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SHORTWAVE BROADCASTING IN A NEW WORLD ORDER: AN HISTORICAL
EXAMINATION OF THE INFLUENCES OF SATELLITE RADIO AND INTERNET
RADIO ON SHORTWAVE BROADCASTING SINCE THE END OF THE COLD
WAR.

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By

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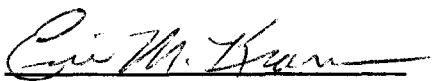
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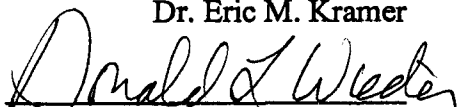
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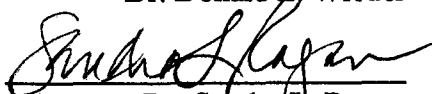
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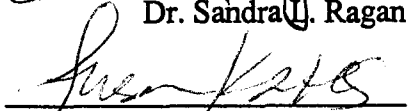
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Abstract

From the application of shortwave frequencies to broadcasting in the 1920s until the last decade of the 20th century, international broadcasting was synonymous with shortwave broadcasting by state-run radio stations. For the bulk of this history of international broadcasting, such cross-border communication was developed, sustained, and refined in war—first the radio propaganda wars preceeding World War II, then World War II, and finally the Cold War which dominated geopolitics for the better part of 40 years. With the emergence of other international communication media such as satellite broadcasting beginning in the 1960s, and the internet in the 1990s, the potential for the monopoly in practice and name of shortwave on international broadcasting has been ever present. Additionally, at the termination of the Cold War conflict, the social/political framework that had governed international broadcasting for nearly half a century was removed, thus creating the potential for additional revisions and mutations in the realm of international broadcasting. This project examines the first decade of state-sponsored international broadcasting following the end of the Cold War in order to document the changes that have taken place in international broadcasting. Specific attention is paid to the emergence of newer international broadcasting media through which international broadcasting has begun to be carried and received since 1991. Additionally, changes made, and challenges faced, by the state-run international broadcasters are examined and documented in order to better understand the evolution of international broadcasting at a time in history that may well mark the beginning of the decline of the nation state in the face of such changes in international broadcasting. It will be illustrated that with the advent of additional electronic media for international broadcasting which is increasingly becoming commercially driven, the nation state that emerged on the heels of the advent of the printing press is in the process of mutation and possible decline.

Chapter One

In the early 1920s, Frank Conrad of Westinghouse had been traveling in Europe on business for his employer. In an effort to follow the baseball scores in the U.S. while he was away, Conrad traveled with what not only may have been one of the first shortwave receivers, it appears to have been one of the first portable shortwave receivers. Designed around a single vacuum tube, the receiver utilized the curtain rod in Conrad's room as an antenna. This simple operation allowed Conrad to tune in Westinghouse's KDKA Pittsburgh station that had recently begun experimental simulcasting on shortwave (Barnouw, 1966; Berg, 2000; Wood, 1992). Nearly 70 years later, during the Tiannenman square demonstrations, television cameras and photojournalists captured images of Chinese demonstrators holding up signs that read, "Thank you BBC" (Dogan, 1991). One may wonder if Conrad anticipated such an international influence of shortwave broadcasting as he listened for updates to the baseball scores back in the 1920s.

Shortwave has been identified as the most cost effective medium through which a country can send messages to the largest possible audience over the greatest distances, making it one of the most significant media of international communication (Daniel, 1995, Mytton, 1986). Howell (1986) describes radio as the most universal mass communication medium, and he draws particular attention to shortwave radio as an ideal, if not *the* ideal, medium of international broadcasting. By the 1980s, "[m]ost international broadcasting [was] done via shortwave because [that was] the only way to reach most of the world" (Boyd, 1986, p. 29).

According to John Tusa, Director General of the BBC in 1991, shortwave has been the standard in terms of large delivery systems. Considering the convenience of shortwave receivers that are as small as a cigarette case, Tusa claims that the value of shortwave broadcasting is unbeatable ("State Broadcasters," 1991). George Jacobs, broadcast engineer and advisor to the *Christian Science Monitor*, also reinforces the value

of shortwave broadcasting, as it is direct and instantaneous, as well as intimate for the listener (Jacobs, 1991). Also, the access to shortwave is free (once a radio is purchased). In short, when considering the potential audience size, shortwave is cheap when compared to other international broadcasting media ("Broadcast Technologies," 1991), and it is this global potential and affordability that has made broadcasting on shortwave so attractive to international broadcasters.

Unfortunately, these claims concerning international broadcasting via shortwave radio more than ten years old. In the world of electronic communications, much can change in ten years. Such is the impetus for this research project into the current state of shortwave radio broadcasting, with particular interest in other technological influences on international broadcasting during the last ten years. In the material that follows in this initial chapter, shortwave radio broadcasting will be described both in terms of its general characteristics as well as through a brief history of international broadcasting on shortwave. This will then be followed with a description of the work done by others during the 1990s in the area of shortwave broadcasting. Finally, the methods, data, and analysis used in this project will be described in preparation to the presentation of the findings, which will follow in the subsequent chapters.

Overview of Topic

International shortwave broadcasting takes place over a range of frequencies between medium wave, or medium frequency (MW or MF) and the Very High Frequency (VHF) range. In the U.S., the medium waves are where commercial AM broadcasting is accomplished (among other forms of broadcasting). Over the VHF spectrum, FM radio and television channels 1 through 6 are broadcast (Sterling & Kittross, 2003). It is between these two ranges of electromagnetic frequencies that shortwave (SW), or high frequency (HF) is found (Headrick, 1991). As with the medium waves and the VHF spectrum, many interests use these frequencies for various forms of radio transmissions. Among the many parties interested in radio frequencies there are rescue services,

amateurs, and aviation and maritime interests, to name a few. Broadcasters also use various portions of the electromagnetic spectrum, and shortwave is no exception. In between the rescuers, the pilots, the amateurs, and all other interested parties, a set range of frequencies within shortwave is set aside for broadcasters to send programming around the world to anyone with the proper radio(s) capable of receiving the programming (Howell, 1986).

Over these assigned frequencies, thousands of channels carry programming from hundreds of broadcasters around the world. Any issue of *Passport to WorldBand Radio* illustrates how many channels there are and how many stations are filling these channels. While any variety of programs can be, and are, carried over these frequencies (Hatchen, 1999), the majority consists of state-sponsored programming sent to listeners around the world (Browne, 1982). Much of this programming is of a news and documentary format, at times representing the policies of the sponsoring government (Wasburn, 1992), of which there about 170. There are also a handful of private shortwave broadcasters out there (*Passport* , 2002). In addition to the broadcasters, there are listeners throughout the world. The numbers are usually small when compared to those tuning in standard, local, commercial broadcasting (Mytton, 1986). However, they tend to be those with more education and affluence among their fellow citizens (Elliot, 1982), and are usually considered as opinion leaders.

Of course, this world of international shortwave broadcasting did not happen overnight. It has instead, been growing and functioning for over 70 years. The first two decades of the 20th century were filled with ongoing experiments done to better understand and apply the "ether" of the electromagnetic spectrum (Berg, 2000; Toubia, 1982). However, not until the 1920s do many of these experiments begin to include what we today consider shortwave (Toubia), and once these experiments were underway, they moved along rapidly. Early on, many discovered that this particular range of frequencies was well suited for long distance transmission (Berg, 2000). How long? Long enough to

cover the longest distances on the planet, as first accomplished by amateurs as soon as 1924 (Toubia, 1982).

By 1930, many of the major countries in Europe had established formal, state-sponsored shortwave operations (Barnouw, 1966; Browne, 1982). Many were used to broadcast programming from the mother country to colonies across the globe (Berg, 2000), but it did not take long before aggressive propaganda filled the airwaves as countries began to attack each other over the ether in what would be a prelude to World War II (Warlamount, 1988). For the most part, this continued through the war (Barnouw, 1968), and right into and through the Cold War, except for a brief pause right after World War II (Browne, Wasburn, 1985).

As can be seen, there is a strong relationship between war and international shortwave broadcasting. However, by the end of the 1980s and the beginning of the 1990s, the longest running "war" in which international shortwave broadcasting took part was rapidly drawing to a close. In fact, in 1991, the Center for Strategic and International Studies (CSIS) took up the issue of international radio broadcasting in an international symposium dedicated solely to that topic. The published proceedings from the gathering (see Garcia, 1991) indicate that for the first time in its history, an intense debate concerning the future of international shortwave broadcasting had surfaced. While many still saw shortwave broadcasts as the ideal medium for international broadcasting, many others felt that its usefulness had come to an end, and that it was time to move on toward other media for the dissemination of international programming, and/or begin developing other delivery systems (Dogan, 1991).

One of the participants at the symposium was Noah Samara, a specialist in international media law who had, just prior to the symposium, founded WorldSpace, a U.S. corporation beginning development of a satellite radio service for Third World countries. Samara was planning to develop and launch a satellite radio broadcasting service that would be received free of charge to listeners with then-to-be-developed

receivers expected to cost \$50 (Samara, 1991). Considering the debates that were circulating around shortwave broadcasting's future, as well as the proposed development of an affordable satellite radio broadcasting system for Third World listeners—who have tended to constitute the largest consistent audience of international shortwave broadcasts (Boyd, 1986; Browne, 1982)—there was very real reason to question the exact future of shortwave broadcasting as the Cold War came to a close.

Additionally, other media of international broadcasting have emerged that were not even considered, or touched on, in 1991. Since 1994, the internet has developed into a medium for radio broadcasting that has provided many formal international broadcasters one more medium for sending their programming to the world. It has also provided local broadcasting interests a medium through which they too can reach a global audience. The development of audio streaming and internet simulcasting has allowed these broadcasters to do with personal computers what could previously be accomplished only through shortwave—the sending of radio programs to anyone around the globe with the appropriate computer hardware and software. As a result of this newer medium of international communication, the BBC World Service saw fit to terminate its shortwave transmissions to the U.S., Canada, Australia, and New Zealand in the summer of 2001, and direct listeners in these areas primarily to the World Service's online broadcasts (Colker, 2001, May 22).

As can be seen, shortwave broadcasting has been a significant player, if not *the* player, in international broadcasting through most of the 20th century. As the results of experiments in long distance broadcasting up through the early 1920s, shortwave emerged as the best medium to broadcast across the globe. From the early 1930s onward, it has served governments across the world as they have filled these airwaves with their programming and policy broadcasts to anyone in the world who would listen. In this capacity, shortwave has practically been a medium of war since its earliest formal applications—first in the radio wars of the 1930s, then during World War II, and finally

through the Cold War that was central to the second half of the 20th century. By the early 1990s, though, the long running Cold War coming to a close, and a number of issues regarding international shortwave broadcasting emerged. Some felt that its useful days were over, while others opposed such thinking. Additionally, newer media for international broadcasting were being developed, or did develop during the 1990s. It would seem that the 1990s would be ripe with some level of academic and professional attention to the evolution of these conditions and events in the 1990s as they pertained to international shortwave broadcasting. However, as shall be shown, this has not been the case.

Problem

Review of Literature

As it turns out, the literature concerning shortwave broadcasting since the early 1990s has done little, if anything, to address the issues identified above. Since the beginning of the 1990s, material published concerning shortwave broadcasting has had very little to do with the actual state of shortwave broadcasting since the end of the Cold War. Nor has very much of this literature addressed the development and implementation of newer international communication technologies as they relate to traditional shortwave broadcasting. Furthermore, it is mostly a mix of academic, professional, and general interest literature. According to Munroe Price, professor of Law at Princeton University's Institute of Advanced Studies, the general history of international radio broadcasting has been written by the international radio broadcasters, while academic work in this area is very limited, if not absent ("The Voice of America: Searching for a new doctrine," 2001).

Much of the literature concerning shortwave broadcasting that has been published since 1991 is often oriented toward historical periods of shortwave broadcasting that pre-date the 1990s. Both Krugler (1999, 2000) and Nelson (1997) focus their works on the shortwave broadcasting of the Cold War, and Krugler further narrows his work with specific attention on the passage of the Smith-Mundt Act in 1948 that permanently

established the Voice of America and placed it under the direction of the State Department. Rawnsley (1996) takes up BBC broadcasting during the 1950s with specific focus on the Suez crisis and the uprisings in Hungary, while Salwen (1997) concentrates on the development of shortwave broadcasting in Latin America in the 1930s. Although written with the popular audience more in mind, Berg (2000) does provide an insightful, and at times informative, history of shortwave broadcasting, but he carries his work only through 1945. Finally, while covering only the history of Radio Australia's efforts on shortwave, Hodge (1999) does offer some thoughts concerning the future of shortwave broadcasting, especially in light of newer technologies. However, his comments are made in passing, and are extremely vague. He expects that shortwave radio will function "well into the twenty-first century" (p. 265), but feels that it will be supplanted by international satellite broadcasting. Direct satellite radio broadcasting and the internet are not even mentioned.

In addition to these histories published during the 1990s, there are other works that offer some insightful accounts into the state of shortwave broadcasting, but they are either outdated, or not effectively updated. Both Bookmiller (1992) and Wood (1992) offer some helpful histories and descriptions of shortwave broadcasting, but as can be seen by their copyright dates, they are of little use concerning the last ten years. With a copyright date of 1999, Hachten's (1999) effort seems to be positioned to offer some insight into shortwave broadcasting through much of the 1990s. However, in its 5th edition, all the previous four revisions paid little, if any, attention to shortwave, as nearly all Hachten's claims concerning shortwave broadcasting are based on sources prior to 1995, with some from the 1980s.

Finally, other academic efforts in the area of shortwave broadcasting published during the 1990s either offer too narrow a focus, or do not discuss the issues of satellite radio broadcasts or the internet sufficiently. Boyd's (1987, 1997) work does illustrate the negative effects of greater diffusion of media outlets on shortwave listening. However,

his work addresses the impact of local AM, FM, and television broadcasting on shortwave listening among Arabic speaking populations. Boyd includes no comments on satellite radio broadcasting in Africa, nor any comments on internet simulcasting. And while Daniel (1995) does provide some good historical data concerning shortwave broadcasting generally, his work is concerned only with comparing the news outputs of the BBC, the Voice of America, and All India Radio. While there exists the potential for Daniel to offer some history of shortwave from 1992 to at least 1994, such topics are not addressed in his work.

The closest effort in the last ten years to offer an insightful assessment of shortwave broadcasting since the end of the Cold War is found in Wood's (2000) *History of International Broadcasting, Volume 2*. Drawing on his own personal background and associations in the shortwave broadcasting industry, Wood provides an account of shortwave broadcasting since the end of the Cold War. Although his background in the shortwave transmitter industry heavily influences the perspective of his book, Wood does describe in good measure a sense of confusion that seems to have occupied the broadcasters during the 1990s. Some broadcasters clearly cut back their programming citing declines in audience size, while others, particularly the BBC, have increased their broadcasting output and even claim to have enjoyed a rather steady growth among listeners. Drawing from the weekly outputs of 30 prominent international shortwave broadcasters (representing about "a quarter of the world's external broadcasters" [Wood, p. 20, note 5]), Wood shows that for as many operations that reduced broadcasting output from 1990 to 1996 (a total of 12 countries), there were more that either increased their output (14 countries), or made no significant changes in weekly broadcast output (four countries).

In addition to the continued strength of broadcasting output by most of the world's primary broadcasters, Wood (2000) notes other trends suggesting a strong future for shortwave broadcasting. For example, shortly after the end of the Cold War, some

stations entered into leasing agreements with republics from the former Soviet Union to broadcast from transmitters formerly used by the USSR. The BBC, VOA, and even Deutsche Welle, for example, have been leasing transmitters that once carried Radio Moscow to the world, or were used to jam Western broadcasts during the Cold War. Also, Wood points out that the high power shortwave transmitter industry is doing anything but slowing down. By his account, high power transmitters in the 500 kW, 1,000 kW, and even higher ranges are being developed, sold, and installed by the major transmitter manufacturers.

Wood (2000) does offer some comments concerning some of the newer media issues that have earlier been described as threats to shortwave broadcasting. While Wood does note some loss of shortwave listeners in Eastern Europe to local AM and FM outlets, he does not take up the issue with as much focus as Boyd (1987, 1997) does regarding the Middle East. However, Wood does address the recent development of high power mediumwave broadcasting that he describes as "nearly perfect for medium distance, cross-border broadcasting" (p. xvi).

With all that Wood (2000) covers in his book, however, the issues of the progress and development of satellite radio broadcasting through the 1990s, as well as the development of internet simulcasting by international shortwave broadcasters are not treated in any detail by Wood. Wood does comment on WorldSpace in the preface of his book, noting that he sees WorldSpace more as an adjunct to, rather than as a replacement for, actual shortwave broadcasting. Wood suspects that satellite owners' third-party veto to shut down any non-preferred broadcasting will prompt shortwave broadcasters to keep their transmitters working while using WorldSpace as another outlet of their programming.

Concerning internet simulcasting by international shortwave broadcasters, Wood is silent. Although the BBC's cuts took place after Wood's copyright date of 2000, the development and implementation of internet simulcasting has been taking place for much

of the 1990s. In short, While Wood (2000) does devote sections of his book to many of the prominent broadcasters, most of this material is of a technical nature (e.g. the types of antennas that are being developed), or it reviews a history of each of these broadcasters that precedes the Cold War. Precious little is devoted to any of the social/political histories of any of these stations since 1991. Furthermore, due to the lag times associated with book publishing, most of Wood's material is only good through 1996, or 1997 at best.

Together, the limited work on international shortwave broadcasting done during the 1990s leaves some issues and questions untreated and unanswered. Only one book, Wood's (2000) *History of International Broadcasting, Volume 2*, offers any form of a comprehensive effort to account for shortwave broadcasting after the end of the Cold War. However, it's coverage is more from a technical standpoint, and its material really does not carry through the last three to four years of the 1990s. All of the other works published during the 1990s on shortwave broadcasting are either too narrow to cover the issues raised above, or they address historical concerns that precede the 1990s.

Research Questions

From the general history of shortwave broadcasting leading up through the symposium held with regards to international radio broadcasting, there appear some issues and events concerning shortwave broadcasting during the last ten years that are worthy of further academic research and investigation. From the general history of shortwave broadcasting, with particular reference to the 1991 radio symposium, it appears that WorldSpace was in a very unique position to divert a large segment of shortwave listeners away from the traditional shortwave broadcasts common to the last 50+ years. Focused on the population of the Third World, WorldSpace was clearly targeting what appears to be the largest population segment on the globe that still manifests a potential for regular shortwave listening (Browne, 1982; Boyd, 1997). Yet the progress of WorldSpace and its possible effects on shortwave listening and broadcasting are not

readily apparent, or perhaps even known or familiar, as the academic literature on WorldSpace is non-existent. Concerning internet simulcasting, the BBC's cuts in shortwave broadcasts to North America, Australia, and New Zealand in 2001 have had a very marked and recent impact on the world of shortwave broadcasting and listening. Of course, due to the recentness of this event, the academic literature has been non-existent, as is the coverage of the events leading up to these cuts, and any reactions to it. Furthermore, after ten years of debate and observation, it would seem that greater certainty concerning the current status and future of international shortwave broadcasting can be found. With that said, research to address the issues described above has been done to satisfy the dissertation requirement for a Ph.D. in Communication Studies at the University of Oklahoma. Mindful of the exploratory nature of this project, this dissertation specifically addresses the following research questions:

RQ1: What is the current status of WorldSpace's efforts to develop and implement a satellite radio service for Third World audiences?

RQ2: How did the BBC's decision to divert its listening audiences in the U.S., Canada, Australia, and New Zealand from shortwave to the internet unfold, and what has been the reaction in the shortwave community?

RQ3: What are the main issues that international shortwave broadcasting has passed through since the end of the Cold War? In other words, what is its status since the end of the Cold War?

RQ4: What is the future outlook for international radio broadcasting on shortwave specifically, and over other media generally?

Method and Analysis

Method

In order to address these questions, historical methods and interviews of significant individuals in international broadcasting have been used. Barzun and Graff (1977) explain that in order to better establish the state of current events, the past (which led to the current state) must be examined, as "only events gone by can disclose the prevailing state of things" (p. 5). In addition, Nerone (2003) specifically calls for work in the history of communication. According to Nerone's arguments, due to their constitutive nature within the human condition (see also Pearce, 1989), communication and media phenomena have been difficult to grasp as historical objects by the professional historian. In the work within the many fields of historical work (intellectual history, political history, cultural history, etc.), elements of communication, mediation, and the diffusion of ideas have been implicitly or anonymously treated (Nerone).

However, changes in how communication phenomena are perceived by academics came in the wake of the "structuralist moment" (Nerone, 2003), or what Pearce (1989) identifies as the linguistic turn wherein it became apparent that the human condition and experience is within and through our human communication. In other words, "a sophisticated historical analysis . . . should be a lesson in constructedness" *through* communication (Nerone, p. 95). With this in mind, Nerone cites such works as Innis (1951), McLuhan (1962), and Ong (1982) as examples of communication histories that embrace the action of "telling really big stories" accounting for "world-historical" shifts. At the same time, Nerone suggests that such approaches open the way for, and suggest, research into ages of "distinct media environments" in which "microhistories that would look like thick descriptions" can be accomplished for those media environments (p. 95). Such is the goal of this project—to provide a microhistory, or thick description of international shortwave broadcasting within the larger context of international broadcasting generally. Additionally, Nerone further delineates the discussion concerning

media into that which centers around media technologies, and that which addresses media institutions. In this project both concerns are addressed as the media technologies and the political and social institutions associated with them will be discussed.

