced in October 1950. Without national or network ratings, Seiler would later remark, ARB would have been lost in the crowd. Only ARB, Nielsen, and a much smaller rating service called Videodex represented a national cross-section in its sampling. Although the Nielsen network service, the Nielsen Television Index, was Audimeter based, Nielsen supplemented his meter method at the local level for his Nielsen Station Index with a diary to provide demographics. The development of a meter-plus-diary service was necessitated when, in 1954, ARB introduced an electronic instantaneous meter service, called Arbitron, to supplement its diary method. Videodex, a diary-only service, was discovered to be making up numbers from a discontinued sample of warehoused diaries; this came to light during a 1963 congressional investigation into rating services and their practices. The diary provided data on both gross (or duplicated) and cumulative (or unduplicated) audiences, and data were projectable to estimates of all U.S. television homes.

The ARB diary keepers were randomly selected from telephone directories of all U.S. cities within a 50-mile radius of the television signal. Diaries, mailed to those who agreed to cooperate, were kept for a one-week period. Field personnel made two subsequent calls to ensure continued cooperation. ARB drew new samples for each one-week period.

The ARB grew rapidly throughout the 1950s. Following Hooper’s death in a 1955 boating accident, ARB took over his local market reports.

**Arbitron**

By 1959 Seiler had added a multicity rating service that used the same method as his archrival Nielsen, an electronic household meter. He called his meter service Arbitron. This meter service offered a distinct advantage over Nielsen’s mail-in Audimeter and over its own hand-tabulated diaries in use at the time, because Arbitron’s data were collected instantaneously. As part of the service, each station was represented by a row of electronic lights on a display board. As viewers switched from one station to another, the lights blinked off in the row for one station and lit up in another row for a different station. Arbitron did not succeed as a national television service owing to a number of factors: stations and networks balked at the cost, Nielsen entangled Arbitron in a lengthy patent litigation suit that drained it of financial resources, and the better-capitalized Nielsen undercut the cost of ARB’s station reports.

Arbitron produces estimates for three areas: the metro area, the Area of Dominant Influence (ADI), and the total survey area (TSA). The metro area is short for
metropolitan area, the standard metropolitan statistical area as defined by the U.S. census, although it is occasionally more loosely employed. The ADI is an exclusive geographical area consisting of all counties in which the home-market commercial stations receive a preponderance of total viewing or listening hours. The ADI concept divided the United States into more than 200 markets, assigning each station to only the one market where it captured the largest share of audience. The ADI was the first standardized means of defining a market, because previously, media planners had used their own definitions. The ADI paved the way for demographic targeting, because with a boundary for each market, a market’s performance could be related to demographics. The TSA is a nonexclusive marketing area that indicates a station’s viewing or listening audience regardless of where the station is located, including areas where stations overlap. Thus, a station could be assigned to more than one TSA if listening occurred in neighboring counties or markets. Unlike television, most radio buys are based on metro areas, because radio competes primarily in the local market against such media competition as newspapers. In 1982 Arbitron switched from 4-week to 12-week measurement periods in order to reduce the influence of promotions, giveaways, and other gimmicks used by radio stations to increase listenership. Advertising rates are based on audience size.

Radio Ratings

Arbitron entered the local radio marketplace in 1963 after the Harris hearings, a congressional investigation into the ratings services that resulted in Nielsen’s exit from the radio marketplace that same year. ARB’s new emphasis on the field of radio audience measurement over television was also partly motivated by RKO Radio’s request that Seiler conduct a study that same year of the best way to measure audiences of all media, especially radio. The outcome was the recommendation that the personal diary—a small booklet designed for each individual in the household to carry with him or her throughout the day—be used to measure radio. This was an improvement over the household or set diary previously in use, because for the first time since the mass exodus to television, radio stations were able to report a measurable audience. Radio had shifted from a mass medium where people listened around a single set to a more portable medium because of such technological innovations as the transistor. Now radio’s largest audience was its out-of-home listeners, as people listened in such places as at work, in the car, and on the beach, a phenomenon that had not been recorded by the previous method, the household set diary, which conceptualized viewing as occurring at home and as a family.

Ratings Innovator

Arbitron has typically been more technologically and conceptually innovative than its competitors in responding to the marketplace. Dominant firms such as Nielsen find it more profitable to pursue a “fast second” strategy whereby they allow small pioneers a modest inroad before they respond aggressively. Arbitron’s research and development, as a result, have led to a significant number of new features in product design. Seiler developed both the all-radio diary, which measured the radio audience separately rather
Seiler began the practice of using a four-week ratings period (rather than the previously used one-week period). Television still uses this four-week period as the basis of its ratings, although radio now uses a 12-week period. Seiler provided the first county coverage studies, which determined station viewership on a county-by-county basis by actual measurement rather than the previously used projections.

Seiler also began the practice of “sweeps” periods, or the simultaneous measurement of all markets based on actual coverage areas. In 1966 ARB developed new survey markets, or ADI, which, in addition to the metro and total survey areas used by rating services during the period, became the industry standard for exclusively defining the geography of local markets. The ADI geography largely replaced the previously used metro areas in television. In failing to copyright the idea, however, ARB opened the door for Nielsen to introduce a somewhat similar concept, the Designated Market Areas. Much of this additional information was made possible by ARB’s switch from hand-tabulated methods to use of an electronic Univac 90 computer in 1959. By 1961 ARB was measuring every U.S. television market and had twice produced national sweeps.

By the 1960s Arbitron led the other ratings services in its inclusion of age and sex demographic information; it was able to do so because of its use of the diary method, which asked specific viewers about their viewing. Arbitron’s innovation offered advertisers and agencies finer and more discriminating tools to cherry-pick audiences. These innovations, together with its national sample, resulted in Arbitron’s quickly emerging as a leader in local market measurement.

After merging with the Committee for Economic and Industrial Research (CEIR) in 1961, ARB expanded its computer facilities. By 1964 many members of the original ARB management, including Seiler, Roger Cooper, and John Landrith, left, citing basic differences between ARB and CEIR policy. CEIR hired new management who were not well received by major agencies. In 1967, faced with agency and station cancellations, CEIR sold Arbitron to Control Data Corporation.

By the mid-1980s, Arbitron radio audience measurement had grown to 420 markets measured four times a year, and the personal diary had become the standard tool for radio. For studies of the radio audience, Arbitron was testing a portable pocket “people meter,” a passive sound-measuring methodology, for radio, television, and cable audiences. Adoption of this device was stalled because of a 1993 patent infringement suit filed by Pretesting Company of Tenafly, New Jersey, which had developed a prototype similar to Arbitron’s that it had shown to Arbitron in 1994. The device is the size of a handheld beeper. It is worn by respondents and is able to detect, decode, and store signals encoded in television and radio sound transmissions. A recharging base unit collects daily data and feeds them to a central computer. Audio encoding is located at each participating radio and television station. In 1998 Arbitron moved its Portable People Meter system out of the lab and into testing in Manchester, England. By 2003, the People Meter system was being test-marketed in Philadelphia. Arbitron had negotiated an agreement with Nielsen Media Research that gave Nielsen the option to join Arbitron in future deployment of the PPM system in the United States.
The Archers

British Soap Opera
The world’s longest-running radio soap opera was the brainchild of Godfrey Baseley, a British Broadcasting Corporation (BBC) producer of factual agricultural and countryside programs. In the years following World War II, Britain was still subject to food rationing, and the BBC saw it as its duty to help the Ministry of Agriculture educate farmers in more efficient methods of food production. However, much of this programming was in the form of dry talks from Ministry experts, which failed to attract the farming audience.

At a meeting in 1948 between representatives of the BBC, the Ministry of Agriculture, and the National Farmers’ Union, one farmer, Henry Burtt, opined that what was needed was “a farming Dick Barton.” The idea seemed preposterous; Dick Barton—Special Agent! was an immensely popular daily thriller serial. But Baseley started to muse on the idea of using radio drama as a medium for education, and he worked doggedly to persuade his BBC masters to let him make a trial of the idea. He recruited the writers of Dick Barton—Geoffrey Webb and Edward J.Mason—and obtained funding for five pilot episodes, which were aired in May 1950 on the BBC Midlands Home Service. The pilots were well received, and on 1 January 1951 the official first episode was broadcast on the BBC Light Programme.

The program was set in the fictional village of Ambridge, in the equally fictional county of Borsetshire, but its geographic location was clearly intended to be equivalent to the area somewhere to the south of Birmingham, and so typical of much of the farming country in Britain. The central characters were the Archer family of Brookfield Farm: tenant farmer Dan Archer; wife Doris; their daughter Christine; son Phil; Phil’s unreliable elder brother Jack; and Jack’s city-born wife, Peggy. Of the other characters, the most notable was the comic creation Walter Gabriel, a ramshackle smallholder whose
crackedvoiced greeting “Hello me old pal, me old beauty” was to become one of Britain’s best-known radio catch phrases.

The program was an instant success, gaining an audience of 2 million within a few weeks of its debut. It was soon moved to take over the evening slot previously occupied by Dick Barton, and its audience grew to 4 million by May and 6 million by the end of the year. Listeners enjoyed the mixture of comedy, as Dan helped Walter out of his regular scrapes; drama, as traditional Dan and progressive Phil clashed over plans for Brookfield; and romance, through Phil and Christine’s respective love affairs.

But underlying these universal tales was the educational purpose that was the program’s raison d’être. So when proud Phil wanted to marry Grace, the boss’ daughter, he decided that he needed sufficient capital of his own to refute any suggestion that he was marrying for money. He resolved to raise £5,000 (a substantial sum then) by breeding pedigree pigs, and over the next two years listeners unconsciously learned about the finer points of pig breeding as they followed the tale of a young man’s pursuit of this headstrong, well-to-do young woman.

Phil achieved his aim, and he and Grace married in 1955. But their happiness was short-lived, as the decision was made to kill Grace while she was heroically trying to save a horse from a stable fire. The fictional death—heard by a record audience of 20 million—provoked national mourning on a completely unexpected scale and in the process eclipsed the launch of independent television the same night.

The Archers has always had an air of reality unusual in a drama series. In the early days, the actors were encouraged to use a non-histrionic, understated style of delivery, which was designed to give the impression that the listener was eavesdropping on the lives of real people. Each day in Ambridge portrays the real day and date of transmission, so the program reflects the changing of the seasons that is so important to the farming community. And when the listener celebrates Easter or Christmas, the Archers do, too. The characters grow old in real time, and many cast members have been on the program for decades. The first episode featured Norman Painting as Phil and June Spencer as Peggy, both of whom were playing the same parts well after the program’s 50th anniversary.

This intermingling of fact and fiction was reinforced by the inclusion of a “topical insert” in 1952, when the Archer family was heard discussing the content of the budget announcement that had been made to Parliament by the Chancellor of the Exchequer only hours earlier. Topical inserts have continued to be a feature of the program, and in more recent years they have reflected both farming matters, such as the crisis over bovine spongiform encephalopathy (or “mad cow disease”), and more general events, such as the Gulf War and the death of Princess Diana. Real-life celebrities have also been keen to appear on the program, and visitors to Ambridge have included actor Richard Todd, jazz trumpeter Humphrey Lyttelton, veteran disc jockey John Peel, and actor Britt Ekland. Most notably, the Queen’s sister, Her Royal Highness Princess Margaret, appeared as herself in 1984.

Farm production eventually grew to a position of surplus, and as the original hand-in-glove relationship between The Archers and the government became less appropriate, so the educational function of the program was removed in 1972. However, it retained its reputation for well-researched accuracy and continued to inspire public debate on farming and non-farming topics. In 1993 the jailing of a mother of two who had aided her
brother while he was on the run from the police inspired a “Free Susan Carter” campaign that provoked reaction from the Home Secretary. In 1999 the actions of Tommy Archer, who partially destroyed a crop of genetically modified oil seed rape, were soon mirrored in real life by Lord Melchett of Greenpeace. Tommy and Lord Melchett used the same defense, and both walked free from their trials.

The program moved in 1965 from the Light Programme to the mainly speech Home Service (later BBC Radio 4). Its regular pattern—five weekday episodes, each with a repeat, plus a weekly omnibus edition—was increased by the establishment of a Sunday evening episode in 1998. With weekly audiences averaging 4.5 million, it is the network’s most-listened-to program after the morning news sequence Today. But its place in Britain’s culture extends far beyond its regular listeners. The bucolic “dum-did-dum” of its signature tune “Barwick Green” still conjures up for many an image of a mythical rural heartland, the actual decline of which the program has been charting for more than 50 years.

KERI DAVIES

Cast

Dan Archer  Harry Oakes, Monte Crick, Edgar Harrison, Frank Middlemass
Doris Archer  Gwen Berryman
Christine Archer  Pamela Mant, Joyce Gibbs, Lesley Saweard
Phil Archer  Norman Painting
Jack Archer  Dennis Folwell
Peggy Archer  Thelma Rogers, June Spencer
Walter Gabriel  Robert Mawdesley, Chriss Gittins

Producer/Creator

Godfrey Baseley

Programming History

<table>
<thead>
<tr>
<th>BBC Light Programme</th>
<th>1951–65</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBC Home Service (later BBC Radio 4)</td>
<td>1965-present</td>
</tr>
</tbody>
</table>
Further Reading


Archives. See Museums and Archives of Radio; Nostalgia Radio

Armed Forces Radio Service

The Armed Forces Radio Service (AFRS) was the chief means of providing popular radio network programs to military forces outside the U.S. Begun during World War II, it later expanded to include television and continues to operate today.

Origins

In February 1939, shortwave radio station KGEI in San Francisco began beaming broadcasts to the Philippines for U.S. armed forces stationed there. Later these broadcasts became the responsibility of the War Department’s Radio Division, which began broadcasting music and sports overseas in the spring of 1941. Late that year U.S. forces set up a 1000-watt station on Bataan, later moved to Corregidor. They relayed news and entertainment from KGEI.

At about the same time, officers of the Panama Coast Artillery Command (PCAC), in an effort to ensure that troops would listen to widely spaced messages on a tactical radio circuit, began playing popular records in between the announcements. Early in 1940, they started broadcasting on a regular schedule. Soldiers wrote to radio stars in the United States asking for copies of programs to air. Replies were immediate. Jack Benny sent an autographed disc, and his became the first network program to be broadcast by PCAC. In September 1941, NBC sent the station 2000 pounds of programs. PCAC signed off on the day Pearl Harbor was attacked, 7 December 1941, for fear that Japanese aircraft might
home in on the signal. It resumed broadcasting in January 1943 as a part of the growing new AFRS organization.

In a very different climate, imaginative soldiers in Alaska began “bootleg” radio stations of their own, beginning with KODK on Kodiak in January 1942, and shortly thereafter, KRB in Sitka. Unlicensed, KRB was ordered off the air by the Federal Communications Commission (FCC). In February 1942, ignoring the problems of KRB, soldiers established a new station at Sitka which they identified as KGAB and later as KRAY. C.P. MacGregor, a Hollywood recording executive and radio producer, received a request from one of these Alaskan stations for any and all recordings. Quick to comply, MacGregor sought approval from the War Department to send a large shipment of glass and aluminum based recordings “out of the country” for “your radio station in Alaska.” The puzzled staff members didn’t know what he was talking about.

World War II

The United States Armed Forces Radio Service was established by order of the War Department on 26 May 1942. Thomas H. Lewis, vice president of the Young and Rubicam advertising agency, was commissioned as an Army major and assigned to command the new organization. Los Angeles was selected as the headquarters because of its proximity to the entertainment industry, which quickly gave its overwhelming support. The mission of the new AFRS was to provide American servicemen “a touch of home” through the broadcast of American news and entertainment. It was also intended to combat Tokyo Rose and Axis Sally, whose broadcasts to American troops from Japan and Germany were heavily laden with propaganda.

AFRS first reached its target audience via borrowed shortwave transmitters and through dissemination of “B Kits,” or “Buddy Kits.” These were large, so-called “portable” 16-inch turntables delivered with transcriptions of music and radio programs, produced under the supervision of Los Angeles producer and recording executive Irving Fogel.

It was Glenn Wheaton, a “dollar a year” man with the War Department’s Radio Division, who first proposed a special program for the armed forces that would present entertainers requested by military personnel serving overseas. On 8 December 1941, Wheaton suggested it be called Command Performance. The first broadcast on 1 March 1942, featured Eddie Cantor as master of ceremonies. A special addition to the program was a recording of the Joe Louis/Buddy Baer title fight. Other Radio Division broadcasts included disc jockeys, sports roundups, and a regular section titled “News from Home.” Within a week, Command Performance was aired on some 11 stations, and by mid-year KGEI was transmitting the show to the South Pacific.

Command Performance was moved to Hollywood, where it continued production with the enthusiastic cooperation of the entertainment industry. Stars such as Betty Hutton, Gary Cooper, Edgar Bergen, and Gene Tierney made frequent appearances. A new program, Mail Call, was added and early shows starred Bob Hope, Jerry Colonna, Frances Langford, and Loretta Young.

Soon other AFRS productions included Melody Roundup, hosted by Roy Rogers, Personal Album, with Bing Crosby, and Jubilee, which featured African-American
entertainers. Easily one of the most popular programs was a musical request feature, *AEF Jukebox*, hosted by a perky “G.I.Jill” (Martha “Marty” Wilkerson).

In AFRS broadcasts, all commercials were removed for two reasons. First, neither the government nor the War Department wanted to appear to be endorsing a commercial product or service. Second, and even more compelling, performers agreed that their work could be rebroadcast overseas without payment if no additional benefit accrued to the original sponsor. The sponsors agreed to the deletion of their commercials. In the same spirit, AFRS made agreements with all broadcasting and music guilds and unions, from the American Federation of Musicians to the American Federation of Radio Artists, and these continue today. Likewise, agreements were signed with copyright agencies to permit duplication and distribution of popular music. The cooperation of the performers, producers, directors, musicians, and sponsors made possible an AFRS schedule of programs that otherwise would have been prohibitively expensive. (AFRS created special troop information and education spot announcements to replace the excised commercials.)

Shortwave broadcasts continued from both U.S. coasts to furnish troops with news and sports programming, although music, despite the vagaries of shortwave reception, was included. The War Department approved the establishment of an American radio network in England. Lloyd Sigmon, a Los Angeles radio engineer, was commissioned to establish the stations. When he arrived in England, the new Signal Corps officer discovered his mission was to oversee activation of a number of 50-watt stations with extremely limited range.

In a relatively short period there were 140 stations broadcasting AFRS programs in England, Europe, Alaska, the Caribbean, and the South Pacific. AFRS had begun shipping self-contained stations for assembly in the Pacific area, and in 1944 the “Mosquito Network” of seven stations was established in the southwest Pacific with Noumea, New Caledonia, as key station. At about the same time the “Jungle Network” was also founded. These were affiliations of stations under a single commander. By VJ Day (15 August 1945) the total number of AFRS stations worldwide had reached 154, plus 143 public address systems and hospital bedside networks. AFRS pressed its 1 millionth disc and produced its most famous *Command Performance*, “The Wedding of Dick Tracy.”

**Postwar Developments**

At the end of the war, the first Armed Forces Radio station in Japan signed on in Kyushu in September 1945, closely followed by stations in Kure, Osaka, and Tokyo. Frankfurt became the new headquarters of the American Forces Network (AFN), Europe, and London signed off for the last time. AFN facilities became the first American outlets to use audiotape recovered from the Germans.

As part of a worldwide reduction, in 1947 AFRS decreased production of original programming to 14 hours per week. However, stations began receiving an additional 41 hours of
network programs, excluding their commercials. The Far East Network, which had reached a high of 39 stations, was gradually reduced to 16. The Berlin station served as a homing beacon for the allied Airlift in 1948–49. AFRS slowly gave up creative radio production.

In 1950, the same year that South Korea was invaded by North Korea, AFRS stations assisted in evacuation. The Seoul station became mobile as “Radio Vagabond” and eventually had to retreat to Japan. It returned to Seoul only to be driven out again, then returned permanently in May 1951. South Korea was soon well supplied with additional
mobile stations known as Troubadour, Gypsy, Homesteader, Rambler, Nomad, Mercury, Meteor, and Comet.

**Vietnam, Lebanon, and Desert Storm**

In 1962 Armed Forces Radio and Television Service (AFRTS) Saigon signed on in Vietnam to counter propaganda broadcasts from Radio Hanoi. Da Nang’s Red Beach radio transmitter was knocked off the air by enemy fire, and the Armed Forces Vietnam Network (AFVN) at Hue came under fire during the 1968 Tet offensive. The station staff was captured and spent five years in prison. Despite the fact that the network headquarters building in Saigon was nearly demolished by a car bomb, more than 500,000 troops were now receiving radio and television (which had been added in the 1950s) from AFVN stations throughout Vietnam. By 1970 the Armed Forces Thailand network was operating six manned radio and television stations and 17 relay facilities, with headquarters at Korat. In the early 1970s, as American forces pulled out, AFVN began closing stations. Saigon was the last to shut down, signing off in March 1973.

The AFRTS SATNET satellite system began program feeds from Los Angeles on a 24 hour basis in 1978. By 1982 the Los Angeles Broadcast Center was providing satellite feeds to stations from Iceland to Diego Garcia in the Indian Ocean. In 1988 satellite radio transmissions replaced the east and west coast shortwave broadcasts, providing greatly enhanced coverage and quality. A year later all satellite transmissions from the AFRTS Broadcast Center were encrypted to prevent program piracy, a move applauded by the television industry, which was still providing programs at very little cost to the Armed Forces.

In 1982 a mobile broadcasting unit was dispatched to Lebanon to support the U.S. Marine peacekeeping force. In 1983 the AFRTS station in Lebanon was knocked off the air by a bomb explosion that killed over 240 Marines. Three mobile stations were flown to Honduras to provide support for American troops operating in that country.

When Iraq invaded Kuwait in 1990, mobile stations were provided almost immediately to Dharhan and Riyadh as part of Operation Desert Shield. Two mobile stations were deployed to Saudi Arabia and in 1991 became the Armed Forces Desert Network, with headquarters in Kuwait. The stations received live news from SATNET.

AFRTS celebrated its 50th Anniversary in 1992, feted by the Pacific Pioneer Broadcasters. The organization also received the coveted George Foster Peabody Award and later a Golden Mike from the Broadcast Pioneers.

The single-channel SATNET was replaced in 1997 with multi-channel television service. These channels were identified as NewSports, Spectrum, and American Forces Network (AFN), giving overseas stations more programming choices. Later that year Direct to Sailors (DTS) service was instituted, providing ships and remote sites two live television and three live radio services, 24 hours a day. DTS also delivers a daily *Stars & Stripes* newspaper to ships and remote installations.

As of 2000, overseas stations receive seven radio music channels 24 hours a day, plus one channel of public radio and another dedicated to news, live sports, and information. Station music libraries are furnished weekly shipments of popular music on CD, keeping
overseas disc jockeys abreast of their stateside counterparts. Service reaches every continent and most U.S. Navy ships through more than 300 radio and television outlets.

JACK BROWN

See also Axis Sally; British Forces Broadcasting Service; Cold War Radio; Propaganda; Radio in the American Sector; Shortwave Radio; Tokyo Rose; Voice of America; World War II and U.S. Radio

Further Reading

Brown, James, “AFRTS: Good for Morale,” Los Angeles Times (10 August 1980)
Christman, Trent, Brass Button Broadcasters, Paducah, Kentucky: Turner, 1992
Department of Defense, “History of AFRTS: The First 50 Years,” 1992
“Radio Profile: Jack Brown,” The International Radio Report 2, no. 32 (August 1979)

Armstrong, Edwin Howard 1890–1954

U.S. Radio Engineer and Inventor

Inventor of the regenerative circuit, the superheterodyne, and frequency modulation (FM), Edwin Howard Armstrong is remembered as perhaps the greatest radio inventor of all time.

Youth and College Years

Armstrong was born in New York City on 18 December 1890 to John Armstrong, an employee and later vice president of Oxford University Press, and Emily Smith Armstrong, a public school teacher. At the age of nine, Armstrong developed a severe case of Saint Vitus’ Dance, a disorder causing involuntary contortions and contractions of muscles, especially in the face and neck, probably caused by rheumatic fever. Because of their concern over their son’s illness, in 1900 the Armstrongs moved, 15 miles up the Hudson River to the relative serenity of Yonkers.

When Armstrong was 13, his father gave him a book entitled The Boys Book of Inventions: Stories of the Wonders of Modern Science. The next year Armstrong read Stories of Inventors: The Adventures of Inventors and Engineers, True Incidents and Personal Experiences. From that time on, Armstrong knew that he would be an inventor. He was particularly interested in reading about Guglielmo Marconi and his invention of the wireless telegraph. By the time he entered high school in 1905, Armstrong’s inventive energies focused on wireless, and, with the help and encouragement of his family, he set up his first “laboratory” in his upstairs bedroom, from which he sent and received wireless messages with his friends. By the time he graduated from high school in 1909,
Armstrong had built wireless receivers so sophisticated that he regularly received signals from as far north as Newfoundland and as far south as Key West.

Armstrong entered Columbia University in September 1909, commuting from his home in Yonkers on his high school graduation present, a red Indian motorcycle. The next year he gained admittance to the University’s School of Mines, Engineering, and Chemistry, where he concentrated his studies in the electricity department. Though many of Armstrong’s professors disliked him because of his willingness to question and even contradict their teachings, Armstrong found a mentor and proponent in Columbia’s leading researcher in the electrical engineering department, Michael Pupin.

Because he commuted to Columbia from his home in Yonkers, Armstrong was able to continue his wireless experiments in his bedroom laboratory. In 1910, dissatisfied with his indoor antenna, Armstrong built a 125-foot tower behind his house, to which he attached his antenna wire at the top. Armstrong built the tower himself, hoisting himself skyward on a bosun’s chair. This early experience demonstrated another of Armstrong’s passions: the love of heights.

