



# Stay Tuned

A HISTORY OF AMERICAN BROADCASTING

*Third Edition*



CHRISTOPHER H. STERLING & JOHN MICHAEL KITROSS

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K\E\G Associates



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*To our parents—  
who were there and thus listened  
to many things we missed*

# PREFACE

## TO THE THIRD EDITION

### (2002)

Broadcasting—if, indeed, the term “broadcasting” is still a valid label for the subject matter of this book—isn’t what it used to be. In some respects, it is better, in some worse than it was in decades past—but it certainly is different and more complex.

Nearly a quarter of a century ago, when the first edition of *Stay Tuned* was published, the broadcasting industry was relatively simple and placid. The second edition, published a dozen years later, reflected the technological, organizational, economic, and legal developments that then had started to change the industry.

Today, it is almost an entirely new ball game. Keeping up is a major task. To understand the game’s unwritten rules, it is more important than ever to understand how the broadcasting industry has evolved to what it is today. That is the purpose of this new edition of *Stay Tuned*.

Accordingly, we have reviewed every single word of the second edition, removed ambiguities and a gratifyingly-small number of reported errors, added in new and sometimes unpublished scholarship in broadcasting history—such as research by Louise Benjamin, Donna Halper, Don Godfrey, Harold Cones, Paul Beck, Gordon Greb, and Mike Adams and many other known and unknown contributors to the body of knowledge found in this volume—and eliminated discussion of a few “dead ends” that earlier we didn’t know were dead ends.

To bring this account of broadcasting history up to 2001, we’ve written a new chapter 11 to describe what in our judgment are significant historical developments from 1988 until the present and completely rewritten chapter 12 (“Lessons From the Past for the Future”) in light of new lessons.

To make this edition even more useful, we’ve expanded the Bibliography (Appendix D) substantially, supplied “Selected Further Reading” for each chapter in an alphabetical format (within topics) in order to avoid the risk of influencing readers with our own biases, and expanded both the

Chronology of Appendix A and the Glossary of Appendix B. The historical tables in Appendix C have been thoroughly updated and reorganized and several new ones have been added on topics from public television programming to the relationship of television to presidential elections.

We've also moved most of the data from the "Key Indicators" tables for every five years found in the second edition to Appendix C—partly because what once were "key" no longer may be so, and partly because of the increasing unavailability of current data. Nothing significant from earlier editions has been omitted.

We've seen many developments since the second edition. Digitized technologies, the convergence of broadcasting and computers, viable new broadcast networks, an ever-growing tendency toward concentration of ownership of networks and stations, commodification of everything from industries to programs and audiences, the possibly temporary triumph of the ideology of deregulation, programming more highly specialized than had been imagined a few years earlier and lowest-common-denominator "reality" (such as *Survivor*) and quiz programs, DTV and DVD and a myriad of additional technological acronyms, streaming, changes in the copyright law, and literally dozens of other developments all are to be found in the pages of this edition of *Stay Tuned*.

These developments all have at least one thing in common: None of them appeared full-blown, out of nowhere. They all evolved from earlier developments, inventions, trends, and principles—and this is where we hope *Stay Tuned* will be most valuable. The reader can both understand what is behind what she or he sees or hears today and develop a sense of historical evolution that will make it possible to be better prepared for what will show up tomorrow.

We are trying to concentrate on trends and principles, even though they are reflected in myriad developments and events. We do try to point out that "what everyone thinks happened" isn't always what actually occurred. For example, was the first U.S. broadcasting station KQW, KDKA, WWJ, or 1XE or one of several other claimants? Did Marconi deserve his reputation for having invented radio, or should the praise go to Tesla? Why has Armstrong been largely forgotten—but de Forest remembered? We try to provide data that may help you decide these questions, but we are not egotistical enough to act as "the" judge. Although both of us are trivia buffs, we also are well aware that trivia of person, time, place, and gadget is much less important than are trends.

In preparing this edition, we owe special thanks to our long-suffering families, perceptive readers such as Lou Benjamin and Don Godfrey, and the helpful staff, particularly Linda Bathgate, at Lawrence Erlbaum Associates, our new publishers. The many production problems inherent in a book of this length and scope were handled with aplomb by Susan Detwiler, of TechBooks; Ruth Mandel was of great help in locating photographs; and Jennifer Sterling (who was less than a year old when this project was

conceived) and her colleagues at Spot Color Inc. were responsible for the design of this edition's cover.