Concerning actual historical methods, the terms most often mentioned in the literature concerning historical research are *primary sources* and *secondary sources*. Primary sources are provided by witnesses or first recorders of an event (Barzun & Graff, 1977). Primary sources are those documents and sources associated with, or originated during, the time period that is of concern to the researcher (Storey, 1999; Tuchman, 1994). Some examples include newspaper articles, legal records, letters, and even how-to manuals associated with the period of interest. Secondary sources, are those documents or manuscripts that are based on primary sources (Barzun & Graff). Storey explains that secondary sources are those sources that have reflected on, interpreted, and/or analyzed an earlier time. In Storey's words, secondary sources interpret "the events and primary sources" (p. 18) of an earlier period. Tuchman's comments echo Storey's wherein he describes secondary sources as the scholarship written about a previous event or time period.

The beginnings of historical research usually start with secondary source material as found through searches of databases such as bibliographies, indexes, catalogs, etc. to locate material already published on the subject of interest (Barzun & Graff, 1977). Tuchman (1994) refers to a number of academic indexes and abstracts that lead the researcher to the appropriate scholarly work for a given research project. For example *Historical Abstracts*, *Social Science Citation Index*, and the *Arts and Humanities Citation Index* are noted as possible indexes through which one can locate appropriate secondary sources.

Once the secondary sources have been located and reviewed, and an appropriate context of research established concerning the subject of interest, primary sources should then be pursued in an effort to add to the current body of knowledge and understanding.

Again, much of this work is accomplished through the appropriate databases. Tuchman (1994) refers the researcher to prominent newspaper indexes for newspapers such as *The Wall Street Journal* and the *New York Times*. Barzun and Graff (1977) also mention newspaper indexes as a starting point for finding appropriate primary sources. Further printed primary data can also be obtained from government databases and organizations, as well as appropriate private and public business organizations.

An additional primary source for historical data are the eye-witnesses and/or participants in the historical subject and time period of interest. Such individuals are the first-hand witnesses of an event that Barzun and Graff (1977) describe as primary sources, and should be contacted and interviewed for their insights and contributions to the project of interest. According to Fontana and Frey (1994), interviewing is the most common and most powerful manner in which we seek to understand the human experience. Lindlof (1995) describes interviewing as "a preeminent method" used in one form or another "in nearly all qualitative projects," while Holstein and Gubriam (1995) claim that 90 percent of all social science investigation uses interview data (citing Briggs, 1986). An act of prospecting for facts and feelings from participants, interviewing is "a productive site of reportable knowledge" (Holstein & Gubriam, p. 3) that opens up a greater variety of perspectives on an event or topic of interest than other methods alone (Lindlof). Through effective interviews, the researcher can understand a social actor's perspective, obtain validation of, or comment on, data from other sources, and gain access to data not readily available through other means (Lindlof). When used as a complement to other data (as Fontana & Frey, and Lindlof suggest), interview data adds keen biographical substance to any research project of interest (Holstein & Gubriam).

To summarize concerning the historical method, primary sources are the first-hand accounts contained in records made by primary witnesses and initial recorders of an event. These records are found, or "held," in personal journals, letters, timely newspaper and magazine articles, and the first-hand witnesses themselves. Secondary sources are

the analyses of primary sources. Generally, secondary sources are the academic accounts that have worked through the primary sources. Through successful use of such sources, or data, the researcher is able to accomplish the historian's purpose "to portray intelligibly" a "*recount* of lifelike sequences." Or in other words, to "present human affairs as in a story, describing conditions and complications, reaching climaxes and conclusions to aid understanding," while illustrating the elements that compose the greater and more complex context, with each element in its respective place in relation to the others and the whole (Barzun & Graff, 1977, p. 148, emphasis in the original).

Analytical Framework

At this point, it is important to note that this is not a History project *per se*. Instead, this project is concerned with research into phenomena of international communication and media, and the principles of historical methods have been utilized in order to illuminate this particular realm of human communication—a realm of increasing media options and changing technologies at the international level. As a result, this particular project addresses the above research questions from the academic perspectives of media studies and international communication. The Communication Studies department at the University of Iowa describes its media studies program as one that "focuses on the interplay of institutions, texts, and audiences of mediated communication systems" with an effort "to examine modern media—radio, television, advertising, music, and a wide range of other popular cultural expressions—within their historical, social, political, economic, and cultural contexts" (www.uiowa.edu/~commstud/graduate/media/index.html). The media studies program at the University of Illinois "seeks to understand modern communications media from a liberal arts perspective: the theory behind contemporary mass communications and telecommunications, their origins, structures, and implications for our society" (www.comm.uiuc.edu/icr/mediastudies/intro.htm). As Nerone (2003) explains, efforts in media studies have evolved into a clear interdisciplinary as evidenced by the works from a

variety of scholars such as Anthony Giddens (Sociology), Marshall McLuhan (Literary Studies), Jurgen Habermas (Philosophy), and Harold Innis (Economics).

Other academic works bring the study of communication and media into a central position when considering human history generally, and Western Civilization more specifically. According to Innis (1986), as media change, frameworks of appraisal change as well, and therefore, "the subject of communication . . . occupies a crucial position in the organization and administration . . . of empires and . . . Western civilization" (p. 2). While some have loosely associated changes in communication with human progression from tribes to villages to cities to nations (Hamelink, 1993; Mumford, 1934; Mumford, 1961), others have been more descriptive about such connections. Gebser (1985) argues that developments and refinements in human language are associated with the emergence of villages and the move from wandering subsistence to domesticated life. The emergence of writing has been connected to the development of city-states/empires (Bertman, 2003; Innis), while the printing press was instrumental in the formation of nationalist thought of the modern age (Innis). Currently, with the advent of electronic mediation and its convergence with computerization, there are claims that a newer, global structure is emerging (Hamelink; Mattelart 1994/1991).

In fact, a review of the literature concerning international communication indicates that the concept of nationalism formed under the influence of the printing press is being weakened, if not undone, with the advent of increasingly diverse modes of electronic international communication. To better appreciate such claims, along with their position in this project, it is helpful to review the concept of national sovereignty as explained by scholarship within the field of international communication.

Drake (1993) reminds us that "national sovereignty is a fairly recent and modernist innovation" (p. 262). Assuming a social constructivist's perspective, it is important to understand that sovereignty is an operational activity—something that is constituted in "communally recognized actions" (Drake, p. 254), and as such it is

accomplished in interaction, and does not exist as a "once-and-for-all creation" independent of practice (p. 254). Prior to the emergence of nationalism, a number of power entities including the church, princes, barons, and monarchies negotiated influence within the larger territorial space. During the 16th and 17th centuries, however, the concept of sovereign rule over a specific group within a specified space that was honored among and between ruling parties emerged. This marks the emergence of the national, sovereign state (Drake).

As Innis (1986) explains, changes in communication and information storage technologies associated with the press facilitated the decline of the church, princes, barons and monarchies, and in turn gave rise to the national state as the primary governing body. Prior to the development of paper and printing in Europe, the church controlled knowledge storage, dissemination, and acquisition through recordings on parchment. Eventually, however, the older and more costly medium of parchment as a medium of knowledge storage and transmission was replaced by the cheaper, economical, and more flexible paper (Innis). Paper facilitated growth in trade, education, and urban centers, and therefore brought about a decline in the control of knowledge held by the monasteries, and in turn, there arose a growing trend toward nationalistic monarchies (Innis).

The newspaper also strengthened the growth of nationalism as they contributed to the increasing value of vernacular languages (Innis, 1986). In 16th century France, French soon displaced Latin in the practice of law, and was eventually declared the official language. As preference for the vernacular increased, and as knowledge monopoly shifted from monasteries to city and state supported institutions, eventually the monasteries and the churches became an entity *within* the emerging kingdoms, or states, and the dominance of the state over the churches became apparent (Innis). In short, "the monopolies of knowledge based on language reinforced by mechanical communication led . . . to nationalism and the growth of communism" (Innis, p. 166).

It is important to appreciate that the spatial dimension occupies a central position in the concept of national sovereignty as well. Borders are established to define the space within which sovereignty functions, and across which transnational interactions are mediated. Administrative barriers exist within the sovereign state, and these barriers also establish organizational zones and areas of authority within the state. Finally, some mechanism, or combination of mechanisms, is employed to monitor the comings and goings within the state, as well as inter-nationally (Drake, 1993). With the advent of electronic forms of communication and information storage, these spatial dimensions supporting the ideas of nationalism have begun to erode.

Under the structure of nationalized telecommunication industries, overall practices and advancements were more clearly governed by international agreements and the states themselves. With an eye toward the management of efficient cross border transfers and limited government budgets, rapid change and development was held at bay. Furthermore, the management and surveillance of intra and international communication flow was more easily accomplished (Drake, 1993). The newer international communication technologies of satellites, computers, and fax machines have introduced a communication context that is beyond the management and control of traditional sovereign entities. As it was, the early electronic forms of communication, which could also be exploited internationally, such as telephony, telegraphy, and radio "defined the limits of the comfort zone for policy formulation" (Mowlana, 1996, p. 40), and I would add, governmental monitoring and control. As Drake explains, "in the 1960s, most corporate transnational data flow moved over private circuits leased from national carriers in bulk at flat . . . rates." (p. 270).

However, changes in the world of telecommunication during the last 30 years have led to a decline in states' abilities to subject information flow to territorial, sovereign controls. Concern regarding declines in national sovereignty began to surface in the 1950s and 1960s in reaction to the growing proliferation of Western technologies and

cultural products (Hamelink, 1993). Also, the rapid miniaturization of computer technologies and the incorporation of such technologies into telecommunication have led to a rate of expansion that has challenged traditional territorial control. At the same time, the value of rapid international information flow has been embraced by transnational corporations as a "key strategic competitive tool" (Drake, 1993, p. 269). Hence, the territorial control of transnational data flow that was once exclusive to sovereign states and international agreements has become increasingly influenced by the needs and demands of transnational corporate interests in the areas of corporate information flow and the proliferation of Western cultural products around the globe.

By the 1990s, corporate demands and increasing competition in global markets "radically accelerated the rate of technical change" (Drake, 1993, p. 269), along with the decline in sovereign control in international communication. Transborder data flow (primarily through computer and telecommunication networks) is viewed by many political leaders as a threat to their respective countries' sovereign independence. Of particular concern is the flow of information from transnational corporations, most of which are U.S. based (Drake). For example, there is the very real possibility for information concerning one country to be processed and stored in computer databases in other countries, thereby raising questions of concern for national sovereignty (Mowlana, 1996). In a real way, transnational corporations have begun to exert similar influences in international issues as national states alone did in the past (Mowlana, 1993). Additionally, under these conditions, global broadcasting and telecommunication activities have become increasingly commercialized (Mowlana, 1996).

Overall, the new communication technologies are restructuring the notion of the state that strengthens the sense of control of the state *in conjunction with the management of transnational enterprise*, while at the same time weakening the relationship between states and their respective publics (Barbero, 1993). Barbero defines "transnationalization" as the "dislocation of the centers that articulate the universe of each

culture" (p. 145). It is important to remember that these cultural centers coalesced through paper and the printing press while national identities, structures, and policies were emerging in the wake of monasteries losing control as the knowledge centers in Europe. The nationalism of the past which was oriented toward the collective interest as a political entity is giving way to the idea of transnational management (Barbero).

The idea and practice of state sovereignty is not being abandoned, per se, as much as it is being diluted. It is, after all, in the interest of international corporations to maintain measures of state sovereignty for their host countries. In the very least, the existence of multiple states with differing interests does prevent the creation of an overall supra-regulatory structure that may work against some of the more freely flowing activities of transnational corporations. Therefore, in some ways the relationships between such corporations and nation-states is more symbiotic, though at times contentious (Hamelink, 1993). Additionally, the term "global" which often used to describe the emerging world structure does not (yet) have reference to a single currency or governing influence recognized the world over. Instead, "global" most often is associated with forms of communication which, for the most part, are centered around "mass-market advertising and electronic entertainment produced by a few megacompanies" (Hamelink, 1993, p. 376).

As a result of these changes in international communication media and patterns, as well as the nation state, there has begun a shift from political ideological reach to more of a corporate reach. Previously, nations competed for political and ideological influence over their own citizens, as well as the citizens of other nations. Since the advent of increasingly dominant electronic forms of transborder communication and information storage, a corporate reach has begun to displace the political and ideological reach of the nation state of the past. In some ways, nations have begun to adopt the corporate perspective in place of the political and ideological perspective. In these processes of displacement, democratic ideologies are being displaced by what can be referred to as

postmodern influences of consumerism and popular culture. The corporate and commercial influences, therefore, displace what was previously the reach of the empire and/or the democratic state. As a result, the emerging globalism does not equate to a pluralism of nations working together, *per se*. Instead, the emerging globalism represents a cultural homogenization dominated by corporate and commercial ideals and interests. As will be seen, such has happened within the realm of international broadcasting, particularly among the state-run broadcasters.

Together, the historical method and the previous thoughts on media studies and international communication combine within this project. The historical method provides the means for identifying and gathering the data for this study, while the thoughts on media studies and international communication provide meaningful frameworks and considerations for structuring the analysis. As will be illustrated through the project, as newer media of international broadcasting emerged, and/or were put to use after the Cold War, and as state-sponsored shortwave broadcasting mutated through the 1990s, there is evidence of a decline in national state sovereignty as described above by the scholarship on international communication from the early 1990s. At this point, the actual gathering of the data will be described, and this will be followed with a more specific discussion of the methodological perspectives employed in the analysis of the data gathered for this project.

Data and Samples

For this project, a mix of primary and secondary sources have been gathered through database searches, as well as through telephone interviews and email surveys to develop the narrative historical accounts of WorldSpace's development through the 1990s, the changes in international shortwave broadcasting through the 1990s and its status ten years after the end of the Cold war, the BBC's decision to terminate shortwave broadcasts to the U.S. Canada, Australia, and New Zealand, and to determine a clearer

idea as to the future of international broadcasting generally, and over shortwave particularly.

Following the general patterns outlined by the literature on historical research methods, various bibliographies and databases were searched to yield the secondary sources which have written about international shortwave broadcasting during the 1990s. These databases include library catalogues, electronic databases for print material, *Communication Abstracts*, and *Historical Abstracts*. These searches provided the material used to develop the framework for this project as manifested in the above review of literature. This material was also used to develop the discussion on the history and general characteristics of international shortwave broadcasting up to the end of the Cold War which appears in chapter 2. While not all sources gathered through these searches were utilized, the complete list of these sources is found in Appendix A.

In terms of primary source data, other databases have been searched to access primary sources of a printed nature. Additionally, the interviews and surveys provided access to primary data from individuals involved with the various issues of interest for this project. Beginning with the printed material, newspaper and magazine indexes have been searched to locate articles written about shortwave broadcasting and WorldSpace broadcasting in the 1990s, as well as the BBC's shortwave cuts in 2001. Most of these articles were gathered through the *Lexis-Nexis* online newspaper and magazine database, and provided over 250 newspaper and magazine articles concerning shortwave broadcasting, WorldSpace, and the BBC's 2001. Nearly all of these articles provided some form of data for this project. Of particular value to this project have been the number of articles from overseas and international sources that would not have been so readily available through more traditional, bound indexes and databases.

Additional primary sources were found through other avenues as well. *The Readers Guide to Periodical Literature* was searched, and it produced a number of magazine articles on shortwave broadcasting found in the popular press during the 1990s.

The annual *Passport to WorldBand Radio* series was reviewed as well for primary data for this project. Also, the *Serials Directory* was searched for more magazine titles that might provide additional primary source material. The titles from this search are listed in appendix B. However, indexes to these titles proved inaccessible, or unavailable, and internet searches were made to locate websites for these publications. This led to locating websites for *Monitoring Times*, *Radio World*, and *DX Listening*. All three combined to provide primary source material helpful to the project.

Other websites were searched for additional primary material. BBC World Service Online was accessed for material concerning its 2001 cuts. Also, The Save BBC World Service website created in reaction to the announced cuts was also accessed, and it provided a large volume of material oriented to the reactions of those affected by the cuts. Transcripts of radio interviews concerning the cuts, links to reports of online media research, and legislative material concerning the cuts were also available from the Save BBC World Service website. Private and government websites were also accessed. WorldSpace operates a website, which also provided data used in the study. U.S. government websites providing histories of bills proposed in congress were utilized as well. It should be noted that the data obtained from these legislature websites have been cited and referenced as from the actual bills themselves, and not as websites.

After reviewing the material gathered through the databases listed above, names were compiled to contact for telephone interviews, and these individuals were sent an email explaining the nature of the project and inviting them to participate through a telephone interview. That list is found in appendix C, and includes the schedule of questions asked. Similar emails with surveys were sent to a number of the countries and private organizations involved in international shortwave broadcasting. Additionally, private organizations involved in the manufacturing and sales of shortwave transmitters were also sent surveys. The list of these organizations, and a copy of the email and survey sent to them is found in appendix D. Overall, 46 surveys were sent.

The general response rate from both emailings was rather low, and follow-up emailings for interviews and surveys were conducted. Additionally, some respondents provided additional contacts to include in the project. Still, it was particularly frustrating to note the lack of responses generated from the state-sponsored international broadcasters. However, in reply to a similar comment I made to Larry Magne through email concerning these stations' lack of response, he pointed out that they at *Passport to WorldBand Radio* have just as much trouble with the state-run operations when they seek information from them as I have had. As Magne explained, these operations are indeed "beholden to the official exchequer, not the audience or lack thereof" (L. Magne, Editor for Passport to WorldBand Radio, personal correspondence [email], September 3, 2003), and therefore may be under restraints as to the forms of correspondence in which they may participate. In fact, one individual who works within the bureaucracy of U.S. international broadcasting politely declined to participate, claiming that certain professional guidelines do not allow the individual to be associated with any comments made during such interviews or surveys. Still another individual from a country not on the best political terms with the U.S. responded by flatly refusing to participate as a result of the current political situation, and specifically asked that his/her name not be used in any form in any publications resulting from this project.

From these efforts, a total of 20 individuals participated in providing data for the project. Some of those contacted for interviews chose instead to complete a survey, while some contacted with a survey opted to be interviewed over the phone. In the end, five individuals were interviewed, while 15 responded with surveys via email. The interviews lasted between 30 and 90 minutes, depending on how in depth the participant wished to be with his or her responses. Notes were made of the respondents' comments, and each was audio-taped. Those who participated are listed among the references under Interviews and Surveys among the primary sources.

Analysis

As one who agrees with the arguments for the interpretivist's perspective as found in the literature of Anderson (1996), Polkinghorne (1983), Stewart & Mickunas (1990), and Mercier (1994), I have engaged an hermeneutical approach to the historical, survey, and interview data gathered for this dissertation. Hermeneutics is often described as the method and art of interpretation (Mercier; Stewart & Mickunas). Extending from Aristotle's *On Interpretation*, much of the hermeneutical tradition has been occupied with the interpretation of sacred and religious written texts (Stewart & Mickunas). However, by the 19th century, Dilthey expanded the practices of hermeneutics beyond religious texts and into larger realms of inquiry, particularly human culture. As Stewart and Mickunas explain, Dilthey especially advocated its use in historical inquiry in opposition to the use of a natural scientific method to analyze historical data. As Mercier explains, not only is hermeneutics appropriate to historical analysis, historical understanding is central to the hermeneutical approach.

With a focus on interpretation, especially concerning the relationships and patterns of meaning within relationships (Hodder, 1994), a clear theme to hermeneutical research is an awareness of, and appreciation for, interrelatedness, whole-part relationships, and intertextuality (Mercier, 1994). Especially, there is the need for hermeneutical research to practice phenomenological reduction. In other words, hermeneutics requires the researcher to bracket his/her own previous assumptions when approaching the subject of interest. Such bracketing is described as "the suspension of . . . commonly held beliefs" (Stewart & Mickunas, 1990, p. 26), and is similar to Pearce's (1989) description of a willing suspension of disbelief of others' interpretations. Put another way, in order to be mindful of the potentially infinite perspectives that could be taken on an issue, one needs to be willing to give a good reading to others' interpretations. One needs to be willing to suspend his/her own belief in his/her own interpretations, and

then be willing to suspend the disbelieving attitudes often held toward others' interpretations.

Conclusion

To conclude this first chapter, international shortwave broadcasting has been around for many years, and developed into a massive undertaking as part of international diplomacy and propaganda during the 20th century. It has clearly been a significant part of war. Yet the primary conflict in which shortwave broadcasting was a part, as well as the primary means for which that conflict was carried out, ended more than a decade ago. Beginning in 1989, many of the Eastern European countries that were then Communist aligned turned from Communism. Then in 1991, after a failed coup attempt, the Soviet Union dissolved and the Cold War of 40 plus years came to an end. And what of the shortwave broadcasting that was at the heart of that war? Near the end of the Cold War, some were calling for its retirement, while others balked at the idea. Yet through the 1990s, newer technologies emerged and were utilized for international broadcasting. Still, few, if any, have taken a detailed, academic look at international shortwave broadcasting through the 1990s, or its status a decade after the end of the war of which it was such a significant part.

This project does just that. In the next chapter, the history of international broadcasting will be detailed up to the end of the Cold War. In chapters 3 and 4 that follow, the general international broadcasting environment of the 1990s will be described, as well as some of the key experiences of some of the major international shortwave broadcasters at the end of the Cold War and through the 1990s. Chapters 5 and 6 will specifically detail the experiences of the Voice of America and U.S. international broadcasting through the 1990s, as well as the BBC World Service. The three chapters following these will detail the BBC's cuts in shortwave broadcasting made in 2001, the development of WorldSpace and its impact on international shortwave broadcasting, as well as a prognosis for the future of international broadcasting through shortwave, as well

as some of the newer international media discussed in this project. The final two chapters will return to the original research questions and summarize, and further analyze, the data presented in this project. For now, attention is turned to the general review of international shortwave broadcasting as it emerged in the 20th century up to the end of the Cold War.