During his junior year at Columbia, Armstrong set out to understand the workings of the Audion tube, invented six years earlier by pioneer wireless inventor Lee de Forest. De Forest had taken the two-element “valve” (tube) of Ambrose Fleming and added another element, which he called a “grid.” The grid allowed de Forest to regulate the flow of electrons through the tube and amplify them, thus providing a superior detection device for wireless signals. But de Forest never understood how or why his Audion worked. After much experimentation, Armstrong came to understand how the Audion worked and resolved to improve it by making it not only detect electromagnetic waves but amplify them as well. To do this, Armstrong fed the current back through the grid many thousands of times per second, thus amplifying it over and over again. He achieved success on 22 September 1912, noting “great amplification obtained at once.” Using his new invention, Armstrong could receive signals from Ireland and Hawaii with remarkable clarity. The “feedback” or “regenerative” circuit, as it came to be known, revolutionized radio reception. Further tests of the regenerative circuit led Armstrong to discover that it could also be used to transmit continuous waves much more efficiently and powerfully than the large and expensive mechanical generators then in use. By early 1913, using modified circuitry, Armstrong successfully demonstrated the transmitting capabilities of his new invention.

Armstrong graduated from the engineering program at Columbia University in June 1913. Later that year he filed two patent applications, one in October for his wireless receiving system and one in December for his transmission circuit. At about the same time, Armstrong demonstrated his regenerative circuit to the then chief inspector of the American Marconi Wireless Company, David Sarnoff. The two quickly became close friends.

**Patent Battles and World War I**

Lee de Forest, believing that Armstrong had gained prominence by using his discovery, fought back by filing a patent in 1915 for an oscillating Audion, which he claimed to have discovered in 1912—a year before Armstrong filed his patents. In doing so, de
Forest asserted that he was the inventor of the circuit that made the Audion work as both a receiver and a transmitter. This led to a series of patent infringement suits between the two inventors that lasted almost 20 years.

The looming patent battles between Armstrong and de Forest were delayed by the entry of the United States into World War I. During the war, the U.S. government suspended all patent cases and pooled the wireless patents in order to develop better technology for the war effort. The Navy Department controlled wireless and its development throughout the war. Armstrong joined the U.S. Army Signal Corps with the rank of captain; he was stationed in France, assigned to the division of research and inspection. Armstrong upgraded the wireless capabilities of the Expeditionary Forces on the ground and then developed a communication system for the Army Air Corps.

While Armstrong was in France, he developed his second major invention—the superheterodyne. Allied forces suspected that the Germans were using very high-frequency bands to transmit messages, anywhere from 500,000 to 3 million cycles per second. Although receivers could be built to detect such high frequencies, tuning them proved to be extremely difficult. Armstrong developed a circuit that would combine the higher frequency with lower frequencies and then amplify them so they could be heard. This new circuit permitted the precise tuning of very high frequencies. Armstrong filed a patent for his new invention in France in 1918 and in the United States in 1919 when he returned from the war. For his efforts during the war he was promoted to major. While in Paris, Armstrong learned that the Institute of Radio Engineers had awarded him the first medal of honor it ever presented.

Armstrong initially won his patent battles with de Forest and began to profit handsomely from the sale of his patents to Westinghouse and to the newly formed Radio Corporation of America (RCA). Sarnoff, then general manager and vice president of RCA, negotiated directly with Armstrong for rights to his next invention, the super-regeneration circuit. Following their agreement, which included cash and RCA stock, Armstrong became RCA’s largest private shareholder. Armstrong’s financial prosperity seemed secure. It was during this time that Armstrong met Marion Maclnnis, Sarnoff’s secretary, and began wooing her by doing tricks atop RCA’s 115-foot towers in downtown New York and giving her rides in his new Hispano-Suiza automobile. They married on 1 December 1923. Armstrong’s wedding gift to Marion was the first portable superheterodyne radio.

Although Armstrong had won his patent case against de Forest in 1923, the decision was never finalized because Armstrong, considering de Forest an unethical thief, refused to sign off on the judgment, which waived de Forest’s court costs because he was nearly bankrupt. Nor would Armstrong agree to license his patents to de Forest. With nothing to lose, de Forest initiated another suit in federal court, this time challenging adverse decisions from the U.S. Patent Office. In 1924 the court overruled the Patent Office decisions, ignored the prior court cases, and awarded the rights to the regenerative circuit to de Forest, based on an arcane reading of the original patent applications. Armstrong lost again at the U.S. Court of Appeals and then appealed the decision to the U.S. Supreme Court. In 1928, 15 years after Armstrong filed his patent for the regenerative circuit, the Court ruled decisively in de Forest’s favor. The Court did not reach the merits of the claims but made the judgment based on a technical reading of the patent applications.
Most of the community of radio engineers correctly believed that Armstrong had been wronged. Armstrong took up yet another patent suit against the owners of de Forest’s regenerative circuit patent, now RCA. Armstrong lost at the trial level but won at the Court of Appeals. RCA, wanting to protect its ability to earn royalties on the patents, took the case to the Supreme Court. In 1934 the Court ruled again in favor of de Forest’s claims. This time, however, the case was decided on the merits, with the Court finding that de Forest was the true inventor of the regenerative circuit. But the decision, written by Justice Cardozo, revealed serious errors in the Court’s understanding of the inventions. Again the engineering community reacted with disapproval. Later that year Armstrong attended the annual meeting of the Institute of Radio Engineers, intending to return the medal of honor it had awarded him in 1918. The president of the Institute would not accept Armstrong’s offer, and the assembled engineers, knowing who really invented the regenerative circuit, stood and applauded when Armstrong took the stage.

**Invention of Frequency Modulation**

The amplitude modulation signals used by radio stations in the 1920s shared many drawbacks; among the most serious was that they were subject to significant levels of interference. This interference led to much crackling and hissing at the radio receiver. Armstrong had studied this problem on and off since 1914, but he did not pursue it seriously until 1923. One way of eliminating static that had been discussed by some radio engineers involved a different form of modulation in which the frequency of the carrier wave was modulated instead of the amplitude. However, mathematicians considering this issue stated categorically that frequency modulation could not solve the problem. Armstrong disagreed. For the next ten years, when not distracted with patent lawsuits, Armstrong worked toward eliminating static through the use of FM.

Conventional wisdom dictated that radio should be sent via as narrow a bandwidth as possible. Widening the bandwidth, it was thought, would simply subject the signal to more interference. After several years of failure in trying to reduce interference through a narrow-band FM system, Armstrong changed course and began experimenting with wide-band FM transmission in 1931. After redesigning his transmitter and receiver to utilize wide-band (200 kHz) FM, Armstrong found success. In the process of designing his new system, Armstrong filed five new patents from 1930 to 1933, all of which were granted in 1933.

In December 1933 he invited Sarnoff and several RCA engineers to his laboratory, where he displayed his new invention. Skeptical of the results, Sarnoff offered RCA’s transmitting space atop the Empire State Building for a field test. Armstrong conducted the first test on 9 June 1934. A receiver was placed in a house 70 miles from the transmitter. When Armstrong transmitted a signal via AM, there was significant static. When Armstrong switched over to his FM system, the static disappeared. In fact, the receiver picked up low notes from an organ that the AM signal, with its narrow bandwidth, could not even carry. In addition to high-fidelity sound, later tests with Armstrong’s FM system proved the possibility of sending more than one signal simultaneously—a process known as multiplexing.
According to Sarnoff, Armstrong’s invention was not an improvement, but a revolution—one that Sarnoff could not support given RCA’s existing investment in AM radio and the NBC network, as well as Sarnoff’s decision to spend heavily to develop television. By July 1935 Sarnoff asked Armstrong to remove his equipment so RCA could further test its television system. Sarnoff’s lack of support for FM, plus RCA’s recent patent suit against Armstrong, created a strain on their friendship.

Without the backing of Sarnoff and RCA, Armstrong decided to pursue the development of FM on his own using his patent-generated fortune. After securing an experimental license from the Federal Communications Commission (FCC), Armstrong constructed an FM station in Alpine, New Jersey (across the Hudson from New York City), and began testing W2XMN in 1938. By 1940 several experimental FM stations, including several built by the Yankee Network in New England, all using Armstrong’s technology, were in operation. At this time, Armstrong displayed the network potential of FM by relaying FM programs from station to station over the air, over the length of the East Coast, with virtually no signal deterioration. By the end of 1940, the FCC had received over 500 applications for FM licenses and had decided that the audio portion of television signals should be transmitted by FM. Commercial FM broadcasting was authorized to begin 1 January 1941.

**World War II and More Patent Battles**

With the growing popularity of FM, Armstrong struck patent-licensing deals with all of the major radio manufacturers except RCA. According to the terms of these agreements, the manufacturers agreed to pay Armstrong 2 percent of all their earnings from the sale of FM receivers and related equipment. When RCA finally realized the importance of FM, it offered Armstrong $1 million for a non-exclusory license to use the FM technology. Armstrong refused, insisting that RCA pay the same royalty as the other manufacturers. This decision by Armstrong led to fierce patent battles as well as the loss of his friendship with Sarnoff and, over the next dozen years, his fortune, his wife, and his life.

Once again, however, a war delayed the pending patent suits. When the United States entered World War II, Armstrong declined to accept royalty payments on the sale of radio equipment to the military, believing he should not profit from the war effort. He worked with military personnel to perfect FM equipment for their wireless communications links and then began working on long-range radar systems, which he continued to develop after the war.

In 1944–45, the FCC undertook a number of investigations of spectrum allocation and use, drawing on wartime research. In a hugely controversial decision, the commission decided in early 1945 to shift the FM service higher in the VHF band, to 88–108 MHz. In so doing, it made more than 50 FM radio station transmitters and half a million FM receivers obsolete after a three-year transition period. Pressured by other major broadcasters who wanted to ensure AM radio’s dominance, notably William Paley at Columbia Broadcasting System (CBS), the FCC also limited the power at which FM stations could operate. Although Armstrong contested them, these actions by the FCC severely limited (and nearly terminated) FM radio broadcasting for more than a decade while the industry turned to developing television and expanding AM.
Meanwhile, unwilling to pay Armstrong the royalties he sought, RCA began developing FM circuits of its own, which its engineers claimed did not use Armstrong’s inventions. By using these circuits, RCA would not have to pay Armstrong any royalties on the sale of television sets, which used FM for the audio portion of the signal. RCA convinced other set manufacturers to do the same. In July 1948 Armstrong filed suit against RCA, alleging infringement on his five basic FM patents. RCA’s trial strategy was to delay the proceedings as long as possible, to a date after the expiration of Armstrong’s patents. RCA’s attorneys also realized that, without any royalty revenues, Armstrong would soon be broke and unable to continue prosecuting the case. The strategy worked. By 1952 Armstrong had run out of money and had to rely on credit to pay his lawyers.

In August 1953 Armstrong proposed to settle the suit against RCA, seeking $3.4 million over a ten-year period. In December RCA responded by agreeing to pay $200,000 initially, with an “option” to pay more the next year. The option meant that Armstrong was guaranteed nothing but the initial $200,000, and Armstrong rejected the offer.

The years of litigation had taken their toll. His one-time friend David Sarnoff was now his bitter enemy. His fortune was depleted. In a fit of rage in November 1953, he took his anger out on Marion, his wife of 30 years, and she fled their apartment. On the evening of 31 January 1954, Armstrong wrote a note to Marion apologizing for his actions. He then stepped outside the window of his 13th-story apartment and fell to his death.

Marion Armstrong continued the patent battles. RCA settled its case for just over $1 million in 1955. Through settlements and court decisions—the last of which came in 1967—the other equipment manufacturers began paying damages. In the end, all of Armstrong’s FM patent claims were upheld.

MICHAEL A. MCGREGOR

See also de Forest, Lee; FM Radio; Radio Corporation of America; Sarnoff, David; Yankee Network

Edwin Howard Armstrong. Born in New York City, 18 December 1890. Bachelor’s degree in electrical engineering, Columbia University, 1913; served in U.S. Army Signal Corps during World War I, attaining rank of major. Inventor of regenerative circuit (1912), superheterodyne (1918), superregeneration circuit (1921), and frequency modulation (FM) broadcasting (1933). Died by suicide in New York City, 31 January 1954.

Selected Publications

Operating Features of the Audion, 1917
Frequency Modulation and Its Future Uses, 1941
Nikola Tesla, 1857–1943, 1943
Asia

The world’s largest continent, Asia at the beginning of the 21st century was home to some 3.5 billion people—more than half of the world total. Although income levels vary widely, many Asians have yet to own a radio or even to make their first telephone call. Radio broadcasting systems of some Asian countries were initially modeled on the structures of their former colonial powers. For example, India, Singapore, Hong Kong, and Sri Lanka (Ceylon) were modeled on the British Broadcasting Corporation (BBC). Likewise, radio in Indochina once followed the French model.

Both medium wave (standard or AM) and shortwave have been in use for decades. But as original transmitters are becoming obsolete, use of FM is increasing. Advertising support of radio’s operational costs is becoming more accepted and widespread. Asian radio’s role has undergone change—including more entertainment programming (music, drama, call-in shows) in recent years to counter the growing influence and popularity of television. Experiments with digital radio have taken place in China and elsewhere, but broad introduction is years into the future.

This continental survey begins in the West and moves toward the East, briefly surveying the past and current state of radio in countries other than India and Japan, which are covered in separate entries.

Southwest and Central Asia

Turkey

Radio broadcasting in Turkey was first regulated in the Telegram and Telephone Law (enacted 1924), which granted monopoly rights to the government post, telegraph and telephone (PTT) authority. In 1926, the first radio broadcasting concession was granted to the Turkish Wireless Telephone Co., with which the PTT was a partner for a license period of ten years. Initial broadcasts followed in 1927 with installation of 5-kilowatt transmitters in both Ankara and Istanbul. The company operated these until 1936, when, on expiration of the concession, they became a state monopoly. A new transmitter of 120
kilowatts was installed in Ankara in 1938, and radio broadcast services came under the direction of the press office attached to the prime minister’s office. In 1949 a new 150-kilo-watt transmitter installed in Istanbul began its first broadcasts. The 1961 Constitution stipulated that an autonomous public agency should operate and supervise radio (and television) services, and the 1982 constitution continued this requirement. The Turkish Radio and Television Corporation (TRT) was established in May 1964. FM service was introduced in 1968.

By the start of the 21st century, TRT operated four national radio services. Radio I, headquartered in Ankara (164 hours weekly), reaches 99 percent of the population and is devoted to educational and cultural programs including drama, music, and entertainment, together with news and sports. It uses 12 FM and 12 medium wave transmitters. Radio II (126 hours weekly), based in Istanbul, reaches 97 percent of the population, and its programs are also broadly cultural, including education, drama, music, entertainment, news, and sporting events. It uses three FM and three medium wave transmitters. Radio III, also based in Ankara, reaches 90 percent of the people and programs 168 weekly hours of local and foreign popular music in stereo via 94 FM transmitters. Radio IV serves 90 percent of the population with Turkish classical and folk music for 112 hours per week. TRT also provides radio service aimed at tourists in seven regions of the country, with programs composed of music, cultural topics, and news. Broadcasts are in English, German, and French, in stereo using seven FM transmitters for 61 hours a week.

In addition to the national services, regional stations operate in Ankara and Istanbul as well as six other cities with programs consisting of educational, cultural, drama, musical, and entertainment broadcasts. Expansion of this regional system continues. The Voice of Turkey Radio broadcasts internationally in 16 languages to Europe, the northeastern part of the U.S., Asia, North Africa, the Balkans, and Central and Far East Asia. The center for such broadcasts is in Ankara-Mithatpasa, and the service transmits nearly 350 hours a week.

**Afghanistan**

Afghan radio, government-controlled from the start, began in 1925 when the USSR donated a low-power longwave transmitter to be installed in Kabul. Three years later a German 200-kilowatt transmitter replaced the longwave unit and marked the start of regular broadcasting. Audiences were tiny—there were perhaps 1,000 receivers by 1930. Political unrest took the station off the air for two years in the early 1930s. Expansion of radio’s role became a part of successive government five-year plans beginning in the 1950s. New facilities, expanded programs, and effective training programs were begun, largely with aid from Britain and Germany. By the early 1970s, Radio Afghanistan was on the air about 14 hours daily with a diversified program schedule that emphasized national culture and performers. When the monarchy was overthrown in 1973, the event was first announced over Kabul radio.

A 1978 revolution led to establishment of a pro-Soviet government, followed by a partial Soviet occupation in the 1980s, during which powerful transmitters in the USSR relayed external service. In September 1996 Talaban forces occupied Radio Afghanistan and renamed it Radio Voice of Shari’a. With the overthrow of the conservative Talaban
and installation of an interim government early in 2002, the future direction of Afghan radio (which needed to virtually begin anew) was again at a crossroads.

**Persia/Iran**

The first broadcast in Persia was made in February 1928 from Tehran. In 1940 regular broadcasting began under the control of the Ministry of Posts, Telephones, and Telegraphs and the prime minister. By 1950 the state-controlled system included three transmitters in Tehran (on the air about six hours a day) and one at Tabriz (five hours daily) plus another 25 low-power relay stations. A limited amount of advertising helped to defray system expenses. National Iranian Radio and Television (NIRTIV) operated Radio Iran by the 1960s, providing three national services 24 hours a day on both medium wave and shortwave transmitters. One service using stereo FM provided three daily hours of music for the capital city. Radio Tehran programs were also carried on 13 regional stations that provided many of their own programs. Two private stations were operated in the 1970s, one by the national oil company in Abadan and the other from a U.S. Air Force transmitter in Tehran.

With the 1979 overthrow of the Shah’s government, the sole broadcaster became Islamic Republic of Iran Broadcasting, which provided five national services originating from Tehran. There are studios in 39 centers producing programs in Farsi and local languages. The external service broadcasts in 29 languages.

**Central Asia**

The five Central Asian republics were all part of the USSR until the early 1990s, so the first radio stations generally relayed broadcasts from Moscow Radio for much of the day, with some local programs. In later years each republic inaugurated one or more additional republican services in the local language. In all these countries, the former Soviet broadcasting apparatus has been reformed as national state broadcasting organizations of each republic. Where private media exist, these broadcasters have had difficulty in reforming themselves to meet the newly competitive environment. In most places local stations still relay some of the most popular programs from Moscow, notably key newscasts.

Although the first test transmissions in the region originated in 1922, from Tashkent in Uzbekistan, regular broadcasting began in February 1927. An external service was inaugurated in September 1947 that now broadcasts in 12 languages. Broadcasting in Uzbekistan is one of the most restricted in the region. Tashkent is the largest city and serves as the capital not only of Uzbekistan but also unofficially of the region. However, its radio and television services are exclusively government channels. There are four radio stations operating 18 hours daily. Although there are no private broadcasters, the government accepts commercials on its radio and television programs.

Broadcasting spread to Kazakhstan in 1923 when Radio Almaty was inaugurated. Private media are well developed in Kazakhstan, the largest of the Central Asian republics, and vigorous competitive media conditions have emerged, especially in the capital, Almaty. Although under restrictions and considerable informal pressure from
officials, independent radio has become firmly established. Kazakh State Television and Radio Broadcasting Company is the national governmental service.

Radio Ashkhabad began broadcasting from Turkmenistan in 1927. In the 1990s, independent media have been suppressed in the country, which has the smallest population of these republics.

Radio came to Tajikistan in 1928. Broadcasting is now controlled by the official State Radio and Television Company, originating from the capital, Dushanbe. However, there are some fledgling private broadcasters struggling to get a foothold. Independent radio dates its origins from 1989, two years before establishment of the Commonwealth of Independent States. This follows a pattern familiar across the region of pirate underground stations becoming legitimate independent broadcasters after the fall of the Soviet Union.

In 1931 Radio Frunze (now Bishkek) began broadcasting from Kyrgyzstan. Pyramid Radio, the first private station, was launched in 1992. Among the five republics, only Kyrgyzstan has supported the development of comparatively free and open media. Three independent radio stations were on the air by the mid-1990s in Bishkek, Kyrgyzstan’s capital, and other private stations soon developed.

South Asia

Countries in the Subcontinent were formerly British colonies, and their broadcasting systems at least initially reflected that heritage (India is covered elsewhere). Radio has always been an important medium in this region, where literacy rates are often very low and the impact of the press is limited.

Pakistan

Radio stations in what became Pakistan first went on the air in Peshawar in 1936 (an experimental station, designed with Marconi’s help, under the local government) and in Lahore in 1938 (part of All India Radio). Both were used for news and propaganda during World War II by the British authorities. These relatively weak stations—covering less than ten percent of the country—formed the beginning of Radio Pakistan when the country became independent in August 1947. Announcement of the new nation was made over what was initially dubbed the Pakistan Broadcasting Service. Early operations were stymied by lack of funds and facilities. A new station aired in Karachi in 1948, and new higher-powered shortwave transmitters followed a year later. By 1950, with the addition of a station in Rawalpindi, the country had five powerful stations broadcasting in 17 languages totaling more than 100 hours a day. Domestic and international radio services expanded in the late 1950s and into the 1960s with substantial budget increases.

Radio is a service of the Pakistan Broadcasting Corporation (PBC); television is the responsibility of a wholly separate service, Pakistan Television (PTV). While PTV is a limited corporation owned by the Pakistan government, PBC is a statutory corporation. By the 1990s PBC operated nearly two dozen medium wave and shortwave stations. In 1995, the Bhutto government introduced private FM station operations in Karachi, Lahore, and Islamabad. Calling itself FM100 on the air, the new service emphasized
popular music and call-in programs. BCP added its own FM service in the same three cities in 1998.

**Bangladesh**

Radio service was established in 1939 in Dacca (which would become capital of the modern Bangladesh) in what was then British India. From 1947 to 1971, radio served as a vital link between densely populated East Pakistan and the larger portion of that country 1,000 miles to the west. A variety of medium wave facilities were developed, and the radio service operated largely independently of the Karachi government. After considerable fighting in 1971, Bangladesh became independent of the former West Pakistan. Radio Bangladesh, a government monopoly dependent on license fees, took over the radio facilities in Dacca, although most of the transmitters had been destroyed or seriously damaged in the strife.

The radio service, now known as Bangladesh Betar (Radio Bangladesh), operates eight regional stations effectively covering the country. As the country is mainly agricultural, farm broadcasts remain an essential program feature. While a private television station was allowed to air in 1999, radio remains a government monopoly, and news broadcasts emphasize activities of the party in power. Two thirds of all programming is music and entertainment.

**Ceylon/Sri Lanka**

Ceylon’s first broadcasts in 1923 consisted of recorded music played over a transmitter built out of parts of a radio set from a captured German submarine. A regular broadcasting service started in July 1924 in Colombo. A shortwave station was built in Ekala, 13 miles north of Colombo, for the wartime South East Asian Command’s Radio SEAC, with a 100-kilo-watt transmitter, used as a relay for BBC service. The facility was transferred to the Ceylon government after the war. Radio Ceylon was founded on 1 October 1949. Commercial service began a year later when Radio Ceylon added a welcome alternative of music and entertainment programs. Medium wave transmitters were expanded in the 1960s. After the country achieved independence as Sri Lanka in 1972, the station became Sri Lanka Broadcasting Corporation (SLBC).

At the turn of the century, the SLBC operated six services, broadcasting nationally in English, Sinhala, and Tamil. One focused on service to rural areas. The planned elimination of license fee revenues, however, threatened to drastically alter the funding basis of SLBC. Two community radio stations in rural Sri Lanka—Mahaweli Radio and Radio Kotmali—have attracted international attention because of their high degree of community involvement. Radio broadcasting in Sri Lanka suddenly became intensely competitive by the end of the 1990s. By 2000, some 21 private stations had been granted licenses, mostly in the capital of Colombo. Indeed, privatization proceeded so rapidly that it outpaced policy. As of 2002, a regulatory framework still had not been formulated for the country’s increasingly complex broadcast situation.
Maldives

The Maldives are a group of more than 1,100 islands in widely scattered atolls in the Indian Ocean southwest of Sri Lanka. They became an independent country in 1965. Radio Maldives opened as a government monopoly on 12 March 1964, with broadcasts in English and Dhiveli. Four years later a shortwave transmitter was put into service. In 1984 this transmitter broke down, and the station now uses two AM and one FM transmitters. The service operates for about 16 hours daily and is widely listened to. News, information, and education take up nearly half of all air time, followed by entertainment. Because of the vast distances between its island groups, Radio Maldives uses satellite relays to connect outlying atolls with the national broadcasting center in Male. There are no plans for issuance of private licenses.

Nepal and Bhutan

Radio Nepal was founded on 1 April 1951, using a 250-watt shortwave transmitter in an old school building, broadcasting four-and-a-half hours a day. The station soon broadcast on medium wave (AM) and shortwave channels and by the mid-1970s was up to ten hours a day. The shortwave transmission achieves complete national coverage, but the medium wave broadcasts reach only between 80 and 90 percent of the population. Because literacy is low (54 percent according to the 2001 census) and access to television is limited to the urban elite, radio plays an important role in informing, educating, and entertaining the masses. Information and education programs make up 40 percent of the total broadcast. Entertainment programs consist mainly of Nepali, Hindi, and Western music, supplemented by traditional music. News is broadcast in Nepali and English as well as 16 other languages commonly spoken in Nepal. Radio Nepal began broadcasting recently on FM, covering Katmandu and adjoining areas with a 1-kilowatt transmitter. Nepal licensed its first independent community radio station in 1996, and Radio Sagarmatha came on air in May 1997, operated by the Nepal Forum of Environmental Journalists. Radio service from India can also be heard throughout Nepal.