The professional interests of both authors have changed—Kittross is deeply into media ethics, and Sterling into telecommunications policy—and our book jacket photographs from earlier editions no longer look like us. While Sterling is still at George Washington University, Kittross now is managing director of K\E\G Associates, an academic consulting firm, and editor of *Media Ethics* magazine.

Although the authors are as excited about the history of broadcasting as they ever were, a look around our homes—filled with computers, new television sets with bells and whistles, VCRs, CD players, radios, and other paraphernalia, but no longer containing children (all of ours now have their own homes, computers, television sets, etc.) or parents—tells us that the rate of change has, if anything, speeded up. If one claims to be knowledgeable about broadcasting, there is a lot, past and present, that one needs to know.

While predicting the future is even more problematic than interpreting the past, it is an impossible task unless one understands *both* the present and how it evolved from the past. For example, will today's new technologies and programming, providing hundreds rather than only scores of content choices every minute, ultimately be beneficial or harmful to society? Will the raging growth of deregulation-spawned concentration of control of broadcast outlets remove the last vestiges of "localism"? Will our growing dependence on space communication satellites render us more vulnerable to accidental sundering of our communications connections? What will be the effect of replacing the "public interest, convenience, and necessity" licensing standard with auctions and lotteries? Stay tuned!

In 1958, acclaimed newsman Edward R. Murrow said to his colleagues, "This instrument [of television] can teach, it can illuminate; yes, and it can even inspire. But it can do so only to the extent that humans are determined to use it to those ends. Otherwise it is merely wires and lights in a box. There is a great and perhaps decisive battle to be fought against ignorance, intolerance, and indifference. This weapon of television could be useful."

In its own small way, we hope this third edition of *Stay Tuned* also will be useful to you as you fight the battle.

C.H.S. and J.M.K.



# PREFACE

## TO THE SECOND EDITION

### (1990)

In the decade since publication of the first edition of *Stay Tuned*, the world has not stood still. Indeed, the jury is out as to whether this period has not seen more changes in broadcasting than any other decade since broadcasting became an industry in the 1920s.

It may be argued that the late 1970s were the period of highest complexity, even achievement, of the broadcasting industry, as described in chapters 3 through 9. It was a period of real scarcity of outlets, with limited opportunity for entry. But it also was the last period when the people running the industry had come up through the ranks and perhaps still believed in broadcasting as a public interest, convenience, and/or necessity.

Actually, 1978 marked the start of a new ball game. At that time, only three-quarters of today's full-power stations were on the air; cable served only half the number of homes it serves today—and pay-cable was only starting; home VCRs were virtually unknown; PBS rarely made the ratings books; nobody talked about LPTV or HDTV; the FCC was still a force to be reckoned with; "indecentcy" was left to the pulpit and the pamphlet; and nobody ever dreamed that all three networks, the most stable part of the industry, would be sold.

There are those who now say that the "gee-whiz" or "glamorous something special" hallmark of broadcasting has dissipated. They say that broadcasting is only one small but inseparable part of our current culture and economy. By 1980, it was clear that the new breed of MBAs were in control of broadcasting, as they were in many other industries, and were treating broadcasting as "just another business" that could be manipulated for improvement of the short-term "bottom line" according to the gospel of the graduate business schools. Additionally, the Reagan administration had the political clout to expand the "marketplace ideology" policies supporting arbitrary deregulation that had surfaced late in the Carter administration. These views are held by many outside of broadcasting and, due to the

influence of the present crop of business managers who do not think of broadcasting as a calling, by many now in positions of leadership in radio and television. The authors of *Stay Tuned*, however, are not convinced that we should dismiss the special nature of broadcasting that easily. We believe that it *is* special, even if its shape has changed.

We have tried to cover the turbulent first decade of this new shape of the industry in an all-new chapter 10, while retaining those portions of earlier chapters that have withstood the test of time and the slings and arrows of our colleagues and students. Rewritten chapters 9 and 11 benefit from what we have learned since the first edition. Corrections and minor updates have been made in chapters 1 through 8, and the greatly expanded glossary and bibliography include the results of current knowledge and scholarship. Tables in Appendix C have been updated, a difficult task since the FCC, in the name of “deregulation,” no longer collects much of the data we had access to earlier.