Chapter Two

The year 1990 is the year when I personally became a listener of shortwave broadcasting. I bought my first shortwave radio—a Sangean ATS-803A—and I invested in my first *Passport To WorldBand Radio book*—the 1990 edition. Before I received the book, I spent time listening to whatever stations I could pick up. At that time, there were many, especially at night. Yet, even though fewer stations broadcast to North America during the day, I could still easily tune in a number of stations such as the BBC World Service, the Voice of America, Radio Moscow, Radio Canada International, and Monitor Radio International from the *Christian Science Monitor*. There were so many different documentaries on each of these stations, and diverse perspective from the news broadcasts that I felt I had stumbled into a gold mine of international news and understanding, and at one point, these stations kept me company while I was unemployed and looking for work. When the West German station, Deutsche Welle, held a listener quiz, I entered it and was rewarded with what is supposedly a piece of the Berlin Wall. (While I personally trust Deutsche Welle's claim, one can never be sure that his/her chunk of concrete with some spray paint on it is legitimate.)

Soon I learned that there was order to these frequencies I had known so little of before. Due to the laws of physics, these broadcasters I was enjoying so much could only broadcast to me from their respective countries within a specific range of frequencies. Also due to international rules, these broadcasters were restricted to even smaller frequency segments within the larger HF range. What I did not know at that time was that this vast expanse of international shortwave broadcasting was nothing new, and that its history covered much of the 20th century. In fact, international shortwave broadcasting was extensively intertwined with much of the conflict associated with the previous century, namely the Cold War. These issues will be addressed in this chapter. Specifically, this chapter will provide an overview of the general nature of shortwave broadcasting, including its physical and social/political characteristics. This will then be

followed with a review of shortwave broadcasting up to the end of the Cold War which will also include the debate concerning the future of international shortwave broadcasting as that debate emerged in 1991. Particular attention will be paid to the emergence of international shortwave broadcasting as a voice of the state, and in doing so, will more clearly link such broadcasting to support of the nation-state. In subsequent chapters, the documented changes in international broadcasting and shortwave broadcastings will illustrate a decline in the nation-state that is associated with the changes in international broadcasting. But first an overview of international shortwave broadcasting and its emergence as a voice of the state.

An Overview of Shortwave Broadcasting To 1991

Shortwave Broadcasting

General characteristics.

In order to better appreciate and understand broadcasting on shortwave, it is helpful to first begin with an overview of some of the primary, physical characteristics of the shortwave spectrum. The radio waves of the electromagnetic spectrum are roughly divided as follows: Medium Frequency (MF; also called medium wave, or MW) is between 300 and 3,000 kilocycles (kHz), High Frequency (HF) is between 3,000 and 30,000 kHz, Very High Frequency (VHF) is between 30,000 and 300,000 kHz, and Ultra High Frequency (UHF) is above 300,000 kHz. (Browne, 1982; Headrick, 1991). For reference purposes, the AM band between 520 and 1700 kHz used for local broadcasting in the U.S. falls within the medium wave range, and the stations of the FM band between 87.5 MHz (87,500 kHz) and 108 MHz (108,000 kHz) fall within the VHF range. The shortwave frequencies are located within the HF bands between 3,000 kHz and 30,000 kHz.

One very attractive, if not the most attractive, feature of the shortwave spectrum is its ability to carry programming over great distances. As Toubia (1982) describes shortwave theory, "all short-waves are more or less reflected or refracted against the . . .

ionosphere, a layer of electrical particles varying in altitude from 70 to 250 miles above the earth's surface . . . These waves are . . . reflected back to earth at a great distance from the transmitter by the ionosphere" (p. 18). With the exception of some of the medium wave frequencies, nearly all other radio frequencies will pass through the ionosphere. Only shortwave will consistently reflect off the ionosphere, skipping as many as five or six times to reach distances, in some cases, of 12,000 miles. Typically, however, ideal reception takes place around 4,000 miles and occurs in about two skips off the ionosphere (Daniel, 1995).

Just as AM (mediumwave) and FM (VHF) broadcasters share a particular frequency spectrum with other interests (such as maritime, aviation, weather, government, amateurs, etc.), broadcasters on shortwave must also share the HF spectrum with other interests. As Howell (1986) explains, shortwave broadcasting is specifically assigned to the following twelve frequency ranges (often called Meter Bands [M], referring to approximate length of the electromagnetic wave for the frequency range): 2,300 - 2,495 kHz (120 M); 3,200 - 3,400 kHz (90 M); 3,900 - 4,000 kHz (75 M); 4,750 - 5,060 kHz (60 M); 5,950 - 6,200 kHz (49 M); 7,100 - 7,300 kHz (41 M); 9,500 - 9,775 (31 M); 11,700 - 11,975 kHz (25 M); 15,100 - 15,450 (19 M); 17,700 - 17,900 (16 M); 21,450 - 21,750 (13 M); and 25,600 - 26,100 (11 M). The eight bands with the highest shortwave frequencies (or the lowest meter bands; 49M to 11M) are used by broadcasting organizations to broadcast internationally, while the four lowest frequency ranges are reserved for local broadcasting by nations immediately north and south of the equator. These four frequency bands are often called the Tropical Bands (Howell; Wood, 1992).

Utilizing these frequencies, there are currently thousands of broadcasters, as can be observed in any of the station and frequency listings of the annual publication *Passport to World Band Radio*. Even though international radio broadcasting can, and does, take place over other frequency bands (such as MW, LW, and VHF), the shortwave spectrum was the dominant medium for international broadcasting for much of the 20th century

(Boyd, 1997; Daniel, 1995; Mytton, 1986). The most common, or popular format, at least among the more prominent broadcasters, centers on providing news and information, music, and listener response programs (Browne, 1982). This informational aspect is often accomplished through interviews, talks, press reviews, and documentaries. Generally, programming is divided into 10, 15, or 30 minute segments which are usually quite rigidly followed (Browne). International shortwave broadcasting is coordinated around Coordinated Universal Time (UTC), which is also known as Greenwich Mean Time, or GMT (Howell, 1986). Such temporal coordinating provides a standard time around which broadcasters and listeners in many different time zones can orient their shortwave activities.

Programming on shortwave has been described as a continuing "polyglot cacophony of sounds detailing the news, unfolding diverse feature programs, and playing all sorts of music" (Hatchen, 1999, p. 109). Overall, the news and informational programming has dominated shortwave broadcasts in the past (Browne, 1982; Wasburn, 1992). The atmospheric conditions and nature of HF signals make shortwave broadcasting suitable for little more than voice (Browne; "Private International Radio Broadcasters," 1991). While there has been programming that includes musical fare (Browne; Elliot, 1982), music simply does not broadcast over HF signals as well as it does over medium wave (AM) or VHF (FM). Therefore, as a result of the basic laws of nature and radio propagation, shortwave broadcasting has emerged less as an entertainment source and more as a source of information. This condition leads Lawrence Magne, editor of *Passport to WorldBand Radio*, to call shortwave radios "information boxes, not music machines" ("Broadcast Technologies," 1991). Undoubtedly, shortwave radio broadcasting provides the greatest diversity of news for its listening audiences (Hatchen, 1999).

Broadcasters.

Shifting attention more specifically to the broadcasters, a brief review of the 2000 edition of *Passport to WorldBand Radio* reveals that there are approximately 170 nations that have some form of shortwave broadcasts emanating from within their sovereign borders. *Passport - 2000* also provides addresses to over 900 shortwave broadcasting operations within these different countries (Passport, 1999). Although a number of these shortwave operations are non-governmental and/or private operations (Browne, 1982; Elliot, 1982), the majority of shortwave broadcasters are government funded and operated (Daniel, 1995; Mytton, 1986).

The purposes behind this vast broadcasting community fall generally within the realm of what might be called propaganda. However, regardless of the reasons for broadcasting on shortwave, all shortwave broadcasting is encouraged by the HF bands' capacity to reach large and distant audiences worldwide. As Berg (2000) points out, the term "broadcasting" is taken from agriculture and means to scatter, or "cast seeds widely" (p. 14). From the 1920s through the early 1990s, if anyone wanted to cast their philosophical, political, social, religious, etc. seeds widely, it was best done on shortwave.

Of course, it is of little use to broadcast a message around the globe if those receiving the message are unable to understand the message being sent. This issue has been addressed by the broadcasters, and it is common for most broadcasters to translate their programs into the languages of the intended target audiences when possible. In 1985, the top ten broadcasting nations (broadcasting for more than 400 hours a week) all broadcast in English, French, Spanish, and Arabic. Many also included Chinese, Russian, Portuguese, Hindi, Swahili, and German (Mytton, 1986). Even with the added burden and expenses of translating shortwave programming into multiple languages, the larger broadcasters found the value inherent in shortwave's ability to reach large audiences around the globe as unbeatable.

With this ability to cross borders with what is hoped to be perceived as truthful information (Demitz, Fox, & Gibson, 1991), it is easy to see why so many state-sponsored broadcasters have long appreciated shortwave. Over the years, these broadcasters have energetically used the shortwaves to cross borders with information. The degree of aggressiveness with which these shortwave messages have crossed borders has varied with time and broadcaster. Generally, most have either used the shortwaves to intentionally undermine one or more other government regime(s), or they have used the shortwaves to more casually carry their foreign policy and public diplomacy to the world (Boyd, 1986; Wasburn, 1985; Wood, 1992). In this sense, we see the irony of international shortwave broadcasting as it relates to the state. Primarily a voice of the state, and therefore a support of the national state, particularly the one broadcasting, international shortwave broadcasting emerged as one of the first large scale electronic transborder data efforts that would undermine the idea of national sovereignty. In fact, in many cases, as will be discussed later in this chapter, the effort to undermine foreign states through such broadcasts was quite overt.

To summarize concerning the shortwave broadcasters, they are usually government sponsored, although there are some sufficiently financed religious operations broadcasting on shortwave. These broadcasters use the global reach of shortwave to send their messages of propaganda and policy to an audience of hoped for world listeners. Since little or no financial profits are made over shortwave, the only profit to be made usually involves the hoped for change or increased awareness in the targeted listeners. It is to those listeners that attention is now turned.

Listeners.

In spite of what appears to be large sums of money spent on international shortwave broadcasting (Mytton, 1986), there is a feared certainty that the actual audience tuning in is rather small. In Mytton's own words, "A great deal of international broadcasting seems to attract only tiny audiences" (p. 38). International broadcasters do

not have access to data similar to the immediate rating responses common to commercial television (Wasburn, 1985). Often, the best that international broadcasters can do in order to gauge strength is to rely on listeners' letters sent to the stations (Browne, 1982). At times, some survey data is collected ("Audience Research," 1991; Mytton, 1986), but as Browne points out, surveying citizens of foreign countries can prove to be extremely difficult and problematic. However, with the research that has been done, some demographic data concerning listeners is available, as well as descriptions of listening habits around the world.

Beginning with some demographics, shortwave listeners across the globe tend to fit a rather common mold. For the most part, regular listeners tend to be male, and they are among the more affluent and educated within their respective countries and communities (Browne, 1982, Elliot, 1982). Of the 59 participants in Elliot's study, which focused on listeners in North America, 58 had at least a four-year degree, and 19 had advanced degrees. Still, it should be remembered that, around the world, these levels of wealth and education are relative to the listeners' local norms, as much of the shortwave audience is composed of listeners in Third World countries. This brings us to the next point concerning listeners, namely some of their general listening habits.

First, as just touched upon, listening to shortwave broadcasts has tended to be higher in less developed countries, and clearly lower in Western countries (Browne, 1982). As Mytton (1986) points out, in the past, listening in developed countries has been very low, while in Third World countries, the presence of SW bands on personal radios was very prevalent. For example, in Egypt in the early 1980s, close to 85 percent of the population living in urban settings could receive shortwave broadcasts (Mytton). In the U.S. at that same time, most radios could receive only mediumwave (AM) and/or VHF (FM), and few people knew of, or cared about, shortwave radio broadcasting (Browne). It has been observed that as the number of other electronic media sources

(e.g., FM radio, TV [local and satellite], and computers) increases, shortwave listening decreases ("Audience Research," 1991; Demitz, et al., 1991; Elliot, 1982).

When (regular or occasional) listeners do tune in, they do so in an effort to tap into the variety of programming found over shortwave. According to Larry Magne, editor of *Passport to World Band Radio*, people listen to international radio for additional perspectives ("Broadcast Technologies," 1991), or, put another way, to access "a worldwide electronic market place for ideas and information, an arena for ideological, political and religious discussion . . ." (Jacobs, 1991, p. 116). Generally, the literature indicates that around the world, those who listen to shortwave programming do so to supplement local media, especially in places where media outlets are heavily controlled by government (Boyd, 1986; Boyd & Asi, 1991; Daniel, 1995; Mytton, 1986; Mytton & Forrester, 1988). Such listening is usually a check and balance against the locally controlled media ("State Broadcasters," 1991). And finally, shortwave listening is often associated with some form of crisis (Demitz, et al., 1991) as shortwave listening increases as crises develop and surface around the world ("Audience Research," 1991).

To summarize concerning listeners of shortwave broadcasting, they tend to be among the well educated within their respective societies, and they usually tend to be male. Most listening to shortwave is done secondary to other, usually local, media outlets. As the number of other media outlets increases in a society, usually the amount of shortwave listening declines. However, increases in shortwave listening can be observed in times of crises, and in cases where local media are heavily controlled by local governments. With the variety of source, perspectives, and information from around the world, shortwave offers listeners a variety of information helpful in checking and validating other sources.

Generally, this is where broadcasting on shortwave was as the Cold War came to a close. But, as in all things social, that context then reflected the influences of the political, social, and economic events and experiences of the previous 60 years.

Therefore, the nature of shortwave broadcasting at the end of the Cold War is better explained and understood, in light of those events which preceded the end of the Cold War, and it is toward these past events and experiences that attention is now turned.

A Brief History of Shortwave Broadcasting

Pre-World War II

The early history of shortwave propagation actually precedes the 20th century. Heinrich Hertz experimented with shortwave in the late 1880s, and even Marconi did some work with shortwave in some of his experiments (Toubia, 1982; Headrick, 1991). However, Marconi felt that longwave (located below 300 kHz) was better suited for long-distance broadcasting, and therefore pursued research into longwave propagation at the expense of shortwave (Berg, 2000). In following Marconi's lead, those interested in radio waves all clamored and struggled for a share of the longwave frequency spectrum as they all felt that shortwave was useless. Government, corporate, and amateur interests all sought to find a place in the world of longwave, and some medium wave transmissions.

Naturally this led to a great crowding of the limited frequency space then known, understood, and appreciated. Soon, these conditions also led to restrictions placed on access to the radio frequencies then, and by 1912, under the provisions of the Radio Act of that year, the amateurs in the U.S. were effectively banished to shortwave (Barnouw, 1966; Toubia, 1982), leading the amateurs to take up their experiments in the only frequency ranges available to them. By the early 1920s, after restrictions placed on radio experiments (due to World War I) were lifted, the amateurs began their experiments in earnest with shortwave, and were soon demonstrating its efficient and effective long-distance characteristics (Berg, 2000). Within a few years, numerous contacts were made across the Atlantic, and eventually distance records for receiving broadcasts on shortwave were continually being surpassed so that "by 1924, the longest distances [on] earth . . . had been covered by amateur transmissions" (Toubia, p. 20).

In addition to the amateurs' success with shortwave transmissions in the early 1920s, there was a growing interest in shortwave within corporate circles about the same time. Under Frank Conrad's influence and direction, Westinghouse's KDKA in Pittsburgh began experimental shortwave broadcasts in 1920, and by 1924, it had established a bit of a shortwave network spread among other Westinghouse stations in the western U.S., as well as with stations in Great Britain and South Africa. By 1925, RCA and General Electric also joined Westinghouse in shortwave broadcasting (Barnouw, 1966; Berg, 2000; Toubia, 1982; Wood, 1992).

The success of these corporate operations, in conjunction with the continued success of the amateurs led to the decline of longwave as a long-distance broadcasting medium so that by 1925, shortwave had effectively replaced longwave as the medium of choice for international transmissions (Barnouw, 1966; Wood, 1992). As the viability and popularity of shortwave increased in the 1920s, the experimental classification of shortwave was soon replaced with a newer perspective that saw shortwave as the medium best suited for long distance broadcasting. By 1928, there were 400 stations operating on shortwave (Toubia, 1982)

At this point in the history of the development of shortwave broadcasting, two distinct perspectives developed with each reflecting different approaches to shortwave broadcasting. Ironically, these two approaches were separated by the Atlantic ocean that the earlier amateur experiments effectively bridged via their shortwave transmissions. While European nations were quick to move from the experimental mindset of shortwave, and to begin actively broadcasting on shortwave, the U.S. still held onto the experimental classification of shortwave. The 1930s saw the growth and entrenchment of clear and sustained state supported international broadcasting over shortwave among the nations of Europe. However, in the U.S., broadcasting on shortwave unfolded differently. While some in government circles desired an official U.S. voice on shortwave and tried to

follow the European lead, U.S. corporate (commercial) interests opposed such efforts, and instead lobbied to begin commercial broadcasting over shortwave.

Taking up the events in Europe first, within the geographically smaller nations of Europe, shortwave was more readily perceived of as a medium for international broadcasting. Some of the major European countries made it a point to broadcast on shortwave to then current and former colonies (Barnouw, 1966; Berg, 2000). Other countries would broadcast to its citizens, or recent emigrants, that were living abroad in other nations (Browne, 1982; Wasburn, 1992). Within the five years from 1927 through 1931, nearly all of the major countries of Europe established an official, government sponsored station to broadcast on shortwave (Barnouw, 1966; Wood, 1992).

Of course, as these early European shortwave stations were beginning their broadcast efforts, their respective countries were moving closer to war. It is within this context of war preparations that international broadcasting on shortwave first becomes established. While many associate shortwave broadcasting with the international propaganda of the Cold War, it is important to remember that there was another cold war prior to the official declarations of war associated with World War II. Within this other cold war before the outbreak of World War II hostilities, shortwave broadcasts were a primary weapon (Warlaumont, 1988). In spite of international treaties and efforts to curb such activities, from 1935 onward, there was an explosion in state sponsored broadcasting that was undeniably politically and ideologically charged (Matellart, 1991/1994). Thus we see how shortwave became, at the same time, not only a voice for the state, it also began to undermine national state sovereignty as well.

In the U.S., however, the use of shortwave for broadcasting unfolded differently than in Europe. As late as 1931, the FCC was still turning down requests by private operations to commercially broadcast on shortwave (Barnouw, 1966). In denying these requests, the FCC continued to cling to the "experimental" classification of shortwave, and reasoned, or explained to those desiring to broadcast commercially over shortwave,

that such frequencies were still an experimental medium for point-to-point relaying of messages. It was not until 1936 that the experimental classification was dropped, and shortwave stations were re-classified from amateur/experimental, to International Broadcast Stations (Salwen, 1997). However, restrictions on commercial broadcasting remained in place. Even so, some stations were broadcasting to South and Central America by 1938 with the hopes that commercial broadcasting on shortwave would soon be approved by the FCC (Salwen). Though many stations were broadcasting their commercial programming on shortwave, they just were not selling the air time to their sponsors (Barnouw, 1968). Then in the Spring of 1939, the FCC lifted its earlier ban on commercial shortwave broadcasting, and mandated a minimum broadcast strength of 50,000 watts (Barnouw, 1968; Salwen).

As the beginnings of formal hostilities World War II approached, the countries of Europe continued with the first cold war conducted over shortwave, while in the U.S., private stations struggled to develop commercial markets south of the border through their sponsored shortwave programming. As war broke out, and as the U.S. entered the hostilities, some elements in the shortwave world would change, while some elements would stay the same. It soon became clear to the private broadcasters in the U.S. that there was no profit in commercial shortwave broadcasting, and by the early 1940s, the U.S. finally followed the European lead and established a government sponsored voice on shortwave. These events, and those associated with shortwave broadcasting following World War II are described below.

World War II and the Cold War.

With the outbreak of hostilities around the globe by the early 1940s, the world was once again plunged into a global conflict. Unlike the Great War that preceded World War II, international broadcasting on shortwave played a visible role in this second World War of the 20th century. As shortwave went to war, the patterns of shortwave broadcasting that had emerged during the 1930s among the Europeans became more

entrenched, and in many ways, have become characteristic of shortwave activities ever since (Wasburn, 1992). In fact, with regards to the European shortwave broadcasters, the patterns changed very little if any, during the war as these countries were already engaged in a cold war within which radio, and particularly shortwave radio, was a primary player, if not *the* primary weapon (Wood, 1992). With the outbreak of hostilities in Europe at the end of the 1930s, radio continued to be used as a weapon of the newer hot war much as it had been used as a weapon during the preceding cold war. Apparently, the only significant change to take place in European shortwave broadcasting came in the form of growth—while the number of international shortwave broadcasters in Europe during the early 1930s was somewhat limited, by 1941 the number had grown to 40 (Wasburn, 1985). With this understanding of European shortwave broadcasting in mind, most of the following information will address the emergence of an international, government sponsored voice on shortwave from within the U.S.

As the threat of war continued to grow over the U.S. horizon in 1940, the U.S. government began to buy 15 minute blocks of air time from the private shortwave broadcasters. It was within these 15 minute blocks that the U.S.'s official shortwave voice—the Voice of America—was born (Berg, 2000; Howell, 1986; Wasburn, 1992). By 1942, the U.S. government assumed complete control for the duration of the war of the private shortwave operations in the U.S. (Berg; Krugler, 1999). It should be noted that the private stations had no qualms about selling the air time to the government, or allowing the government to take over the shortwave stations. The private broadcasters were more than happy to turn their shortwave operations over to the U.S. government (Berg). From 1939 through 1941, these private broadcasters, who had lobbied the government for most of 10 years to allow commercial broadcasting over shortwave, quickly learned that there was little or no profit to be made broadcasting on shortwave. After losing money on shortwave for three years, they were more than happy to let the government step in and assume responsibility for shortwave broadcasting from the U.S.