Bhutan was one of the last countries in the world to initiate a radio service, which began only in 1973. At that time the National Youth Association of Bhutan, under the Ministry of Information, inaugurated a low-power shortwave transmitter. This station, known as NYAB, broadcast only on Sundays for 30 minutes of news and music. An unusual postage stamp was issued with a hole in the center, representing a phonograph record of local music. The government took over station operation in 1979 as the Bhutan Broadcasting Service (BBS), initially broadcasting three hours daily. A UNESCO-supplied shortwave transmitter in 1986 allowed the first radio service that covered the country. By 1991 the service was broadcasting 30 hours a week in four languages. With further UNESCO support as well as aid from Denmark, the system was further modernized and expanded in the early 1990s. Operation relies on government financial support. Radio receiver ownership grew from about 25 percent of households in 1989 to more than 60 percent a decade later.

In June 2000 BBS introduced an FM radio service for Western Bhutan with the main transmitter at Dobchula and one relay station at Takri in the South. Within a year the FM service was extended to central Bhutan. Plans call for total FM coverage of the country by 2007.
Southeast Asia

Burma/Myanmar

In 1926 the Radio Club of Burma was founded in Rangoon and inaugurated station 2HZ with a 40-watt medium wave transmitter. The station closed in the early 1930s. In 1938 test transmissions began from two shortwave transmitters. These were taken over by the Japanese in 1942. (there was also a Burmese resistance radio service by 1944–45) and by the South East Asia Command (SEAC) in 1945. On 15 June 1946 the Burma Broadcasting Service was founded. The military have controlled the nation since 1962 and have oppressively controlled all media. Well into the 1960s, the country still relied on the single Rangoon-based broadcast station (using both medium wave and shortwave transmitters) with a modest level of programming, the government preferring to put its media efforts into newspapers. There were no stations in other cities, nor were repeater transmitters employed, making the medium easier to control.

In 1989 the military government changed the country’s name to the Union of Myanmar, and Rangoon became Yangon. The government-controlled broadcast service is known as Myanmar Radio and TV. A few opposition political radio stations operate from time to time on or near the country’s borders.

Siam/Thailand

The kingdom of Siam (until 1939) was never occupied by a colonial power, unlike virtually all of its neighbors. On 25 February 1931 the first station opened in Bangkok, operated by the Office of Publicity and Armed Forces. Experimental shortwave transmissions began from Bangkok in 1937, and the following year Radio Thailand was founded, broadcasting in English and French. A second national state-run network, Tor Tor, began operation in 1952. FM service was introduced in 1956. The number of radio stations grew dramatically—from less than 30 before 1960 to 250 two decades later and more than 500 by the turn of the century.

In 1992 a student uprising against the General Suchinda government drove the military from power, and in the aftermath broadcasting laws were completely rewritten. The new laws opened the system to private stations and provided relatively open and transparent licensing procedures. This led to a quick commercialization of radio as new private stations signed on the air.

National public radio is a service of the Public Relations Department (PRD) of the Government of Thailand. Private radio stations are operated commercially under long-term licenses by private firms, but under fairly tight government control. Military-operated stations provide another alternative to government broadcasts. Efforts to promote legislation that would change the nature of the PRD and make new rules for the operation of all electronic media have been considered regularly by Parliament since 2000. Radio Thailand has for more than 30 years been providing a special service to indigenous hill tribe peoples. Bangkok has the largest number of local stations in Asia, with more than 50 on the air.
Malaya/Malaysia

Radio service began in the British colony of Malaya in 1924 with the Amateur Wireless Society of Malaya in Singapore providing music from their amateur transmitters. Regular broadcasting appeared only in 1935 with the British Malaya Broadcasting Company. The company was sold to the colonial government on the eve of World War II. Under Japanese occupation (1942–45), the radio system provided news and propaganda but also offered a voice for local languages and cultures. The Japanese also established low-power stations in Penang, Malacca, and Seremban. Post-war radio (operating as Radio Malay) was again under British colonial control from 1945 until independence in 1957. In 1963 the Federation of Malaysia was formed, although Singapore withdrew two years later. Commercial radio and the country’s first international radio service began about the same time as tension rose with Indonesia. The radio system was largely privatized in the early 1980s.

Radio Malaysia, operated by the government and supported by license fees and advertising, owns 21 stations in various state capitals and in East Malaysia, using medium wave, shortwave, and FM transmitters. The service provides seven national services, most of which operate on a 24-hour basis. They include national broadcasts in Malay, English, Tamil, and Mandarin (Chinese), as well as a national FM music service, special services for aboriginal peoples, and regional stations. Private commercial stations include the Time Highway Radio which operates a network, Mix FM, and Hitz FM.

Singapore

Long a British colony, Singapore became self-governing in 1959. The first radio stations appeared in mid-1936, operated by the British Malaya Broadcasting Service, a private commercial organization. The colonial government took over operations in 1940, and the Japanese occupation authorities ran the facilities from 1942 to 1945. Post-war colonial service expanded using both medium wave and shortwave transmitters to cover all of Malaya. Radio Singapore became a separate entity after Malayan independence in 1957 and was designated Radio-Television Singapore in 1965 and the Singapore Broadcasting Corporation 15 years later. Financial support came from both advertising and license fees.

The broadcasting service was privatized in 1994. The government closely controls all operations, though stations are privately held. Three private corporations operate all commercial radio stations in Singapore. In 2002 MediaCorp Radio owned the five top-rated stations plus seven other outlets, including Radio Singapore International, broadcasting in shortwave to the region. The other radio broadcasting companies are SAFRA Radio, operated by the Singapore Armed Forces Reservists’ Association, and Union Works, jointly owned by the National Trade Unions Council. A not-for-profit arts and culture station is managed by the National Arts Council and is operated by MediaCorp.

Indonesia

Radio service makes particular sense in and for a country made up of nearly 14,000 islands, some 3,000 of them inhabited by people speaking more than 275 languages and
dialects. Indeed, radio’s use of Bahasa Indonesia as the official national language has helped to promote national unity.

Radio broadcasting (which grew out of earlier radio-telegraph connections with the Netherlands) began in mid-1925 with the establishment of the Batavia Radio Vereniging in what is now Jakarta. Music and entertainment programs in Dutch were aimed at the colonials. The first Indonesian-language service came in 1933. A year later the Dutch established Nederlands Indische Radio Omroep Maatschappij, which slowly developed shortwave stations in outlying areas to tie Dutch settlers with Batavia and the home country. Indonesian listeners, dissatisfied with the Dutch-sponsored radio system, began to build their own stations and by 1938 received a subsidy from the colonial authorities. From 1942 to 1945, radio came under Japanese control, focusing on news, culture, and propaganda.

With the end of Japanese occupation in 1945, Radio Republik Indonesia (RRI) was formed, and it became a voice during the struggle for independence from the Netherlands, which lasted until 1949. RRI expanded the Japanese system and by 1955 there were 25 transmitters plus some international service as well. A decade later 38 stations included the main government station in Jakarta, three more that covered most of the country, and 28 that were regional or local, though well under half the country could receive any of these signals. School broadcasts began in 1966, and a special system of rural radio forums, initiated in 1969, broadcast to farmers (often listening in community groups) in a joint venture by the government and UNESCO.

By the early 1970s the Indonesian radio system had expanded to some 50 RRI stations and another 100 regional outlets, most operated by provincial governments. By the late 1990s, after several periods of considerable political upheaval, the country enjoyed the use of nearly 1,000 radio stations including 52 RRI outlets, nearly 800 low-power (500 watt) commercial stations, and 133 stations run by local political authorities.

**Brunei**

Located on the island of Borneo, Brunei was under British colonial rule from 1888 until independence came in 1984. The Brunei Broadcasting Service was founded in 1957 (two years before the country became internally self-governing) using a medium wave transmitter for less than three hours daily. Radio TV Brunei operates five FM networks (National with news, religion, education and entertainment; Pelangi aimed at younger listeners with a largely musical service; Harmony directed to family listening; the Optional service of news and entertainment in English and Chinese; and the Nur Islam service of religious programs), supported by both advertising and government funds. A private FM radio station began operation in 1999.

**Philippines**

In June 1922 an American electrical supply company was granted temporary permits to operate three 50-watt stations in the neighbor cities of Manila and Pasay. The Radio Corporation of the Philippines subsequently acquired one of the stations and expanded radio with a station in Cebu in 1929. Radio generally followed the American pattern (and use of English) and focused on entertainment with some news in the years leading up to
World War II. Four commercial stations, all owned by department stores, were based in Manila. During the Japanese occupation (1942–45), all but one were closed, and the survivor was used for news and propaganda.

After independence in 1946, radio expanded rapidly—there were 30 stations operating by 1950. By the late 1960s there were some 200 stations (40 of them in the Manila region), those numbers having risen to 350 and 55 respectively by 1972. A few chains controlled most stations and radio advertising was widely used, though political parties supported some outlets, especially during campaigns. During the period of martial law decrees by the Ferdinand Marcos government (1972–86), many nongovernment stations were closed down or severely controlled. In the years since, private commercial stations (unusual among most Asian nations) have regained considerable freedom, though all are licensed by the National Telecommunication Commission.

Philippine radio programming has always been largely entertainment centered—especially music and soap opera drama. Radio news remains of fairly low quality, often emphasizing sensationalism. Radio Veritas is an exception—a Catholic-controlled entity operating more than 50 stations with an emphasis on quality news broadcasts. By the late 1990s there were more than 500 stations (half AM and half FM) in the country, making radio by far the most important mass medium (especially in rural areas), reaching perhaps 85 percent of the population, compared to 50 percent for television and only 25 percent for the press.

**Indochina**

The three nations (Vietnam, Laos, and Cambodia) that now make up Indochina became French colonies in the late 19th century. Initial radio broadcasting began under colonial authorities before World War II, set up largely to serve colonial needs and create closer ties to France. Japan occupied the region from 1941 to 1945, converting radio services to models akin to its own NHK as well as for propaganda. France tried to re-establish its colonial rule in 1946 but was eventually defeated in 1954 after bitter fighting.

**Vietnam**

The colonial authorities established Radio Saigon in July 1930, using a 12-kilowatt shortwave transmitter. The colonial service was re-established in September 1945, adding an external service in French, English, Cantonese, and Esperanto known as *La voix du Vietnam* (Voice of Vietnam). Vo Tuyen Viet Nam (Radio Vietnam) began in 1950 and had eliminated all French influence a few years later. South Vietnam was administered separately beginning in 1955. By 1961 there were six stations, though most programs originated from Saigon. Beginning in the early 1960s, American support helped to expand and update the radio service. By the early 1970s, Radio Vietnam provided three services to most of the country. An external service, the Voice of Freedom, was aimed at North Vietnam. A clandestine service, Giai Phong (Liberation Radio), operated from the mid-1960s (starting with less than two hours a day) under the control of North Vietnam and Radio Hanoi. By the early 1970s it had become a multilingual service providing more than 100 hours of programs per week, much of it aimed at specific ethnic groups. The Armed
Forces Vietnam Network operated stations on behalf of U.S. forces from 1962 to 1973, eventually expanding to six AM-FM outlets. After the fall of Saigon in April 1975, these were closed as Vietnamese broadcasting came under control of the former North Vietnam.

In the North, radio began in Hanoi, under French colonial authorities, before World War II. The Voice of Vietnam emerged after 1955, and by the early 1960s the service had several medium wave and shortwave transmitters covering most of the Democratic Republic of Vietnam (North Vietnam). By the 1960s perhaps 20 percent of the radio audience listened to community loudspeakers connected by wired networks to government stations. Hundreds of such wired networks connected public facilities and major rural towns. During the Vietnam War, various women cited by American listeners as “Hanoi Hannah” and “Hanoi Hattie” broadcast radio propaganda from Hanoi to American military forces operating in South Vietnam.

National radio service is provided by Radio The Voice of Vietnam, with headquarters in Hanoi. Radio The Voice of Vietnam has several networks for domestic medium wave and FM broadcasting, and it is responsible for international broadcasts in a number of languages. VOV airtime expanded dramatically in the 1990s, and the organization grew to about 1,500 staff members. VOV has an internet radio service for one hour daily. Each province has its own radio station with the total now at 61, and many of the larger cities have their own municipal stations. These are loosely regulated under the Ministry of Culture, Information, and Sports. As a consequence the system is surprisingly decentralized. Even with expanding television service, radio remains an important government tool in promoting various national development campaigns.

Laos

The first regular broadcast in Laos (now the People’s Democratic Republic of Laos) was inaugurated in 1951 from Vientiane by the state-owned Radiodiffusion Nationale Lao. By the 1970s the system (supported by both advertising and government funding) used a medium wave and shortwave transmitter plus regional medium wave transmitters in the royal capital city of Luang Prabang.

National Radio and National Television are separate organizations, though both report to the Ministry of Information and Culture. Radio broadcasts in five languages on two AM radio channels. One channel is exclusively Lao and another channel is programmed in foreign languages as well as Lao. An FM station in the capital Vientiane has recently been added mainly playing recorded Lao, Thai, and Western music.

Khmer Republic/Cambodia

In 1946 Radio Cambodge opened in Phnom Penh using Japanese equipment. By 1955 there were four stations in the city, though only one remained three years later. Stations were controlled by the government, and during the government of Prince Sihanouk (1960s-1970s), they devoted up to a third of their time on the air to his speeches. In the 1970s Radio Diffusion Nationale Khmère (RNK) operated the national system with 12 to 14 daily hours of programming supported in part by advertising. Various political resistance groups operated their own stations in the 1980s. In 1994 Radio FM 103 began
broadcasting from Phnom Penh as a joint venture between KCS Cambodia Company and Phnom Penh Municipality. A second station opened in 1998, providing international news and music programs.

In 1994, state TV and radio were placed under the Ministry of Information and were separated into different organizations. Prior to this, all of broadcasting was united in a single organization headed by a Director-General of Radio Television who reported to the Prime Minister’s Office. RNK, National Radio for Cambodia, has a staff of 560 persons. Because of competition and funding issues, staff size is expected to shrink. There are two services on AM (simultaneously transmitted on two different frequencies) and another on FM. Separate local stations—one in the north and another in the west—are presently in operation.

Government stations receive only a fraction of their budget from the government; the remainder must come from advertising. There is consequently great pressure to produce greater income from advertising. But the advertising revenues have declined due to economic conditions and the fact that more and more stations are dividing the available advertising into smaller portions.

In the main cities, especially Phnom Penh, private stations present stiff challenges to the government stations. There are 15 private radio stations in operation (and five private TV stations). Two of the private stations are said to have slightly larger cumulative audiences than the government channel.

East Asia

China

An American businessman built the first two radio stations in Shanghai in 1922 and was soon providing local newscasts. The first state-owned stations in China, in Tientsin and Beijing, were established by the Minister of Communications in May 1927. The following October, the Sun Company in Shanghai inaugurated the first private station atop its building. The number of stations in major cities in the north and east grew to total more than 70 by 1934, many of them very small, and most privately owned. Shanghai alone had 43 stations, a number of them foreign owned and serving the International Settlement. Most of China was covered by the Central Broadcasting Station, a shortwave transmitter, installed in Nanking in 1932. Cheap crystal radio receivers were in wide use. Most programs on these early radio stations consisted of lectures and talks, some news, and music. Government policy placed severe restrictions on what could be broadcast, censoring anything found to be “contrary to public peace or good morals.” By 1945 what became known as the Broadcasting Corporation of China served the country through 72 medium wave transmitters.

The Chinese Communist Party established their first radio station (called “New China”) in 1945 near their base at Yunan, broadcasting but two hours a day. A second soon followed, and by 1948 there were 16 transmitters operating in Communist-controlled parts of the country. With their civil war victory in 1949 the government quickly moved to take most of the 89 existing transmitters. A handful of big-city private stations were allowed to continue in operation for several years. Radio served only part of
the country, being virtually unavailable in most rural regions. An international radio service began in 1950.

By the mid-1950s, a system of wired radio networks (allowing listening only to a single station) was established, with more than 2,000 transmission centers and some 13,000 community receiving centers (loudspeakers) where group listening was encouraged if not required. In addition some 60 highpower and 165 low-power stations were operating. A decade later nearly 9,000 transmission centers served some 25,000 community receiving centers, virtually one for every commune in the country. Programs focused on news, information, and political lectures with considerable education and cultural content as well. Radio propaganda was used by all sides in the contentious Cultural Revolution of the late 1960s, which set back domestic radio as staff were diverted elsewhere.

By the early 1990s there were some 1,200 stations in the country in addition to the wired networks, which taken together reached nearly all of the population (official figures placed coverage at 92.1 percent). Talk radio programs on personal and consumer topics helped the medium overcome television’s inroads. At the beginning of the 21st century, China had a three-tier broadcasting system, with national, provincial, and municipal networks serving a growing number of receivers. Thus, even though there are no private stations, there is a high degree of rivalry among stations. Competition has caused radio stations to adopt imaginative and highly polished production techniques, just as is occurring in other Asian countries where many private stations are vying for listeners. China Radio International has become the largest overseas broadcaster in Asia, with programs in 44 languages.

**Formosa/Taiwan**

The first radio station on Formosa, then under Japanese control, appeared in Taipei in mid-1925. A network of transmitters covered the island by 1931. Only five stations remained of this system by 1945. As the Republic of China shifted to Formosa in 1949, the Broadcasting Corporation of China (BCC) became responsible for the existing stations, though initial growth was slow. Two decades later, 33 broadcasting companies, most of them private, operated 77 stations (with nearly 200 mostly medium wave transmitters), with radio reception being widely available. In 1965 the BCC’s Overseas Department was established to intensify service to overseas listeners, including those on the Mainland. The BCC’s first FM transmitter began operation in 1968—by 1972 four of them broadcast classical music from as many cities. The BCC offered two national services, one in Mandarin Chinese and the other in local dialects. Several stations begun to train the police became highly popular with general audiences for their traffic reports on the increasingly car-choked island.

Only after 1993 did the government loosen its tight control of radio frequencies (pushed in part by the development of unlicensed stations presenting call-in programs), allowing more local and community stations on the air—about 150 by the late 1990s. By 2000, deregulation of radio had occurred. Some frequencies were set aside for aboriginal and minority ethnic (Hakka) broadcasts, to aid in preserving languages. With the government control loosened, radio became highly competitive. New stations such as UFO and the Voice of Taipei have become popular, exceeding audiences for the national
stations. Most programs are entertainment oriented and are supported by advertising. But an educational service has existed since 1950 (with a second station added in 1966) and most stations carry a program featuring instruction in English.

Hong Kong

Radio Hong Kong was founded in the then British colony in June 1928. A shortwave transmitter was opened in 1935. Japanese occupiers ran the radio system during the war, and it took several years to rebuild the system afterwards. In 1948 Rediffusion Hong Kong introduced wired radio services in English and Chinese. Hong Kong’s first commercial radio station, Hong Kong Commercial Broadcasting Company Limited, began broadcasting in 1959. By the early 1960s, there were seven stations (two FM) on the air from morning to midnight. In mid-1997 Hong Kong reverted from British to Chinese control, but as a part of the Basic Law governing the change, media remained markedly free compared to mainland standards. By 2000, there were three companies operating more than a dozen stations broadcasting in Chinese and English. One group of six stations was owned by the government.

Korea

In February 1927 Japanese authorities established a radio station at Kyongsung in Seoul which operated largely as a mouthpiece for their colonial policy. Over the next decade, additional stations were established throughout the country, broadcasting in both Japanese and Korean and depending on license fees to meet operational costs. After World War II, Korea was divided at the 38th parallel, with very different government and broadcast systems.

In the South, the U.S. military government (1945–48) took over the Japanese-built stations and helped to create the Korean Broadcasting System (KBS). American music and other formats were encouraged, as was advertising support. In 1954 the first privately owned stations (operated by Christian organizations) began broadcasting. The first commercial station, the Pusan Munwha Broadcasting Station, was established in 1959. Munhwa Broadcasting Corporation (MBC) was established on 12 December 1961 as the first public broadcaster in Korea. At various times political upheaval has affected radio operation, though never to the extent that it has with television. The first FM outlet aired in 1965, and several were on the air by 1970. MBC makes use of AM and FM with its 20 affiliates. Television competition forced radio to develop specialized formats of all kinds in an attempt to attract listeners.

By 2000, there were nearly 100 radio stations in Korea, including 42 FM outlets and one shortwave station. In addition to those run by the KBS, many are operated by religious organizations. Music and drama predominate. The American Forces Korea Network has been on the air since the beginning of the Korean War (1950–53), providing news and entertainment for U.S. military personnel stationed in Korea. Radio Korea International broadcasts overseas in ten languages.

Radio in the Democratic People’s Republic of North Korea was first introduced under the Japanese and has remained under government control. The Central Broadcasting Service took over in 1945 and was a high priority for reconstruction after the Korean
War. This included development of a wired system connecting Pyongyang with more than 4,000 “broadcasting booths” located in factories, farms, and other public places. It has been a key medium in the constant touting of the country’s leadership cult. By the mid-1970s, radio service operated on seven medium wave and 12 shortwave transmitters. Radio receivers were regularly checked to be sure they could receive only the official domestic service and no foreign broadcasts.

Most programs are relayed from the capital city of Pyongyang and offer public affairs, culture, and some entertainment content, most of it with strong political overtones. Pyongyang FM’s 14 transmitters offer music and propaganda-laced serial dramas to entice South Korean listeners. North Korean media remain the most tightly controlled on the continent—aided by widespread use of wired networks that prevent listening to foreign broadcasts.

Mongolia

In 1934 a national broadcasting service began from Ulan Bator. With substantial Soviet aid, an extensive medium wave and shortwave radio system was established that by the mid-1970s featured one national service and 20 provincial stations. Two decades later, radio served 90 percent of the country’s population (television could reach only 60 percent), with some towns reached by wired networks. An overseas service was established in 1964, now called Voice of Mongolia. Until the country became a republic in 1992, all stations were owned and operated by the government and carried a strongly propagandistic program schedule.

The state-controlled system was abolished in the late 1990s. A few private stations are on the air and the government has encouraged further investment. There is little legal restriction on station ownership or operation. Three independent FM radio services now compete with Mongol Yaridz Radio, which had long operated as a monopoly and still enjoys the largest audiences. Most Russian-language programs have given way to expanded interest in learning English.

CHRISTOPHER H. STERLING AND DREW O. MCDANIEL

See also All India Radio; Arab World Radio; Developing Nations; Japan; Radio Free Asia; Russia and Soviet Union; South Pacific Islands

Further Reading


Government Printing Office, 1932,


Association for Women in Communications

The Association for Women in Communications (AWC) is a professional organization that supports the advancement and recognition of women in all communications fields, including journalism, advertising, public relations, radio, television, film, marketing, photography, and design. The association is also dedicated to supporting First Amendment rights and high professional standards in communications professions.

The organization consists of professional and student chapters, with a national headquarters staff and an 11-member board of directors. Since 1972 the organization membership has been open to both women and men and at the turn of the century numbered around 7,500.

Origins

AWC began in 1909 as an honorary women’s journalism fraternity at the University of Washington. After collaborating on a women’s edition of the school newspaper, one of the university’s seven female journalism students, Georgina MacDougall, got the idea for a university organization devoted to supporting college women who wished to pursue careers as professional journalists. MacDougall enlisted the support of classmate Helen Ross, who helped formulate the mission of the organization, which would be called Theta Sigma Phi. Fellow journalism students Blanche Brace, Helen Graves, Rachel Marshall, Olive Nauermann, and Irene Somerville joined the group to form the fraternity’s first chapter.

The original mission of Theta Sigma Phi was very similar to AWC’s current mission. High professional standards in journalism would be encouraged, the working conditions for women in journalism would be improved, and women journalists would be
recognized for superior efforts. The group took the matrix as its insignia. In printing, matrices are small brass molds used in a Linotype, a common typesetting machine of that period. In its original Latin meaning of “womb,” the matrix also signified for the group a place of development and growth. The Matrix would become the name of Theta Sigma Phi’s membership publication, a magazine for women in journalism begun in 1915.

The University of Wisconsin established the second chapter in 1910. Chapters at the Universities of Indiana, Missouri, Kansas, Oklahoma, and Oregon and at Ohio State University were also chartered during that period. For the first several years, the officers of the University of Washington chapter served as national officers and initiated the publication of The Matrix. By 1916 national officers were elected separately, and plans for a national convention were in the works. Although the war delayed those plans, the first Theta Sigma Phi convention was eventually held in 1918 at the University of Kansas. In 1919 the first alumnae chapter was established in Kansas City, followed by two more alumnae chapters in Des Moines and Indianapolis. Alumnae chapters would eventually become known as professional chapters.

In the years between the world wars, Theta Sigma Phi grew as a national organization, reaching 39 student and 23 alumnae chapters by 1940. The Headliner Awards were established in 1939 to recognize excellence in any communications field. Despite facing much resistance, more women were getting jobs in journalism in the 1930s and 1940s, although they were often relegated to society pages and were nearly always paid a lower wage than their male colleagues. The new medium of broadcast radio expanded job opportunities for women not only in journalism, but in entertainment and advertising as well. Theta Sigma Phi alumnae branched out into a variety of writing fields, and the organization began to broaden its scope. In 1934 the organization established a national office in New York and hired a professional director to manage its growing national affairs. That same year, First Lady Eleanor Roosevelt was given honorary membership in Theta Sigma Phi. Mrs. Roosevelt supported the cause of female journalists by closing her press conferences to men. Theta Sigma Phi president and editor of The Matrix, Ruby Black, covered the first lady for United Press.

During World War II, women once again found themselves filling jobs vacated by men going off to war. Several Theta Sigma Phi members became overseas correspondents, and others were promoted to editors and producers. Radio, in particular, was in great need not only of writers and correspondents, but also of engineers, directors, and other technical people. The Matrix published lists of radio courses and articles describing various radio jobs.