To do all this required help. Frank Kahn voluntarily supplied a surgical overview of the first edition; George Shiers brought his technical knowledge to bear, as did Paul Beck; Amy Vossen gleefully unlimbered her blue pencil on the new sections; Donald G. Godfrey, Harry Sova, and Michael J. Stanton provided useful feedback as they reviewed chapters 10 and 11; the ever-patient Becky Hayden had every excuse to stop being patient; those who called upon us for information (and the settling of bets) found themselves pumped for information; those who complained about our subtling the book “American,” ignoring the other nations of this hemisphere, received apologies; and several classes of guinea pigs suffered good-humoredly.

As individuals, we have noted some changes that are not explicitly included in *Stay Tuned*. Our children are not children any more; there are new pets to feed; only one of the parents to whom we have dedicated this volume is still alive; we have both dabbled in academic administration; we have both moved to new locations (the George Washington University and Emerson College, respectively) and owe thanks to new presidents and chairpersons. We have both subscribed to cable and acquired VCRs. But the important things remain the same: the steadfast support of our wives, and our belief in—and excitement over—the importance of the history of broadcasting.

C.H.S. and J.M.K.

# PREFACE

## TO THE FIRST EDITION

### (1978)

“...it might be advantageous to ‘shout’ the message, spreading it broadcast to receivers in all directions, and for which the wireless system is well adapted, seeing that it is so inexpensive and so easily and rapidly installed—such as for army manoeuvres, for reporting races and other sporting events, and, generally, for all important matters...”—J. J. Fahie, *A History of Wireless Telegraphy* (1901), p. 259

“In 1928 we were watching it grow.

“And in 1950 the radio art will have influenced this whole people for more than thirty years, breaking down their distance barriers, making all the world their neighbor, carrying the electric word from coast to coast and nation to nation ... promoting understanding, sympathy, peace ...

“It will have played its part in the development of music ... in education, and in business, and in happiness...”—Paul Schubert, *The Electric Word* (1928), p. 311

We think that the history of broadcasting is important.

The ambiguous mirrors of radio and television, reflecting the world about us and projecting our interests and concerns upon themselves, are a major part of all our lives. In fact, most of us spend more time listening to and watching radio and television in an average week than doing anything else except perhaps sleeping.

But we feel, in addition, that any institution—such as broadcasting—must recognize its roots and learn from its history in order to compete with other institutions and to grow in a constantly changing environment. Even though the past never exactly repeats itself, our knowledge of it will shape our future course.

Our goal is to tell how American broadcasting got where it is today and, by analyzing principles, events, and trends, suggest what directions it may

take in the future. We emphasize trends rather than incidents and trivia, key individuals rather than random examples, and basic principles rather than isolated facts. Instead of just listing events, we try to explain them, interrelating developments in technology, organization and structure of the industry, economics, news and entertainment programming, audience research, and public policy and regulation.

We have arranged our material both chronologically and topically. The chapters are built around well-defined, consecutive periods of broadcasting's development. The topical arrangement of sections within chapters is consistent throughout the book except for the first two chapters. Tables of contents for both approaches are provided.

Within each chapter describing an era, we start with technology—the conditions, inventions, and innovations of that period relating to broadcasting. Man-made laws are more easily changed than are natural laws governing the electromagnetic spectrum. Allocations of spectrum space trigger political attention because broadcasting is important to the public. Allocations of time and money are important to other technologically based media and industries. Technological innovation involves economic antecedents and consequences, from the acquisition and control of patents, the unwillingness to discard investment in obsolescent studio equipment and receivers, to the entire range of relationships between government, industry, and the public, as the financial stakes grow over the years. These relationships are often far more important than the individual inventors, innovators, or electronic devices they develop.

Within each chapter beyond the earliest, we then discuss the basic unit of broadcasting—the individual station, originally thought of as the outlet for local expression and regulated by Congress accordingly.

Stations soon found it more profitable to establish affiliation with a national network, helping create the power of nationwide broadcasting organizations, to which we turn our attention in the third section of most chapters. We see the changing cast of haves and have-nots among stations and networks constantly jockeying for position and often creating or coloring important trends in the not-so-monolithic broadcasting industry.