While the private broadcasters were losing money over shortwave, the U.S. government began to organize formal agencies to oversee the emanation of government sponsored, international broadcasting. By the end of 1941, the CIAA (Coordination of Inter-American Affairs) and the COI (Coordination of Information) were organized with the CIAA focused on Latin America, and the COI concerned with the rest of the world (Barnouw, 1968). By June 1942, the COI was divided into the OWI (Office of War Information) and the OSS (Office of Strategic Services). The OWI was responsible for overt propaganda efforts while the OSS addressed the more covert propaganda operations (Mattelart, 1991/1994). As Browne (1982) and Mattelart explain, the OWI organized the operation of the private shortwave stations that the government had just previously assumed responsibility for in the name of war. It is from this operation that the formal Voice of America (VOA) emerged (Howell, 1986; Wasburn, 1992). The U.S. also made use of shortwave links to develop and maintain its Armed Forces Radio Service (AFRS; Barnouw, 1968).

By war's end, there were 55 countries broadcasting on shortwave in 40 different languages (Wasburn, 1985). However, although the value of having a government voice broadcasting on shortwave was not lost on the U.S. government, the overall attitude after the war was to allow international shortwave broadcasting to return to private enterprise as much as possible, while allowing VOA to stay on the air with only a minimal expenditure of money and effort devoted toward its operations (Browne, 1982). Of course, the private broadcasters no longer had any interest in commercial broadcasting over shortwave. Commercial broadcasting on shortwave had operated as a deficit before the war, and the private stations were in no hurry to start that again (Berg, 2000). Also, after the war there were additional media outlets in television and FM broadcasting that captured the attention of the private broadcasters enough to leave them with little if any interest in shortwave (Barnouw, 1968). It appeared that the Voice of America would

soon follow the path of a number of other shortwave stations that had been greatly reduced or cut after the war.

However, by 1950, the Voice of America was not only still on the air, it was well entrenched within, and strongly supported by, the U.S. government. The change in attitude toward VOA and shortwave broadcasting came as the result of yet one more war that would occupy world attention for the next 40 years—namely the Cold War.

According to Mytton (1986), the period from the 1950s through the 1980s marks the Golden Age of International Radio. Approximately 240 million radio sets existed worldwide in 1955. By 1985 the number was 1.5 billion. Beginning in the 1950s and continuing into the 1980s, shortwave receivers became smaller, cheaper, and simpler to operate (Boyd, 1986). Fueled by the radio warfare of the Cold War participants, there was what Wood (1992) calls explosive growth in international radio broadcasting and listening during the years that mark the period of the Cold War. In fact, in the post World War II climate, international broadcasting was used to legitimize and support state efforts (Mowlana, 1996), and therefore, national sovereignty.

It appears that the first radio shots fired around the world in this shortwave battlefield of the Cold War actually emanated from the West. The war in Europe had not been over one year when the BBC was instructed by the British government to begin broadcasting to the Soviet Union in March, 1946 (Wood, 1992). (Wood [2000] also reminds us that the UK emerged from World War II as the world leader in international broadcasting on shortwave with a weekly output greater than the US and USSR combined). In February of the following year (1947), the U.S. followed suit and also began to broadcast to the USSR (Warlaumont, 1988; Wood, 1992). Browne (1982) suggests that much of this broadcasting to the Soviet Union was in response to the international radio network that was developed by the Soviets shortly after the war. According to Browne, a significant portion of this network consisted of broadcasting systems in satellite countries that were occupied by the Soviets after the war.

In any case, one response by the Soviets was to begin jamming Western broadcasts on a regular basis in 1948 (Warlaumont). Under these conditions—the Soviet occupation and use of Eastern European countries and their broadcasting networks, as well as the jamming of Western broadcasts by the USSR—the U.S. government easily passed the Smith-Mundt act of 1948 making the Voice of America a permanent fixture of the State Department (Barnouw, 1968; Krugler, 1999; Krugler, 2000). By 1950, and the start of the Korean conflict, efforts toward more aggressive political propaganda were more formally endorsed by the government. Specifically, President Truman instructed the State Department to "combat communism and communist media output . . . by exposing its lies . . . and subjecting it to ridicule" (Browne, p. 98). During the Eisenhower administration in 1953, the U.S. Information Agency, which was created as part of the Smith-Mundt act to oversee international radio broadcasts from the U.S., was moved out of the State Department where it had originally been housed since USIA's creation in 1948. It was treated as an independent agency under the direction of the President with the aim of cultivating a news operation, while "the more strident propaganda that permeated the . . . Voice of America under the Truman administration" was turned over to covert operations of Radio Free Europe and Radio Liberty (Parry-Giles, 1994, p. 268). This focused effort against communism generally, and at times the Soviet Union specifically, kept the Voice of America on the air after World War II, and sustained its general growth and place within the world of international broadcasting for the next 40 years.

At the other end of the ideological spectrum, the Soviets were also active. In addition to their efforts to jam and interfere with Western (mainly American) broadcasts targeted to the USSR and its satellites (Browne, 1982; Wasburn, 1992), the Soviet Union began to build what became the largest shortwave effort of the Cold War. As Mytton (1986) explains, the Soviet Union broadcast about 660 hours each week in 1955, and by 1985, it had grown to nearly 2,200 hours a week. According to Wasburn's (1985)

descriptions, the Soviet Union increased its international radio activities four-fold between 1948 to 1972. In any case, the size, volume, and scope of the Soviet Union's efforts in shortwave broadcasting simply grew and grew from the 1950s through the bulk of the Cold War so that by 1990, *Passport to World Band Radio* would write that "Radio Moscow is one of the easiest stations to hear *anywhere*" (*Passport*, 1989, p. 39, emphasis in the original).

While the growth and development of international shortwave broadcasting during the 40+ years of the Cold War did not always occur in linear progression, by the 1980s, the size and scope of shortwave broadcasting around the world was impressive, and it still continued to grow. Many older 100 kilowatt (kW) and 250 kW transmitters had been upgraded to 250 kW and 500 kW transmitters respectively by 1980 (Boyd, 1986). Listenership appeared to grow as well. The BBC, for example, noted a 60% increase in listeners between 1980 (75 million listeners) and 1990 (120 million). There were also more than 80 different countries broadcasting on shortwave by 1980 (Elliot, 1982; Mytton, 1986; Wasburn, 1985), and by 1990, that number had grown to 150 (Dougan, 1991; Wood, 1992).

Within this continually growing crowd of international broadcasters, some stood out more than others. By the 1980s, the major players on shortwave were Radio Moscow, the BBC, Voice of America, Deutsche Welle, and Radio Beijing (Wood, 1992). Some of the prominent lesser players included Canada, Japan, Israel, Cuba, the Netherlands, and North Korea (Wasburn, 1985). By 1990, the USSR, United States, the People's Republic of China, West Germany, and the United Kingdom were still the leading operations on shortwave radio, broadcasting between 1800 (USSR) and 767 hours (United Kingdom) each week (Familiant, 1991).

Among all these state-run international broadcasters three stood out—namely the BBC World Service, Radio Moscow, and the Voice of America. Of these three, the World Service is often described as the most journalistically independent, objective, and

dependable. While the World Service has rarely, if ever, topped the list in terms of transmitter output strength and/or number of hours broadcast weekly during the bulk of the Cold War, it is repeatedly identified in the literature as the station perceived as having the greatest journalistic integrity (Bookmiller, 1992; Browne, 1982; Wood, 1992). The World Service has accomplished this by ongoing efforts to keep a clear editorial distance between it and its funding government agency, the Foreign Office. While the Foreign Office did govern the number of hours the World Service broadcast, as well as in which languages, the Foreign Office has had little, if any, influence over the content of the programming (Bookmiller). As a result, World Service programming on shortwave has been allowed to practice a form of journalistic integrity and objectivity not found in any of the other shortwave broadcasters unable to break clear of the editorial influences of their respective sponsoring governments.

Radio Moscow, on the other hand, manifested one of the strongest connections between station and government. Noted for its bombastic propaganda during the Cold War, what Radio Moscow lacked in credentials it made up for in sheer broadcasting power and strength. As Bookmiller (1992) explains, Radio Moscow was the largest of the three, it completely dominated the airwaves, and it overwhelmed its competition through sheer numbers of transmitters and broadcast hours. At the height of the Cold War, according to *Passport to WorldBand Radio—1990*, Radio Moscow operated some of the world's most powerful transmitters, it geographically covered some of the largest sections of the globe, it targeted Europe and North America 24 hours continuously, and it provided the most language services. "Just tune around, . . . and you'll find it" was the advice given to the novice listener in 1989 and 1990 (*Passport*, 1989, p. 127).

Where did the Voice of America fit regarding the popularity and credibility of the BBC World Service, and the size and strength of Radio Moscow? According to Bookmiller (1992), somewhere in between. In 1989, the VOA broadcast 1050 hours each week in 44 languages, and estimated that about 120 million listeners tuned in (Rampal &

Adams, 1990). The broadcast hours were a little less than Radio Moscow, but the listenership was on par with the World Service. However, during the height of the Cold War, the Voice of America was a clear tool of propaganda and foreign policy against communist governments (Alexandre, 1988), and it did not enjoy the journalistic respect often afforded the World Service. Alexandre continues by pointing out that during the Reagan administration, the dissemination of foreign policy information through international media, namely international radio, was strongly linked to military build-up expenditure, and military efforts around the world. Quoting a Reagan administration spokesperson, Alexandre notes, "the U.S. information program is a part of the defense effort and has to be treated with the same urgency as our national security efforts" (Alexandre, p. 101). This was really nothing new during the Reagan administration, as the VOA has struggled at times to distinguish itself as a more independent, journalistic enterprise throughout its history. The Voice of America's relationship to the Department of State has often turned VOA into an outlet for U.S. policy makers. Sometimes the distance between VOA and Department of State has been described as only a phone call away (Rampal & Adams, 1990).

As the Reagan administration drew to a close, the general attitude toward international shortwave broadcasting continued as it had for the previous 40+ years. Specifically, shortwave was treated as the ideal medium for reaching large, globally dispersed audiences. Since the beginnings of a cold war in Europe during the 1930s, through World War II, and especially during the global Cold War of the last half of the 20th century, international broadcasting on shortwave has been treated as the medium of choice for propaganda broadcasting directed to audiences worldwide. However, as the last decade of the 20th century began to unfold, changes and challenges to shortwave broadcasting as it had been known for most of the 20th century were emerging.

At the End of the Cold War

By the early 1990s, political and technological changes led to increased discussions for changes in shortwave broadcasting. By 1992, the Cold War had come to its (then) surprising conclusion after the shift from communism to more democratic governments in most of Eastern European, and after the failed coup attempt in the Soviet Union in 1991. At this same time there were numerous manifestations of the successful roles played by the Western shortwave broadcasters—notably the BBC World Service and VOA—in influencing and contributing to these political changes (Dougan, 1991; Król, 1992; Manaev, 1991). With this apparent success, and with the Cold War—which was the *raison d'être* for much of the shortwave broadcasting from 1950 to 1990—concluded, it would stand to reason that some change in shortwave broadcasting would occur.

Indeed, with one eye toward past strengths and recent successes of international shortwave broadcasting, and the other eye looking at possible changes in the future of shortwave broadcasting and at newer broadcasting technologies, the Center for Strategic and International Studies (CSIS) convened an extensive symposium in 1991 to more closely examine and discuss the world of international radio broadcasting at the beginning of the 1990s. Entitled *Turning Up the Volume on International Radio*, the symposium brought in experts and opinions from numerous fields of expertise associated with international broadcasting (Garcia, 1991). Not only were key individuals from the BBC World Service and the Voice of America (among other international shortwave broadcasters) present, many other government and corporate interests associated with international broadcasting were represented as well.

From the published highlights of the transcripts of the many panels and reports presented at the symposium, two general themes, or perspectives, regarding international shortwave broadcasting emerged (or were present and vocalized) at the symposium. In light of newer technologies, some clearly questioned "the [continued] need for

international radio services" (Dougan, 1991, p. ii) built on the foundation of shortwave broadcasting. However, there were others who still felt that the productive, effective, and influential life of shortwave was more than healthy, and that it was actually growing stronger. The proponents for shortwave broadcasting pointed out that in spite of the "CNN effect" manifested during the Gulf War, the shortwave receiver sales that had been growing between 15% and 20% were strengthened even more as a result of the Persian Gulf hostilities ("Broadcast Technologies," 1991). Also, in spite of newer technologies, Dougan (1991) describes "teeming streets [in] Cairo . . . [and] far-flung hamlets of Southeast Asia" where one could hear "the din of voices [and] music blaring from radios in almost every home and shop" (p. ii). These advocates for shortwave pointed out that shortwave radio was still (then) the only medium that truly had a global reach. To borrow from Larry Magne, editor of the annual book, *Passport to World Band Radio*, and one of the panelists and presenters at the symposium, "The reputed corpse of shortwave is up and about, not because we have no other alternative, but burying it makes no sense" ("Broadcast Technologies," p. 39).

On the other side, those who felt that shortwave broadcasting was coming very near the end of its useful life span pointed toward two clear trends that had been developing since at least the 1960s, and appeared to come to fruition at the beginning of the 1990s. Those two trends were the development of satellite broadcasting as well as the diffusion of media outlets in countries previously served primarily by shortwave ("Broadcast Technologies," 1991; Demitz, et al, 1991). Concerning satellite broadcasting, a number of participants at the symposium noted CNN's success in bringing the war to so many viewers around the globe in real time. The vision of such effective audio/visual reporting in real time appeared to spell the end of the shortwave broadcasting that had been chugging along for much of the 20th century.

In addition to televised satellite broadcasts, others noted the emergence of digital radio broadcasting from satellite. Present at the symposium was Noah Samara, founder

of WorldSpace, a U.S. incorporated venture working to provide satellite radio signals for listeners in Third World countries. In preparing to deliver satellite radio broadcasting to Africa, WorldSpace was devising a method whereby subscribing nations could finance the use of channels on the WorldSpace satellite system named Afrispace (Samara, 1991). In anticipation of receiver needs, WorldSpace had contracted with MARCOR and Techsonic industries in the U.S., and Goldstar in South Korea to develop and deliver (in 100,000 lots) radios capable of receiving their satellite broadcasts by 1993. The price of the individual radios was not to exceed \$50 (Samara).

A final concern noted by some of the skeptics of shortwave was the diffusion of other media outlets in areas that had previously been strongly, if not exclusively, served by shortwave radio. It was argued that the increases in more clearly audible broadcasts on mediumwave (AM) and on VHF (FM broadcasting) led many listeners away from the sometimes scratchy and unpredictable programming on shortwave (Demitz, et al., 1991). In addition, it was noted that many of these countries that previously had little more than shortwave to meet their media needs had by this time established their own television networks that were operating rather successfully, and in some cases very extensively by 1990. Reason and evidence suggested that with more radio and television media at listeners' disposal, shortwave listening would naturally decline, and for some, this decline was expected to lead to a substantial change in shortwave broadcasting sooner than later.

To summarize the key thoughts and feelings concerning shortwave broadcasting manifested at the international radio symposium in 1991, there was a clear division between proponents who expected continued growth in international shortwave broadcasting, and the antagonists who felt that international broadcasting over shortwave had nearly reached the end of its useful life span, and that newer technologies, along with the diffusion of other communication media, would lead to a natural end of international shortwave broadcasting.

Conclusion

By way of conclusion, As a medium for broadcasting, the shortwave frequencies have excelled as *the* medium for long distance, wireless transmissions. Discovered to be an extremely viable medium for long distance broadcasting in the 1920s, shortwave soon became the medium that many European countries used to broadcast to their citizens living in colonies and other countries abroad, as well as citizens of other nations nearby and around the world. Additionally, before the hostilities of World War II broke out, many of these countries were already attacking each other over these airwaves in what proved not only to be a prelude to war, but also the first cold war carried out over international radio.

These combatant behaviors continued over the shortwave through the war, but took a small break after World War II. By the late 1940s and early 1950s, however, aggressive international broadcasting over shortwave once again became the norm as the world followed the East-West conflict of the Cold War. For the next 40 years, much of what took place over shortwave broadcasting was overshadowed and influenced by this ideological conflict. Within this context, state-sponsored international shortwave broadcasting continued to strengthen the notion of state sovereignty by functioning as the international voice of sovereign states around the globe. However, at the same time, it also undermined state sovereignty as many broadcasting states did so in an effort to challenge other nation states.

By the late 1980s and early 1990s, the Cold War came to its unexpected conclusion, and this in turn opened a rather vocal debate for many as to the future of international shortwave broadcasting. With newer technologies in satellite television and radio broadcasting being developed and promoted, and with the Cold War over, those calling for the end of shortwave broadcasting seemed justified in their arguments. Yet with shortwave receiver sales still growing, and many around the globe still locked to radio generally, and shortwave radio particularly, as their only source for news and

information around the world, it seemed foolish, or hasty at least, to start scaling back the shortwave broadcasts.

With regards to the notion of the nation-state, we see that shortwave broadcasting proved invaluable in giving the state a global voice and reach. With the exception of the U.S., all major Western nations incorporated the HF spectrum into their respective (and emerging) broadcasting systems by the early 1930s. Through the efficient and effective long-distance capacities of shortwave, these nations were able to broadcast to their citizens living in colonies abroad, and in foreign countries. In a Europe that was still unsettled after the war to end all wars, it was not long until these state-sponsored broadcasts began to carry broadcasting that was hostile among the many state players. With shortwave, these nations found a new medium through which they could publish their own accolades at a level and speed never known before.

At the same time, such broadcasting began to open the door for increased weakening of the nation state as nations could reach and attempt to persuade citizens under the rule of other sovereign states. Prior to these international radio broadcasts, much of what constituted international communication could be checked and/or controlled at the borders. Newspapers, the telegraph, telephones, and all forms of transportation could be monitored and controlled at they entered and exited national borders. Radio was a different story. And as much as it may have helped promote a nation's image throughout the world, that nation's image was vulnerable to the broadcasts emanating from other countries. And as so many comments made at the end of the Cold War, such broadcasts were indeed effective in undermining the control a nation might have over its citizens.

After the Cold War, international broadcasting over shortwave did indeed pass through significant changes, as did the concept of representing the nation state over the airwaves. The next four chapters provide the detailed review of what exactly happened among the international broadcasters as that next period unfolded. The next two chapters

review the international broadcasting environment generally, and then examine some of the experiences of some of the larger, state-sponsored broadcasters. Then chapters 5 and 6 will look at how the two stations who came out on top after the end of the Cold War—the Voice of America and the BBC World Service—fared. But first, a review of the international broadcasting environment during the 1990s is covered next.

Chapter Three

With the crumbling of Eastern Bloc relations, and the falling of concrete walls, there were also changes *on* the air to accompany the changes taking place in the air. For example, radio programming from the Soviet Union that used to have "husky voices ripe with anti-U.S. invectives" (*Passport*, 1990, p. 21) began to sound more like the BBC. According to an employee of Vatican Radio's Russian service, the Soviet press had become very reliable, even comparable to Western stations (*Passport*, 1990). Aside from Radio Tirana (Albania), all other stations of the formerly Eastern Bloc countries had turned away from communism in their broadcasts and had begun to resemble Western station in programming and openness (*Passport*, 1990). Additionally, as part of German reunification, Radio Berlin International was merged with Deutsche Welle, the West German station (*Passport*, 1990). Of course, as history unfolded, Albania also turned away from Communism, and subsequently dropped the heavy rhetoric associated with the Cold War, and as the decade unfolded, the shortwave programming overall became more and more homogenized as stations sounded more and more alike (K.A. Elliot, Audience research analyst in the Office of Research of the U.S. International Broadcasting Bureau; personal correspondence [email]; September 8, 2003; F. Osterman, President of Universal Radio, Inc.; personal conversation [telephone interview]; September 19, 2003)

Shortwave broadcasting even played a key role in the failed coup attempt in the former USSR during 1991. During the failed coup, the VOA correspondents who were trapped around the barricades, called in reports of the coup over their cell phones to their Moscow offices. These reports were then transmitted to VOA headquarters in D.C. (most likely via satellite) which in turned broadcast the reports almost instantly over shortwave back to the Soviet citizenry. Similar events took place at RFE/RL, and provided information that contradicted the official Communist party line that Gorbachev was sick and resting (Hughes, 1991, August 29).

Events like this, and others, added to a popularity of shortwave that was at an all-time high in Western countries, and was increasing in importance in the Middle East. Lech Walesa likened international shortwave radio's influence on freedom in Eastern Europe to the sun's influence on the state of life on the earth (Hughes, 1991, December 26). Shortwave listening was also boosted by the thousands of U.S. military reservists who purchased portable shortwave radios and used them during their time in the Middle East during the Gulf War (G. Mytton, Manager of the BBC World Service's global audience research programme from 1982 until 1996; personal correspondence [email], September 18, 2003). According to Jack Eliot, a contributing editor to *Passport*, sales of shortwave receivers were up 20 to 25 percent in the U.S. in the early 1990s (Peterson, 1992, June 3). Fred Osterman, president of Universal Radio Inc. which specializes in selling shortwave and ham radio equipment, explained that during the Persian Gulf War, "you just couldn't get enough shortwave radios." (Peterson, 1992, p. C8).

This moment in the history of international shortwave broadcasting was described by some as "the most exciting period of shuffling, scrambling, and changing in decades" (*Passport*, 1991, p. 37). Everything from budgets, times, and languages was up in the air. For the listener, it was a time described as having better programs, signals, and radios. Programs were increasingly more open and quality oriented. During this time, there was a great reduction in jamming, as well as an increase in transmitter leasing and sharing, as well as frequency sharing (Deutsche Welle; personal correspondence with the staff at Deutsche Welle [email], September 19, 2003; D. Gibson, Intermedia Research Specialist, personal conversation [telephone interview], August 20, 2003; M. Wiberg, Frequency manager for Swedish radio station, personal correspondence [email], November 6, 2002). Signals were more clearly transmitted and received, and finally, the number and quality of radios in the market were increasing noticeably (*Passport*, 1991). It was a time that led some to proclaim that shortwave was the best medium to get through the Iron Curtain (Osterman, 1997).