**Creation of WICI**

Theta Sigma Phi became more involved in political and social movements during the changing times of the 1960s and 1970s. Articles on race relations, the women’s movement, and pollution appeared in The Matrix, several members went to Vietnam as war correspondents; and in 1973 the organization joined the National Equal Rights Amendment Coalition. Recognizing that they had outgrown the Greek letters of the original fraternity, members decided in 1972 to change the group’s name to the more professional sounding Women in Communications, Incorporated (WICI). In the 1980s...
WICI continued to fight for equal rights; in 1980 it opened a public affairs office in Washington, D.C., to monitor legislation and to lobby on behalf of the organization. WICI also became more active in First Amendment issues, having formed the First Amendment Congress in 1979.

Membership in WICI peaked in the mid-1980s at around 13,000. By 1995, however, membership had dropped to 8,000, and the organization was deeply in debt. The members agreed that WICI needed a new strategic plan, but they disagreed on the means of attaining one. In a controversial move, the board of directors approved a recommendation from the 40-member Fundamentals for the Future Task Force to suspend elections for the open board seats, with the intention of allowing the board time to streamline and restructure the organization. In 1996 Women in Communications, Incorporated was dissolved, and the Association for Women in Communication was incorporated in Virginia. Instead of financing its own national office and staff, AWC set up a contract with Bay Media, a management firm in Arnold, Maryland, to run the national headquarters operation. In 1997 board elections were restored, and the organization stabilized with a positive cash flow.

AWC offers ten national award opportunities, including the Clarion Award competition for recognition of excellence in any communications field. The Rising Star Award is reserved for student members who demonstrate leadership potential through school and community activities.

CHRISTINA S. DRALE

See also Female Radio Personalities and Disk Jockeys; Roosevelt, Eleanor

Further Reading

The Association for Women in Communications website, <file:///D:/input/2000ae99/www.womcom.org>
Giobbe, Dorothy, “Democracy vs Survival,” Editor and Publisher (30 September 1995)
The History of The Association for Women in Communication, Arnold, Maryland: The Association for Women in Communication, 1998

Audience

Over the eight decades of radio broadcasting’s existence, knowledge about the medium’s audience has developed and become more refined. Whereas other entries explore how radio audiences have been studied and measured, the purpose here is to characterize the audience for American radio through time.
Radio’s Audience Before Television

The earliest information about radio listeners was at best anecdotal. Stations received letters from listeners (usually responding to a program), which revealed some sense of a program’s geographical spread, but little else. What little research there was focused on who purchased receivers—and thus, presumably, who listened. The 1930 census gathered information on radio set ownership showing that half the urban but only 21 percent of the farm families owned a receiver. Whereas 63 percent of homes in New Jersey owned a radio, only 5 percent of Mississippi homes did.

In the early 1920s, and to some degree for several years after that, radio appealed to an upper-class audience. Manufactured receivers were often quite expensive (upwards of $1,000 in current values for better models), and only upper-income people could afford them. Programs and advertising reflected this audience. The Depression and the appearance of a variety of popular programs made radio more attractive to a wider audience.

The first concerted attempt to study patterns of the radio audience more deeply was the work of psychologist Daniel Starch, whose consulting firm conducted personal interviews with some 18,000 families across the country in 1928 and again in 1929–30 under contract to the National Broadcasting Company (NBC). The Starch researchers found that 80 percent listened daily, that radio was used about 2.5 hours per day, that listening was largely a family affair that took place in the evening, and that nearly 75 percent of the audience tuned to one or two favorite stations most of the time.

By the end of the 1930s, more than 90 percent of urban and 70 percent of rural homes owned at least one radio (half the homes in the country had two), and whereas ownership was universal in higher-income households, radios were also found in 60 percent of the poorest homes. The average receiver was on for five hours a day, and listeners developed a fierce loyalty to the characters in favorite programs (especially daily soap operas, one of the first formats whose audiences were carefully studied). Radio was also trusted, as became clear in the panic caused by the 1938 War of the Worlds broadcast. Research was finding, however, that as a listener’s income and educational level rose, the time spent listening to radio dropped.

During the 1941–45 war, radio became the prime source of news, and listening levels reached their peak. Radio’s variety of programs appealed at some time of the day to virtually everyone. Radio was available in nearly 90 percent of households and in a quarter of all cars by 1945. At the end of the 1940s—and the end of radio’s monopoly of listeners—studies found that most people liked most of what they heard. Indeed, radio was ranked as doing a better job than most newspapers, churches, schools, or local government, although its reputation slipped a bit from 1945 to 1947, perhaps reflecting the end of wartime news (newspapers replaced radio as the primary news source over the same period).

Growing from related studies of the movie audience, some concern was raised about how radio affected young listeners. Programs that featured suspense and horror were said to keep children awake. Crime programs might encourage violence on the part of listeners. Considerable research was undertaken, especially at universities, but no clear results were forthcoming.
Radio Since Television

The public’s growing fascination with television after 1948 initially cut down on radio listening, especially in cities with the handful of early television stations. Network audiences dropped sharply in just a few years. Radio rebounded in the 1950s, but patterns of listening were changing—radio was now largely a daytime (especially morning) medium, whereas television dominated evening time. Ironically, as radio diminished in the eyes of some of its listeners, it became the focus of more academic research. Studies began to assess the sociological and psychological reasons why people listened, but most of what was known about radio’s listeners grew out of ratings and other commercial research.

As popular music formats (e.g., Top 40) appeared and as car radios became more common (half of all cars had radios in 1951, 68 percent by 1960), radio became a medium with considerable appeal to a teenage audience. Stations developed many gimmicks to keep young people listening—chiefly the use of contests and giveaways. Most parents were totally lost in this new format.

Another audience was attracted to radio, especially to the relative handful of FM stations offering classical music. These were the high-fidelity buffs who were interested in the best quality audio they could buy. They listened to AM-FM stereo broadcasts in the late 1950s and flocked to FM after stereo standards were approved in 1961. This was a relatively highbrow audience with considerable appeal to some advertisers.

By the mid-1960s, radio was in use for about 25 hours per week in the average household, with half of that from portable and car radios (in 80 percent of cars by 1965), showing radio’s expanding ability to travel with its audience. Listening peaked in morning “drive time” and slowly dropped off for the rest of the day, reaching low levels in the evening. Most people turned to radio for news and weather reports and some type of music—and despite the growing number of outlets, most people still listened to only a handful of favorite stations. Radio in many cases had become background sound for other activities at work and at home. Nearly 80 percent of households listened to radio sometime during a typical week.

Until the 1970s, radio still meant AM stations for most people, because FM was a limited service catering primarily to an elite audience interested in fine-arts programming. However, as the number of FM stations grew and began to program independently of AM outlets, that medium’s appeal increased. FM stations began to appear in ratings in major cities, and in 1979 national FM listening first exceeded that for AM. By the 1990s FM accounted for three-quarters of all radio listening.

The minority listening to AM were tuned to various talk formats, and they wanted to participate. Call-in talk shows became wildly popular, especially those with controversial hosts. Radio became almost a two-way means of expression for such listeners. Some controversy arose in the 1990s over the likely effect of some youth-appeal music lyrics that seemed to promote violent behavior.

By 2000 radio was reaching a wholly new and largely unmeasured audience—listeners tuning in via the internet. A station could now appeal to listeners well beyond its own market and even in other countries. This new mode helped to promote the splintering of radio formats—and their audiences—into more specialized categories.

CHRISTOPHER H. STERLING
See also A.C.Nielsen Company; Arbitron; Audience Research Methods; Automobile Radio; Cooperative Analysis of Broadcasting; Demographics; Hooperatings; Lazarsfeld, Paul F.; Office of Radio Research; Programming Research; Psychographics; Violence and Radio; War of the Worlds

Further Reading


Audience Participation Programs. See Quiz and Audience Participation Programs

Audience Research Methods

The necessary and sufficient condition for success in radio is an audience loyal to its favorite stations and important enough to advertisers to produce reliable levels of advertising revenue. Noncommercial radio station aims are much the same except that the advertising is called *underwriting*, and listener (audience) donations are an important source of revenue.

Research into radio audiences has been a part of radio broadcasting from its beginning. In the earliest days of radio, stations were concerned with audiences at a distance and the distant places where the signal of the station could be heard. Stations relied upon motivated listeners to send postcards and letters reporting which programs and stations they had heard.
Newspapers carried stories about the distances at which local stations had reportedly been heard; they also reported which far-distant stations had been received by readers. Consider this report in the *New York Times* (18 March 1924):

**Pope Hears Opera on His Radio and Picks Up a London Station**

ROME, March 17 (Associated Press)—The radio receiving set at the Vatican has been installed and Pope Pius already has been “listening in.” Last night the Pontiff heard the opera “Boris Godunov” played at the Costanzi Theatre in Rome, and later picked up a London station which was broadcasting.

Pope Pius expressed great pleasure at the clearness with which the sound waves were received, notwithstanding the fact that there was some static interference.

The set at the Vatican is said to be powerful enough to pick up some of the stations in America, and an effort is to be made to hear KDKA (Pittsburgh). Up to the present, however, there has been no attempt made to listen in on other than Continental stations.

This interest in the reach of radio signals continues today among shortwave broadcast audiences. Many stations encourage listeners to write or e-mail them about the shortwave programs and personalities they have heard. When listeners correspond with a station, they are rewarded by receiving colorful photo cards (QSL or “distant listening” cards) featuring favorite performers.

By the late 1920s advertising on radio had grown to the point that advertisers desired to know at a quantitative level the reach of their radio commercials. Broadcasters also needed to learn whether they were charging enough for the advertising opportunities they sold. The result was systematic radio audience research.

The principal questions addressed by audience research were (1) who is likely to be in a given station’s or program’s audience? (2) what is the popularity of a program or station? (3) what is the success of a program or commercial announcement? and (4) what is the probable success of a program or commercial announcement that had not yet been broadcast?

The term *ratings* is often used by media professionals to refer to all measures of audience listening and sometimes to describe the commercial companies that conduct syndicated audience research. Of greatest weight in the view of broadcasters is the fact that audience research is the principal tool used to persuade advertisers that significant audiences will be delivered for their advertising. The evidence of the future value of a station or network advertising opportunity is measured by the size and composition of the audience provided by particular programming in the past, and these are reported in audience research.

The first national radio survey conducted on a systematic basis took place in 1927 when Frank Giellerup of Frank Seaman Advertising asked Archibald Crossley to study audiences for the Davis Baking Powder Company. In March and April 1928, NBC commissioned Daniel Starch, a Harvard professor and pioneer market research consultant, to conduct an extensive survey east of the Rockies. By the 1929–30 radio season a regular program rating service, Cooperative Analysis of Broadcasting (CAB)
had been established, providing routine reports on the audiences of network programs. Significantly, the CAB governing board assured that the Association of National Advertisers controlled the infant rating service. Later, broadcasters rather than advertisers became the prime force in establishing standards and practices for audience research.

Methods of Data Collection

Audience research must always ask what listeners have heard (which programs, which stations). The methods of collecting this data have evolved over the history of radio ratings. They include techniques known as telephone recall, telephone coincidental, roster interviews, diaries, meters, and recorders.

In a telephone recall survey, a radio listener was called by an interviewer from the research company at some time after a program has been presented. The interviewer asked whether the respondent listened. In March 1930 the CAB interviewed regularly in 50 cities using the telephone recall method. Telephone recall interviewers asked respondents about their radio listening in the previous 24 hours, noting the time of listening, who was listening, and the programs and stations heard.

Telephone interviewers using the telephone coincidental technique asked respondents about radio listening taking place at the time of the call. Their questions revealed whether anyone was currently listening to a radio in the household, which family members were listening, and what programs and stations were being heard. In the early years of radio, this method was associated with the research firm of ClarkHooper formed when Montgomery Clark and C.E. Hooper left the Daniel Starch organization in 1934. Later this technique became known as the Hooper ratings. As only one time of listening was researched per telephone call, this style of research was labor-intensive for the interviewer and somewhat expensive. However, it is thought by audience research authorities to be the best measure of audience activity when conducted correctly.

Roster interviews were those in which the respondents were interviewed face-to-face. At designated points in a roster interview, respondents were shown a list of programs and stations and asked to identify those that they remembered hearing within a specified period of time. This method of data collection for audience research was also known as aided recall measurement. The roster method was used by The Pulse during the several decades of its history and is associated with Sydney Roslow, a psychologist who formed the organization in 1941.

The diaries used in audience research are special questionnaires in booklet form in which listeners record their times of listening and the stations or programs heard. This method has the advantage of collecting many times of listening over a given period of time (typically a week). The development of this method is often associated with James Seiler, founder in 1949 of the American Research Bureau. Diaries may be kept by an individual for his/her own listening (individual diary) or by one household member for all of the household (household diary). Contemporary radio audience research in the United States and Canada asks that all individuals in selected households maintain individual diaries, a pattern called flooding the household.

Listening meters were devices that automatically record times and tuner settings for radio receivers. The first of these was devised by Robert Elder and Louis Woodruff of the
Massachusetts Institute of Technology and first used in 1935 for CBS. As radio meters measure the potential listening in a household by monitoring which receivers are on or off at what times and to which signal each is tuned, they produce household ratings. In 1936 market researcher A.C. Nielsen attended a luncheon at which Elder spoke about the Elder-Woodruff Audimeter. He was impressed and bought out the inventors, later establishing a radio meter rating service known as the Nielsen Radio Index.

Sound recorders are potential audience research tools, and a variety of recording methods have been employed to capture listener behavior. One form of recorder, carried by the listener, tunes to a special inaudible identifying signal in the transmissions of local radio stations. The recorder logs signals received and heard by the listener at stipulated intervals throughout the day. A computer later assembles this data as a record of listener exposure to stations throughout the day. Experiments with this sort of recorder have continued for decades without producing a syndicated research service built upon this technology. The Arbitron and Nielsen companies have announced their plans to launch a research service using this method to measure audiences of both radio and TV.

Another sort of recorder captured samples of sounds heard by a listener who carried the device throughout a listening period. On a carefully controlled schedule, the recorder sampled sounds in the environment of the radio listener carrying the device. Later a computer compared the sounds recorded by the listener for their match to signals being broadcast in the market at that time. This method required a relatively unsophisticated recorder but a complex analytical system and was not used in an established system of audience research reports.

Some researchers have proposed that recorders be carried by individual listeners participating in audience research surveys. Others have proposed that stationary recorders record sounds from portable receivers operating in their vicinity, with the data then analyzed to produce audience research reports.

**Samples of Listeners**

In the early years of radio broadcasting, samples were typically drawn from phone listings in cities selected because they were served by radio stations affiliated with the networks sponsoring the study. During the 1940s and 1950s there were considerable efforts to produce samples that would be perceived as excellent by researchers in the broadcast and advertising industries.

Different samples are used for audience research with national and local audiences. Because the motive for much research has been to substantiate the value of advertising opportunities, the areas where surveys are conducted are called *markets*.

Networks, advertisers, and others interested in nationwide entertainment and advertising support national market audience surveys. National surveys must give weight not only to every local market and but also to listening in rural areas where national signals may reach. RADAR (Radio’s All Dimension Audience Report) conducts the only regular national surveys of the radio audience.

In local market surveys the sample is drawn from three survey areas. The smallest of these is the metropolitan (metro) area, usually a core urban area as defined by the U.S. Office of Management and Budget. The largest area surveyed in a local market survey is
called the total survey area (TSA), which typically is an aggregate of units of county size, including the relevant metro area or areas. The TSAs of adjacent markets may include the same counties; for example, the total survey area for City A may include Brown County because an important part of the listening in the county is to City A radio stations. At the same time, the TSA for City B may also include Brown county for the same reason. An “exclusive area” is sometimes included, in which each market consists only of those counties where the plurality of listening is to the market being surveyed. In this system of exclusive areas, any particular county can belong to only one market.

**Random Sampling**

In sampling for audience research, random sampling is preferred, because theoretically a random sample maximizes the probability that a sample will be very similar to the population from which it is drawn. A random sample is one in which each member of the target population is equally likely to be chosen for the survey (participants are chosen at random); each choice is also entirely independent of the others. The first criterion—equal likelihood for selection—requires that the researcher name the “sample frame” from which the sample is to be drawn (i.e., to list all members of the target population). In the early days of radio audience research, telephone directory listings were the sample frames. Listed telephones serve best as sample frames when nearly all residential telephones are listed and when nearly all residences are equipped with telephones. In the early years of audience research the first condition was typically met, but telephone penetration had yet to reach its peak.

In the past several decades residential telephone listings have become progressively poorer telephone sample frames. Although nearly all residences now have telephones, fewer and fewer have listed telephone numbers. One of the methods audience researchers have adopted to cope with this problem is random digit dialing, a method in which all possible telephone numbers within a target area are listed and the sample frame is drawn from that list. A number of variations on this procedure are used as contemporary sample telephone frames. There are sample frames for households rather than telephones; an example is a city directory. Enumerations of households within census tracts (designated by the U.S. Census Bureau for control of their surveys) also serve as household sampling frames. A quite different approach to sample frames is a frame of clusters, which are sampling units that each consist of two or more interviewing units such as residences. A city block, for example, may become a cluster in a sample frame, as it is a cluster of households or interviewing units.

In most contemporary radio audience research, sampling procedures are mixed. Thus the initial sampling frame could be a residential telephone listing, later supplemented by a second frame of telephone numbers computer-generated at random.

**Producing Ratings Survey Reports**

Whenever a radio audience report lists a rating (percentage of potential audience) or a listening estimate (numbers of listeners), a degree of error is also implied. This is called
**Sampling Error**

Sampling error, a scientifically determined estimate of the difference between research results if the entire target population were surveyed and those obtained using a sample. The probability that such an error will occur is given by the confidence interval listed for any professional research study. The confidence interval standard in audience research is 95 percent, meaning that if the same study were conducted many times, the same results would be obtained at least 95 percent of the time. Commercially produced audience survey reports include descriptions of the methods used for estimating sampling error and confidence intervals.

Stations, networks, and program suppliers who use audience data in their sales and planning prefer to receive audience data at a modest cost, so the research suppliers must not spend more on audience research than their customers are willing to pay. The statistic used to compare the cost basis of competing radio audience research reports is price per “listening mention.”

A listening mention is the smallest unit of reported radio listening. It consists of at least five minutes of continuous listening to a certain station or program. One listening mention, then, means that one member of the sample reported listening to a particular station/program for at least five minutes during a 15-minute interval of the time period being surveyed. The telephone coincidental method for collecting listening mentions from audiences is the most expensive method of producing routine audience reports, as any respondent can provide only one listening mention—the one in which the individual was involved at the time of the interviewer’s call. The lowest cost per listening mention is nearly always a research method employing a meter or recorder, as analysis of one instrument’s data can provide a train of listening mentions over months or even years.

The number of hours per week over which ratings or audience estimates are provided is another cost factor. If every hour of the week were surveyed for listening, a maximum of 672 listening mentions could be recorded. To reduce costs, audience research firms have typically limited the number of hours reported in their surveys. Thus over the years they have reported listening during prime time only, or they have excluded the hours of lowest listening (such as those between midnight and dawn).

The break-even cost of an audience survey is reached when the number of clients who will pay for the survey at a designated price meets the cost of collecting, tabulating, and printing the data they are willing to buy. When the number willing to buy increases above the break-even point, then the research company becomes profitable (at times very profitable). This explains why a number of new companies over time have entered into the radio audience research business, although relatively few have survived.

### Special Research Studies

A number of research methods are used to study the desirability of using particular songs or groups of songs within the established format of a radio station or network. Each of the following music audience research methods has its advocates and detractors, but all have persisted in one form or another over the past several decades.

Telephone call-out and call-in is a method that focuses on recent musical releases and older (but still fairly recent) songs that have remained popular and are still frequently
played. Each music selection being studied is prepared as a recorded hook—that is, a representative excerpt of a recording.

In telephone call-out research, the researcher will have previously identified a pool of qualified study participants (listeners to the station in question or to the categories of music being studied). The interviewer plays over the phone one hook at a time and asks the study participant to respond with phrases such as (1) “I’ve never heard of it,” (2) “I dislike it strongly,” (3) “I dislike it moderately,” (4) “I don’t care,” (5) “I’m tired of it,” (6) “I like it,” or (7) “That’s my favorite record.”

Stations and networks that make use of call-out research conduct their studies weekly or semiweekly. Satellite programming services making music available to stations throughout the country conduct this research on a continuing basis in many markets.

In one form of telephone call-in, study participants receive a letter in the mail asking them to participate in the study. The letter identifies a telephone number for participants that connects them to a recording of the hooks for the study. The participant listens to the hooks when convenient, then returns the questionnaire by mail or telephones a researcher who writes down the responses read by the participant from the completed questionnaire.

Auditorium studies are surveys often used to study audience response to “oldies” (songs that were quite popular during the more distant past and that are still popular with at least part of the radio audience) and “standards” (new versions of oldies). Researchers recruit a sample of radio listeners, who assemble in an auditorium or rented meeting room. Hooks of the music are played over high quality sound systems. Participants then mark their responses to each hook in questionnaire booklets or on digital responders (keypads that summarize responses into a convenient computer file). Auditorium studies commonly include hooks for large numbers of recordings, greatly reducing the cost per hook for respondent data. Because of the effort required to assemble hooks, arrange for facilities, and recruit respondents, auditorium studies are conducted less frequently than call-out or call-in studies.

The relatively low costs of mail and internet surveys make these surveys appealing. However, mail surveys require that study participants recognize songs from written descriptions that may include the name of a song or performer or some words from a song’s lyrics. This limitation often leaves researchers wondering whether the music has been correctly identified by study participants. Internet surveys permit playing hooks over a respondent’s computer speakers, reducing the possibility that study participants will not recognize the music being studied. Survey questionnaires are then presented for completion on respondents’ computer screens. When all answers have been provided, the data is immediately returned to the researcher’s computer. As not every radio listener has access to a computer connected to the internet, study participants must be identified in a pre-survey as (1) listeners accessible by internet, and (2) listeners to the radio music being studied.

Radio Program Format Research

Radio program format research concerns the mixture of music, news, and talk programming that is best for a given station or network. Although a
number of methods are used in format research, focus groups have received the greatest attention in the literature about radio. A focus group is a group of research participants who are selected for their relevance to the matter being studied. Their viewpoints and opinions are collected with a guided conversation about the research topic. In the case of format studies, one strategy is to recruit a variety of groups—those who listen only to the station in question, those who listen to the station sometimes, and those who never listen to the station but by their media habits show that under some circumstances they could become listeners.

The results of station format focus group studies identify the “position” (reputation) of the station in its market. In addition, the specific language used by study participants during the focus sessions may suggest useful slogans or themes for station promotional campaigns.

Because many radio stations today are owned by corporations that own large groups of stations, station format studies may be a matter of researching format issues in several markets simultaneously. The results may lead to the choice of a station format that will function competitively in all of the group’s markets.

JAMES E. FLETCHER

See also A.C. Nielsen Company; Arbitron; Auditorium Testing; Cooperative Analysis of Broadcasting; Hooperatings; Programming Research; Pulse, Inc.; RADAR

Further Reading

Lumley, Frederick Hillis, “Methods of Measuring Audience Reaction,” *Broadcast Advertising* 5 (October 1932.)
Audimeter

The Audimeter—for audience meter—was the name of the A.C. Nielsen Company’s mechanical, and later electronic, device for measuring radio and television set tuning as a way of determining a show’s share of the audience, better known as its ratings.

Origins

In 1929 Claude Robinson, a student at Columbia University, applied to patent a device to “provide for scientifically measuring the broadcast listener response by making a comparative record of…receiving sets…tuned over a selected period of time.” Robinson later sold his device for a few hundred dollars to the Radio Corporation of America, owner of NBC, but nothing more came of it at that time.

Many realized that the least intrusive and most accurate way to keep track of listeners’ radio tuning would be to attach some kind of mechanical recorder to the set. In 1935 Frank Stanton, a social psychology student at Ohio State University, as part of his Ph.D. dissertation built and tested 10 devices to “record [radio] set operations for as long as 6 weeks.” (Stanton was later research director and eventually president of the Columbia Broadcasting System.)

Others experimented with similar devices. Robert Elder of Massachusetts Institute of Technology and Louis Woodruff field-tested their device in late 1935 by measuring the audiences tuning in to Boston stations. But it was Arthur C. Nielsen, a consumer survey analyst with a degree in electrical engineering, whose wealth and fame would be made by the device. In early 1936, Nielsen heard a speech by Robert Elder, who called his device an “Audimeter.” At the time the Nielsen Company, a consumer survey business, was primarily a collector of information on grocery and drug inventories.

After receiving permission to use the Robinson-RCA device and some redesign of it, in 1938 the Nielsen Company began tests in Chicago and North Carolina. In 1942, the company launched the Nielsen Radio Index based on 800 homes equipped with the Audimeter, which recorded on a paper tape the stations a radio was tuned to. In the beginning, Nielsen technicians had to visit each of the 800 homes periodically to change the tape and to gather other information from each household based on an inventory of the family’s food supply. The Audimeter was usually hidden from view in a nearby closet or some other out-of-the-way place. Respondents were usually given nominal compensation for their participation, and Nielsen usually shared repair costs on any radio in which the meter had been installed. Beginning in 1949, the receiver’s tuning was recorded by a small light tracing on and off on 16 millimeter motion picture film that could be removed and mailed back to the Nielsen office in Chicago for examination and tabulation by workers using microfilm readers.
Audimeter Ratings

The Nielsen Company soon supplanted the older and dominant Hooperatings, and Nielsen acquired the C.E. Hooper company in 1950. That year the Audimeter was used to record TV tuning for the Nielsen Television Index (NTI). The company also launched the Nielsen Station Index (NSI), which provided local ratings for both radio and television stations for specific market areas. In the same homes where Audimeters were in use, Nielsen obtained additional information on audience demographics by the use of diaries in which viewers were asked to record their listening and viewing of radio and television.