In the fourth section of chapter 3 and later chapters, we examine the checkered development of educational, later public, broadcasting and the often precarious fortunes of noncommercial broadcasters, supported by donations, schools, government, and, more recently, corporate underwriting.

However, radio and television in the United States have become overwhelmingly commercial in respect to overall investment, audience interest, or nearly any other criterion. By the late 1920s advertising agencies had assumed a dominant position in network programming policy-making, a position they held for nearly three decades. Also discussed in the fifth section of most chapters are the changing roles of different media as new broadcast advertising competitors arrived on the scene.

Certainly listeners value broadcasting almost exclusively for its programming. In the sixth part of all but the first two chapters we review the

development of program types, the apparent cycles of their invention-imitation-decline over the years, and the borrowing by one medium of another's content. We explore reasons for television's rapid development of program diversity compared with radio; we see why entertainment programming has been most popular while specific news broadcasts are often most memorable. Broadcast programming helps us maintain our surveillance of the world, to integrate what we see and hear, and transmits our culture—whether we like it or not—from person to person, country to country, and generation to generation. At the same time, its entertainment is a counterbalance to the stresses of our increasingly complex society.

One cannot discuss programming without looking at the audiences, of which we are all a part. The seventh part of chapters 3 through 10 [11 in the second edition] covers various aspects of the audience for radio and television—how it evolved, its reflection in the development and sale of receivers, ways of measuring its size, needs, and desires, and the effects that broadcasting is believed to have on people.

Because the radio spectrum is considered to be a national natural resource, it is administered by the federal government. We devote the eighth section to the roles of the legislative, judicial, and executive branches of government as well as to that creature with characteristics of all three, the Federal Communications Commission and its predecessors. Communications policy in this country is an intricate combination of politics, economics, technology, and sometimes logic, formed in a crucible of opposing public and private interests. Because the regulatory policies and judicial doctrines form slowly, many problems in broadcasting continue without apparent solution for years or even decades.

Finally, each chapter ends with a very brief account of the parallel events in broadcasting elsewhere in the world and notes some relationships of American radio and television to other social expressions of the period, such as wars, fads, the Depression, and Watergate.

Within this topical structure, we follow not only trends and continuing problems but the contributions of individual persons. Problems often return in other guises with other casts of characters. Personnel changes create policy changes in or among networks, stations, advertisers, the FCC, Congress, and citizen groups that can affect the entire institution of broadcasting. In reviewing the lives of radio and television's pioneers, we are reminded that broadcasting has been a part of American life for little more than a lifetime.

The authors of this book are, quite frankly, fascinated with the subject of broadcasting. We have tried to share our enthusiasm and show why broadcasting history is interesting as well as important. Our method lacks some of the trappings of serious historiography (footnotes) but does include a detailed glossary in unusual format, a lengthy bibliography of sources for further reading, supplementary tables, a chronology, and an index. In *Stay Tuned* we have tried to note the important events and themes in American broadcasting's story through careful selection of items to include in this single volume and subjects to analyze at length.

To find what we included, we suggest that you pay particular attention to the two tables of contents (chronological and topical), skim through the appendixes to get a sense of their contents, and then dig in where the book seems most relevant or interesting. No matter where you start or how you use the book, we hope you will obtain a better understanding of how broadcasting became the industry-art-babysitter-hero-villain-advertising medium-entertainer-news communicator and everything else it is today.

In the research, writing, and editing of this volume, we have had the help of many people. Among those who deserve our warmest thanks are (alphabetically): Joseph E. Baudino, of the Westinghouse Broadcasting Company and the Broadcast Pioneers, for his unparalleled knowledge of radio's early days; Joseph Berman, of Ohio University, for helpful criticism and encouragement; Gordon Greb, of San Jose State University, for his expert knowledge of early radio pioneer "Doc" Herrold; Kenneth Harwood, Dean of Temple University's School of Communications and Theater; the ever-patient Becky Hayden, of Wadsworth, who more than any other person is responsible for keeping us going for half a decade and hence for many of the strengths of this book; Temple colleague Sydney Head for his page-by-page criticism; Cathie Heinz and her staff at the Broadcast Pioneers Library in Washington; the *Journal of Broadcasting's* many contributors during the long years when one or the other of us was editing it (1960–1976); collector of broadcast data *par excellence* Lawrence W. Lichty; consummate manuscript editor Jean Schuyler, who overcame the turgid prose of early drafts; Elliot Sivowitch of the Smithsonian's division of electricity and nuclear energy, who set us straight on many occasions; Robert R. Smith of Boston University, who offered valuable and constructive criticism at several stages of the book's gestation; Dallas W. Smythe of Simon Fraser University, who showed how to look behind the scenes; and Nathan B. Stubblefield, for obvious reasons.