Yet in spite of the basking glow in which the international shortwave broadcasters found themselves, uncertainties still faced the broadcasters. Most were not certain of the permanence of the changes in Eastern Europe, and as a result many Western stations continued to broadcast to former Communist countries (*Passport*, 1990). This continued programming did experience a change in content, however. Shortly after the fall of the Soviet Union, anti-communist content vanished from Western broadcasters, and programming began to include how-to spots instructing citizens on living in democratic states with greater freedoms than they previously experienced (Solomon, 1993, March 26).

Within this early, post-Cold War time frame, there also emerged the sounds of those who felt that international broadcasting (which at the time was almost exclusively done over shortwave) had completed its mission, and was outliving its usefulness. It was a time of debate and conflict as some called for bringing the "boys [of shortwave] home" after the Cold War, while others felt very cautious about any cuts to their international shortwave programs and operations (Wood, 2000). For the consumers of international broadcasting, it was becoming easier for people around the world to get balanced and uncensored news and information from local sources, thereby creating a post-Cold War climate of competition among international broadcasters for the listeners of the world (Lamb, 1994, September 6). The loss of a clear, single ideological division in the world also left many of the international broadcasters competing with other sources of international news and information, such as CNN, USA Today, the New York Times, and the Wall Street Journal (Lamb). Many broadcasters were in the process of finding their identity at the end of the Cold War (Tusa, 1992, December 12), once again suggesting that the Cold War was very much the *raison d'être* of international shortwave broadcasting. As late as 1994, VOA director Geoffrey Cowan explained that the end of the Cold War did not mean the end of VOA, just a change in focus (Lamb). Yet Cowan was not specific as to what that focus should entail. For others, some stations were

expanding, such as the BBC World Service and Radio France International in an effort to become mainstream news sources for the world, while others were beginning to feel the pinch of declining budgets (*Passport*, 1991).

This chapter will review the general climate of international broadcasting at the beginning of the 1990s, as well as touch on some of the changes that have taken place in the last ten years which have impacted international broadcasting generally, and shortwave specifically. The debate concerning whether shortwave broadcasting should be reduced or cut, or not, will be addressed. Also, some of the prominent, newer technologies and programs of international broadcasting will be discussed with focused attention on local AM/FM rebroadcasts of international programming, satellite radio broadcasting, and the development of internet simulcasting.

Post-Cold War International Broadcasting Environment

To Cut or Not To Cut

At the end of the 1980s, there emerged the debate that seems to have begun in the 1960s with the launch of the first communication satellites. As was addressed at the symposium of international radio broadcasting (touched on earlier), one side called for the end of international broadcasting via shortwave, with the other side holding fast, and at times experiencing an expansion of shortwave listening and broadcasting—sometimes through the use of newer technologies that were supposed to put an end to international shortwave. Though much of this debate took place surrounding U.S. international shortwave broadcasting, the presence of other international broadcasters at the 1991 symposium indicate an interest in the debate by other international broadcasters across the globe. As a result, the issue is taken up in this chapter, while the debate within U.S. circles will be addressed in greater detail in chapter 5.

According to one account, this split appeared to be divided between those involved in broadcast engineering, and those more associated with providing programming. Generally, those on the programming side were interested in exploring

more delivery options as additions to, or replacement for, shortwave. The engineers, however, seemed to feel a need to move more slowly in that direction in an effort to see returns on recent investments made in the older technology (A. Heil, former Deputy Director of VOA; personal conversation [telephone interview]; September 4, 2003). Regardless, using the end of the Cold War as the impetus, there were calls to cut back, eliminate, or demobilize, and, as these voices were raised, those defending shortwave did not hesitate to stand by this older technology and the broadcasters who had used it.

To Cut.

In the U.S. and elsewhere, there were those who felt that additional efforts to increase shortwave broadcasts, or to expand facilities, were wasteful and unnecessary. This was especially the case with efforts to continue with plans made during the Cold War. Such actions were seen as "relics of the Cold War" and it was argued that such efforts should be terminated (Collins & Kaplan, 1992, October 1). Alvin Snyder of the Annenberg Washington Program in Communication felt that the government was misguided in continuing to spend money on VOA's radio service. He advocated the continued operation of international broadcasting, but recommended the use of newer technologies. In his words, "time has passed radio by, probably not too soon" ("Broadcasting from 40 fathoms", 1993, May 7, p. A6). Tom Korologos, chairman of the U.S. Advisory Commission on Public Diplomacy, also felt that as a technology, shortwave was in decline ("Getting the message to China", 1992, July 25). The Director of the Israeli Broadcast Association, Arye Merkel, felt that shortwave listeners were a dying breed (Cashman, 1991, August 1); while Derek White, General Manager of Radio Australia also thought that shortwave would die out, but only after an affordable satellite radio receiver was developed (Green, 1993, October 20). And even the Voice of America itself had been anticipating an end to shortwave—before the end of the Cold War was in sight. In 1985, the VOA created the radio program *VOA Europe* in an effort to reach the young people in Europe who were born after World War II. The service was designed to

resemble a commercial radio station with news bulletins, small features, and mostly popular rock-n-roll. Rosanne Skirble, one of the VOA staff who worked for *VOA Europe* explained that "*VOA Europe* decided [in the 1980s that] the future might not be in shortwave" (Feran, 1992, October 15, p. E8).

Early on, it appeared that listener behavior validated these claims. As Wood (2000) explains, shortwave listening among former communist citizens had declined since the end of the Cold War, as former communist countries expanded their media offerings to their citizens. Even within three years from the end of the Cold War, listenership in Eastern Europe was beginning to decline (Binder, 1994, August 28). Alvin Snyder also claimed that by 1993, many in China were turning off their shortwave radios and were tuning in foreign television programs carried by satellite ("U.S. broadcast services fight for survival", 1993, May 26), a point that Tom Korologos also noted ("Getting the message to China," 1992, July 25). And according to one more claim, growing freedom of the press in African nations was challenging the near monopoly that large international shortwave broadcasters had on African audiences (French, 1994, November 21).

As the decade moved on, there were additional statements and reports which echoed those made above. One article in 1996 felt that the presence of shortwave was shrinking in the world in conjunction with the increase of radio and television stations generally, specifically those stations that were not state controlled (Shane, 1996, August, 18). Another explained, "If local radio can provide balanced, fair information, people tend to tune out shortwave" (Marks, 1995, November 1, p. 1), while still another went so far as to say that shortwave has virtually died after the Cold War ended as local radio began to pick up (Yaakov, 1996, April 26). By 1997, while the BBC World Service had enjoyed modest growth among its listeners, it reported that the "overall the number of people listening to shortwave transmissions around the world [was] in decline" ("BBC axe falls", 1997, March 9, p. 2). Coming to the end of the decade, some explained that

the end of the Cold War was the cause of the declining shortwave audience (Cullen, 1998, February 22), while in 1999, the new chair of the U.S. Broadcasting Board of Governors, Marc Nathanson (who was the former head of Falcon Cable TV), felt that shortwave was outmoded, and wanted to see U.S. international broadcasters move into satellites, the internet, and FM (Hopkins, 1999, July).

As can be seen, there were clear voices and opinions for the reduction, if not elimination, of international shortwave broadcasts. Some felt that the act of international broadcasting itself was simply a product of the previous geo-political climate, and the time had arrived to put such broadcasting in the past. Others were more critical of the shortwave medium and desired to move beyond it into newer technologies of international broadcasting. However, these were not the only opinions expressed about international shortwave broadcasting, and a significant collection of opinions disagreed and defended continued international broadcasting generally, and shortwave specifically.

Not To Cut.

According to a BBC study in the early 1990s, shortwave listening was still increasing around the world with approximately 200 million tuning in on an estimated 600 million shortwave radios (Binder, 1994, August 28). Lawrence Magne of *Passport* described an even larger audience. According to Magne, 500 million people listening to shortwave is a conservative estimate. During a crisis, it is expected that 200 million will tune in to the BBC (Levy, 1993, March 14). And John Tusa, former Director of the BBC World Service, encouraged the upkeep of international broadcasts as a form of aid that moves knowledge and information around the globe, while also functioning as a form of informal diplomacy (Tusa, 1992, December 12).

According to a 1991 U.S. Presidential Task Force on International Broadcasting, "This [was] no time to abandon or degrade America's great international broadcasting endeavor", and that it was instead "a time of delicacy and drama that must summon from the West, patience and perseverance" (Hughes, 1991, December 26, p. 19). And even

though Hughes also felt the future held newer technologies that would render shortwave obsolete, such a future was not sufficiently present (Hughes, 1991, December 26). Four years later, Graham Mytton, head of BBC audience research claimed that "the demand for shortwave was still high," while others added that "for the foreseeable future, shortwave will remain the world's only truly global medium that can educate, inform, and—with its soothing voice—comfort" (Marks, 1995, November 1, p. 1).

There were also rebuttals for those who felt that Eastern Europeans did not want or need shortwave broadcasts after the end of the Cold War. Terry Hargreaves, then director of Radio Canada International, explained that shortwave broadcasters in Eastern Europe did not want the Western broadcasters to terminate broadcasts. Eastern European broadcasters still used the Western broadcasts as a check for their own broadcasts, and as Hargreaves noted, newly freed states do not always stay as free as they started (Boone, 1995b, February 25). An opinion written in to *The Christian Science Monitor* expressed disagreement with various politicians' proposals to cut back on U.S. international broadcasting. The author, referring to Czech President Havel's thoughts on the issue, noted that local broadcasters in Eastern Europe were still struggling with balanced reporting ("Keep those radios on", 1993, March 23). Writing in the editorial section of *The Phoenix Gazette*, Mr. Tom Rothweiler of Phoenix felt that it was unwise to scale back on the U.S.'s broadcasts overseas, feeling that although the Cold War had been won by the West, it was still needful to continue sending news and information to those making significant transitions in the countries that did not win ("Voice worth keeping", 1995, October 28). And finally, Wood (2000) points out that the decline of listeners in North America and Europe should be noted with the fact that there was already a small audience of listeners from these regions to begin with, rendering any further declines rather small.

The sales of receivers *and* transmitters indicated little slowing down both in broadcasting and listening, at least through the early part of the 1990s. Wood (2000)

observed continued growth of European transmitters, as well as continued money spent on rather expensive foreign broadcasts (Wood, 2000). One report indicated that new shortwave transmitters, some costing as much as \$4 million each, were still being made and sold (Binder, 1994, August 28). Wood points out that six hundred transmitters (between 100 and 500 kW) were sold between 1950 and 1990, with one third of that total being sold within a five year period between 1985 and 1990. He then adds that sales between 1990 and 1996 totaled 243 units, a pace that slightly exceeds sales during the last five years of the Cold War. Receivers were keeping up with transmitters as well, as shortwave listening enjoyed a rebirth of interest in this older international technology (Levy, 1993, March 14; Macqueen, 1993, March 7). It has been noted that the decreases in size and costs, along with increases in receiving technologies were leading more to pick up, or return to, shortwave listening (Levy)—what hobbyists describe as the abundance of broadcasts that make up a smorgasbord of news and information over shortwave (Green, 1993, January 9).

In response to those who felt that shortwave was declining around the world, including the developing world, the proponents of international broadcasting over shortwave disagreed, claiming that vast areas of the world were still incredibly dependent on shortwave broadcasts to inform them of local and world situations and crises (Robins, 2000, March 21). Others felt that there were still places in the world where radios and batteries power the information revolution ("A world rallies", 1996, August 30). Africa was one location cited in which shortwave was holding strong, if not increasing (Binder 1994, August, 28). According to Michel Lobelle, Rebroadcasting Manager for Africa at the BBC World Service, radio was still the primary medium for information flow in Africa. Television was limited to the extremely wealthy, and was not practical for the common citizen due to cost and lack of electricity to villages (Richardson, 1997, July 26). In a place where every village has at least one shortwave receiver (Balzar, 1995, October

22), those in Africa have been described as "the world's most avid listeners to shortwave radio" (French, 1994, November 21, p. D5).

One report went into detail concerning the shortwave listeners in Africa. "To speak of radio in Africa is to discuss life and death . . . Shortwave, FM, transistor, battery, solar, clock, windup—radio is the central nervous system of this very nervous, decentralized continent" (Balzar, 1995, October 22, p. A1). While the rest of the world waded its way through the information age, in Africa, "events over the next hill and beyond are known by just two means: word of mouth . . . by travelers, . . . and word of mouth . . . on radio" (Balzar). According to Julian Bedford, a former Reuters news service correspondent who later prepared news briefs for the U.N. Assistance Mission in Rwanda, "because of the oral tradition, everything that is put out on radio is sucked up like a sponge" (Balzar). Furthermore, radios were even treated as a status symbol in parts of Africa. According to Siyanga Maluma, marketing director of BenGen Power (maker of crank powered radios), a radio "can procure a wife" (McNeil, 1996, February 16, p. A1). Additionally, many, if not most, of the stations broadcasting in Africa by the middle of the 1990s still did so under the tether of local governments. Therefore, the great "phenomenon of African radio: shortwave broadcasts . . . from abroad" (Balzar, p. A1). "Perhaps with justification, Africans and Westerners working in Africa [found] it ironic that developed nations . . . [were] debating cuts in international broadcasting . . . at the very time they [were] pushing [African] nations to embrace pluralism and democracy" (Balzar, p. A1).

To summarize the debate, much like the debate near the end of the Cold War that was captured at the International Radio Broadcasting symposium in the spring of 1991, some felt that shortwave broadcasting was over, or at or near the end of its life expectancy, while others continued to defend this nearly 70 year old technology. Those calling for cuts called attention to declining listener rates in developed countries and former Communist countries. They also pointed out the newer technologies, such as

satellite radio broadcasting that should be exploited in order to broadcast to an international audience. The defenders of shortwave called into question the claims that shortwave was declining across the globe, and referred to areas where shortwave was still the core medium of mass communication.

New Technologies and Media for International Broadcasting

As many of the opponents of shortwave made reference to newer mass communication technologies, and as these technologies were beginning to be explored and utilized by international broadcasters during the 1990s, it is appropriate to discuss them at this point. Not only were more advanced technologies (that had been in use for some years, such as satellite broadcasting) entertained and developed further, but entirely new modes of international broadcasting entered the mix. Additionally, some long-standing media were put to use in newer ways to add even more variety to the international media environment. In this next section these will be discussed with particular attention to the 1992 World Administrative Radio Conference, satellite radio broadcasting, the placement of international broadcasts over local AM and FM stations around the globe, and the development of internet radio as an international medium.

WARC-92.

At the World Administrative Radio Conference for 1992 (WARC-92), shortwave broadcasters received extra shortwave spectrum allocations, but congestion was still a problem. An unexpected increase in smaller shortwave stations in Eastern Europe and Russia had led to even more concerns with the already stretched allocation of frequencies (Purton, 1992, March 6). According to Wilson Dizard, who was a senior associate from the Center for Strategic and International Studies at the time, previous conferences were more concerned with frequency allocation among limited shortwave frequencies which in turn led to a great deal of wasting and "warehousing of frequencies" (Spotts, 1992, February 3, p. 7). In an effort to deal with this issue, the use of single sideband technologies was proposed, but many felt it implausible because of the multitude of

listeners who could not afford the newer, expensive receiver equipment. The large international broadcasters in fact openly opposed the development and implementation of single sideband technology claiming that most of their listeners in the world would no longer be able to receive their broadcasts over their traditional radios (Purton; Spotts).

For many, these discussions about the limited shortwave frequencies amid a long congested spectrum were expected. What caught many by surprise, however, was the amount of attention devoted to newer technologies. Not only did WARC-92 differ from WARC-82 as a result of easing political tensions, but WARC-92 was also highlighted by the attention devoted to the newer technologies (Spotts, 1992, February 3). Though the U.S. planned to discuss big increases in frequency allocations for international shortwave broadcasters, it also planned to spearhead proposals for digital audio broadcasting via satellite that could render shortwave obsolete (Spotts). As a result, WARC-92 may mark the beginning to move international broadcasting to direct radio satellite broadcasting (Purton, 1992, March 6), which will now be discussed.

Satellite Radio.

Tom Korologos of the U.S. Advisory Commission on Public Diplomacy, noted the research and progress in satellite radio that should offer CD quality radio by the turn of the century ("Getting the message to China", 1992, July 25). Before the turn of the century, however, a number of the international radio broadcasters began to carry their programs over satellites for anyone with the necessary receiving equipment (Trueman, 1994, May 14). Much of this early satellite broadcasting of international radio was carried over television sets and also included similar broadcasts carried over cable. The editors of *Passport* were skeptical, however, citing previously failed efforts to combine radios and TVs back in the 1950s (*Passport*, 1994).

Perhaps mindful of this concern, others pressed forward with efforts to develop satellite radio broadcasting systems, including an acceptable receiver that would be portable, and not tethered to television or any other device or appliance. While the

technology has been operational for years, the main hold-up in getting such a medium to average people had been in developing receivers and dishes that could be portable. Dr. James Hollansworth, program manager of direct satellite broadcasting at NASA's Lewis Research Center in Cleveland believed that engineers would be able to develop an initial receiver the size of a Sony Walkman costing about \$300, which in turn would drop in price to about \$50 through mass-production, "*if the technology catches on*" (Belsie, 1992, March 11, p. 14, *emphasis added*). On December 2, 1991, NASA engineers conducted reception experiments with a portable satellite digital radio receiver. By using lower power options, the experimenters determined that digital radio satellite broadcasters could broadcast several hundred AM quality channels. According to Hollansworth, these AM-like types of satellite radio channels might be "just the ticket for developing nations that don't have a sophisticated broadcast network" (Belsie, p. 14). Even shortwave broadcasters appeared interested in these developments, as VOA was a cosponsor in the NASA test. Apparently, the cost to broadcast one hour of digital satellite programming to a one million square mile area (about \$150) is less than the electricity costs of a shortwave system (Belsie). Other broadcasters appeared interested as well. Just over two years after the NASA tests, stations that were carrying Mandarin programming to mainland China met to develop ideas and methods to increase the penetration of their programs to China, and direct satellite transmissions was one method discussed (Zhang, 1994, June 13). As noted earlier, WorldSpace was another organization interested in developing such a system, and an account of its efforts will be covered in a later chapter devoted wholly to WorldSpace.

For all involved in this newer medium of international broadcasting, at WARC-92, a frequency range called the L-band (1452 - 1492 MHz) was allocated specifically for digital satellite radio broadcasting (Belsie). According to Pat Clawson, Washington bureau chief of the trade publication, *Radio & Records*, the potential for "an emerging global radio market" was in the works (Belsie). The BBC World Service was even

looking into the possibilities of satellite radio technologies (Wallen, 1995, January 2). At that point in time, many felt that the biggest obstacle left was to get people to buy the receivers (Belsie), after they were built of course.

Rebroadcasting Over Local AM/FM Stations.

Other media outlets that did not require the listener to purchase any additional receiving equipment or spend any money were employed by the international shortwave broadcasters. Around the world, local AM and FM stations were being freed from previously heavy government controls (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003). Additionally, such stations were simply increasing in various places around the world. For example, in the early 1990s, there were less than five independent FM stations in sub-Saharan Africa, and by 2000 there were hundreds (A. Heil, former Deputy Director of VOA; personal conversation [telephone interview]; September 4, 2003). By having local AM and FM stations around the globe rebroadcast programming from international stations, the stations could reach an audience that did not listen to shortwave, and in fact, bypass shortwave altogether. This move to local rebroadcasting has been described as one of the more significant trends in international broadcasting through the 1990s (D. Gibson, Intermedia Research Specialist, personal conversation [telephone interview], August 20, 2003). Although such placement broadcasts were not entirely new, having been tried in the 1970s (*Passport*, 1994), there was a strong increase in such activity after the end of the Cold War (Wood, 2000). As Wood further explains, stations began to rebroadcast and/or simulcast their programs over local FM and AM stations in other countries, allowing shortwave stations to increase their audience size without constructing more transmitter facilities. For example, in Kampala, Uganda, 14 percent of the listening audience was tuning in VOA over shortwave in 1992. By 1995, after two commercial FM stations had gone on the air, VOA's audience in Kampala dropped to 2 percent. The Voice of America's response was to donate programming to the FM

stations, which earned VOA 14 percent of the listeners tuning in the FM broadcasts, *and* 2 percent still tuning in the shortwave broadcasts (Marks, 1995, November 1). Today, most of Uganda receives VOA through local FM affiliates instead of shortwave (D. Gibson, Intermedia Research Specialist, personal conversation [telephone interview], August 20, 2003).

As might be expected, such broadcasting decreases listeners' dependence on shortwave (Wood, 2000). Even so, or because of this, according to Derek White, General Manager for Radio Australia, many international broadcasters were working with local broadcasters to rebroadcast their shortwave programming (Green, 1993, October 20), and such placement broadcasting increased (Binder, 1994, August 28). The Voice of America developed over a thousand local AM and FM stations around the world (Lamb, 1994, September 6), and a number of stations in Indonesia, for example, were rebroadcasting programs from the BBC, VOA, and Radio Australia by the end of the decade ("Foreign radio stations", 1999, April 25).

Unfortunately for such international broadcasters, and perhaps fortunately for the shortwave advocates, many of the international shortwave broadcasters who had arranged to have their programming carried over local AM/FM stations were reminded of what might happen to their programming and connection to their audience when a third party stands in the middle. On March 2, 1997, the Albanian President Sali Berisha shut down the FM station that carried the BBC's World Service programs (Owen, 1997, March 4). The BBC quickly moved the Albanian service to shortwave, "and to a signal that could be picked up by Albania's many satellite dishes" (O'Sullivan, 1997, March 24, p. 8). The BBC was not alone, as the local outlets for VOA were destroyed in riots in Albania at the time, leaving only their shortwave services available to the population (Martin, 1997, March 4).

Similar events took place in Yugoslavia. In October, Serbia's parliament, under Slobodan Milosevic's influence, passed extremely restrictive media laws to prevent the

broadcasting of dissenting opinions by independent broadcasters. Additionally, broadcasts of Serbian-language programs from international services such as the VOA and BBC World Service carried over local AM and FM outlets were also banned, cutting off those without shortwave radios ("Muzzling dissent," 1998, October 22). By 1999 it was reported that Yugoslavian stations that once carried broadcasts from the VOA and other Western stations had terminated those broadcasts in the late 1990s (Hopkins, 1999, July).