Throughout most of the 1950s, as television’s audience grew rapidly, the measurement of radio audiences by Audimeters provided the most important information used by sponsors, advertising agencies, media buyers, and programmers. As network radio audiences declined and independent Top 40 stations rose, however, local ratings became more important. In 1941 a competitor called Pulse entered the ratings business and, with its ratings based on interviews, eventually eclipsed Nielsen.

In the late 1950s and 1960s there was much criticism of broadcasting in general, resulting from scandals involving rigged quiz shows and disk jockeys being bribed in the “payola” scheme to play specific records, and there followed lengthy congressional investigations of ratings methodologies. As a response, Arthur Nielsen tried to develop a new radio index that would be above criticism but found it would be prohibitively expensive; advertisers and stations resisted higher costs. In 1963 the Nielsen Company ended local radio measurement and the next year withdrew from national radio ratings as well. The Arbitron rating company, founded in 1949 as the American Research Bureau (ARB), continued using meters for many years to supplement its diary method of radio ratings collection.

Audimeters that merely indicate when a receiver is on, and to what station it is tuned, are now obsolete. Advertisers and station operators alike want to know who is listening—the listener’s income, buying habits, location, level of education, etc. The Audimeter began to give way in television research (the new method was too costly to apply to radio) to the more expensive but also more useful “people meter,” which can indicate who is listening by means of a remote control-type device on which each listener punches his or her key to show they are present. The people meter is connected by dedicated data lines to computers in Florida that provide overnight ratings.

Since 1999 Nielsen, with Arbitron, the largest radio ratings firm, is testing a passive, personal meter, about the size of a pager, that listeners wear to record all electronic media use. As with the rest of radio, what began as a large device—the “Audience meter”—has become much smaller and more portable.

LAWRENCE W. LICHTY

See also A.C. Nielsen Company; Arbitron

Further Reading


Audio Mixer. See Control Board/Audio Mixer

Audio Processing

Electronic Manipulation of Sound Characteristics

Once a sound has been transduced (transformed into electrical energy for the purpose of recording or transmission), the characteristics of that sound can be electronically manipulated. These characteristics include pitch, loudness, duration, and timbre. Thus, the term audio processing refers to the art and science of making changes to an audio signal to improve or enhance the original sound or to create an entirely new sound based on the original. There are many technical and creative reasons for audio processing in radio.

In the early days of radio, if the audio going into the transmitter was too loud, the transmitter could be damaged. Even today, because of the potential for interference to other stations caused by overmodulation, the Federal Communications Commission (FCC) has strict rules about modulation limits. Audio processors continuously maintain a station’s compliance with these rules.

There are also many creative reasons to process audio. Consider the following examples: a commercial producer needs to transform the talent’s voice into that of a space alien. In another commercial, the voices sound a little muffled; rerecording the spot through an equalizer to increase the midrange can make the voices sound louder. A third spot as recorded runs too long; it can be shortened by redubbing it through a digital signal processor using the time compression function. These are examples of problems that can easily be solved with the right audio processing in a production studio. Radio stations want their sound to be clean and crisp, bright, and distinctive. Rock-formatted stations targeting teens and young adults usually want to sound loud, regardless of the particular song being played. These are examples of the types of needs addressed by the processing equipment in the audio chain before the signal goes to the transmitter. A description of the basic characteristics of sound identifies the component parts that are manipulated during audio processing.
Characteristics of Sound

Sound is created when an object vibrates, setting into motion nearby air molecules. This motion continues as nearby air molecules are set into motion and the sound travels. This vibration can be measured and diagrammed to show the sound’s waveform. The characteristics of a sound include its pitch (frequency), loudness (amplitude), tonal qualities (timbre), duration (sound envelope), and phase. A sound is described as high or low in pitch; its frequency is measured in cycles per second or hertz. Humans can hear frequencies between 20 and 20,000 hertz but usually lose the ability to hear higher frequencies as they age.

The subjective measurement of a sound’s loudness is measured in decibels (dB), a relative impression. The softest sound possible to hear is measured at 0 dB; 120 dB is at the human threshold of pain. The range of difference between the softest and loudest sounds made by an object is called its dynamic range and is also measured in decibels. A live orchestra playing Tchaikovsky’s *1812 Overture* complete with cannon fire will create a dynamic range well over 100 dB. The amplitude, or height, of a sound’s waveform provides an electrical measure (and visual representation) of a sound’s loudness. Timbre is the tonal quality of sound; each sound is made up of fundamental and harmonic tones producing complex waveforms when measured. A clarinet and flute sound different playing the same note because the timbre of the sound produced by each instrument is different. Timbre is the reason two voices in the same frequency range sound different. The sound envelope refers to the characteristics of the sound relating to its duration. The component parts of the sound envelope are the attack, decay, sustain, and release. Acoustical phase refers to the time relationship between two sounds. To say that two sounds are in phase means that the intervals of their waveforms coincide. These waves reinforce each other, and the amplitude increases. When sound waves are out of phase, the waves cancel each other out, resulting in decreased overall amplitude.

Individually or in combination, the frequency, amplitude, timbre, sound envelope, and phase of the audio used in radio can be manipulated for technical and creative reasons. The characteristics of the audio created for radio typically need adjustment and enhancement for creative reasons or to prepare the audio for more efficient transmission.

Processors Manipulate Audio Characteristics

Equipment used to process audio can generally be classified using the characteristics of sound described above. There are four general categories of audio processing: frequency, amplitude, time, and noise. Some processors work on just one of these characteristics; others combine multiple functions with a combination of factory preset and user-adjustable parameters. Some processors are circuits included in other electronic equipment, such as audio consoles, recorders, or microphones. Processing can also be included in the software written for a computer-based device such as a digital audio workstation.

An equalizer is a frequency processor; the level of specific frequencies can be increased or decreased. A filter is a specific type of equalizer and can be used to eliminate or pass through specific narrow ranges of frequencies. Low-pass, band-pass,
and notch filters serve specific needs. Studio microphones often contain a processing circuit in the form of a roll-off filter. When engaged, it eliminates, or “rolls off,” the bass frequencies picked up by the microphone.

Amplitude processors manipulate the dynamic range of the input audio. Three examples of amplitude processors are compressors, limiters, and expanders. A compressor evens out extreme variations in audio levels, making the quiet sections louder and the loud sections softer. A limiter is often used in conjunction with a compressor, prohibiting the loudness of an input signal from going over a predetermined level. An expander performs the opposite function of a compressor and is often used to reduce ambient noise from open microphones. Most on-air audio processing uses these types of processors to refine the audio being sent to the transmitter. Recorders often have limiter or automatic gain control circuits installed to process the input audio as it is being recorded.

A time processor manipulates the time relationships of audio signals, manipulating the time interval between a sound and its repetition. Reverberation, delay, and time compression units are examples of processors that manipulate time. Telephone talk shows depend on delay units to create a time delay to keep offensive material off the air. Commercial producers use time compression and expansion processing to meet exacting timing requirements.

Dolby and dbx noise reduction processing are methods of reducing tape noise present on analog recordings. The Dolby and dbx systems are examples of double-ended systems: a tape encoded with noise reduction must be decoded during playback. These types of processing become less important with the shift to digital audio.

Until the 1990s most processing was done using analog audio. Individual analog processors, each handling one aspect of the overall processing needs, filled the equipment racks in production and transmitter rooms. Equalizers, reverb units, compressors, limiters, and expanders all had their role. Digital processors were introduced during the 1990s. These processors converted analog audio to a digital format, processed it, and then converted the audio back to the analog form. Most processing today has moved to the digital domain. These digital signal processors allow for manipulation of multiple parameters and almost limitless fine adjustments to achieve the perfect effect. Modern on-air processors combine several different processing functions into one unit.

Audio Processing in the Audio Chain

Virtually every radio station on the air today uses some type of processing in the audio chain as the program output is sent to the transmitter. The technical reasons for processing the program audio feed date to the earliest days of radio. Engineers needed a way to keep extremely loud sounds from damaging the transmitter. The first audio processing in radio was simple dynamic range control done manually by an engineer “riding gain.” The operator adjusted the level of the microphones, raising the gain for the softest sounds and lowering it during the loudest parts. During live broadcasts of classical music, the engineer was able to anticipate needed adjustments by following along on the musical score. Soon, basic electronic processors replaced manual gain riding.
Early processing in the audio chain consisted of tube automatic gain control amplifiers and peak limiters. The primary purpose of these processors was to prevent overmodulation, a critical technical issue with an amplitude-modulated signal. Operators still needed to skillfully ride gain on the program audio, because uneven audio fed to these early processors would cause artifacts, such as pumping, noise buildup, thumping, and distortion of the sound. Early processor names included the General Electric Unilevel series, the Gates StaLevel and Level Devil, and Langevin ProGar.

Broadcast engineers generally consider the introduction of the Audimax by Columbia Broadcasting System (CBS) Laboratories to be the birth of modern radio audio processing. The Audimax, introduced by CBS in the late 1950s, was a gated wide-band compressor that successfully eliminated the noise problems of earlier compressors. The Audimax was used in tandem with the CBS Volumax, a clipper preceded by a limiter with a moderate attack time. In 1967 CBS introduced a solidstate Audimax and the FM version of the Volumax, which included a wide-band limiter and a high-frequency filter to control overload due to FM’s preemphasis curve.

The reign of the Audimax was challenged in the early 1970s with the introduction of the Discriminate Audio Processor by Dorrough Electronics. This broadcast compressor/limiter divided the audio spectrum into three bands with gentle crossover slopes, compressing each band separately. Broadcast engineers began to make their own modifications to some of the internal adjustments, adjusting for specific program content and personal preference.

In 1975 Orban Associates introduced the Optimod-FM 8000, which combined compressor, limiter, high-frequency limiter, clipper, 15-kilohertz low-pass filters, and stereo multiplex encoder into one processor. This unit allowed for higher average modulation without interference to the 19-kilohertz stereo pilot signal. The Optimod-FM 8000 was replaced by what soon became the industry standard, the Optimod-FM 8100. A digital version, the Optimod-FM 8200, was introduced in 1992. The Optimod-AM was introduced in 1977.

The development of these processors was driven by the need for a reliable method of maintaining compliance with the FCC transmission and interference rules while allowing for creative use and adjustment of processing for competitive advantage. Along with maintaining compliance with regulatory constraints on modulation, interference, and frequency response, engineers and programmers are always looking for ways to make
their stations sound better than and different from the others. Some stations have taken creative processing to extremes. During the 1960s WABC in New York was well known for the reverb used on disc jockey voices during music programs.

A station programming classical music has processing needs different from those of an urban format station. Preserving the dynamic range of an orchestral work is critical, whereas maximizing the bass frequency and loudness enhances the music aired on the urban station. Today’s processors allow for this kind of flexibility in adjustment based on format and on specific goals for the sound of the station. Audio processing plays an important role in radio stations’ competition for listeners. Stations targeted toward teens and young adults want to sound louder, brighter, and more noticeable than their competitors. This is where audio processing becomes something of an art. Programmers and engineers cooperate to adjust processing to attract and maintain listeners. This is a subjective process that involves trial-and-error adjustments and critical listening by station management. There is a fine line between compressing audio to boost overall loudness and creating listener fatigue. Low time-spent-listening numbers in the ratings may not be the fault of poor programming as much as of overprocessed audio.

Audio Processing in the Studios

Much of the audio sent to the on-air processor has already been processed, perhaps as it was originally recorded, dubbed in production, or mixed with other sources in the air studio to create the program output.

One of the most common forms of audio processing in the studio is equalization (EQ), which is the increase or decrease of the level of specific frequencies within the frequency spectrum of the audio being created. Many audio consoles, especially those used in the production studio, have equalization controls on each channel to allow for adjustment of the EQ of each individual audio source. At a minimum, there are controls for low-, medium-, and high-frequency ranges, but many consoles divide the frequency spectrum into more parts. The EQ controls can be used for various creative and technical purposes. Examples include matching the frequency response of different microphones so they sound the same, creating a telephone effect by decreasing the low and high frequencies of the audio from a studio microphone, adding presence to the voices in a commercial by boosting the midrange, or eliminating hum on a remote line by decreasing the low end. Equalization can also be done through an outboard equalizer; the source or console output can be routed to the equalizer for processing. These units usually divide the frequency spectrum into intervals of one-third or one-half of an octave. Each band has a slider to increase or decrease the amount of EQ on that band. Filters, a specific type of equalizer, can be used to eliminate specific narrow ranges of frequencies. Low-pass, band-pass, and notch filters are usually used to eliminate technical problems with the audio or to keep unwanted audio frequencies from getting to the transmitter.

A well-equipped production studio has a number of processing options available to producers. Until the development of digital signal processors, every effect came from a separate unit. Although many of these single-function processors are still in use and are still manufactured, digital multiple-function processors are the norm today. These are generally less expensive than the on-air multifunction processors, and a number of
manufacturers provide many different models and options in their studio processor lines. Most units offer a number of factory preset effects with user-adjustable parameters. These units also allow users to create and store their own combinations of effects. The Eventide Ultra-Harmonizer, for example, provides pitch changing, time compression and expansion, delay, reverb, flanging, and sound effects as part of its inventory. The major advantage of these multifunction units is their ability to combine effects. For example, pitch change can be combined with chorusing and reverb. Flanging can be combined with stereo panning. Given the opportunity for user-created presets and parameter adjustments, the possibilities are almost limitless.

These same types of digital effects are also integrated in the software of digital audio workstations and editors. Audio processing can be added after a recording is made on a multitrack editor. The complex waveform of each track can be processed using the same type of multiple-effects options described above. An announcer can be made to sound like a group of elves through the addition of chorusing, pitch change, and reverb; each track can be processed independently. Because the changes are not made to the original sound files, any of the modifications can be easily undone and the original audio remodified.

Microphones in the production and air studios often receive special, full-time processing. An analog or digital microphone processor typically provides compression, limiting, de-essing, equalization, noise reduction, and processing functions designed specifically to enhance vocal characteristics.

JEFFREY D. HARMAN

See also Control Board/Audio Mixer; Dolby Noise Reduction; Production for Radio; Recording and Studio Equipment; WABC

Further Reading

Audio Streaming

Carrying Sound on the Internet
Delivering audio-video (AV) content on the internet has been a long anticipated goal for the media. Audio delivery became practical in 1999 with the introduction of better streaming software and the widespread adoption of MP3 compression techniques. By 2001 major internet companies (including software, hardware, and content providers) were jockeying for positions in the new market. Streaming involves sending data but not asking the computer to record it.

Compared to other internet files, AV files are very large. At first, AV was delivered in the same manner as all other files. The user would download (receive) the entire file from a central computer. This method is still used with high quality compression (for example, MP3 files). But sending the whole file was unacceptable for two reasons. First, it took too long and required too much space on the user’s computer, causing the typical home computer memory to fill up quickly. Second, after transfer, the user could keep the whole copy of the AV file. For radio it was not possible to send anything more than simple air checks or short songs, and in any case copyright holders would not allow most songs to be sent.

In 1995 Rob Glaser and company introduced RealAudio—later called RealPlayer and RealOne. The concept was simple. The software would download enough of a sound file to cover the difference between the transmission and play speed. A buffer was created on the user’s computer and the file would begin to play. Only a fraction of the file needed to be transmitted before the user could enjoy it. The idea was that the file transfer would be completed shortly before the file was done playing. Continuous streaming would come later as bandwidth and compression increased.

The music industry is working to adopt both models. First, delivering whole files (download) for people to use at will—a sale model. Second, streaming content without giving it to people—a broadcast model. Even if whole files are sent, streaming is often used for more instantaneous delivery of content.

Because streaming content is expected to be one of the biggest profit centers on the web, streaming providers are engaged in a technology trade war. The system that is accepted by the majority of providers and consumers will be in a very strong position to make money. There are three levels to the competition: players, distribution, and content.

Streaming media is produced much like any other media. The target player determines how the content is stored and served. The player is the most visible element in the process. In addition to RealPlayer, Microsoft developed its own MediaPlayer and Apple added streaming capability to its Quick Time software. Finally, the MP3 compression standard allowed software vendors to create streaming media without aligning themselves with a major corporation. The main differences among these players involve cost, compression, ability, and quality.

Once produced, the digital file is encoded in one or more of the streaming formats and stored for use by the appropriate server. The server delivers files as users request them. The server may also add visual content such as advertising or graphic illustrations (such as an album cover).
Continuous programming may be delivered by a never-ending stream or by a playlist format. The latter method sends a list of files to be played rather than a never-ending stream. Playlists may make the entire file available to users, though this is a distinct disadvantage for copyright holders. On the other hand, playlists allow users to skip songs they do not want or to build playlists of their own design.

The competition in players comes down to a software choice while the competition in distribution mainly concerns hardware. Streaming files are not only very large but are also timesensitive. If a part of the streaming content does not arrive in time, the music will stop. Distribution systems have been developed to deliver streaming files without delay. Newer server systems allow on-demand conversion from one streaming format to another. This means the producer need only store content in one format.

The competition in players comes down to a software choice while the competition in distribution mainly concerns hardware. Streaming files are not only very large but are also timesensitive. If a part of the streaming content does not arrive in time, the music will stop. Distribution systems have been developed to deliver streaming files without delay. Newer server systems allow on-demand conversion from one streaming format to another. This means the producer need only store content in one format.

The first method to assure delivery was to increase the speed of delivery. Standard telephone modem delivery—the most widely used form of hooking up to the internet—has peaked at about 56,000 bits per second. Broadband delivery systems for home use are becoming increasingly available, but they are more expensive. Rollout is slow and not nearing the level required for entertainment media.

The second method is to push content closer to potential users. In 1999, companies such as Akamai Technologies and Digital Island built additional internet connections designed only to transfer streaming content. Some networks stored copies of popular media in regional servers to reduce the distance to home users. The idea was to keep the content close to users and reduce the delay caused by network transfer.

A third method is called multicasting. In traditional (unicast) distribution, a separate file was sent to every requesting receiver. When the Clinton Impeachment hearing was put on the web, thousands of people wanted the same file. If the file were three megabytes in size and 100 people wanted to get it at the same time, the network would have to accommodate a 300 megabyte transfer. In multicasting, one copy of the file is transmitted to a large number of users. Then the transmission would be a little more than the original file size. Multicasting has been hurt by the lack of standards and network compatibility.

Content providers have been working to fill streaming media. By the end of 2000, there were nearly 4,000 internet radio sites worldwide with nearly half that number in the United States. Music content led the way since it could be enjoyed before true broadband capacity could be delivered. Most were still seeking a successful means of generating revenue. Along with the search for programming came issues of copyright and payment. ASCAP and BMI created internet payment models in 1998. At about the same time, the Recording Industry Association of America (RIAA) began separate negotiation for web content payments. Their efforts resulted in successful lawsuits against MP3.com and Napster. The continuing threat of lawsuits based on the Digital Millennium Copyright Act (1996) caused most content providers to refocus their market. Pure streams of broadcast content nearly stopped in favor of copyright free content—usually new artists or in promotion of traditional media products. Eventually, a compromise will be worked out. Major media companies (especially music companies) are developing their own distribution systems so that both content producers and distributors will profit when the copyright issue can be resolved.

Content providers faced a second challenge in the early 2000S as the dot-com bubble burst. Unlike most player and distribution companies, many content providers did not
have a second line of income and failed as online companies. Most players were supported by major software or hardware platforms. While distribution systems often saw corporate reorganization, broadband delivery was still seen as an acceptable investment by cable television and telephone companies. And new delivery systems show great potential including those that deliver to cellular phones, handheld players, and smart cable television boxes.

STEVEN DICK

See also American Society of Composers, Authors, and Publishers; Broadcast Music Incorporated; Internet Radio; Virtual Radio

Further Reading

CNET How-to, “Streaming Media Explained,”
RealNetworks, “Getting Started: A Primer on Streaming Media,”

Audiotape

Introduced commercially only in the late 1940s, audio recording tape would transform radio broadcasting by removing the stigma of recorded broadcasts. Development of the technique dated back decades, to work accomplished in several countries.

Origins

Early audiotape technology drew on Danish radio pioneer Valdemar Poulsen’s 1898 invention of a device called the “Telegraphone.” The mechanical energy of sound was converted into a flow of electric current in a microphone and was then translated into magnetic fields, or “flux,” in a small induction coil. Then, as a magnetizable steel wire or tape was drawn rapidly past the induction coil, the steel would retain a portion of that magnetic flux as a record of the original sound. This process became the basis for all later developments in magnetic recording. The Telegraphone was a grand prize winner at the 1900 International Exposition in Paris. However, it was only in the late 1930s and early 1940s that U.S. firms became interested in this technology, and even then, only two firms
were actively engaged in commercializing it: the Brush Development Company of Cleveland, Ohio, and the Armour Research Foundation of the Illinois Institute of Technology in Chicago.

In contrast, the development of magnetic recording technology advanced in Europe. A turning point came in the early 1930s, when the German firm Allgemeine Elektricitäts Gesellschaft developed the Magnetophone, a high-quality broadcast recorder capable of superior sound recording and reproduction. In 1944, after almost a decade of production, the most advanced Magnetophones incorporated scores of technical innovations. The German broadcasting authority, Reichs Rundfunk Gesellschaft (RRG), became the major customer for Magnetophones, installing them in nearly all German radio studios. During World War II, the RRG took over the operations of broadcast stations in occupied countries and installed Magnetophones there as well. Thus, by the end of the war, tape recording was a standard feature in many European radio stations.

One of the chief distinguishing features of the Magnetophone system was its special recording tape. Since the late 1920s, the German chemical firm IG Farben had been developing a plastic tape base coated with a magnetic form of iron oxide that could substitute for the heavy, expensive steel recording tape used in previous designs. The particles of oxide on such a tape act as tiny individual magnets, and it was learned that it was possible to record higher frequencies at slower tape speeds than on a solid steel band or wire. The slower speed and the lower cost of materials made the coated tape much cheaper, contributing to its widespread adoption in Germany.

The structure of U.S. broadcasting militated against the creation of a demand for that technology. U.S. radio networks relied heavily on live programming distributed by telephone line. Recording represented a threat, both because the recording of a network program was piracy of the network’s product and because it would then be technically possible to operate a network by distributing recorded rather than live programs. The status quo in program technology was reinforced by the oligopolistic structure of the broadcast equipment manufacturing market, which was dominated by firms such as Western Electric and the Radio Corporation of America (RCA). None of these firms would offer magnetic recording equipment until after World War II.

Postwar Innovation

In 1945 the United States enlisted the aid of its businesspeople, scientists, and engineers to collect German scientific and industrial knowledge. Some of those who became intimately familiar with Magnetophone technology while in Germany returned to the United States to play a role in the establishment of magnetic recording manufacturing there.

In 1945 Col. John T. Mullin was part of an Army Signal Corps team investigating the military applications of German electronic technology. He was told by a British officer about a tape recorder with exceptional musical quality at a Frankfurt, Germany, radio station that was being operated by the Armed Forces Radio Service (AFRS). There Mullin found German technicians working for AFRS using Magnetophone audiotape recorder/players. The technological improvements of a constant speed transport, plastic tape impregnated or coated with iron oxide, and the employment of a high AC-bias
frequency mixed with the audio signal made these machines high fidelity. The first two machines acquired were turned over to the Signal Corps, and Col. Mullin disassembled two other machines and shipped them to his home in San Francisco. In 1946 Mullin designed custom record/reproduce electronics that improved the performance, rewired and reassembled the Magnetophone machines, and went into a partnership with Bill Palmer for movie soundtrack work, using those machines and the 50 reels of tape he had acquired.

In October 1946 Mullin and his partner Palmer attended the annual convention of the Society of Motion Picture Engineers, where he demonstrated the machine to the sound heads of Metro Goldwyn Mayer and Twentieth Century Fox and to the chief engineer of Altec Lansing. Mullin was then invited to an Institute of Radio Engineers meeting in May 1947 to demonstrate the German Magnetophone. It was there that employees of Ampex, a small maker of electric motors in Redwood City, California, first saw and heard the tape recorder. The U.S. government had arranged for the suspension of all German legal claims to magnetic recording technology and had sponsored its wholesale transfer to the United States. The Commerce Department released its technical reports, captured documents, and patents related to the Magnetophone, allowing any interested manufacturers access to information relating to tape-recording technology. Shortly thereafter, Ampex began its own developmental project.

In 1947 the technical staff of the Bing Crosby Show on American Broadcasting Company (ABC) arranged to have Mullin rerecord original disk recordings of the Bing Crosby Show onto tape and then edit them. Crosby had been with the National Broadcasting Company (NBC) until 1944, doing the Kraft Music Hall live, but he did not like the regimen imposed by live shows. Because NBC would not permit recorded programs, Crosby took the fall off and returned on the newly formed ABC network with a new sponsor, Philco, because ABC had agreed to let him record on electrical transcriptions as long as his ratings did not diminish. The process required cutting a record and then rerecording; what with sometimes two or three generations, the quality of sound suffered. In July 1947, after the initial demonstration of editing, Mullin was invited to give a demonstration of his equipment for Crosby’s producers by taping live side by side with transcription equipment the first show for the 1947–48 season in August at the ABC-NBC studios in Hollywood. Bing Crosby Enterprises then negotiated financing for Ampex for exclusive distribution rights, and Mullin was employed to record the Crosby show on his original German equipment until the Ampex machines became available. Made with the original German tape recorders and 50 rolls of BASF tape, Mullin’s first recorded demonstration show of August 1947 was broadcast over ABC on 1 October 1947.