We also owe gratitude to our many sources, among which are the books listed in the bibliography, many that are not so listed, several different libraries, countless secondhand bookshops, various Temple University departmental chairmen—one a former Iowa radio station manager and network operations supervisor, the second a former Philadelphia weekend television anchorman, and the third the son-in-law of radio's *The Whistler*—who ignored the mounting quantity of xerography requisitions, and many others.

As with most such volumes, our families gave far beyond the call of duty, without even the inner spur of scholarship or the outer spur of academic politics, and we hope that this recognition of the Sterling (Ellen, Jennifer, and Robin), and Kittross (Sally, David, Julie, and Serendipity) clans will be an aid to them during the transition of becoming reacquainted with husbands and fathers.

And, of course, for several years we have had each other to fight with, leading us to adopt the cheerful injunction in Backstrom and Hursh's *Survey Research* that "the authors will attribute any errors to each other."



## ABOUT THE AUTHORS

**Christopher H. Sterling** is a professor of Media and Public Affairs and of Telecommunications, and served as associate dean for graduate affairs in the arts and sciences at George Washington University, having joined that faculty in 1982. From 1980 to 1982, he served as a special assistant to FCC commissioner Anne Jones. Before that, he served for a decade on the faculty of Temple University's School of Communications and Theater. Sterling founded *Communication Booknotes Quarterly* in 1969 and still edits this review service, edited the *Journal of Broadcasting* for five years, and was chairman of the Broadcast Education Association from 1985 to 1987. Among his other books, he co-authored, with Sydney Head, four editions of *Broadcasting in America*, authored *Electronic Media: Trends in Broadcasting and Newer Technologies, 1920-1983*, co-authored *History of Telecommunications Technology: An Annotated Bibliography*, plus a number of other books on the telephone and telecommunications industry. He has lectured on American telecommunications policy in the United States, Europe, Asia, and Latin America. Among his avocations are collecting books about communications policy and history, passenger air and sea travel, code-breaking, Winston S. Churchill, and medieval castles. He and his wife have two grown daughters and live in the Virginia suburbs of Washington, D.C.

**John Michael Kittross** currently is Managing Director of K\E\G Associates, an academic consulting firm, and editor (since 1989) of *Media Ethics* magazine. After nine years on the faculty of the University of Southern California and more than 16 on the faculty of Temple University (where he was associate dean for graduate matters in the School of Communications and Theater), he moved to Emerson College in January 1985 as academic vice president, returned to teaching in the Fall of 1987, and "retired" in the mid-1990s. His interest in radio was kindled in high school, and his first full-time job in broadcasting was in the newsroom of WNYC at the side of his Antioch College classmate, Rod Serling. Other jobs in the media followed before Kittross earned his doctorate in communications at the University of Illinois. Among other scholarly publication efforts, he co-authored two editions of *Controversies in Media Ethics* (with A. David Gordon, John C. Merrill and Carol Reuss), wrote *Television Frequency Allocation*

*Policy in the United States*, was editor of the *Journal of Broadcasting* for more than 12 years, edited *Administration of American Telecommunications Policy*, *Documents in American Telecommunications Policy*, and *Free & Fair: Courtroom Access and the Fairness Doctrine* (with Kenneth Harwood), and compiled *A Bibliography of Theses and Dissertations in Broadcasting, 1920–1973*. He considers himself a jack of all trades and a gadfly, appreciates and uses gadgets, holds an amateur radio license, is thrilled by the experience of learning something new, enjoys academic, journalistic, and legal consulting on a variety of topics, walks a great deal in the U.S. and U.K., and is inordinately proud of his personal library. With their two grown children now located elsewhere, Kittross and his wife (and his books) live in the western suburbs of Boston.



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