Passport also commented on local placement, and offered their criticisms. It was noted in *Passport* that local placement on AM and FM surfaced again in the 90s after the end of the Cold War, but much of these programs were used as filler programming and often stuck in time slots with low listening rates by the local stations. Additionally, in some prominent examples (Radio Moscow International, the BBC World Service, and the VOA), rebroadcasts were terminated for various reasons. As *Passport—1995* explained, local gatekeepers closed the gate, and these international broadcasters, once previously renowned for their global reach, were feeling the pinch of someone else controlling the reach of their programs (*Passport*, 1994). Two years later, the issue of local placement was again touched on in *Passport—1997*. There it was noted that the relaying of shortwave broadcasts over local AM/FM stations in distant markets was supposed to be the "new wave" while replacing traditional shortwave broadcasting. Instead, such rebroadcasts helped bring an increase in listeners to shortwave, a growth that was continuing in 1996 (*Passport*, 1996).

For better or worse, local placement of international shortwave broadcasts continued through the 1990s among most of the larger broadcasters. In Eastern Europe—the former hotbed of Cold War international shortwave broadcasting, nearly all the major state-run international broadcasters have moved programming to local FM and AM outlets (G. Mytton, Manager of the BBC World Service's global audience research programme from 1982 until 1996; personal correspondence [email]; September 18,

2003). Programming may or may not be the same as what was found over shortwave, and such programming is at greater risk to be interfered with by third parties. Even so, such broadcasts gave the broadcasters a further reach than before, and helped place their names before larger audiences than was reached by shortwave alone.

Web Radio.

While local placement of shortwave broadcasts was not new and did not require additional receiving equipment for the listener, and as satellite radio broadcasting was an idea that, at least in concept, was not unfamiliar to the world of international broadcasting, broadcasting radio over the internet was truly the newest technology kid on the block of international broadcasting in the 1990s (*Passport*, 1996). The thought of it was almost unheard of in the early 1990s as Communism declined and international broadcasters began to consider what to do next. Yet by the end of the decade, it had become a very prolific medium for radio broadcasting, especially for stations already broadcasting internationally at the time. Some have even described the "rapid rise of the internet" as perhaps "the most significant challenge for shortwave in the past 10 years" (C. Tyson, Editor, *Passport to WorldBand Radio*; personal correspondence [email]; September 11, 2003).

Web radio consists of live feeds from AM, FM, and shortwave radio stations that are carried over the internet, and in its early days Web radio seemed work best for talk radio as its sound quality was described as similar to listening to an AM station over a clock radio (Blackwell, 1999, April 1). RealAudio has usually been the recommended software for listening to radio broadcasts over the internet (*Passport*, 1996). And though internet radio has been specifically recommended to shortwave enthusiasts (Riga, 1998, June 10), Chris Westcott, Supervisor for World Service online operations, explains that traditional radio programs cannot simply be rebroadcast online. In his words, every broadcast message "has to be refashioned specifically for [a] medium" (Sweeting, 2000, April 24, p. 6).

The Voice of America had gone online with its broadcasts as early as 1994 (Lamb, 1994, September 6). Still, 1995 is usually identified as the year in which a number of radio stations began to pioneer their programming over the internet. The World Radio Network (WRN) was developed in 1991 by three former BBC executives who felt that there was a "movement away from shortwave in international radio," according to Karl Miosga, WRN manager and one of the original founders (Colker, 1995, December 8, p. E3). Initially, English programming was gathered from various broadcasters, edited, and then delivered via satellite, but a new internet version of their service began in July of 1995 (Colker, 1995, December 8). Access was through a 14.4 modem and RealAudio software, and WRN offered access to 19 international shortwave services, including VOA, Deutsche Welle, Radio Netherlands, and Voice of Russia (Colker, 1995, December 8).

Concerning web radio overall, initial results were limited to poor audio, disconnects, and lengthy gaps, leading some to explain that listening to web radio was worse than listening to shortwave radio (Fox, 1997, December 24). While the technology in theory could provide FM quality broadcasts, internet traffic prevented such from happening, and some felt that the broadcasts were good only for speech, while lousy at broadcasting music (Fox). *Passport* (1996) was kinder and explained that listening to broadcasts received through the original 14.4 Kbaud rate was similar to listening to average shortwave signals, but the 28.8 Kbaud rate provided audio clearer than much of shortwave.

However, with improvements in modems and software, internet radio improved substantially in the course of one year (Riga, 1998, June 10), which in turn allowed for decent audio over the Web by 1996 (*Passport to web radio*, 1997). One hundred and seventy eight station were broadcasting over the internet by August of 1996. Within six months, the number of stations had grown to 390. Eighteen months later, the number as up to 1,550 (*Passport to web radio*, 1998). By 1998, the programming software and the

modem technology had developed to the point of delivering an audio quality comparable to that received from a clear, local AM station (*Passport to web radio*, 1998). However, reception quality was still affected by the volume of internet traffic (*Passport to web radio*, 1998). For the listener, once the costs were incurred for the proper equipment (PC with modem, speakers, audio board, web browser software, and audio software), one only needed access to the internet through an Internet Service Provider. Usually this involved a monthly fee, and/or long distance phone charges (*Passport to web radio*, 1997).

International Broadcasting Services Inc., which publishes *Passport to WorldBand Radio*, began to monitor Web radio in 1996, and started publishing *Passport to Web Radio* (Gussow, 1999, August 9). From their own reports, web radio has been compared closely to shortwave broadcasting in that web radio can provide the listener with access to practically unlimited numbers of stations beyond his/her traditional radio market (Kommando, 1998), and the editors at *Passport* expected significant growth in the future (*Passport*, 1996). Most of these internet stations have usually been typical AM and/or FM stations simply simulcasting over the web (*Passport to web radio*, 1998). However, there are some stations that carry their programming only over the internet, and have no wireless transmitting facilities. Some are live, and some are on-demand stations with archives of pre-recorded shows available upon request—at the click of a mouse (Colker, 2001, May 22; *Passport to web radio*, 1997).

Running internet radio has been seen by some as marking a revolution in mass communication, while others note that it is not without its own problems that are still unresolved. Concerning some of the visionaries, there are those among the shortwave crowd who saw internet radio at the threshold of something significant. According to *Passport* editors, streamed audio, or real-time audio carried over the internet, "signaled the start of an entire new era whose profound impact is only now becoming apparent" (*Passport to web radio*, 1997, p. 6). They felt that Web radio was on the verge of its own "Golden Age," akin to wireless radio's of the 1930s, and that internet broadcasting had

crossed the "Rubicon from a pleasant curiosity to a mass communication medium of historic proportions" (*Passport to web radio*, 1997, p. 41). Some of the shortwave enthusiasts at *Passport* expected devices to emerge that would allow wireless web audio to be received on the move. "It'll be a 'wireless wired' world, and the full power of the internet—radio, TV, and all—will be in your pocket or purse and car" (*Passport to web radio*, 1997, p. 11).

But would it replace shortwave broadcasting? While some in Vietnam saw the development of internet information flow as more of a threat than the international broadcasters (Richburg, 1995, November 19), those at *Passport* did not think so. In their words, "Given the history of similar situations [of tethered radio], it's hardly likely, at least anytime soon" (*Passport*, 1996, p. 67). Furthermore, though expenses to broadcast over the Web were minimal, those who were trying to exist solely as Web broadcasters were trying to establish a mode of revenue generation as Web radio's economic foundation was not secure at that time (*Passport*, 1996).

However, as an indication of Web radio's success since that time, *Passport* has begun to analyze and critique home AM and FM transmitters used to rebroadcast PC based webcasts. They resemble small black boxes similar to radio tuners or cable black boxes, and rebroadcast Web radio over an unused AM or FM frequency to traditional radios within the home. Most are sold as assembled appliances, but a few sell as kits. One—NetPlay Radio—caters specifically to the web browsing market. Among all that were reviewed by *Passport*, prices ranged from \$130 up to \$1,000, with the kits, of course, occupying the lower end (*Passport*, 2000).

Furthermore, some individuals associated with international broadcasting feel that the internet has indeed impacted shortwave listening over the last few years. Scott Hults of the Global Catholic Network feels that the internet has significantly affected the medium of shortwave (S. Hults, Director of Communication, EWTN Global Catholic Network; personal correspondence [email]; September 15, 2003). The Voice of

America's Arabic website has done well in recent years, and receives about 180,000 hits each day (A. Heil, former Deputy Director of VOA; personal conversation [telephone interview]; September 4, 2003). And for those wishing to keep contact with the home country, the internet has become "a very important way for diaspora audiences to hear radio services in their own languages" (G. Mytton, Manager of the BBC World Service's global audience research programme from 1982 until 1996; personal correspondence [email]; September 18, 2003).

As the newest technology to be employed for international broadcasting, Web radio shares some similarities with international shortwave. As with shortwave, the listener has access to a nearly unlimited number of stations from around the globe, and once the appropriate receiving equipment is procured, reception of these stations is free. Unlike shortwave broadcasting, the technology of internet radio, at least through a standard modem is prone to interruption caused by changing traffic over the internet. Additionally, the Web radio listener has access to not only traditional international shortwave broadcasters, but also local AM and FM stations around the globe, as well as internet-only stations. But all these newer technologies and delivery methods are primarily oriented toward radio broadcasting. International television was also beginning to become a more prolific medium at the end of the Cold War, and it too has been seen and discussed in relation to shortwave broadcasting, as will now be illustrated.

The CNN Factor.

Perhaps as an example of the potential of an international video star to impact the earlier international radio stars, CNN has also been seen by some as a force to be reckoned with by the international shortwave broadcasters (C. Tyson, Editor, *Passport to WorldBand Radio*; personal correspondence [email]; September 11, 2003). As Fred Osterman of Universal Radio explains, 15 to 20 years ago, one would tune into a shortwave station from a given country if something significant was happening there.

Today, however, most just turn the TV on and tune in CNN (Personal conversation [telephone interview]; September 19, 2003).

CNN's ratings spiked off company charts during the Persian Gulf War, a point in time that may be looked to as a defining moment in international television news (Lippman & Tuohy, 1992, October 20). At the beginning of the 1990s, CNN claimed to be reaching about 53 million worldwide, and CNN President, Tom Johnson described the emerging international news races as the beginnings of a new "global television revolution" (Lippman & Tuohy, p. A10). Clearly, the race to lead the international news programs appeared to hold big stakes for the leader(s). "The winner could command audiences in the tens of millions of viewers. Advertising revenue would be commensurate" (Lippman & Tuohy, p. A10). By the end of the decade, CNN had developed local-language television broadcasts, seven foreign language websites, and had begun to use local anchorpersons and local content in its European programs leading one reporter to describe CNN as the greatest threat to BBC World Service on shortwave (Sweeting, 2000, April 24).

That Old Fashioned Radio

Yet by 2001, there were still those who spoke positively of shortwave broadcasting. It was still presented as the only international medium that cannot be completely jammed or intercepted, thus defying state censorship ("Larry Magne's commentary," 2001). In this way, shortwave is able to avoid the political boundaries that can threaten satellite and local AM/FM broadcasting ("BBC to cut off 1.2 million," 2001, June 6). As *Passport* summed up in the 1990s, "there is no technology other than shortwave that allows the audience to hear what it chooses, when it chooses, and where it chooses—in the office, in the garden, on the road, or in the worst of times, hidden under a blanket" (*Passport*, 1994, p. 71.).

Shortwave was still the medium able to appeal to, or develop, a certain kind of audience member. Early in the 1990s, one reporter offered that shortwave broadcasts

make listeners more well-rounded by providing insights that would never be available through local media outlets (Green, 1993, January 9). Another reporter explained that shortwave listeners tend to create their own picture of world news that differs from what is formed through coverage provided by local TV networks (Peterson, 1992, June 3). Additionally, as they listen to coverage and reports about events within the countries reporting the events, shortwave listeners tend to feel more connected to those events and "have a sense of participating in the news" (Peterson, p. C8). According to Rajiv Thind in India, it "is the best way of accessing the voices of the tiniest countries, and knowing their culture" (Elliot, 2001, June 2).

Another theme that has surfaced in the newspaper reports, the magazine articles, and the from the websites is the notion of something qualitatively unique about listening to shortwave broadcasts. The words "magic," and "magical" are often used to describe the listening experience by many. In spite of the local relays of international programming, Amrin Nazir, a retired executive from Bank Indonesia, preferred to listen to the original broadcasts on shortwave, describing them as "more 'artistic'" ("Foreign radio stations," 1999, April 25, News Section). As one reporter explained it, "In an age of instant satellite broadcasts and international jet travel, [shortwave reminds the listener] of a romantic time when a faint and tiny voice might serve as the only link to a home half a world away" (Colker, 2001, May 22, p. A1). Another added the following:

It's almost as if the entire globe is covered in a thick cloud of radio waves, and somehow your tiny box can suck up the sounds and speech from anywhere within this electronic babel. Sitar music and Billie Holliday, howling winds and fragmented voices, alien tongues overlapping each other and washing in and out of the ether . . . [A] rich and rapidly changing cultural terrain. (Cunningham, 1992, November 10, p. 12)

Shortwave was also described as a place where "those distant signals are captivating" . . . with "a kind of magic [knowing] there was this signal floating around out there, and . . . I

could catch it and hear what people were saying" (Levy, 1993, March 14, p. 6). Many of the big cities of the world "float through the room . . . , wavy, elusive, more romantic than they seem on CNN" (Macqueen, 1993, March 7, p. B1). For those who listen to shortwave, "there remains a strong magic to the world of static, hisses, intriguing sounds and voices that is shortwave" . . . and "this magic permeates the very air and casts its spell in the remotest jungle" (Chandwani, 1996, December 9, p. A2).

For some, this magical, romantic feeling associated with shortwave listening appeared tied to feelings of nostalgia. One reporter described the BBC World Service as what radio was like 50 years ago (Popham, 1996, January 17). Another was more specific, and eloquent, with the following:

I'm glued to [the BBC World Service on shortwave] because it reminds me nostalgically of something that once was—neat little quarter-hour programs, succinct talks by scholars and eloquent pundits . . . , Alistair Cooke's weekly Letter From America, . . . and news programs with hard-nosed questioners who don't just sit there and let the politicians and their spinners get away with their pat little sound bites. Even dramas with properly cast voices and splendidly eccentric scripts! As if someone had invented a radio service for old people who remember what . . . radio once was. (Coneybeare, 1999, June 18, News Section)

Romance, nostalgia, and art all seem to be wrapped into one for those who listen to shortwave. Even so, at least one of the key players in shortwave broadcasting did not share the sentiment. As far as Sandy Ungar, Director of the Voice of America in 2001, felt, only clarity of signal mattered. In his words, "Maybe there are some people who think it's romantic to have trouble hearing the radio, but not me" (Colker, 2001, May 22, p. A1).

Sandy Ungar's comments aside, these descriptions help illuminate the more communal feelings associated with "ye olde" fashioned shortwave radio. Such broadcasting has been noted to have a "magical" effect on its listeners, perhaps drawn from the feeling that when listening was sharing more in the broadcast experience.

Listeners felt a shared connection with the events and issues being covered and carried over the shortwave broadcasts. Yet as shall be seen in the next section, many of the stations themselves struggled to share such an identity, and were in fact struggling to locate their identity in a post-Cold War world. Furthermore, the sense of community that marked the shortwave experience prior the end of the Cold War does not factor prominently into their search for a new identity.

Searching For a New Identity

At the end of the Cold War, the previously clear framework of competing political ideologies which defined international radio broadcasting for almost 50 years disappeared, and the ability of these stations to define themselves clearly faded as well. As a result, an identity crisis occurred among many of the prominent state-run international broadcasters. Before the end of the Cold War, international broadcasting "had a defined, important and established mission and budgets to match." However, since then, it "has gone from a medium with a mission to a medium looking for a mission" (L. Magne, Publisher for International Broadcasting Services, Ltd. [*Passport to WorldBand Radio*], personal correspondence [email], August 20, 2003). Even as far back as 1992, John Tusa (1992, December 12) openly reminded the BBC World Service to be clear about defining itself in the post-Cold War socio-political environment, a suggestion that was still being echoed for all international broadcasters more than 10 years later (M. Price, Professor of Law at the Institute of Advanced Studies at Princeton; personal correspondence [email]; September 14, 2003). In 1994, *Passport* (1994) observed how some of the prominent state-run operations were beginning to define themselves against the other growing international media, particularly commercially run international television, and in the material that follows, it will be illustrated that there has indeed been a move during the 1990s toward mirroring commercial broadcasting among some of the significant state-run international broadcasters.

In speaking as the James MacTaggart Memorial Lecture delivered to the Edinburgh International Television Festival in 1996, John Birt, then Director General of the BBC, appeared to be speaking from both the public and commercial sides. On one hand, he strongly advocated the need for clear, continued support of state-run broadcasting to ensure the protection of national culture against globalization, and in announcing the BBC's efforts to digitize their operations, he explained that going digital at the BBC would "not mean [becoming] privatised or commercialized" (Birt, 1996, August 23). However, within the same speech, Birt also drew from the language of business to describe the streamlining, increases in business efficiencies, and reductions of redundancies within the BBC organization. Birt then concluded his comments by calling upon BBC operations to follow the leads of Ted Turner and Rupert Murdoch, and he further identified the upcoming digital age as one of competition between numerous entities—from broadcasting, banking, retail sales, etc.—for *consumers'* attention.

Similar language was being used in Canada at the same time. For example, Canadian journalist, Mike Boone, used the language of economics as a reason for keeping Radio Canada International (RCI) operating in the face of severe funding cuts in 1995. In Boone's words, "Consider Canada's prospects for prosperity in a global economy. *RCI can be seen as a low-cost way of boosting our image abroad*" (Boone, 1995b, February 25, p. C1, emphasis added). With RCI's loss of mission and Cold War identity, Boone's comments suggest the potential for a move by international shortwave broadcasting from policy voice (or political ideology voice) to advertiser/public relations voice in a global market.

As noted, in 1994 the editors at *Passport* took notice of these trends and in turn offered their perspective. They observed a preoccupation with audience size and growth of audience among some of the major state-run international broadcasters, and in doing so, these broadcasters were in fact trying to define their worth using the standards common to commercial broadcasting. The editors at *Passport* then explained that

international shortwave broadcasting is *public* broadcasting, and that the issue should be "whether international broadcasters plan to continue as public broadcasters, . . . or shift into a commercial role" instead of blindly seeking justification through audience size (*Passport*, 1994, p. 70).

Continuing with *Passport's* (1994) comments, when the realization is reached that state-run broadcasters are a form of public broadcasting, they can in turn begin to function as such in relationship to their audiences and the other international media. These forms of public broadcasting can then direct their efforts to "the intellectually curious" who "make up a small, but disproportionately influential minority in every country" (*Passport*, 1994, p. 69). In other words, instead of trying to justify their existence by audience size, as commercial broadcasters do, the state-run international broadcasters should define themselves as public broadcasters that serve the smaller, more discriminating, yet influential population of shortwave listeners spread throughout the world.

Those at *Passport* are not alone with such a perspective either. Alan Heil, former Programs Director at VOA, explained that the commercial international broadcasters, such as CNN, are designed to make money through advertising, while the Voice of America (and those like it) was (were) designed to provide sustained and developed policy material ("The Voice of America: Searching for a new doctrine," 2001). Heil later explains that it is often the opinion leaders who use shortwave to get the news and information they cannot receive from their own local media outlets (A. Heil, former Deputy Director of VOA; personal conversation [telephone interview]; September 4, 2003). Finally, even though these individuals constitute a small percentage of the world population, and any given country's population, they are still an audience of millions of influential individuals (O. Cip, High Frequency Conference Commission Chairman; personal correspondence [email]; September 8, 2003).

Still, it does not appear that the state-run broadcasters, and/or their supervisory bureaucracies, have come to similar conclusions as the trend toward following commercial broadcasting has continued. In 1998, the BBC was still expressing its commitment to the concept of public service broadcasting, while at the same time announcing that its Worldwide subsidiary organization would provide programming *to be sold* to markets around the world ("BBC declares its public purpose," 1998, December 3). As the years passed, those at *Passport* still held the same view they had in 1994, and felt that international broadcasting has "tended to become managed more like commercial . . . domestic radio (L. Magne, Publisher for International Broadcasting Services, Ltd. [*Passport to WorldBand Radio*], personal correspondence [email], August 20, 2003). In fact, from the U.S., Radio Sawa has been launched as a new international broadcasting service for the Middle East in an effort to better capture the youth audiences in that part of the world. Created under strong influence by Norman Pattis (CEO of Westwood One and member of the U.S. Broadcast Board of Governors), Radio Sawa is primarily a pop station much like contemporary commercial FM stations in the U.S. Additionally, Radio Sawa is practically divorced from the Voice of America, is not carried over shortwave, and is instead broadcast through FM stations in the Middle East (A. Heil, former Deputy Director of VOA; personal conversation [telephone interview]; September 4, 2003).

It can be seen that as the Cold War came to an end, the defining structure of international broadcasting (which was almost entirely done on shortwave) in which international broadcasting's identity had been previously determined was gone. International broadcasting was then left with a search for meaning and identity in the post-Cold War world. In this search for new identity, commercial broadcasting's benchmark of audience size was used by many to justify operations. Those critical of station's efforts to justify their existence through audience numbers have argued that the state-run stations should define themselves as public broadcasters with a different mission than work at attracting a sufficiently large audience as is the customary goal among

commercial broadcasters. However, the trend has been toward mirroring the commercial broadcasters instead.