In 1948 Alexander Poniatov and his team of engineers at Ampex introduced the first commercial audiotape recorder based on the Magnetaphone as Ampex Model 200. The first two, with serial numbers 1 and 2, were presented to John Mullin, and numbers 3–12 went into service at ABC. (To meet the contract requirements, Mullin gave his machines to ABC and later received numbers 13–14 for his contribution.)

The Minnesota Mining and Manufacturing Company (3M) of Saint Paul, Minnesota, already had experience in the manufacture of coated films from its line of adhesive tapes. Home tape machines such as the Brush Soundmirror, which used Scotch 100 paper tape supplied by 3M, had been introduced in the consumer market, but these fell far short of
professional requirements. Mullin then asked 3M engineers to reverse-engineer the German product using samples of IG Farben tape and Department of Commerce technical reports. Although the Minnesota company quickly came to dominate the field, much smaller firms successfully broke into the market, competing with 3M.

The Crosby show remained tape-delayed, setting a precedent in broadcast production that remains the norm to this day. Most other network radio and recording artists quickly adopted tape to produce their shows and discs, including Burl Ives and Les Paul. Live broadcasting was soon limited mostly to local disc jockeys spinning the new long-playing 33–1/3 and 45-rpm music discs.

Mullin remained with Bing Crosby Enterprises, recording his shows and others at ABC, until 1951. As the exclusive distributor for Ampex, Bing Crosby Enterprises sold hundreds of recorders to radio stations and master recording studios. In 1951 Mullin and other engineers were spun off as the Bing Crosby Electronic Division to handle development of audio instrumentation and video recording. In 1956 the Electronic Division became the Minicom Division of 3M, where Mullin served as head of engineering and as professional recorder development manager until his retirement in 1975. He died on 24 June 1999 at age 85.

MARVIN BENSMAN

See also American Broadcasting Company; Crosby, Bing; Recording and Studio Equipment; Wire Recording

Further Reading

Angus, Robert, “History of Magnetic Recording,” *Audio* 68, no. 8 (August/September 1984)
Mullin, John T., “Creating the Craft of Tape Recording,” *High Fidelity* 26, no. 4 (April 1976)

Auditorium Testing

Radio Market Research
Auditorium testing is a method of market research used widely in the radio industry and elsewhere to determine the effectiveness of programming and audiences’ preferences in music, voice quality, commercial messages, and other program elements. Its name comes not from the room where the testing takes place, but from the “auditory” nature of the testing; that is, the subjects hear the samples being tested.
A company called ASI (now Ipsos-ASI) first used auditorium testing in the evaluation of TV programs, commercials, and movies in the 1960s. They used what they called the “Preview House” in Los Angeles as a controlled environment for such tests. Forty years later, versions of auditorium testing are still used by numerous market research firms around the world.

The basic methodology in auditorium testing starts with a careful consideration of the goals to be achieved. The client advertiser, radio station, or TV station needs to identify, in the most precise way possible, the boundaries of the testing and how the results will be used. Once the desired outcomes are known, the researchers design a testing strategy to achieve those outcomes.

With the strategy set, the research company screens and selects a group of between 75 and 200 people reflecting the demographic the client wishes to study. That demographic (a grouping according to age, gender, income, etc.) can be a random sample or one that is consistent with the station’s current or desired audience, or even a subset of the audience that the client wishes to cultivate.

The assembled test group is then invited into a small auditorium and given instructions for the test. They are rarely told what is being tested or who the client is for the testing. In fact, tests often include decoy selections to keep the participants from guessing which specific radio station or product is being evaluated. The test subjects are instructed to respond to samples of music, voice, messages, images, or other content, providing some sort of rating on a scale created by the researchers. This can be accomplished with written questionnaires, a joy stick-type device that measures responses electronically, or even with a show of hands. Sometimes anecdotal comments are also solicited. Participants in auditorium testing are usually compensated for their time in order to increase the seriousness with which they approach the evaluating. The results are then tabulated and evaluated, with many variables charted, and correlations are made among the different samples tested. Ultimately the research firm can provide clients with both a review of the raw data and recommendations on how they may proceed to achieve their goals.

Bob Goode developed a form of auditorium testing called Electronic Attitude Response System. This method uses a video readout of averaged responses of the participants correlated directly to the audio content being rated and allows researchers to determine the test audience’s preferences along with their “tune-out” of program elements. It also provides researchers with a sense of which program elements are more effective if paired with others. For example, a commercial following a weather report may lead to less tune-out than if that same commercial aired after a musical selection.

Music testing is a particular strength of auditorium testing models. Whole pieces within a musical genre can be tested before they are aired on a station. More commonly, however, “hooks,” short segments of songs, are tested. In markets where many stations compete for listeners within each programming genre (country, oldies, urban contemporary, etc.), the subtleties of which songs are most liked within each genre can make a major difference in the ratings successes of each station. One firm, The New Research Group, offers 600 to 1,200 musical hooks along with 100 perceptual questions,
allowing the client to know not only which music is preferred, but why, in specific descriptive terms, dealing with emotions, motivations, associations, etc.

Research firms “cluster” music that appeals to test audiences in auditorium groups, because people who enjoy one song from the cluster are likely to enjoy others as well. In addition, firms use complex matrix charts to show compatibility between clusters, showing radio programmers how to broaden appeal by including more musical selections without causing tune-out by core listeners.

Auditorium testing, along with other music testing, is seen by some as limiting, in that the short hooks it tests can oversimplify otherwise interesting music that might gain acceptance upon being heard by audiences. For example, a hook from “Hey Jude” by the Beatles might not have tested well, whereas the song in its entirety was a number one hit.

Public and commercial radio stations use research, including auditorium testing, to make program decisions; for example, the Wisconsin Public Radio network has been involved in the Corporation for Public Broadcasting program research, and Denver-based Paragon Research studied public radio stations in eight markets using focus groups, surveys, and auditorium research.

As audio broadens its reach through new technologies such as satellite, Web-casting, and other distribution channels, it is likely that increasing specialization of program channels will occur, making auditorium testing more important in the precise selection of program content.

That being said, the increasing sophistication of audience behavior measurement technology imbedded in some of these new communications media may eventually render traditional auditorium testing too slow and imprecise by comparison for the emerging information needs of the industry.

PETER WALLACE

See also Audience Research Methods

Further Reading


Australia

Australian radio is a fascinating amalgam of the unbridled commercialism of U.S. radio and the public broadcasting ethos of Western Europe and Asia, blending the two forms into a mixed private/public system. Its history can be divided into five parts: radio as a new technology in the 1920s; the new broadcast medium of the 1930s; the emergence of a diverse production sector and debates over Australian content and wartime censorship in the 1940s; the impact of television and popular music in the 1960s; and today’s changes, brought about by frequency modulation (FM), digitalization, and deregulation.
A New Technology (to 1930)

Wartime anxieties deriving from the uncoded transmission of the whereabouts of an Australian naval convoy had led to the impounding of all privately owned wireless telegraphy sets in 1915. Governments sought from very early on to exercise control over the airwaves as resources, both for military purposes and to police property, and as a source of revenue. The first public demonstration of radio took place in Sydney in 1919, an event sponsored by the Amalgamated Wireless Company of Australia (AWA). AWA and the Royal Australian Navy were in dispute over the direction the new medium should take and the framework within which it should operate. This struggle for control between AWA and the navy featured the former championing the rights of the lone user and the latter criticizing any moves toward private control.

As in the United States, when the medium’s commercial and governmental potential became clearer, the private and public sectors grew increasingly antagonistic. A major conference was held in 1923 to try to sort out these differences. AWA obtained approval for a “sealed” wireless system, to operate on a competitive basis. Broadcasting companies—which often manufactured and distributed receivers—were to be licensed by the government, with audiences subscribing to particular stations. The sets were then sealed, confining listeners to the stations they had paid to hear. By the following year, cost pressures and differences within the industry led to two further conferences and the establishment of a new dual system for broadcasting: “A” licenses, funded by listeners’ subscriptions—with the government retaining a proportion of the levy—and “B” licenses, financed by advertising. The A stations were required to provide a comprehensive service that would cater to all sectors of the community. The Bs, lacking the safety net provided by access to the license fee, were free of such obligations.

Much of the nation was not catered to by this fledgling industry. Concerns about rural areas, along with the legal mechanics of copyrights and patents, led to a Royal Commission into Wireless in 1927. The government was determined to maximize the capacity of the new medium to bind the equally new nation together. After failing to persuade individual license holders in the A sector to pool their resources for a nationwide grid, in 1928 the government announced that it would acquire all A class stations, in large part as a result of pressure from rural areas. The new national system would be operated by the post office, with programs provided by the private sector. The successful bidder for the contract to provide programs was called the Australian Broadcasting Company.

There was considerable innovation at the programming level: 1924 saw the first transmission of Parliament, the first radio play, and the world’s inaugural broadcast from an airplane. Four years later came the first ecclesiastical opposition to beaming church services into people’s homes. (Religion went on to gain a unique guarantee of airtime in Australian broadcast regulation of all sectors, because Christianity was seen as central to the moral fiber of the nation but marginal to media profitability. Such provisions were of dubious constitutional legitimacy, but they remained unchallenged for decades [Horsfield, 1988].) By 1930 there were 290,000 sets across Australia, with 26 stations in 12 cities. The Labor Party’s campaign platform included a promise to abolish license fees if elected.
A Broadcast Medium (1930s)

By the beginning of the 1930s, radio was firmly established. The critical event was the creation of the Australian Broadcasting Commission (ABC) in 1932 as a public broadcaster, still funded by licenses, in place of the three-year-old private Australian Broadcasting Company. Its enabling legislation obliged the commission to raise the educational and cultural levels of the public. One of its early chairs, W.J. Cleary, described the task of the ABC in 1934 as promoting “the finer things of life” by elevating the populace “to find interests other than material ones, to live by more than bread alone.”

The first overseas transmission from Australia took place in 1933, and big increases in the sale of radio sets coincided with the ABC’s descriptions of play from the 1934 cricket series between England and Australia. By the middle of the decade, the audience for radio was growing by 8,000 people each month. Complaints were made about the heavy schedule of advertisements on the commercial stations, although regulation prevented ads on Sundays. The commercial stations, now represented by the Australian Federation of Commercial Broadcasting Stations, were adjusting to the growth of the industry by networking and borrowing programs from overseas, notably Lux Radio Theater and radio serials. The advent of the serial and the network were linked. Multinational corporations owned the major advertising agencies, and they placed pressure on the commercial stations to deliver a big audience to clients who desired nationwide exposure for their output. They also frequently colluded with each other to rein in recalcitrant networks, assisting compliant groups and undermining others by manipulating schedules. The ABC’s networking arrangements were falling into place by 1939, with two metropolitan stations established in each capital city.

In 1930 there were only a handful of commercial stations in Australia; two years later, the number had risen to 46. With more stations came greater uniformity: cutting production costs, standardizing formats, playing greater amounts of recorded music than was the case anywhere else in the world, and selling blocks of time to specific sponsors so that programs were created around the products that paid for them. Networks were established to satisfy the demands of advertisers for a national reach, with the encouragement of American owned advertising agencies. In the 1940s, following governmental anxieties about monopolistic practice, the networks emphasized the autonomy of individual stations, which were said to rely on networks for resources rather than acting as mere conduits.

By the close of the 1930s, there were well in excess of 1 million license sales and perhaps four times that number of regular listeners. Two of every three dwellings had a set. And despite its early reputation as technologically complex, the potential of the medium to ameliorate the drudgery of domestic work even as it encouraged a habit of consumption made the female listener a target. “The men behind the microphone, in a very real sense, modulate all other sounds. To some they are folk heroes; to some women—phantom lovers” (Walker, 1973). This was also the period when the child audience was discovered: “If children were off sick, they were sometimes allowed to have the bakelite box in bed with them for the drip dramas, the afternoon children’s serials and—if they were privileged—the quiz shows with tea on a tray in the evening” (Kent, 1983).
Wartime and Beyond: Diversity and Australian Content (1940–55)

World War II dramatically increased the role of the state in radio. The war brought about security restrictions on broadcast material as well as the notion that the citizenry must receive expanded coverage of global events. This expansion of service and contraction of autonomy led to both the formation of Radio Australia as an international network (and its wartime takeover by government) and the imposition of strict censorship. ABC news followed the government’s line on the primacy of the Pacific theater of war, and most of these bulletins were relayed to the commercial stations. The diminution in the amount of rebroadcast British opinion and the sense that the ABC was becoming an arm of state propaganda led to serious protests from listeners. Another side effect of the war was the belated—and short-lived—opportunity for women to work as ABC news presenters. They were hired in large numbers in the absence of able-voiced men on military duty. But after the war, no woman would read the national radio news again until 1975.

In 1942 a law was passed to regulate non-ABC sectors of the industry and to provide a guarantee against political directives being issued to the ABC. The new act imposed an Australian music quota of 2.5 percent of commercial airtime. In 1949 the Australian Broadcasting Control Board (ABCB) was created as a statutory authority to regulate the industry.

One cannot draw an indelible line between the program output of the commercial stations catering to public demand and the ABC catering to public education. Both had high costs of production in comparison with today’s emphasis on music or basic talk. In the years after the war, the ABC expended nearly £1 million a year on production, and the commercial stations only slightly less. Recorded material from outside Australia took up less than 5 percent of commercial airtime. Both sectors devoted a good amount of these sums to locally written plays. The ABC devoted a quarter of broadcast time to “light” and “dance” music, with much less “serious” music. This decade also saw the first episode of the ABC’s popular Blue Hills soap opera, which was to continue until 1976. At the other end of the spectrum, the commission was required by law to broadcast Parliament from 1946, partly to raise the profile of politicians in the community and partly because of the Labor government’s concerns with press bias against it.

The rationing of newsprint during the war delivered advertisers to radio on an unprecedented scale. The war also cut off the commercial stations’ supply of transcriptions from North American drama, which led to the substitution of local product. A star system was created, with high-quality serials designed to capture nighttime audiences and block programming to retain interest at a particular point on the dial throughout the evening. Although commercial radio could not match the ABC’s claim to having been the first network anywhere to broadcast all of Shakespeare’s plays, it expended a comparable amount on drama in the 1940s. The commercial stations produced documentaries on nature, history, and medicine; devoted only about 8 percent of airtime to advertisements; broadcast cricket from overseas; and generated the preconditions for illegal off-course betting on horse races through coverage from every imaginable track.
The Challenge of Television and Pop Music (1956–70)

After 1956 television, along with the importation of Top 40 techniques from the United States and a focus on youth as desirable potential consumers, transformed radio listening. Radio shifted from a medium dominated by variety and quiz shows and drama serials to one of popular music, “talkback” (talk radio), and sports. Other enforced changes included a move toward additional use of actuality in news broadcasts, both to compete with television and as a consequence of improvements in taping facilities. Revenue and profits grew in the late 1950s to double their pre-television figures. In 1961 there were 6.5 million radio receivers and 10.54 million people in Australia.

The ornate receiver in the living-room corner of the 1930s had given way by the 1960s to an object that was on the move: the tube was replaced by the transistor. Prior to television, 40 percent of radio set sales were for console and table receivers. In 1960 these made up just 19 percent of the total. The turn toward portables (41 percent of sales) and car radios (26 percent) led the recently formed Australian Radio Advertising Bureau to characterize the trend toward “outdoor listening” and “indoor one-person audiences.” Forty percent of Sunday listening was now outside the home, principally at the beach.

Overseas influence increased independently of the new medium: the ABC was importing discs for programming, and the private Macquarie network was owned by British interests from 1951 to 1965. Macquarie came to make extensive use of current-affairs material from U.S., New Zealand, British, Ceylonese, and South African sources. Programs in languages other than English were strictly limited.

The ABCB doubled the Australian music quota to 5 percent—although frequently this was not adhered to—and it also allowed advertising jingles on Sundays. A study of children’s radio serials warned of the unholy effects on young people that exposure to radio could bring. Moral panics abounded with the shift toward playing rock and roll records, the turns of phrase of which provoked numerous complaints by 1960–61. About 7 percent of music on commercial radio met the ABCB’s tests of local content. Talkback became possible when legislative changes in 1960 allowed stations to broadcast material using the telephone.


Between 1948 and 1972, Australia’s urban population more than doubled, but only one new commercial radio station was added. The Labor government of 1972–75 opened up use of FM, issued additional frequencies on the AM band, and developed public access. Australia was decades behind other countries in the introduction of FM radio (despite initial trials as early as 1947) because television had been allocated the veryhigh-frequency (VHF) waveband. Space was found on VHF for FM signals to exist alongside those of television. By 1978 there were well over 200 commercial and ABC AM and 5 FM stations, plus 50 public access outlets. Of the commercial stations, approximately one-quarter were owned by newspaper interests.

The ABCB was succeeded in 1976 by the Australian Broadcasting Tribunal (ABT). Its first major document, *Self-Regulation for Broadcasters?* was a critical statement of the rationale for significant—albeit limited—private-sector self-determination in the
industry. Nevertheless, the renamed commercial representative, the Federation of Australian Radio Broadcasters (FARB), criticized the report for its extrapolations from the model of television to radio. FARB’s other protectionist activities at this time included trying to shut down the ABC’s youth station in Sydney and threatening legal action to restrain the government from granting community radio licenses. The new ABT opened up the system of license renewals to public participation. It also began to show a real concern with cross-media ownership.

The ABCB had raised the Australian music quota to 10 percent of airtime in 1973, with the ABC electing to follow suit. The figure was increased to 15 percent in 1975, with major implications for both programming and the local record industry. Twenty-two million records were manufactured locally (mostly made from imported masters) in that year. By 1980, when commercial FM commenced operations, rock music and its Australian substratum were embedded in entertainment programming. A major review of Australian content on commercial radio in 1986 led to new rules, which provided that 20 percent of music broadcast between 6 A.M. and 12 midnight must be Australian. Conversely, restrictions holding advertising to 18 minutes per hour were lifted.

The ABC’s movement into a more national focus took two significant steps in the mid-1970s: a national network of classical music set the seal on the higher tone to its mission, and youth station 2JJ appeared in Sydney (2JJ would later go national over the period 1989 to 1991). The ABC was reconstituted as a corporation in 1983 and charged with the responsibility to provide “innovative and comprehensive” programs “of a high standard” in order to “contribute to a sense of national identity and inform and entertain, and reflect the cultural diversity of, the Australian community.” The formation in 1977 of the Special Broadcasting Service (SBS) increased ethnic broadcasting. The period also saw the advent of radio for the print-handicapped and the formation of the Central Australian Aboriginal Media Association (CAAMA). CAAMA began broadcasting by Aborigines for Aborigines halfway through 1980. The federal government allocated A$7 million to Aboriginal broadcasting in 1992, as opposed to A$65 million to ethnic broadcasting, some indication of the groups’ respective political clout. By 2000 there were five licensed Aboriginal stations and special services for tribal peoples. As community radio managers moved onto an increasingly commercial footing, their stations began requiring Aboriginal groups to pay for time on the air. Thus, the amount of access available to indigenous people was strictly limited, emphasizing the importance of opening up the opportunity for Aborigines to control their own stations.

By 2000 there were four sectors of Australian radio, arching across the FM and AM bands: the ABC, the commercial stations, the SBS, and community (previously called public) stations.

The Australian Broadcasting Corporation

The ABC operates a variety of services. It offers a rural network extending across the country, in addition to metropolitan AM stations that mix talk, music, and news from local and national perspectives. Radio Australia is a single shortwave, multilingual, international service of news, music, and information that claims to be heard by 50 million people outside Australia. There are five national services: Radio National
(variously, “Radio to Think By,” “The Truth of Australia,” or “Mind Over Chatter”); ABC Classic FM (“fine music”); JJJFM (“Radio That Bites”); ABC News network (alternating between political proceedings and news); and Dig Radio, an internet network. Finally, Radio Australia broadcasts to the Asia-Pacific region.

The ABC is expected by government and management to combine broad popularity (the metropolitan stations’ breakfast programs) with authoritativeness (news and current affairs) and innovation (music markets neglected by commercial broadcasters but desired by cassette and compact disc manufacturers). Further, the ABC tries to ensure “that listeners across Australia hear viewpoints and perspectives not broadcast on other stations.” Numerous marginal groups regard the ABC as their access to the center. At the same time, the commission continues to refer to “those original aims that saw the ABC come into being in 1932: to draw the country together by bringing radio of special quality, importance and relevance to all Australians.”

For people who grew up with the ABC, their referent is never simply its actual broadcast output. It is also the meaning of the ABC, as Australia’s foremost institution of information and culture. And for the first 25 years of its existence, it had an exclusively audio presence, a presence that continues to be enormously significant. The commission’s remit is basically contradictory: a comprehensive service that should complement market-driven services, simultaneously both popular and specialist.

### Commercial Stations

Commercial stations meet the needs of advertisers by attracting large audiences. The larger the number of listeners, the more the commercial stations clamor for independence from surveillance by the state: popularity, they argue, guarantees their being in step with public values and attitudes. And this in turn is their claim on the advertising dollar.

Once pilloried for their lowbrow teenage audience, commercial stations are now taken to task for ignoring this group in favor of the aging young and its taste for recycled popularity. Instead of the teenage record-buying public, 25- to 39-yearold consumers are sought by metropolitan FM stations because of their conspicuous propensity to purchase. AM stations have found their niche (considered by many to be comparatively unprofitable) in a mythic suburbia that is fond of convivial chat, of inoffensive music, or of sports radio.

The 1980s were the decade of FM. FM prided itself on the “extraordinary sophistication” of its audience research methods, targeting ever more specific categories of listener. The research is divided in five ways: focus groups for qualitative information from a few listeners; audience tracking, to find out whether listeners are loyal; callout music research, or playing music down the telephone line to gauge reaction; auditorium music tests, where respondents sit en masse and listen to hundreds of tunes; and lifestyle research, which systematizes the habits of the audience.

The commercial stations’ daily cycle is differentiated through announcers defined as individual personalities rather than by a range of music. Disc jockeys are the effective markers that distinguish one service from another. This loss of diversity has been assisted by deregulatory forces. The ABT’s successor, the Australian Broadcasting Authority (ABA), has replaced the single quota of Australian music with more targeted quotas.
specific to particular station formats (up to 15 percent for rock stations, down to 5 percent for easy listening). Regulation of offensive content has, however, continued, and stations are subject to a code of practice designed to prevent programming that offends community standards concerning violence, drugs, suicide, or hate speech.

The successor to FARB, Commercial Radio Australia (CRA) claims that 80 percent of radio listeners tune to the commercial stations. The claim represents its justification for opposing a free-market approach to the issue of licenses: room for new entrants is severely limited by the long periods needed to achieve a profit, and exclusivity is required if local commercial radio is to maintain sufficient advertising revenue to continue broadcasting. FARB opposed using the premium space on the FM band for community radio: commercial stations have the listening numbers in their favor, so they should have spectrum allocation in preference to minority interests.

**Special Broadcasting Service**

SBS radio is part of multiculturalism, the federal government’s cultural shift in immigration settlement policy from all-out assimilation. An ethnic middle class that lacked access to media outlets and attention to their informational needs started to lobby politicians in the mid-1970s, leading to the creation of the SBS as the body responsible for stations 2EA in Sydney and 3EA in Melbourne, stations then on the air on a community basis. The SBS extended these stations’ reach via a relay system to Wollongong and Newcastle.

SBS radio programming was to be along language, not community lines. As the 1980s progressed, the SBS board came to resist an overt discussion of politics by advisory groups while supporting the existence of consultative machinery: an apparent openness to public participation actually masked a very limited agenda for discussion. A further dimension emerged with the mid-1980s uptake of antiimmigration positions by the Liberal and National Parties and the 1990s push from Aboriginal and other people to forge a code of anti-discriminatory guidelines for announcers. Attention has shifted away somewhat from SBS radio since the federal government assigned further development of ethnic broadcasting to the community sectors in the mid-1980s, but the Sydney and Melbourne stations continue to attract controversy.

**Community Stations**

Community stations differ from the other three sectors in that their mandate is neither governmental nor commercial. They have a much more focused and limited warrant to serve local, special interest, community, or educational needs. This constituency may be highly specific, as in radio for the print-handicapped or for the residents of East Fremantle, or very broad, as in a station catering to jazz listeners from 8 to 10 o’clock and to Spanish speakers from 11 to 1. Apart from the surveillance of the ABA, which issues specific licenses for education, special interests, and geographical locations, they are also beholden to internal systems of management, often related to educational institutions or sources of program sponsorship. In addition to the reporting requirements
of regulatory bodies and management committees, the sector has a peak representative body, the Community Broadcasting Association of Australia (CBAA). The association makes submissions to inquiries into the area, convenes national meetings to discuss common issues, and provides a point of articulation.

There is a significant democratic, participatory rhetoric associated with such stations. Although most have in-house training and monitor their output, the claim they frequently make is that they transform the passive audience member into an active producer of material, opening up the airwaves to alternative points of view and modes of presentation and demystifying the media. The voluntary nature of this labor also encourages a faith in the value of cooperative management, which has on occasion led to conflict over production values and the basis for making and implementing decisions on programming, finance, and personnel. Such issues can be especially awkward when paid staff seek to control the administration and quality of the station in a way that is seen as replicating the elitism of other forms of Australian media. The CBAA promulgates a “Code of Ethics” that prescribes community accountability, broad media access, participatory decision making by both presenters and listeners, quality balanced with access, no censorship other than legal requirements, and public proclamation of nondiscriminatory station policies.