It is interesting to note that an outside observer (*Passport*) called attention to the matter. It is as if the powers that be at the different state-run operations were not even mindful of the distinctions between public service and commercial broadcasting. If they did, it appears that they did not perceive their state-run broadcasters as public service broadcasters. It should come as little surprise that the state-run shortwave stations would not take notice of the changes. The nature of transnational interests are described as "intangible, functionally integrative, and opaque" in nature (Drake, 1993, p. 261). Such has been the general move of state-run stations from policy voice to entertainment outlet. The change has been opaque, intangible, and perceived as functional in nature in a world of increasing transnational, commercial interests. Such actions have come to increasingly match the comments of international communication scholars. As Hamelink (1993) succinctly put it, in the face of growing commercial globalization, "the public sphere is increasingly eroded . . ." (p. 389). In more detail, it has been explained that the state and the idea of national sovereignty is weakened in the face of transnationality. Driven by the success of international capitalism, the state begins to champion the principles of privatization at the cost of the public sphere (Barbero, 1993). In the case of state-run international shortwave broadcasting, these formerly public spheres of mass communication have begun the near silent and gradual shift toward market principles and commercial broadcasting in their efforts to try to keep pace with the emerging and increasing private and commercial international broadcasting. What was once the voice of sovereign states was subtly and unknowingly becoming the voice of entertainment and commercialism. States that had been at ideological war have begun to compete with the offerings and efforts of transnational media corporations. More examples of this will be discussed in the following chapters, while the issue will be taken up in greater detail in the concluding chapter.

Conclusion

To summarize, amid the debates and the changes in technologies, international broadcasting over shortwave appears to have moved with the flow. Though it is still a large presence in the realm of international broadcasting, shortwave broadcasting is not alone, and it has passed through some changes and modifications. By the end of the decade the number of international shortwave broadcasters did not appear to have declined. More than 150 countries were actively involved in shortwave broadcasting, with about 25 considered as significant broadcasters (Wood, 2000). According to Wood, broadcasters still feel that it is the best way for a nation to project its culture and foreign policy to people around the world. In 2001, The BBC claimed that it was reaching 60 to 70 percent of the Afghan population, while the VOA claimed to be reaching 80 percent of the male Afghan population (Faler, 2001, October 6). For traveling, one cannot beat shortwave radio's ability to bring in the most news and information variety while at the same time keep in touch with the home country (Powledge, 1994, September 18).

But there were still changes. In the past, shortwave broadcasts had a sharper edge and a greater feeling of urgency, while today, many of the broadcasts sound very similar across the globe. Also, many stations in the past were operating with full transmitter schedules, including a number of the smaller operations, such as Radio Tirana in Albania, while today, the schedules are more limited and scattered throughout the day (Osterman, 1997). Additionally, in the face of newer and emerging technologies and delivery styles, what were once known only as international radio stations have become international broadcasting services (Feran, 1992, October 15). According to Chris Wescott, Supervisor of BBC World Service Online, the new challenge has been to successfully carry what was once only a radio service across multiple media (Sweeting, 2000, April 24). Thirty-five years ago, shortwave broadcasts were a listener's most direct access to breaking, international news events. While shortwave still can (and does) fulfill such a function, it must also compete with the internet, satellite broadcasting, as well as more diversely

spread bureaus associated with many broadcast and cable television news operations (Osterman, 1997).

As a final note there are indications that the technology of shortwave broadcasting may be reaching the end of its potential. As Wood (2000) reports, the technology of SW broadcasting continued to develop through the 1990s to the point where it began to reach a diminishing return. Research and development costs continued to grow but after a while, and despite positive sales earlier in the decade, transmitter sales began to decline. This has led to mergers and collaborative ventures in order to cope with the changing market.

Concerning the nation state, it is within this changing context of international broadcasting that the declines and/or challenges experienced by shortwave broadcasting parallel the declines and/or challenges experienced by sovereign states. International radio's search for identity is in many ways a metaphor for, and perhaps even symptomatic of, the nation state doing the same. The edge lost by these broadcasters after the Cold War represents the loss of *political edge* that marked so much of these broadcasting efforts for so many years. And the urgency to win converts and undermine other political ideologies has been replaced with a perceived need to keep up with the Joneses of commercial and consumer-oriented broadcasting. At the end of the Cold War, broadcasting over shortwave was characterized by political ideologies and cultural values and norms that reflected individual nations, the structure of which followed patterns that had emerged following the printing press in the 16th century.

In the following chapters, many of the detailed experiences encountered by international shortwave broadcasters after 1991 are presented. These accounts are provided to illuminate more clearly the unfolding of events among these broadcasters as they existed in the changing environment described in this overview chapter. In these subsequent chapters, attention will first be paid to the smaller broadcasters, and then to the two most prominent state-sponsored international broadcasters that may be called the

clear winners in the Cold War battle of the airwaves—the Voice of America and the BBC World Service. Beyond these chapters, the World Service's termination in the summer of 2001 of shortwave broadcasts to the U.S., Canada, and Australasia will be addressed, as will WorldSpace's efforts to develop and implement an international satellite radio system for the developing world. Together, these chapters will detail many of the experiences of the international broadcasting community as they were played out in the changing world during the years that followed the end of the Cold War.

Chapter Four

As can be seen in the previous chapter, the world of international broadcasting passed through a number of changes during the 1990s. While shortwave broadcasting was not abandoned, other media were developed and implemented. However, the experiences of specific stations within the newly emerging environment of international mass communication have not been addressed or discussed. This chapter, however, does review experiences encountered by some of the major shortwave broadcasters during the 1990s. As will be seen, nearly all of the major state-run international broadcasters, particularly those in the West, experienced some form of financial challenges and/or declines. One is left feeling that with all the cuts and reductions felt by these major broadcasters, a decline in the nation state is apparent. It is difficult not to feel that the declines in international broadcasting by these nations is symbolic of, if not a manifestation of, declining feelings toward the voices of these nation states, and therefore, the national state overall.

As there are so many countries and stations broadcasting over shortwave, it is difficult to assemble a coherent review of them all. Therefore, the more prominent international shortwave broadcasters are reviewed as a benchmark. As part of its publication, *Passport to WorldBand Radio* reviews the status of major shortwave broadcasters each year. In the process, *Passport* reports on frequencies used by these broadcasters to target various regions of the world, and also touches on any changes or developments experienced by the stations.

Organized according to the continents of the world, this material provides insights for shortwave listeners into a number of the significant shortwave stations. As such, these reviews have been used to develop much of this chapter, in addition to appropriate news articles and interview/survey responses that coincide with *Passport* comments. At the beginning of the 1990s, *Passport* reported on what it referred to as the 20+ strong signals among the major broadcasters, but by 1993, *Passport* reduced its comments to 10

"easy-to-receive stations" (*Passport*, 1993). Following that pattern, this chapter will review the experiences of eleven major broadcasters as covered in *Passport to WorldBand Radio* editions from 1991 through 2002. The reason for eleven stations as opposed to ten is that in the 1990s Swiss Radio International was dropped from *Passport's* 10 easy-to-receive stations, and it was replaced by Radio Taipei International. However, beyond these eleven stations, this chapter also included comments about private shortwave broadcasting, mainly among religious broadcasters, which experienced growth in the 1990s.

International Broadcasting Among the Major Stations Since 1991

From Radio Moscow To Voice of Russia

We start with what may be considered the defeated of the Cold War. As noted, during the Cold War, and particularly through the 1980s, three stations stood out among the international shortwave broadcasters—the BBC World Service, the Voice of America, and Radio Moscow. With the dissolution of the USSR, and the general collapse of Communism, particularly in Eastern Europe, Radio Moscow found itself on the defeated side of the ideological confrontation that characterized the Cold War. In many ways, Radio Moscow experienced more fallout at the end of the Cold War than did VOA or the World Service. While the Western broadcasters basically restructured their shortwave efforts to reflect the changing socio-political world climate, Radio Moscow had neither the financial, nor the entrepreneurial resources to do the same (Wood, 2000). Looking back, it is apparent that even early on in the 1990s, Radio Moscow was unable to support its staff of offices, reporters, stringers, and all the other elements necessary to running a large international news bureau (Wood). Also, since *perestroika*, the station has suffered from an identity crisis reflected in multiple name changes. It first tried Radio Moscow International, then opted for Radio Moscow World Service, and finally seems to have landed on Radio Moscow International Voice of Russia (Wood). In what follows, some

of the details covering Radio Moscow's descent from one of the "Big 3" to one among many is outlined.

As the countries in Eastern Europe moved away from Communism in the late 1980s, Radio Moscow still maintained its strong presence on the airwaves. In 1990, *Passport* described Radio Moscow as one of the 20 easy signals to receive. "Nobody broadcasts on as many frequencies, or from as many locations . . . Just dial around. You'll find them over and over again, with little difficulty" (*Passport*, 1990, pp. 94-95). But soon, economic struggles began to surface at the international service, as cutbacks and streamlining were taking place at Radio Moscow. Even so, it was still one of the easiest stations to receive. The listener still needed only to just dial around to find Radio Moscow (*Passport*, 1991). By 1993, Radio Moscow had lost many of its facilities to former members of the Soviet Union which had become independent. For example, Radio Ukraine International emerged from the break-up of the former Soviet Union (*Passport*, 1992). Also, even though it was still one of the most widely heard stations, its personnel were beginning to feel uncertain at this time as to the future of Radio Moscow's broadcasting. Circumstances at Radio Moscow were described as "trying" (*Passport*, 1992, p. 68). Even Radio Habana began to feel some of the losses associated with the end of the Cold War as former Soviet aid dwindled (*Passport*, 1992). Through 1993, the situation did not improve. Though Radio Moscow was still operating a 24-hour international service, funding was uncertain and turnover high among the staff (*Passport*, 1993). Also, the frequency usage was becoming increasingly difficult to predict. *Passport* was not able to offer specific frequencies with which to tune in Radio Moscow, as consistent broadcasting on specific frequencies became uncommon. Instead, general frequency ranges were recommended (*Passport*, 1993). Instead of the station that could be found nearly everywhere on the shortwave dial, Radio Moscow had become the station that may or may not be heard on some frequency ranges.

By the middle of 1994, the end of financial struggling was not in sight. Though Radio Moscow's content and style matched closely that of Western broadcasters, Radio Moscow had cut the number of languages it served by nearly half, from 82 to 42 (Binder, 1994, August 28). According to *Passport* (1994), Radio Moscow International's budget was described as "scandalously low" (p. 47), and it was still not constraining itself to specific, predictable frequency usage. About this time, Radio Moscow went through a name change. If Wood's (2000) account is to be accepted, then the name "Radio Moscow World Service" must have been short-lived. *Passport* (1995) simply reported that Radio Moscow International changed its name to the Voice of Russia. Also by this time, its operations had been greatly reduced. "In a relatively short space of time, the world's most omnipresent broadcaster has been reduced to a small number of channels for each of its target audiences" (*Passport*, 1995, p. 41). What is more, it was still using frequencies unpredictably. One report described Radio Moscow as "elusive as RFI Tahiti" (Trueman, 1994, May 14, p. SW10).

So it continued for the next few years. By the end of 1996, VOR's budget had declined more, but its signals were still clearly heard in most parts of the world, though eastern North America was not one of those locations (*Passport*, 1996). However, lack of consistent programming was still plaguing VOR. "The Voice of Russia is not renowned for sticking to its frequencies . . . Not all frequencies are in use for the entire [broadcast] period . . . Times vary for each channel, and some frequencies carry languages other than English for part of the time" (*Passport*, 1996, pp. 49-50). The Voice of Russia's funding was described as having "virtually dried up" (*Passport*, 1997, p. 54) by 1998. While greatly reduced from its Cold War prominence, the station was still kept on the air through faithful staffers, and strategic use of limited transmitters to ensure some semblance of global coverage. East Asia reception became particularly affected by the reduction in transmitter usage in that area (*Passport*, 1997). Then by 1998, the Voice of Russia passed through two more serious budget cuts, and had dropped to somewhere

around 20th among world broadcasters. Transmission hours had been reduced in order to preserve programming, and the number of transmitter facilities was reduced in order to keep up the power at those sites still in use. Overall, results left the station still being heard in much of the world, but at greatly reduced times and on fewer frequencies (*Passport*, 1998).

It is not until the end of the decade that the Voice of Russia is able to enjoy a measure of stability. By 2000, VOR appeared to be on stable ground, but its broadcasts were sounding more like the voice of the party line, and less like an international news source (*Passport*, 1999). Also, for 2001, *Passport* did not make any comments about the Voice of Russia suffering monetarily (*Passport*, 2000). However, it was noted that VOR was becoming more of a voice of the government's view, presumably to keep being funded. Such was also the case in 2001 (*Passport*, 2001). Even so, it had become a much different station than what it was like during the Cold War—for the better in *Passport's* opinion (*Passport*, 2000). In any case, no longer was it the great booming voice of Communism, sent to all the world on many frequencies in all the international shortwave bands, and easily heard by anyone with a shortwave radio. By the beginning of the new century, Radio Moscow had become the Voice of Russia, and was just one among many.

Europe

Germany

Deutsche Welle, from Germany, did not experience any noticeable changes in its operations until the latter half of the 1990s. It wasn't until 1996 that DW began to pass through some government imposed cost cutting (*Passport*, 1997). Then in 1997, it was reported that the station was considering some changes in programming, but these possible changes concerned content and not quantity (*Passport*, 1998). By 1999, DW suffered budget cuts of an "unprecedented [nature] among Western broadcasters" (*Passport*, 1999, p. 83), and it was confronting efforts by the German government to

eliminate the English services of the station. While the English language service survived the budget cuts at DW, other languages were still reduced or dropped (*Passport*, 2000), and by 2001, it appeared that DW was on solid ground in terms of funding, and was once again noted for its respected international programming (*Passport*, 2001). Overall, Deutsche Welle has cut back its broadcasting hours by 25 percent since the end of the Cold War (Wood, 2000).

Switzerland

Swiss Radio International, a favorite among the editors and contributors at *Passport*, began to feel the pressures of "an ongoing budget squeeze" early in the decade (*Passport*, 1991, p. 47). Even so, by 1992, SRI added a radioteletype operation to its shortwave broadcasts designed to carry a "newspaper of the air" (*Passport*, 1992, p. 69) for listeners with advanced receiving equipment. Through the next few years, all was quiet at SRI as it continued to broadcast without concern for funding (*Passport*, 1997), additionally, the station began to augment its shortwave service with satellite broadcasting in 1994 (Wood, 2000). Initially, two programs were launched—one in French and the other in English—but by 1995, German and Italian were added. For the future, "all SRI programs [were to] gradually be beamed by satellite to non-European countries via additional satellite channels" (Wood, 2000, p. 93). Yet Wood adds that until such future was reached, SRI still felt that shortwave would be a viable medium for at least the next 20 years.

Eventually, the first real challenge faced by SRI came not from funding cuts from the Swiss government, but instead from environmentalists. In 1998, SRI lost a battle with environmentalists concerning its transmitting site, and although there was little change in its programming, SRI was forced to continue broadcasting through leased transmitter sites located in other countries (*Passport*, 1998). Swiss Radio International continued leasing foreign transmitters through 2000, as it was forced to close down all but one of its domestic transmitter sites (*Passport*, 2000). By the end of 2001, SRI was no longer listed

among *Passport's* (2001) list of ten easy stations to receive, and was instead replaced by Radio Taipei. As it turned out, Swiss Radio International had cut its shortwave broadcasts by 80 percent and moved them over to the internet (Colker, 2001, May 22). The expense of shortwave operations when compared to the affordability of internet broadcasting played strongly into the decision as SRI saved \$7 million a year by making the switch (Colker, 2001, May 22). Not much later, SWI was completely off the shortwave frequencies (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003). Apparently, 20 years came a little sooner than expected at SRI.

France

Radio France International is another prominent European station that passed through changes in the 1990s. Through the first half of the 1990s, RFI was not hit with any budget cuts, and by 1994, had just finished upgrading its transmitters to 500 kW outputs (*Passport*, 1994). Then in 1997, it is reported that the station began to feel the pinch of cutbacks (*Passport*, 1997). The cutbacks must have been just a pinch because in 1998, RFI enjoyed good funding in spite of the French government's deficits (*Passport*, 1998). Such would not be the case one year later, however, as RFI finally passed through its share of government budget cuts, described as "the financial guillotine" (*Passport*, 1999, p. 82). Overall, its transmissions were reduced by one-third of previous levels, and the already obscure and limited broadcasts to North America were "all but abandoned" (p. 82). By 2001, RFI was credited with having one of the best quality, and more popular, English-language broadcasts, but RFI still did not broadcast to North America, or Europe, and instead preferred sending its broadcasts to the Middle East, Africa, and Asia (*Passport*, 2001).

The Netherlands

About the only major broadcaster in Europe not to undergo any serious reduction in funding has been Radio Netherland International. In fact, in Europe, the station had

actually done the opposite that was experienced by many of the others, especially the more entrenched, major broadcasters. By 1994, Radio Netherland had passed through some aggressive programming changes, resulting in a marked increase in English-language programming, and the editors at *Passport* described the station as having a very "faithful following among world band listeners" (*Passport*, 1994, p. 46). In fact, Radio Netherland International was one of the few stations, if not the only one, to increase its English language service programming (*Passport*, 1995). The station continued to rise in popularity, as well as in global reach (*Passport*, 1997) until Radio Netherland International was described as an impressive replacement for the declining BBC World Service (*Passport*, 2001). In short, the station was becoming "a rising star" (p. 74).

North America

Canada

Since the Voice of America will be covered in the following chapter, we begin in North America with Radio Canada International, as it appears to have endured the most volatile ten years, and generated the most attention in the press. According to Wood (2000), RCI was scheduled to be cut from the Canadian budget, and therefore removed from the airwaves on March 31, 1996. This was not a reflection of changing attitudes resulting from the end of the Cold War as much as it was a result of recessionary budget problems as well as confusion in government agencies. In the end, the service was not cut, and RCI is still on the air, although in a greatly reduced operation. A primary reason for RCI's continued existence came from the great outpouring of support from listeners, staff, and other Canadian mass media professionals who called for the preservation of RCI. A more detailed account of RCI's challenges follows.

In support of Wood's (2000) explanation, RCI was nearly cut from the Canadian Broadcasting Corporation's budget. However, it was 1990 when such talk first surfaced. In December 1990, the CBC board of directors had decided to cut RCI *entirely*, and authorized the CBC president at the time - Gerard Veilleux - "to terminate the operation .

... by April 1, 1991" (Truman, 1994, June 25, p. SW7). Some in the political arena took the opportunity to call on Canada to establish its voice on satellite (Boone, 1995a, February 25). Elsewhere, great efforts were made throughout the country for citizens to voice their opposition to the decision (Truman, 1994, June 25). The Federal Ministry of Foreign Affairs, then directed by Andre Oullet, took over RCI to preserve it from elimination in 1991 (Boone, 1995a, February 25), and in the end, limited funding was allocated to continue RCI, albeit at a greatly reduced level. Radio Canada International's budget dropped from 22 to 15 million Canadian dollars, staff was cut in half to 120, seven languages were cut, and 75 percent of in-house programming was eliminated (Boone, 1995a, February 25). The operation dropped from a top five position among international broadcasters to somewhere just under 15th, and due to the reductions, listenership dropped from 16 to 5 million (Truman, 1994, June 25). As for programming, RCI was primarily relaying domestic programs produced by CBC (*Passport*, 1991).

For a few years afterward, Radio Canada International enjoyed a time when there were little or no concerns about cuts or elimination. By the middle of 1992, it was reported that RCI was beginning to produce some of its own programming again, though most of its fare was still CBC produced (*Passport*, 1992). Although there was apparently more belt-tightening at RCI in 1993, the station was still on the air (Macqueen, 1993, March 7) and increasing its own produced programs (*Passport*, 1993). In 1994, *Passport* (1994) only noted that RCI was still dependent on CBC material, and although the station had dropped down to 44th among the international broadcasters in weekly shortwave broadcast hours (Boone, 1995a, February 25), it still managed to celebrate its 50th anniversary on February 25, 1995 by rebroadcasting RCI's first message—Canadian Prime Minister Mackenzie King's announcement of a new radio service of "historic significance" (Boone, 1995a, February 25, p. A13). However, a report on RCI done in 1995 recommended that RCI should develop an internet service, claiming that "shortwave

broadcasting 'will shrink, [though] not dramatically'" (Goddard, 1996, December 14, p. G14).

Then began the revolving door of threatened elimination, as the struggles at RCI took on the appearance of an annual experience (*Passport*, 1995). At the end of 1995, RCI was again under the threat of being cut (Goddard, 1995, December 17). Satellite technology was proposed to replace the shortwave broadcasts, but for Canada's Native American populations, such replacements would not be helpful when moving herds and following migrations (Endicott, 1996, January 18). It was estimated that 4,000 Crees (40 percent of the Quebecian Cree population) would be isolated by the closure, and that 8,000 Inuit in Quebec also depended on the shortwave service when out on the land (Endicott). Furthermore, defenders of RCI argued that the station provided a service to Canadian citizens serving, working, and living overseas, while it also provided a window to the world of life and issues in Canada—services that international news operations like CNN cannot provide (Boone, 1995a, February 25). Somehow, RCI survived and continued to press forward with most of its programming still coming from the CBC (*Passport*, 1995).

One year later, the challenges started again. It was announced in December 1996 that RCI would be terminated in March of 1997 (Auf Der Maur, 1996, December 8), and CBC chief, Perrin Beaty, announced that RCI was really dead this time, even "extra dead" (Goddard, 1996, December 14, p. G14). Those who were labeled as the "slashers" of RCI were claimed to have used the end of the Cold War, as well as newer internet technologies, as reasons for justifying their efforts (Chandwani, 1996, December 9). In defense of RCI, one Canadian reporter noted that Canada's "image abroad [through RCI] is vital because Canada is a trading nation" (Auf Der Maur, 1996, December 8, p. A2). Sheila Copps, Deputy Prime Minister of Canada, responded with support for RCI (Goddard, 1996, December 14), and RCI endured "one heart-stopping crisis after another," in spite of its "razor-thin budget" (*Passport*, 1996, p. 56). Through 1997, RCI

was still in uncertain financial straits. The fiscal crises were "seemingly endless" (*Passport*, 1997, p. 61), and most of its material was coming from the CBC, now struggling financially itself.