The Modern Radio Industry

In 1990 Australia’s 150 commercial radio stations earned A$450 million in revenue and spent over A$400 million, much of it to employ over 4,000 people. These figures mean that the sector is only marginally profitable, which pushes CRA toward contradictory postures on industry regulation. At one moment it is all for total freedom to decide what is broadcast and when, arguing that program content should be the sacrosanct domain of the implied contractual space negotiated by broadcaster and listener. But when it turns to use the airwaves, CRA wants regulation to prevent masses of new competitors. This is, however, counter to the penchant for open markets that has been very much in evidence among Commonwealth government policy makers.

At the same time, the government was engaging in a detailed investigation of metropolitan commercial radio, resulting in a 1988 National Radio Plan (NRP). It called for the conversion of ten AM stations to FM, ten additional licenses, and new services in the not-for-profit area. This was occurring against a backdrop of huge declines in ratings for AM stations. FM was the band that everybody desired to enter, and the federal government’s need for cash provided a useful foil to its laissez-faire intellectual preferences: the new licenses for FM were let by competitive tender. The existing players needed to buy airspace in order to remain solvent or grow as business forces. More than half the stations in the southeastern states’ capital cities changed hands between November 1986 and April 1989. In some transactions, prices paid were in excess of 25 times the value of annual profit.

The upshot of this policy innovation and supply-side disruption was that 1991 found 60 percent of the listening audience tuned to businesses run by Austereo and Hoyts. But this audience potential did not necessarily amount to profitability: Austereo was unable to find bidders for its FM and AM stations in Canberra, which had combined with its Perth
license to produce a loss for 1989–90 of about A$8 million. Meanwhile, the extraordinary revival of AM ratings in Melbourne brought into question the automatic equation of FM with profits. CRA emphasized the difficulties confronting the industry, such as the aggregation of television services, the possibility of pay TV, high license fees, competition from a subsidized ABC, and too many competitors in the FM area.

Despite incurring penalties of A$50,000, 5 out of 14 metropolitan AM stations defaulted on their FM-conversion proposals by the end of 1992, because the competitive bidding system had combined with a long and deep recession to strip away the foundations of many companies. Some recompense was available, as the ABA made it possible for a licensee to run more than one station in a market, whereas the NRP had tried to acknowledge a problem with concentrated ownership. The success of the original FM stations diminished to the point of a collective loss in 1991, with the advent of new entrants and some renewal of the AM band’s popularity (although most of those stations are losing money also). This should come as no surprise, because revenue from advertising is now expected to cover 23 FM stations, compared to 7 before 1990. In the first few months of its operation, the ABA issued 130 virtually free licenses for narrowcasting transmission, mostly covering tiny locations for tourist drive-through information or betting services, areas once covered by the commercial sector.

But the definition of narrow—and its implications for niche marketing by full-blown commercial services—was unclear, with 124 of the country’s 150 profit-oriented stations using almost identical golden contemporary playlists! Blocks of programming, both music and news, are increasingly being purchased by many stations in order to keep a continuous service on the air without employing staff, and news bulletins are generally supplied by a small number of services. By 2002 commercial radio was making around A$745 million in revenue a year, amounting to a profit of about $140 million. The sector secured around 8 percent of all advertising revenue to media outlets.

The Future

Four interrelated factors will determine the future character of commercial radio: technology, networking, imagined audiences, and regulation. The advent of digital technology in Australia offers the prospect of enormously high-quality sound reproduction across similarly enormous distances. When combined with the centralizing drive of networking and syndication to reduce costs, this suggests a southeastern, urban broadcasting center that will swallow up both rural and metropolitan stations through a centrally delivered signal that is customized to local time, weather, and traffic conditions.

Digital audio broadcasting (DAB) has major implications for how audiences are conceived and addressed in terms of localism as well as age, income, race, values, and routine. DAB thus suggests a further homogenization of programming, but by the end of 2002 it remained a dream.

Demographic projections say that the average Australian household will increasingly be composed of the delightfully named “unoccupied person,” living alone and keen to turn to casual voices in search of anomic relief. In this sense, metropolitan and suburban life become akin to rural isolation, where the regional radio presenter is a major figure and a source of delightful recognition for many people. This will encourage research into
people’s work and leisure activities and ideological proclivities as part of the surveillant eye of social science. It is also encouraging networks, because CD quality commercials for national advertisers can now be transmitted from central locations to stations throughout the country. In 1999, 75 percent of commercial stations had network affiliations, and several were owned by foreign citizens, following deregulation of ownership controls. In 2000 there were 229 commercial stations serving just 19 million people—but offering a crushing sameness. Only the ABC holds out signs of difference.

TOBY MILLER

Further Reading

Counihan, Mick, “‘Giving a Chance to a Youthful Muse’: Radio, Records, and the First Australian Music Quota,” Media Information Australia 64 (1992)
Kent, Jacqueline, Out of the Bakelite Box: The Heyday of Australian Radio, Sydney: Angus and Robertson, 1983
Mackay, Ian K., Broadcasting in Australia, Carlton, Victoria: Melbourne University Press, 1957
Mundy, Greg, “‘Free-Enterprise’ or ‘Public Service’? The Origins of Broadcasting in the US, UK, and Australia,” Australian and New Zealand Journal of Sociology 18, no. 3 (1982)
Over the past 15 years the Australian radio broadcast system has begun to serve the specific needs of the Aboriginal audience. By the turn of the century, progress was being made on several levels to increase the availability and variety of services offered to the nation’s native minority.

Indigenous broadcasters form a unique segment of Australian Broadcasting. The Aboriginal people, through their own broadcasting services, produce programs in their own languages that enhance and preserve their culture. The Aborigines comprise only 2 percent of a total population of 17 million; half live in the coastal urban areas and the remainder in rural, more traditional communities.

**ABC’s Indigenous Broadcast Unit**

In the early 1980s, ABC began making time available to Aborigines over some of its larger urban stations. In 1985 ABC provided three hours a day for Aboriginal groups in the northern part of Queensland. Training and support were provided by ABC, but the Aboriginal staff had full control over content. In 1986 ABC began to share a 50,000-watt shortwave transmitter with 8 KIN. This improved 8 KIN’s reach across the Northern Territory, but no one knew how many Aborigines had shortwave receivers (Browne, 1990).

ABC Local Radio is committed to Aboriginal Broadcasting in three ways. First, ABC is not a funding agency but provides professional advice in the development of indigenous media organizations. Second, in 1988 ABC agreed to work toward employment equity for Aborigines and Torres Strait Islanders. An employment target of 2 percent in a variety of positions across the company has been set for ABC by an agreement with the Department of Employment Education and Training. Third, ABC Radio carries *Speaking Out* and *Awaye*, programs produced by Aboriginal and Torres Strait Islanders for a general audience. ABC also purchases programs from independent indigenous production houses and also expects to develop new programs for in-house production.

*Speaking Out* deals exclusively with the culture of the Aboriginal people in Australia and the politics and issues that affect them. The show airs every Sunday night live for one hour. *Awaye* airs programs that deal with the art and culture of indigenous people; the program airs on Friday and is repeated on Sunday. To hear the theme music for *Awaye*, visit their website at www.abc.net.au/message/awaye.

**8 KIN Programming**

By the end of 1985, the first exclusively Aboriginal station, 8 KIN, a 50,000-watt noncommercial FM station, came on the air in Alice Springs in Central Australia. Eventually, relays were added in Ntaria, Ali Curung, and St. Teresa. Until 1992, the Central Australian Aboriginal Media Association (CAAMA) operated this, the only...
licensed Aboriginal community broadcasting service. By June 1994, six additional licensed stations were operating for Aborigines and Torres Strait Islanders. Additional Aboriginal media associations, with community broadcasting licenses, operate in North-East Queensland, Brisbane, Perth, Darwin, and smaller stations in Western and Southern Australia. Programs on Aboriginal-owned community radio stations include news, sports, current affairs, Aboriginal music, talk back, Aboriginal oral stories, health, employment, housing, and land rights information. A special program goal is to reach both the young and the old. In addition to the seven licensed broadcasters, 11 other Aboriginal and Torres Strait Islander regional media groups produce radio programs for Australian Broadcasting Corporation (ABC) and other broadcasters. In 2001, the government provided A$3.1 million through the Community Broadcasting Foundation to facilitate radio access for indigenous Australians and ethnic communities.

Today, station 8 KIN FM broadcasts 18 hours a day and reaches a potential audience of 60,000 indigenous people from 25 major language groups. The station broadcasts in English and seven Aboriginal languages which are spoken in Central Australia. These programs account for 90 percent of the time on air or about 11 and one half hours per day. The amount of time in program categories varies from one language to another, but music accounts for 60 percent with spoken language programs comprising the remainder.

Programming includes news from wire services, local and national newspapers, and reports phoned into the station. There is a journalist coordinator and trainer and two Aboriginal journalist trainees, but much copy is translated from English. There are occasional documentaries and traditional stories. Music on the Aboriginal language program is about 75 percent Aboriginal, the rest European.

Satellite Services

Domestic satellite services became available in Australia in 1988 with the launch of AUSSAT, which made radio and television broadcasting available to remote parts of Australia for the first time. There has been debate since the early 1980s about the use of satellite by Aboriginal people as there was concern about the impact of satellite programming on traditional cultures. Two Aboriginal communities, Yuendumu in the Northern Territory (Warlpiri people) and the other in Ernabella in northern Southern Australia (the Pitjantatjara people), were already producing video and radio. They lobbied for funding of their locally produced services, which at the time were being broadcast illegally on low power equipment (Buchtmann, 1999).

In 1984, the Department of Communication and the Department of Aboriginal Affairs recommended policies that would allow local Aboriginal people control over the new satellite service. This led to the establishment of Broadcasting in Remote Aboriginal Communities (BRACS). In many indigenous communities there were objections to programs by white people, and BRACS was considered a shield to protect their culture. Seventy-four communities were given equipment, but in many cases they did not know how to use it and were given no training. In some communities, there was no interest in learning or training and, in this situation, English programs were rebroadcast. Tribal elders in some communities were more active, and under their leadership BRACS assists in developing Aboriginal programming, especially for television.
Selected Aboriginal Radio Stations as of 2002

Sydney-Koorie Radio (FM)
Brisbane-4 AAA (FM)
Port Augusta-5 UMA (FM)
Perth-6 AR (AM)
Kununurra-6 WR (AM)
Central Australia-8 KIN (FM)
Northern Australia-TEABBA (FM and Satellite)
Fitzroy Crossing-6FX (AM)

Further Reading

Burum, Ivo, director, Satellite Dreaming (video recording), Alice Springs, Northern Territory: Central Australian Aboriginal Media Association Productions, 1991
Central Australian Aboriginal Media Association website,
Top End Aboriginal Bush Broadcasting Association website,

Automation

Automation in radio refers to a method of broadcasting in which individually recorded program elements are reproduced in assigned order by equipment designed to operate with little or no human assistance. Automation systems were initially capable of performing two tasks routinely performed by disc jockeys: broadcasting music selections and commercial announcements. Refinements to technology subsequently enabled disc jockeys to record (or voice-track) their ad-libs in advance and to instruct systems to broadcast them at the appropriate times within the program schedule. The addition of voice-tracking capabilities assisted stations in suppressing criticism that automated broadcasting sounded “canned” in comparison with live, disc jockey supervised presentations.
Paul Schafer is credited with automating the studio operation function. After founding Schafer Electronics in 1953 to manufacture remote-control equipment for broadcast transmitters, Schafer extended the application of this technology in 1956 to program automation. Radio station KGEE used the first Schafer automation system to expand its hours of operation and offer nighttime service to its Bakersfield, California, listeners. Capable of unattended operation, Schafer’s initial system consisted of two Seeburg jukeboxes for music reproduction, three Concertone open-reel tape decks for broadcasting commercial announcements, and an electromechanical switcher for storing programming instructions to control the playback sequence.

Schafer installed an automation system into a motor coach and traveled to radio stations to demonstrate its capabilities. During his visits with station owners and managers, Schafer explained how automation could reduce operating expenses while enhancing the quality of the on-air presentation. Automation systems, he asserted, not only reduced the number of personnel needed to operate the station but also executed programming instructions more reliably and with fewer mistakes than human operators could.

Schafer’s identification of the economic and performance concerns were, in the late 1950s, of relatively equal importance to broadcasters. However, the economic incentive would escalate prominently in 1965 when the Federal Communications Commission (FCC) imposed the AM-FM Program Nonduplication Rule. In its effort to stimulate listener interest in the languishing FM service, the FCC reduced AM station simulcasting by their FM sister stations in the nation’s 100 largest markets. A majority of the approximately 200 duopoly stations affected by the rule chose to automate their FM facilities rather than incur the expense of hiring additional announcing and engineering staffs. Contributing to the movement toward automation was management’s realization that the pool of available talent had been depleted by rapid expansion in both radio and television broadcasting. Demand for qualified personnel had steadily driven up the price of labor during the 1950s. Duopolies in the smaller markets, unaffected by the nonduplication rule, were nonetheless enticed into automating when desirable local talent departed for more lucrative opportunities in metropolitan areas.

Equipment

The manufacture of automation equipment, previously a cottage industry, blossomed during the 1960s. The Radio Corporation of America (RCA) and Gates Radio Company, two prominent broadcast equipment manufacturers, entered into competition with Schafer Electronics. Unlike Schafer’s initial design, which had relied upon jukeboxes for vinyl disc reproduction, next-generation systems reproduced program elements with open-reel and cartridge tape machines. This approach provided greater reliability than did the early discdependent systems. More important, it afforded programmers opportunities to execute formatics in a manner that more closely emulated the sound of a live, spontaneous broadcast.
As the sophistication of control switchers grew, tape-dependent systems enabled announcers to develop the technique of voice tracking. In approximately 10 to 20 minutes, announcers could record all of the comments they would normally make during the course of a four-hour, live program. By instructing the automation system to execute their voice recordings at the appropriate times, announcers were freed to pursue other creative activities during their airshifts.

Adapting a station to automated broadcasting did not, in and of itself, liberate operators from the responsibility of creating a program service; it merely facilitated the execution of programming decisions. Rather than attempting to produce tape-recorded libraries of music internally, numerous automated-station operators elected to subscribe to the services of program syndicators. In most instances, syndicators supplied stations with base libraries of recorded music, which were supplemented periodically with reels of music of current popularity.

Syndication

The syndication firm Drake-Chenault, under the supervision of legendary Top 40 programmer Bill Drake, successfully adapted the middle of the road, Top 40, country, and soul formats to automated presentation. By the mid-1970s, approximately 300 stations subscribed to the company’s services. The beautiful music format was also used extensively by automated stations. Because its execution emphasized repeated segues between songs, this format was especially adaptable to automation.

Broadcaster reliance upon tape-based automation diminished during the 1980s. Among the explanations for the decline in automation’s popularity was programmers’ perception that listeners desired more announcer involvement within the presentation than even the most sophisticated systems could reliably provide. Although voice-tracked programming resembled live presentation, it nonetheless was incapable of emulating for listeners the spontaneity and interactivity they associated with hearing a live broadcast. An alternative approach, in which syndicators delivered live, hosted presentations simultaneously to multiple affiliates via satellite, became the preferred method of automated operation during this period.

Following the passage in 1996 of the Telecommunications Act, which sharply relaxed radio station ownership rules and led to significant consolidation of station properties, interest in automated broadcasting renewed. Owners who operated multiple stations within markets began to cluster the facilities into single studio complexes. In such situations, automation has enabled owners to share personalities among stations, thereby reducing the number of announcers required to sustain program operations. Systems now store all program elements, including voice-tracked disc jockey commentary, in hard-disk memory. These “jock-in-a-box” systems offer disc jockeys greater voice-tracking flexibility and have narrowed the gap between listeners’ perceptions of live and recorded presentation. Clear Channel Communications was making use of this technique in the early 2000s, noting that a small station (say, in Boise, Idaho) could gain the use of an on-air personality for as little as $4,000 to $6,000 a year, far less than paying a real DJ on site. The DJ stays in a major market, yet appears to host local programs in multiple locations. Another trend developing among group-owned stations is to interconnect
stations in multiple cities via telephone circuits to a central, or hub, production facility. A single announcing staff is thus able to provide each of the stations within the hub with individualized, market-specific commentary using the voice-tracking technique. Industry representatives estimate that approximately one in five stations now employs systems for either fully automated or announcer-assisted operation.

BRUCE MIMS

See also Drake, Bill; FM Radio; Recording and Studio Equipment; Syndication; Telecommunications Act of 1996

Further Reading


Bennett, Jeffrey, “RCS NT Number One for WONE,” *Radio World* (25 June 1997)


Automobile Radios

First designed in the 1920s as separate radios to be installed optionally in automobiles, the auto or car radio eventually became a standard feature, flourishing in popularity after World War II. Today the auto radio is considered standard equipment on virtually all makes and models of cars.

Origins

Perhaps it was inevitable that two of the 20th century’s most popular products—cars and radios—would unite in some way, but numerous technological barriers initially prevented such a marriage. The earliest known radio equipped car was demonstrated in St. Louis, Missouri, in 1904. In 1922 Chevrolet offered the United States’ first factory unit, the Chevrolet Radio Sedan, featuring a modified Westinghouse radio with an elaborate fence-like antenna mounted on the roof. This early option alone cost one-third the price of the car itself. Few were purchased, so Chevrolet discontinued their manufacture.

Radio experimenters continued to fend for themselves. Some adapted portable, battery-powered units for use as travel radios, but interference from the automobile’s
engine and ignition system thwarted their widespread development. The do-ityourselfers discovered other obstacles, including exposure to extreme heat and cold, incompatible power supplies from automobiles, and loudspeakers too weak to overcome the noise caused by driving.

Gradually these problems were resolved on several fronts and, like the technical development of the radio itself, auto radio evolved from a combination of discoveries over a period of time rather than in the immediate aftermath of a single breakthrough. Ignition interference, for example, was reduced substantially in 1927 with the invention of the spark plug suppresser, or damp resistance. Within three years, a second development, voltage conversion, allowed simplified operation of the auto radio. Enabling the auto radio to operate independently of a battery system, relying instead upon the car’s electrical system, was key to the device’s commercial success. By the mid-1930s widespread manufacturing was underway.

This second development, in 1930, was the result of collaborative work between Paul Galvin, Elmer Wavering, and William Lear, who later gained prominence in aviation design. At the time, Galvin manufactured battery eliminators in Chicago, products that permitted battery-operated radios to be run by the 120-volt system of household current. Galvin applied the same principle to his Studebaker automobile, demonstrating it to passersby at a meeting of the Radio Manufacturer’s Association in Atlantic City, New Jersey. His first production model, the 5T71, sold for $120 (installed) and became known as a Motorola, a combination of the words motor and Victrola. That year Chrysler offered a radio as a regular option and was followed soon by other automakers. The price of an average auto radio dropped to $80 by the mid-1930s, one-eighth the cost of a typical car, as opposed to the one-third cost of 10 years earlier.

In 1933 Ford introduced auto radios compatible with specially designed dashboard panels in some of its models. By 1936 the push-button feature was added, enabling motorists to tune to a desired station safely, without glancing away from the road while driving. The adjustable, telescopic “whip” antenna, which improved reception of distant stations, was introduced in 1938.

After World War II, the popularity of the auto radio soared when automakers began to offer them as a preinstalled option. By the late 1950s, Motorola, by now the name of Galvin’s company, manufactured one-third of all U.S. auto radios.

Postwar Growth

The development of the auto radio reflected the increasing mobility of the United States itself, but television’s arrival in U.S. homes after World War II was swift and nearly complete by the end of the 1950s.

Many radio executives assumed the worst: their medium was dead or dying. In one sense, this was true. The amount of advertising revenue generated by network radio shows dropped by half in the five-year period ending in 1955. Such long-time popular shows as Amos ’n’ Andy, Jack Benny, and Ma Perkins either moved to television or disappeared completely. Yet a paradox was emerging; despite the precipitous decline of network radio, more radio stations than ever were on the air (about 2,300 in the United States by the mid-1950s, nearly triple the number immediately before World War II) and
more radios were being manufactured than ever. Surveys suggested that TV set owners were more likely to own more than one radio than were non-TV set owners and that radio listeners were tuning in more frequently, to different stations, for shorter durations of time. Television, it appeared, was threatening network radio, but not the medium of radio itself.

“Radio didn’t die. It wasn’t even sick,” said Matthew J. Culligan, National Broadcasting Company’s vice president for radio, in 1958.

It just had to be psychoanalyzed…. The public just started liking [radio] in a different way, and radio went to the beach, to the park, the patio, and the automobile…. Radio has become a companion to the individual instead of remaining a focal point of all family entertainment. An intimacy has developed between radio and the individual.

The “disc jockey” and “drive time” had arrived. Influenced by the auto radio and its motorist listeners, radio became a predominantly music and news service after about 1955.

The new portability of radio was made possible, too, by the development of the transistor in 1948 and by the phenomenal growth of auto radios. By 1953 the first transistorized pocketsize portable radios were available, and five years later the first solid-state (tubeless) auto radios using transistors appeared on the market. In 1952 auto radios were in just over half of America’s cars. By 1980 that figure reached 95 percent. The trend reflected, as J.Fred MacDonald put it, “a mobile, affluent, and commercialized America, solidly committed to television for its creative amusement, but still requiring radio for music and instantaneous information.”

The proliferation of auto radios (by 1962 some 47 million cars in the United States were equipped) also coincided with the emergence of a distinct “teen culture” in the United States following World War II. The auto radio helped to promote the growth of this emerging youth culture and, like the drive-in restaurant and drive-in theater, it came to symbolize America’s new level of mobility. At the same time, auto radio offered more stations. FM had been available, although not widely purchased, in car radios since the mid-1950s. With the medium’s growth in popularity, sales of FM-equipped auto radios soared and prices dropped.

Radio in the years since has continually readjusted its approach to programming to meet changing audience needs, and the pervasiveness of the auto radio has remained high. Its technology has evolved in the same way consumer electronics have changed in the home. Digital audio broadcasting, introduced to the consumer in the 1990s, has spawned a new generation of auto radios. Radio continues to attract its largest audiences during commuting hours, a trend well established by the 1960s and continuing 40 years later, thanks to the near universal availability of the auto radio.

See also Motorola

DAVID MCCARTNEY
Further Reading

*An Analysis of Radio-Listening in Autos*, New York: Columbia Broadcasting System, 1936


“Radio Boom,” *Time* (27 April 1936)


Autry, Gene 1907–1998

**U.S. Radio Star and Station Owner**

Born on a cattle farm near Tioga, Texas, son of a livestock dealer and horse trader, Gene Autry really was raised as a western cowboy, a role he lived on radio and in many films and television shows. Although his early dream was to be a telegraph operator and work on the railroad, Autry loved music. His preacher grandfather had taught him to sing at age 5, putting him in his church’s choir, and Autry saved up to buy his first guitar at the age of 12. By the age of 15 he was singing and playing his guitar all over town. Will Rogers heard him sing as a teenager and encouraged him to pursue a radio career singing music. Autry didn’t rush right into radio, but he did travel with the *Fields Brothers’ Marvelous Medicine Show*, playing as the lead-in act to attract the audience so that “Professor” Fields could sell his patent medicines. He earned a hearty $15 a week for his work.

**Radio Years**

Autry was a teenager when radio came to Tioga. He taught himself to make his own crystal set from reading magazine articles. After he had saved up some money, he decided to take Will Rogers’s advice and look into radio for his chance to sing professionally. He figured the best way would be to first cut a record, which would be his ticket through the door of radio stations. After a month in New York, he was finally given the chance to cut a test for Victor records.

He was told that he had a good voice but needed some seasoning in front of a microphone. The Victor producers recommended he spend some time on the radio and gave him a letter of recommendation to take to radio stations, something that was probably unnecessary given that many rural radio stations would let almost anyone on the air in the 1920s. Autry used the letter to land his first radio spot, a daily 15-minute show on KVOO in Tulsa, Oklahoma, in 1929. He was known as the Oklahoma Yodeling Cowboy. He worked for the railroad by day, because the radio job was unpaid, and used
his on-air publicity to land singing engagements wherever he could find them. During that time, he also began to write his own music.

After six months, Autry returned to New York in the fall of 1929 and cut records for Victor, Columbia’s Velvatone label; and the Conqueror label of American Record Corporation, with whom he signed an exclusive contract. As a result of these record connections, he was later invited to appear on Rudy Vallee’s Fleischmann Yeast Hour, one of his first network engagements. He was also invited to be on National Barn Dance on Chicago station WLS. National Barn Dance was one of the most important venues for early country music. Other performers who frequented the WLS “Cornstalk Studio” from which the show originated included Pat Buttram, Lulubelle and Scotty, The Prairie Ramblers, Patsy Montana, the Cumberland Ridgerunners, and Jolly Joe Kelly. They performed what was known as “hillbilly” music in the 1920s and 1930s but which later became known as “country and western,” due in part to the likes of Autry and other “singing cowboys.”

These early appearances led to Autry’s becoming a regular on the National Barn Dance, where he was paid $35 a week for performing on-air and touring with the show. The show would tour county fairs and the like during the week and return to Chicago for the Saturday night radio show, which was performed in front of a live audience of around 1,200. The cast would do two of these live radio shows in a night. One hour of the show was aired on the National Broadcasting Company (NBC). Autry had by 1931 become a WLS regular. His role included singing on the radio program and touring with the company for performances. Sears and Roebuck also sponsored him for a show using his own name, the Gene Autry Program, and he was a guest artist on other shows, including the National Farm and Home Hour.

**Recording Success**

Integral to Autry’s network success was his recording success. One of his early recordings, “That Silver-Haired Daddy of Mine,” became his first hit (he had written it with a coworker on the railroad). After it was recorded for distribution by the Sears mail-order catalogue, it sold 30,000 copies the first month. By the end of a year, it had sold half a million copies. The head of his record company and his press agent together had a gold-plated copy of the record made. When sales topped 1 million, they gave him a second gold record. In his autobiography, Back in the Saddle Again, Autry says that this was the start of the tradition of giving gold records for sales of 500,000 copies. The record sold over 5 million copies by 1940.

Other songs that made Autry a top-selling country star included “Tumbling Tumbleweed,” “Back in the Saddle Again,” “Mexicali Rose,” “Peter Cottontail,” “Here Comes Santa Claus,” and “South of the Border.” The song “Rudolph the Red-Nosed Reindeer” took Autry to the top of the pop charts for the first time when it was released in 1949. It is one of the best-selling singles of all time. Overall, Autry recorded more than 600 songs, some 200 of which he wrote or cowrote.
Managing the Show

Keeping a band together was difficult in the early 1930s; performers regularly left to pursue other opportunities. This meant regularly searching for talent to replace those who moved on. In one instance, Autry’s booking agent, J.L. Frank, was traveling in central Illinois in 1933 when he heard a man by the name of Lester “Smiley” Burnett sing on radio station WDZ out of Tuscola, Illinois. He told Autry that Burnett would be a good addition to the show for his personal appearances. Autry called Burnett at the radio station and offered him the job sight unseen. Burnett responded, “I’m getting 18 dollars a week and getting it regular,” a modest salary, but one to be thankful for in the early Depression years. Autry offered him $35 dollars a week, and Burnett accepted. Burnett would go on to back up Autry on radio, co-write songs with him, and then star in 60 movies as Autry’s sidekick.

Although few band members stayed with Autry through the years, similar stories show how he often went about finding them: once, Autry saw a man hitchhiking and carrying a guitar. He pulled over and asked the fellow to play for him. He didn’t hire the hitchhiker, but he got the name of “the best fiddle player in the county” from the man and hired the fiddle player.

While Autry was at WLS, the station was sold to a national network, further advancing Autry’s fame beyond Chicago to other cities around the country. Autry was still at WLS in 1934 when he began his film-acting career in earnest by starring in a series of westerns. After making a few films in Hollywood, he returned to Chicago during a winter storm. Suddenly, he realized that California looked much more appealing, and when another offer for a movie came in 1935, he left Chicago for good. He made eight films a year from 1935 to 1942. By 1953, when he starred in his last movie, he had been in 93 films.

Autry’s Melody Ranch

In 1940 Autry made a movie called Melody Ranch. The Columbia Broadcasting System (CBS) then gave him a new radio show called Gene Autry’s Melody Ranch. The program would last from 1940 to 1956, interrupted only by Autry’s military service during World War II. The program included a mix of barn dance, vaudeville, Saturday matinee, and medicine show; there was even a role for his movie co-star, his horse Champion. Autry toured extensively with the show, broadcasting it from many of the small towns and rural locations where his country-style music had its greatest appeal.

In 1941, the second year of the show, Melody Ranch received an invitation to perform in the small town of Berwyn, Oklahoma. The town’s 227 residents invited Autry because they had decided to change the town’s name to Gene Autry, Oklahoma. The show performed on a flatbed railroad car to a live audience of 35,000 people who had come to the small town that day. This was in addition to the CBS radio audience and a makeshift network audience put together over several Oklahoma radio stations that carried an extended version of the broadcast.
About a month later, Autry was set to start the show at the CBS studios in Hollywood when, instead of the opening theme, a special news bulletin was announced from New York. The report gave the details of the Japanese attack on Pearl Harbor that drew the United States into World War II. The show went on as usual that night after the news bulletin, but seven months later Gene Autry enlisted in the U.S. Army Air Corps during a live *Melody Ranch* show, one of several efforts he made to promote the war effort.

Autry decided to enlist, knowing that he was ripe for the draft anyway. In July 1942, he enlisted as a G.I., cutting his pay from $600,000 the year before to $2,000 in his first year in uniform. He initially worked to entertain many of the troops and even performed many of his *Melody Ranch* shows from the base while stationed in Phoenix, Arizona. He eventually made it into flight school and became a pilot in the Air Transport Command, flying in the Pacific theater of the war. Once the war ended, he returned to the *Melody Ranch* program and to the movies.

Guests on other episodes of *Gene Autry’s Melody Ranch* included First Lady Eleanor Roosevelt and a baby boy named Franklin Delano Gene Autry Johnston after both the president of the United States and the host of the radio show. One group of back-up musicians who played regularly for Autry’s radio show was the Jimmy Wakeley Trio, a group that also appeared in one movie with Autry, *Heart of the Rio Grande*.

The show, sponsored by Wrigley’s Doublemint gum, sometimes promoted the spearmint version of that product. The company had assured Autry that they didn’t have to worry about ratings as long as the program sold gum. Nevertheless, after the show had reached the 10-year mark, Wrigley’s hired additional writers, singers, actors, orchestra
members, and a publicity agent—all in an effort to stem any defection of audience to the upcoming medium of television.

Because Autry saw the trends moving toward television, 1950 also marked the beginning of his own television series, *The Gene Autry Show*. The show continued for the duration of Autry’s *Melody Ranch* radio program, also ending in 1956. By the time it ended, about 100 episodes of the television program had been made. Autry began to withdraw from personally performing in show business in the late 1950s. He had already made his last film, and in 1956 he ended his regular radio and television shows. He still recorded music regularly until 1962, but after that he concentrated on managing a growing entertainment corporation. He recorded his last two songs in 1964. Autry’s autobiography, titled after one of his most popular films, *Back in the Saddle Again*, was published in 1978.

**Ownership and Awards**

By 1950 Autry was also a radio station owner, having purchased his first property a few years earlier, during World War II, when he was stationed near Phoenix. This Phoenix station, KPHO-AM, became the cornerstone of a corporate entertainment company that he called Golden West Broadcasting. Before incorporating, however, Autry ran the station with a partner, Tom Chauncey, who continued to run the station when Autry was transferred away. The partners also bought a radio station in Tucson. Soon Autry moved into television ownership also when he obtained a broadcast license from the Federal Communications Commission for KOOL in Phoenix. Autry owned KOOL-TV as well as KOOL radio interests until the early 1980s, when he sold them for $35 million.

In 1952 Autry purchased 56 percent of KMPC-AM radio in Los Angeles, which became the flagship station for Golden West Broadcasting. The corporation soon bought stations up and down the Pacific coast in San Francisco, Seattle, and Portland. The adult alternative KSCA-FM in Los Angeles was added to the group later. Golden West owned television stations as well, including KTLA in Los Angeles, bought from Paramount for $12 million in 1964. In 1985, Autry’s company sold KTLA for $245 million, the highest price paid for a television station to that time.

Autry is the only entertainer to have five stars on the Hollywood walk of fame—one each for recordings, television, film, radio, and theater. Autry received many other awards, including the Songwriters Guild Life Achievement Award and the Hubert H. Humphrey Humanitarian of the Year award. He has been inducted into the National Cowboy Hall of Fame and the Western Music Association Hall of Fame, among others.

STEPHEN D. PERRY

*See also* Country Music Format; National Barn Dance


**Radio Series**

1929–30  Oklahoma Yodeling Cowboy
1931–34  National Barn Dance
1930–34  Gene Autry Program
1940–56  Gene Autry’s Melody Ranch

**Television**

*The Gene Autry Show*, 1950–56

**Films**

*In Old Santa Fe*, 1934; *Mystery Mountain*, 1934; *The Phantom Empire*, 1935; *Tumbling Tumbleweeds*, 1935; *Melody Trail*, 1935; *Sagebrush Troubador*, 1935; *The Singing Vagabond*, 1935; *Red River Valley*, 1936; *Comin’ Round the Mountain*, 1936; *The Singing Cowboy*, 1936; *Guns and Guitars*, 1936; *Oh, Susanna!* 1936; *Ride, Ranger, Ride*, 1936; *The Big Show*, 1936; *The Old Corral*, 1936; *Git Along, Little Dogies*, 1937; *Round-Up Time in Texas*, 1937; *Yodelin’ Kid from Pine Ridge*, 1937; *Manhattan Merry-Go-Round*, 1937; *Springtime in the Rockies*, 1937; *Rootin’ Tootin’ Rhythm*, 1937; *Public Cowboy No. 1*, 1937; *Boots and Saddles*, 1937; *Man from Music Mountain*, 1938; *Prairie Moon*, 1938; *Western Jamboree*, 1938; *Rhythm of the Saddle*, 1938; *The Old Barn Dance*, 1938; *Gold Mine in the Sky*, 1938; *Home on the Prairie*, 1939; *Mountain Rhythm*, 1939; *South of the Border*, 1939; *Rovin’ Tumbleweeds*, 1939; *Mexicali Rose*, 1939; *In Old Monterey*, 1939; *Colorado Sunset*, 1939; *Blue Montana Skies*, 1939; Men with Steel Faces, 1940; *Gaucho Serenade*, 1940; *Ride, Tenderfoot, Ride*, 1940; *Melody Ranch*, 1940; *Rodeo Dough*, 1940; *Unusual Occupation*, 1940; *Shooting High*, 1940; *Rancho Grande*, 1940; *Carolina Moon*, 1940; *Meet Roy Rogers*, 1941; *Under Fiesta Stars*, 1941; *Sunset in Wyoming*, 1941; *The Singing Hill*, 1941; *Sierra Sue*, 1941; *Ridin’ on a Rainbow*, 1941; *Down Mexico Way*, 1941; *Back in the Saddle*, 1941; *Stardust on the Sage*, 1942; *Home in Wyomin’*, 1942; *Heart of the Rio Grande*, 1942; *Cowboy Serenade*, 1942; *Call of the Canyon*, 1942; *Bells of Capistrano*, 1942; *Sioux City Sue*, 1946; *Twilight on the Rio Grande*, 1947; *Trail to San Antone*, 1947; *Saddle Pals*, 1947; *Robin Hood of Texas*, 1947; *The Last Round Up*, 1947; *The Strawberry Roan*, 1948; *Loaded Pistols*, 1948; *The Cowboy and the Indians*, 1949; *Sons of New Mexico*, 1949; *Rim of the Canyon*, 1949; *Riders of the Whistling Pines*, 1949; *Riders in the Sky*, 1949; *The Big
Sombrero, 1949; Mule Train, 1950; Screen Actors, 1950; Indian Territory, 1950; Cow Town, 1950; The Blazing Sun, 1950; Beyond the Purple Hills, 1950; Gene Autry and the Mounties, 1951; Texans Never Cry, 1951; Silver Canyon, 1951; Valley of Fire, 1951; Whirl Wind, 1951; The Hills of Utah, 1951; Night Stage to Galveston, 1952; Apache Country, 1952; Wagon Team, 1952; Blue Canadian Rockies, 1952; The Old West, 1952; Barbed-Wire, 1952; On Top of Old Smoky, 1953; Winning of the West, 1953; Saginaw Trail, 1953; Pack Train, 1953; Last of the Pony Riders, 1953; Goldtown Ghost Riders, 1953; Hollywood Bronc Busters, 1956; Alias Jesse James, 1959; Silent Treatment, 1968; Gene Autry, Melody of the West, 1994

Stage

Fields Brothers Marvelous Medicine Show, 1924

Selected Publications

Rhymes of the Range, 1933
The Art of Writing Songs and How to Play a Guitar, 1933
Western Stories, 1947
Back in the Saddle Again (with Mickey Herskowitz), 1978

Further Reading

Fletcher, Steffi, Gene Autry, New York: Simon and Schuster, 1956

Awards and Prizes

As with other American media, the radio broadcasting industry awards itself (and receives from others) a host of annual prizes as a prime means of recognizing key people, programs, and top performances in the business. This entry briefly describes a selection of the longer running and better known national awards available to radio broadcasters. Most are given annually, and many are open to people in both radio and television (and sometimes other media). The means of choosing winners varies tremendously across both prizes and organizations.
Armstrong Awards

Often called “Majors” in honor of inventor Edwin Howard Armstrong’s World War I army rank, these awards, established in 1964, are given in recognition of excellence and originality in radio broadcasting in six content categories: news, music, news documentary, education, community service, and creative use of the medium. Additional awards may be given in the areas of technology, innovation in station programming, and outstanding service by an individual or company. Armstrong Foundation, Columbia University, New York.

Clarion Awards

Given in more than 80 categories, including radio, for people and programs concerning women in society. Association for Women in Communications, Arnold, Maryland.

Clio Awards

Given in honor of the best domestic and international advertising, these awards have been given since 1960. They include radio among other forms of advertising. More than 200 are given annually. Clio Awards, New York.

Crystal Radio Awards

Given to as many as ten radio stations per year for overall excellence in community service. National Association of Broadcasters, Washington, D.C.

Edward R. Murrow Awards

(1) Given for outstanding individual contribution to public radio. Corporation for Public Broadcasting, Washington, D.C.

(2) Given for the best news department, spot news coverage, continuing coverage, investigative reporting, news series and documentary, and for overall excellence. Radio Television News Directors Association, Washington, D.C.

Freedom Foundation National Awards

Given for constructive activities on drug abuse education, ecology, patriotic programs, respect for the law, moral and spiritual values, economic education, human dignity and brotherhood. Freedom Foundation, Valley Forge, Pennsylvania.
Gabriel Awards

Given for radio programs or segments in the following categories: arts/entertainment, news/information, religion, coverage of single news story, community awareness campaigns, public service announcements, and short features. National Catholic Association of Broadcasters and Communicators, Dayton, Ohio.

George Polk Award

These vary from year to year but generally are given to honor discernment in a news story or coverage, resourcefulness in gathering information, or skill in relating the story. These are usually given for foreign, national, and local achievements. Long Island University, New York.

Gold Medal Award

Presented each year to an outstanding individual or corporate entity in radio or other electronic media. International Radio and Television Society, New York.

Golden Mike Award

Awarded to a company or an individual that has made an outstanding contribution to the art of broadcasting and the community at large. Broadcast Foundation, Greenwich, Connecticut.

International Broadcasting Award

Given to “the world’s best” radio and television commercials from anywhere in the world. There are nine radio categories, and subject matter for the advertisement is open. Hollywood Radio and Television Society, Hollywood, California.

Jack R. Howard Awards

Given in honor of investigative or in-depth reporting. ScrippsHoward Foundation, Greencastle, Indiana.

Marconi Radio Awards

Given to stations or on-air personalities for excellence in and contributions to radio. National Association of Broadcasters, Washington, D.C.
Missouri Honor Medals
Given since 1930 in honor of lifetime achievement by the School of Journalism, University of Missouri, Columbia, Missouri.

National Headliner Awards
For radio network and individual station news, public service, documentary, and investigative reporting. National Headliners Club, Northfield, New Jersey.

National Radio Award
Given to an individual for significant or ongoing contributions to radio from a leadership position. National Association of Broadcasters, Washington, D.C.

New York Festivals Award
Encompasses radio advertising, programming, promotion, news, entertainment, editorials, service features, and public service announcements, among others. International Radio Program and Promotion Awards of New York, New York.

Overseas Press Club Awards
Given annually for radio spot news from abroad, or radio interpretation of foreign news. Overseas Press Club, New York.

Public Radio Program Award
Recognizes excellence in radio programming at the local or national level. Corporation for Public Broadcasting, Washington, D.C.

Radio-Mercury Awards
Given to honor creative excellence in paid radio advertising, these carry some of the largest cash prizes of any of the awards in this entry—upward of $100,000 for the top winner. RadioMercury, New York.
Radio Program Awards

To recognize outstanding programming for community-oriented radio, commercial or public. National Federation of Community Broadcasters, Washington, D.C.

Radio Wayne Awards

Given annually for the top account executive, sales manager, general manager, director of sales, and broadcaster of the year. They are named in honor of the late Wayne Cornils, a senior vice president of the Radio Advertising Bureau. Radio Ink, Miami, Florida.

Sigma Delta Chi Distinguished Service Award

Given for radio editorials or radio reporting. Society for Professional Journalists, Greencastle, Indiana.

Silver Baton Award

Given for outstanding work in news and public affairs during the previous year, covering both network and local radio. Can be given to an individual, program, series of programs, or a station. Alfred I. DuPont-Columbia University Awards, Graduate School of Journalism, Columbia University, New York.

See also Peabody Awards; Radio Hall of Fame

Further Reading

“Major Broadcasting and Cable Awards,” Broadcasting and Cable Yearbook (annual listing)

Axis Sally (Mildred Gillars) 1900–1988

U.S. Shortwave Propagandist for Nazi Germany

Axis Sally’s “This is Germany Calling” shortwave radio signature heralded one of the most notorious anti-Allied propaganda broadcasts of World War II. Her sexy voice and clever mix of musical entertainment with morale-shaking commentaries and dramatic sketches were familiar to GIs in every zone of the European theater of operations.

Mildred Gillars began her radio work in 1940, after efforts to secure a job as an actress in the United States failed and she moved to Berlin. With the outbreak of World War II,
radio propaganda became an important instrument in Germany’s psychological warfare campaign. When the Propaganda Ministry began expansion of the Europäische Fremdsprachendienste (European Foreign Language Service), Gillars was offered a position as an announcer and commentator for the British zone. In the summer of 1940, during the Battle of Britain, Gillars blanketed the island with anti-British propaganda from the Reich’s Bremen shortwave station. In her Bremen Sender program, she commented on the course of the air battle (magnifying German victories) and entertained listeners with the light jazz of “Charlie and His Orchestra.” On one occasion, Gillars interviewed captured British fliers at the Dulag Nord transit camp.

When British and German forces clashed in North Africa in early 1941, Gillars transferred to the Europäische Fremdsprachendienste’s southern broadcasting zone and began transmitting her Anzac Tattoo: From the Enemy to the Enemy program from the 100-kilowatt medium wave unit at GrazDoble, Austria. The Commonwealth troops of General Wavell’s Eighth Army tuned in every Saturday night to this 30-minute offering, ignoring the anti-Allied remarks in preference to the musical numbers and Gillars’s seductive “bedroom voice.”

When the tide of battle began to shift adversely for Germany following the November 1942. Allied invasion of North Africa, the propagandistic element in Gillars’s broadcasts became more prominent and more malignant. For the 65,000 U.S. First Army troops who listened to her Thursday night Home Sweet Home program, “Axis Sally,” as the GI’s now dubbed her, presented a warm picture of recently abandoned family life and added, “You’ll get back to all that when the war is over, if you’re still alive.” Sally also made soldiers uneasy by emphasizing their pawnlike status. “How did I let myself get roped into Churchill’s and Roosevelt’s war business?” she had one character remark. “After all, God can save the King. Americans don’t need to bother about him.” Axis Sally’s broadcasts constantly exploited GI lack of training and fear of imminent death. Prior to one engagement she warned, “You poor, silly, dumb lambs, on your way to be slaughtered.” Personal resentments against officers, war profiteers, scheming politicians, and military discipline were also exploited. Her most effective device for undermining morale, though, was her shrewd manipulation of the GI’s romantic anxieties. In a 1943 broadcast, Sally queried, “And what are your girls doing tonight, fellows? You really can’t blame them for going out to have some fun, could you? It’s all so empty back there now. Better to go out for some drinks with that 4-F boyfriend than sit and wait forever, doing nothing…especially if you boys get all mutilated and do not return in one piece.” This was followed by renditions of “Can I Forget You” and “Somebody Stole My Gal.”

Another disturbing feature of Axis Sally’s broadcasts was her apparent ubiquity. GIs of the U.S. Sixth Corps waiting in transports off the coast of Salerno in 1943 heard her warn, “Thousands and thousands and thousands of you men going from…Sicily to Europe are on your last round-up,” followed by the song of the same name. Listeners aboard one U.S. merchantman were astonished when, within 90 minutes of their sailing past Gibraltar, Axis Sally was on the air describing the convoy in detail—number and type of ships, cargo, and so on. Sally’s messages were frequently beamed across the Atlantic. “You women in America waiting for the one you love. Waiting and weeping in the safety of your own rooms…Thinking of the son, husband, brother who is being sacrificed…Perishing on the fringes of Europe…Losing their lives, at best coming back crippled.”
In mid-1943, Sally expanded her on-air operations when she and Otto Koischwitz (another influential North America service propagandist, with whom she had a long-running affair and who may have gotten her into the radio business in the first place) began originating broadcasts from Allied prisoner-of-war camps in Germany. After presenting herself as an International Red Cross representative, she allowed GIs to transmit 25-word messages to their folks back home. Although she would later claim a humanitarian motive, these Medical Reports were pure propaganda. Every broadcast dwelt on the idyllic character of camp life—with obliging guards and tanned and cake-eating inmates.

In the fall of 1943, Sally followed Allied forces on their invasion of the Italian mainland. Her Midge at the Mike program was immensely popular with GIs, despite its constant drumming of themes like homefront betrayal and violent death. Sally’s sexy tones and the lively vibes featuring America’s big band artists brought warmth to many remote hillside foxholes. She ended each broadcast with “That’s all boys and a kiss from Sally.” In February 1944, German aircraft dropped program schedules along the entire Allied line of advance.

By spring 1944, Axis Sally was the highest-paid foreign language broadcaster in the Third Reich, and her notoriety encouraged several imitators in the European theater. With the increasing artistic freedom that accompanied her rising status, she helped produce one of the best-known German propaganda dramas of World War II, Vision of Invasion. Broadcast on 12 May 1944 to the American homefront and to U.S. troops gathering in southeastern England for D day (three weeks before the actual operation), Vision of Invasion was a warning of the catastrophe awaiting Allied forces when they disembarked onto Hitler’s fortified continent. The program opened with an announcer declaring “D day. D stands for Doom, Disaster, Defeat, and Death!” The action alternated between an apprehensive transport-bound GI and his grieving mother at home (played by Sally). “The invasion will be suicide,” she laments, “and between 70 and 90 percent of the boys will be killed or maimed for life.”

To counter Sally’s growing influence, the American Armed Forces Radio Service multiplied the number of shortwave transmitters in its zones of occupation and expanded its schedule of anti-Axis programming. Morale-boosting offerings for Allied consumption were also increased, and an anti-Sally character was created in the form of “GI Jill,” who presented the same mix of vibrant music and alluring commentary. In addition, U.S. broadcasters began a vigorous on-air effort to discredit Sally. At home, a federal grand jury indicted her, in absentia, for wartime treason.

In the summer of 1944, Sally was dispatched to France where, using special mobile transmitters, she tried to foment confusion and undermine morale among advancing Allied troops. After the Allied sweep out of Brittany, Sally retired to
Mildred Gillars, aks “Axis Sally,” leaves court in Washington, D.C., 17 February 1949

*Courtesy AP/Wide World Photos*

Paris, where she endeavored to stir up French resentment against the American bombing campaign, told of increased Allied disunity, and informed soldiers of the ingratitude of “liberated” Frenchmen. After a brief stint at Hilversum studios in Holland, Sally returned to Berlin and continued her broadcasts at KWS until the end of the war. In the spring of 1945, with Allied troops closing in on Germany from all directions, Sally tried to counter the impression of German defeat by broadcasting from officer’s parties and official galas. In the last weeks of the conflict, she advised GIs to shirk their duties lest they become unnecessary casualties.

After the war Sally lived in a Berlin basement until arrested by U.S. intelligence agents in March 1946. She spent 6 months at the Oberursel detention facility and 19 months in another U.S. Army prison in Germany. On 24 January 1949 she was tried in
the United States for high treason and was ultimately given a 10- to 30-year sentence and a $10,000 fine. Although no firm evidence could be produced indicating her ideological commitment to Nazism (hence the relatively light sentence), enough pro-Hitler and anti-Semitic utterances could be gleaned from shortwave transcripts to condemn her. After 12 years in a West Virginia women’s reformatory, she was paroled in July 1961. She returned to Ohio Wesleyan University to complete her bachelor’s degree in speech communication. She died on 25 June 1988 in Columbus, Ohio.

ROBERT J.BROWN

See also Lord Haw-Haw; Propaganda; Shortwave Radio; Tokyo Rose; World War II and U.S. Radio

Axis Sally. Born Mildred Elizabeth Sisk (later Mildred Gillars) in Portland, Maine, 29 November 1900. Studied English and Drama at Ohio Wesleyan University, 1917–20; stagework in Cleveland, lived in New York as unemployed actress, 1920–28; minor role in film Unwanted Children, 1928; artist’s model in Paris, 1929; returned to New York, 1930–33; moved to Berlin and worked at Berlitz language school, dubbed German language films, wrote film reviews, and acted as private secretary to German actress Brigitte Horney, 1934–39; propaganda broadcaster for Nazi-controlled Bremen I shortwave station, 1940; joined southern broadcasting zone of Europäische Fremdsprachendienste (European Foreign Language Service) and hosted anti-Allied propaganda broadcasts, 1941–44; hosted propaganda broadcasts from Paris, the Netherlands, and Berlin, late 1944–45; in hiding in Berlin, 1945–46; arrested, March 1946; in U.S. Army detention center at Oberursel with other U.S. radio propagandists; released December 1946; rearrested by U.S. Army, January 1947; in U.S. Army prison, 1947–49; on trial for treason, found guilty, and received 10–30 year prison sentence and $10,000 fine, 1949; women’s reformatory, in Alderson, West Virginia, 1949–61; paroled, 1961; taught French and German at Catholic school, Columbus, Ohio, 1961–72; returned to Ohio Wesleyan to complete bachelor’s degree in speech communication, 1972. Died in Columbus, Ohio, 25 June 1988.

Radio Series

1940 Bremen Sender
1941–42 Anzac Tattoo: From the Enemy to the Enemy
1942–45 Home Sweet Home
1943–45 Medical Reports
1943–45 Midge at the Mike
1944 Vision of Invasion

Further Reading


Kris, Ernst, and Hans Speier, *German Radio Propaganda*, London and New York: Oxford University Press, 1944

Van Dyne, Edward, “No Other Gal Like Axis Sal,” *The Saturday Evening Post* (15 January 1944)