Then in 1998 another reprieve came RCI's way. The station was enjoying what appeared to be the next period of peace from budget cutters that started earlier in the 1990s. Still relying on CBC programming, RCI was not dealing with serious cuts, or even closure as it had done almost annually at times for the previous eight years (*Passport*, 1998). In 1999, RCI was still sitting comfortable (*Passport*, 1999), and by 2000, RCI was described as having secure funding and some additional transmission facilities. With most of its programming still coming from CBC, it was beginning to look as if RCI would be allowed to move out on its own again in the near future (*Passport*, 2000).

At this point the *Passport* editors should have learned not to speak so soon, as RCI was back on the chopping block again (*Passport*, 2001). Some of its programming was again being reduced, while more material was forced from the CBC. It was also noted that there were efforts to incorporate RCI fully into CBC. While on the surface such a move seemed practical, critics felt that if RCI's operation and funding were to be absorbed by the CBC, Canada's international radio voice would be inappropriately silenced (*Passport*, 2001).

At the end of ten years, Radio Canada International appears to have passed through the most tumult. While later reasoning for cuts or elimination was tied to the end of the Cold War, the back-and-forth merry-go-round experienced by RCI began just after many Eastern European countries had moved from Communism, but before the Soviet Union dissolved. Additionally, there was still uncertainty in the international broadcasting community at that time as to how long-lasting the changes in Eastern Europe would be (*Passport*, 1990). So to associate these earliest experiences at RCI to the ending of the Cold War would be inaccurate. But later arguments in the mid-1990s did

call up the end of the Cold War and the development of newer technologies (such as satellite broadcasting and the internet) as sufficient reasons to justify either cuts at RCI, or complete elimination.

Monitor Radio International

But Radio Canada International was not the only significant international broadcaster in North America. Nor was the Voice of America. The Christian Science Church operated a shortwave service that was primarily secular in its programming and was established to complement the *Christian Science Monitor* newspaper. Early in the decade, the World Service of the Christian Science Monitor was listed in *Passport* among the 20+ stations that were the easiest (and most worthwhile) to receive, and its broadcast quality was likened to the BBC World Service (*Passport*, 1992). But it too was not immune to financial worries, as these shortwave operations dipped into a trust fund established by its founder, Mary Baker Eddy, in order to cover just over half a million dollars in expenses for 1989 (Franklin, 1992, April 17). By 1994, its name was changed to Monitor Radio International, and it was again favorably compared to the BBC World Service in its depth and quality of reporting and programming (*Passport*, 1994). Through 1997, Monitor Radio International continued to be a strong voice over the international airwaves (*Passport*, 1996). However, before the end of the decade, these shortwave operations of the Christian Science Church signed off. As it turned out, the financial burden to the church of operating the transmitters and developing programming was too much, and the transmitter sites were put up for sale or lease. The church then choose to focus on simply producing programming and buying air time on stations in the developing world (Jensen, 1997, December). No Monitor Radio International was discussed in the *Passport—1998* edition (*Passport*, 1997), and it was no longer even listed among the hourly program guide in *Passport—1999* (*Passport*, 1998).

Middle East and AsiaIsrael

In the Middle East, the only station to seriously occupy *Passport* comments, as well as other sources accessed, was KOL from Israel. In 1991, KOL Israel was hit particularly hard by budget crunches, which were the results of redirected broadcasting funds toward the home audiences of recent immigrants (*Passport*, 1991). As reported in the papers, the Israeli Broadcasting Authority (IBA) cut back shortwave broadcasts during early morning hours between 1 and 6 am local time in an effort to save about NIS 360,000 (approximately USD 78,000) a month (Cashman, 1991, August 1). This led to a reduction in broadcasts to the Americas ("A real news service", 1994, October 5). Then KOL was nearly lost in 1992, but enjoyed a minor increase in funding which allowed for small increases in broadcasting hours. Unfortunately, broadcasts targeted to North America, where its strongest audience was, were still at odd hours in the middle of the day when few were able to listen (*Passport*, 1992). In 1994, it was reported that the IBA planned to cancel overseas shortwave services, claiming that the Israeli shortwave service could not compete with television, and that the money was better used elsewhere until Israel could develop its own CNN or BBC Worldwide TV service ("A real news service", 1994, October 5).

Still, Israel maintained shortwave operations for regional broadcasts, since in 1998, after what may have been a station name change, the Voice of Israel was still broadcasting in numerous Middle Eastern languages over shortwave, and had been doing so for the previous 40 years (Greenberg, 1998, February 20). Furthermore, this shortwave operation, which primarily targeted Islamic countries in the area—particularly Iran and Iraq—enjoyed a clear sense of listener support as evidenced by the many letters sent (via a European postbox) and phone calls made (to a U.S. number) that Voice of Israel received (Greenberg). As recently as 2002, *Passport* (2002) was no longer listing shortwave broadcasts from Israel among its ten easy picks, nor was it offering any

discussion of any station from the Middle East among its ten easy picks. However, broadcasts from Israel could still be heard in Europe and Eastern North America for a few hours starting at 1600 UTC.

Japan

In Asia, the larger shortwave operations were doing much of the opposite of the many Western stations—they were expanding. Beginning with Japan, in the early 1990s, Radio Japan was described as one of the few stations not having to struggle with limited funding and/or identity questions. It was receiving money to increase its language services and was broadcasting to larger segments of the world's population (*Passport*, 1992). When asked how the end of the Cold War was impacting operations at Radio Japan, the staff replied that the Cold War had no affect on Radio Japan before or after 1991 (S. Sato; Senior Associate Director for International Broadcasting, Radio Japan; personal correspondence [email]; August 29, 2003). By 1996, Radio Japan had improved its transmitting facilities so that it was now an easy station to receive for most listeners around the world (*Passport*, 1995), and a year later, its broadcasts were still being heard worldwide while its programming was becoming more entertaining and lively as it moved away from previous programming described as "staid and stuffy" (*Passport*, 1997, p. 59). By 2000, Radio Japan was described as the "Most Improved Station" (*Passport*, 2000, p. 61) as it continued to liven up broadcasts and vary its programs with meaningful cultural entertainment. A year later, the station rounded out the Asian broadcasters with quality, worldwide broadcasts (*Passport*, 2001).

The People's Republic of China

From China, the story is very similar to what took place in Japan, but did not begin to catch *Passport's* eye until 1997. According to their account, China Radio International, which was known earlier as Radio Beijing, had moved away from the heavy communist rhetoric once associated with the Cold War. Programming began to include business reviews as well as cultural features instead of Western criticisms and political

propaganda. Additionally, increases and improvements in transmitters gave CRI a truly global reach (*Passport*, 1997). In 1998, the station finalized a number of facilities' improvements including a new building, two new transmitting sites, and the introduction of digital program production (*Passport*, 1998). Then in 1999, *Passport* (1999) reported that while Western and former communist broadcasters were scaling back, or terminating portions of their services, Radio Beijing had moved in the opposite direction and had increased its world coverage (*Passport*, 1999), so that in 2001, China Radio International was described as having good global coverage (*Passport*, 2001).

Taiwan

Moving away from mainland China, another Chinese voice has been a consistent voice on the shortwaves through the ten years following the Cold War. Though not occupying the same level of attention in *Passport* publications as Radio China International, Radio Free China, which later became Radio Taipei International, has always carried advertisements of its shortwave station in each annual *Passport* reference book, and the station has been consistently listed in the hourly program section of each *Passport* published since at least 1990. It was reported in 1991 that the Voice of Free China, among other stations, was increasing its broadcast reach through either new transmission facilities, or exchanging relay service (*Passport*, 1991). By the beginning of the next decade, Radio Taipei International had replaced Swiss Radio International among *Passport's* ten easy pick station, and was also credited with being well heard around the world (*Passport*, 2001).

Miscellaneous

Elsewhere in Asia, shortwave operations were surfacing. Radio Singapore International began broadcasting on shortwave in early 1994, targeting listeners within 1600 kilometer in Malaysia, Indonesia, Brunei, Thailand, Vietnam, and Cambodia. Even so, the station still received listener responses from across the globe (Wee, 1995, February 4). The station was established to present the Singapore perspective to the

region, as well as provide a source of information from home for the increasing number of Singaporeans traveling and working in the region (Wee). According to a BBC survey in 1994, RSI ranked fourth among Indonesian listeners behind BBC, Radio Indonesia, and VOA. Radio Singapore International ranked ahead of broadcasters such as Deutsche Welle, Radio Moscow, and Radio Netherlands (Wee).

Burmese opposition also established a shortwave voice, with a little help from the West. In cooperation with the Norwegian Broadcasting Corporation, Burmese opposition began broadcasting to Myanmar over shortwave during prime time in Myanmar. The Norwegian government provided the facilities and resources while the Burmese opposition provided the content that would last for one hour each day (Crossette, 1992, July 19).

In Asia, many of the countries were expanding their shortwave operations through building and/or improving facilities, and adding to their programming. When compared to the Western shortwave broadcasters, the Asian stations were clearly moving in a different direction. About the only major shortwave operation in the Asia region that was not growing and expanding was the Western oriented Radio Australia. Like its Western siblings, it faced reductions, cutbacks, and possible elimination by politicians who felt it was an expendable service, or who preferred the use of newer technologies (Millikin, 1997, February 10). In fact, not too many years later, Australia actually abandoned external shortwave broadcasting (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003).

Private and Religious Shortwave Broadcasting

In addition to the major, state-sponsored international shortwave broadcasters, commercial shortwave broadcasting enjoyed a mild revival in the 1980s and 1990s, but eventually failed to produce positive results, much like the original attempts made in the 1930s (Jensen, 1997, December). The Christian Science Monitor began a commercial operation in the late 1980s hoping that its news programming would be underwritten to

help pay the costs of programming and broadcasting. Experience proved otherwise, and after 10 years, the shortwave operations were still not self-sufficient. The stations were put up for sale or lease while the Christian Science church turned to just making programs and buying air time on stations in, or broadcasting to, Africa, Asia, and South America (Jensen, 1997, December).

Other private shortwave broadcaster operated by religious organizations, however, have done well, and they have become a clear and established presence in the world of international shortwave broadcasting (Jensen, 1997, December). In the waning years of the Cold War, and since, religious broadcasters have become a constant on shortwave (F. Osterman, President of Universal Radio, Inc.; personal conversation [telephone interview]; September 19, 2003). Since 1985, there has been a strong and growing presence of Christian religious broadcasting, and they have enjoyed notable success in Third World regions of Africa and Southeast Asia (G. McClintock, WWCR General Manager, personal communication [telephone interview], August 19, 2003; Wood, 2000). Although originating in the 1930s, international religious broadcasting on shortwave experienced its greatest growth in the last 20 years (Wood). Some individuals have even identified this trend as one of the more significant changes in the world of shortwave broadcasting in the 1990s (D. Gibson, Intermedia Research Specialist, personal conversation [telephone interview], August 20, 2003). Wood also explains that the religious broadcasters are not to be taken lightly as they possess and exercise significant political and monetary clout. Adventist World Radio's negotiations with the Russian government in 1992, and subsequent successful leasing of shortwave transmitters on Russian soil, exemplify the international stature of the religious broadcasters. These religious broadcasters have even taken up transmitters abandoned by Western broadcasters reducing their operations (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003). One reporter went so far as to claim that the propaganda nature of shortwave broadcasting that

was common during the Cold War was being replaced by increases in religious broadcasting (Binder, 1994, August 28). According to Wood (2000), the big players among the Christian broadcasters include the Far East Broadcasting Company (FEBC), Far East Broadcasting Associates (FEBA), Adventist World Radio (AWR), and Trans World Radio (TWR).

Another source of broadcasting aired over private shortwave stations, many of which are religiously affiliated, has come from somewhat extreme political perspectives. Fred Osterman of Universal Radio describes such programming as "right wing, left wing, and odd wing" (Personal conversation [telephone interview]; September 19, 2003). One report in 1995 noted the then recent emergence of far right programming over shortwave (Bridges, 1995, April 29), while another article explains that extreme right and U.S. paramilitary organizations were becoming active over shortwave (Rimer, 1995, April 27). Often their broadcasts had been on local AM and FM stations, but were soon dropped (Rimer). Most of this programming came from four main stations -- WWCR in Nashville, TN on 5,065 kHz; WRNO in New Orleans, LA on 7,355 kHz; WHRI in South Bend, IN on 7,315; and WINB in Red Lion, PA on 11,950 (Rimer). One account describes WRNO and WWCR as "major rivals," but also adds that 95 percent of WWCR's programming is from Christian ministers (Bridges, 1995, April 29). William Pierce, a neo-Nazi whose programs were carried on WRNO, claimed that "shortwave radio offers a cheaper alternative to commercial radio, faces less government regulation and is less susceptible to outside pressure because it carries no advertising" (Bridges, p. A8). At the time (1995), air time on WRNO cost about \$125 for a 30 minute time slot (Bridges, 1995, April 29).

Overall, these private shortwave stations are dependent on the finances raised from air time sold to program providers (G. McClintock, WWCR General Manager, personal communication [telephone interview], August 19, 2003), and do not have access to the same levels of funding that state-run operations receive. As a result, these

organizations are caught in the market forces that can accompany fluctuating income and changing overhead expenses (G. McClintock; D. McLaughlin, Director of Outreach for High Adventure Gospel Communication Ministries, personal correspondence [email], August 14, 2003). Under these conditions, it is not uncommon for such private shortwave stations to maintain operations for as long as the founding entity survives and is able to provide support. Often, this involves a single individual, and when the individual pulls out from the station's operations, the station tends to decline or fade without the founder's support and encouragement (G. McClintock).

Even though commercial shortwave broadcasting as it existed in the 1930s in the U.S. has not made a comeback, a surge of private shortwave broadcasting that began in the 1980s has continued through the 1990s. Most of these stations are of a religious affiliation or orientation, but still sell air time to program providers as a means to support the stations. While most of the programs aired over these stations are of a religious nature, some air time is sold for non-religious programming, and in some cases has been of an extremist nature.

Conclusion

By way of conclusion, a mix of patterns exist among major international shortwave broadcasters in the 1990s. In direct connection to the end of the Cold War, and its struggling economy, Radio Moscow noticeably dropped from its previous Cold War position as one of the "Big 3" broadcasters to one among many international shortwave broadcasters. Also, many of the Western operations have experienced cutbacks and near elimination in some cases. This led one reporter to claim that there had been a steady decline in shortwave broadcasting since the end of the Cold War as evidenced by Radio Canada International's near disappearance, and clear cutbacks at Radio France International and Australia's external service ("London is still calling", 1997, February 23). Additionally, Swiss Radio International moved its shortwave broadcasting to the internet by 2001.

Together, these reductions in the international voices of nation states suggest evidence of a larger decline in general concerning the nation state, particularly in the West. For example, in Canada, it was argued that Radio Canada International should stay on the airwaves not because it supported a particular ideological perspective in opposition to another, but instead because it could enhance Canada's international trading position. It is as if what may have once been part of the collection of voices for democracy was struggling to become a voice for free trade, or at least increased trade. Add to this the other Western broadcasters who cut back and reduced their services. Together, they suggest a collective sigh and escape of air as if they had finally tired of all that had been done through the 1930s, World War II, and the Cold War. The voices of the state to the world just did not feel as important or needed as previously felt.

However, other broadcasters, almost exclusively in Asia, were expanding broadcasts and improving programming. Radio Japan, China Radio International, and Radio Taipei International all continued to invest in their shortwave operations by expanding their facilities and structuring their programs to sound more like Westerns broadcasts. In addition to the mix of cutbacks and expansions experienced among the major state-run broadcasters, private, religious organizations continued a pattern of growth and expansion begun in the 1980s.

Though not heavily discussed in this chapter, the pro- and anti-communist rhetoric that frequented the shortwave during the Cold War had practically disappeared. For a little while, Albania kept the communist conversation alive over shortwave, along with Cuba (*Passport*, 1993). Near the end of the 1990s, however, about all that was left to broadcast daily communist diatribes was Radio Pyongyang in North Korea (Osterman, 1997). Overall, shortwave broadcasting had not vanished. Instead, many stations experienced some financial challenges handed them from their respective sponsoring governments, while some grew. A few others started afresh. Some private stations went of the air, and others did well. While Radio Moscow faded and changed its name to

Voice of Russia, what did the Voice of America and the BBC World Service experience after the Cold War? This is addressed in the next two chapters.

Chapter Five

One of the striking characteristics of U.S. international broadcasting is the greater variety of forms through which it is accomplished by the U.S. While nearly every other country that operates an international service usually operates only one, the U.S. operated at least four during the bulk of the Cold War. From West and unified Germany there has been *Deutsche Welle*, and from the United Kingdom there is the *BBC World Service*. France has *France Radio International*, and Canada has *Radio Canada International*. However, from the U.S. there was the *Voice of America* targeting the world generally, *Radio Free Europe* targeting citizens of countries in Eastern Europe, *Radio Liberty* targeting citizens in the former Soviet Union, and *Radio/TV Marti* targeting Cuba.

When compared to other state-run international broadcasters, the U.S. operated a larger bureaucracy for international broadcasting operations. Also, it was not organized under a unified office or department. As a result, when the Cold War ended, there were more positions, more organizations, and more turf to consider when the powers that be in the U.S. government began to wonder "What next?" with international broadcasting. As it turned out, there was an abundance of debate, and at times, hostility as people from different political parties, different backgrounds, and different interests tried to decide what to do. While some wanted cuts, others wanted changes (though not necessarily cuts), and others wanted the status quo. In the end, it appears there was little more than compromise as no operations were actually disbanded. The *Voice of America* was not eliminated, but its operations have been reduced, though not because of any "demobilization," so to speak. Instead, more surrogates were created and the older ones stayed in operation thereby creating even more sources competing for budget allocations. Clearly, the bureaucracy of U.S. international broadcasting has led to a much more tumultuous context for U.S. international broadcasters than has been common to others (A. Heil; former Deputy Director of VOA; personal conversation [telephone interview]; September 4, 2003). In this next chapter, these issues are discussed in detail. The

debates surrounding U.S. international broadcasting are first discussed, which will be followed by comments concerning surrogate stations. The last half of the chapter will then review many of the VOA's experiences during the 1990s. On the surface it might appear that the U.S.'s growth in international broadcasting services would debunk the claims of a decline in the national state corresponding with declines in international broadcasting. However, as the issues are examined in greater detail, it will be seen that there was a sense of more decline than growth, and that in some cases, the creation of new surrogates was not accomplished without significant opposition that effectively diluted all operations in the end. But first, we begin with the "great debates."

International Radio Broadcasting in a Post-Cold War United States

Muddling through Bureaucracy

With increases in media openness in Eastern Europe in the early 1990s, many were beginning to call for marked decreases in VOA's operations (Priest, 1992, February 24). In fact, it was more than just calls for decreases. In the words of one reporter, "After the collapse of the Soviet empire in 1991, a bitter debate arose [in the U.S.] over broadcasting's role in a foreign policy that needed revamping to reflect the changed realities of the post-Cold War era" (Kirschten, 1999, May, p. 54). Generally, the proponents for cuts, reductions, or consolidation felt that the stations had completed their missions, while those who opposed such changes felt that there was still too much real and perceived instability in Eastern Europe (Whitney, 1993, March 19). In an editorial printed in *The Washington Post*, Patrick Nieburg, who once served as the director of VOA foreign language broadcasts from 1984 to 1986, and as director of Radio in the American Sector (RIAS) Berlin from 1979 to 1984, felt that the U.S.'s international radio efforts in the forms of RFE, RL, and VOA should move toward consolidation for "fiscally desirable" advantages ("Soviet media", 1991, August 2). Also, Brent Scowcroft and Lawrence Eagleburger each felt that "U.S. international broadcasts had served their purpose and should be silenced" (Hopkins, 1999, July, p. 45). In a generalized response

to such calls, and sounding perhaps a bit flowery with political rhetoric, Chase Untermeyer, then director of VOA, exclaimed, "There are some in our land (including some in my own party) who would silence this great Voice of America just at this crucial moment, claiming that America no longer has any business telling its story to the rest of the world . . ." ("For the record, 1992, February 27, p. A18).

Within the space of three years, from 1990 to 1993, at least nine different commissions, task forces, councils, and committees made serious study of U.S. international broadcasting. These commissions and task forces were charged with determining how best to accomplish international broadcasting from the U.S. after the Cold War (J. Hughes; Chair of President Bush's Task Force on International Broadcasting—1991, and the Congressional Commission on Broadcasting to China—1992; personal conversation [telephone interview]; September 10, 2003). Much of the debate concerned whether the U.S. should continue with the current structure of government organizations to oversee international broadcasting (keep the status quo of the previous 50 plus years), or model the BBC World Service's tradition of journalistic independence from government influence (Fisher, 1993, April 3). John Hughes who chaired two of the Presidential commissions that studied international radio after the Cold War felt that a new organization which would oversee all international broadcasting was needed, and it should be "dedicated solely to broadcasting, protected from interference by other government agencies, its funding secure" ("Who Should Run Uncle Sam's radios", 1993, April 1, p. 19). According to Hughes' proposal, VOA, RFE, RL, and the then newly proposed Radio Free Asia (which will be discussed later in this chapter) would operate under the new organization's supervision. Its governing board should include a bipartisan mix of congressional members, broadcasting professionals, as well as the Secretary of State, Secretary of Defense, and the President's National Security Advisor in order to represent foreign policy issues. Alvin Snyder, who was serving as a senior fellow at the Annenberg Washington Program in Communication Policy Studies of

Northwestern University, also proposed moving all international broadcasting under one roof, but he recommended the Corporation for Public Broadcasting ("U.S. broadcast services fight for survival", 1993, May 26).

As the issue was hashed out in the political arena, roughly three proposals surfaced concerning the structure of international radio broadcasting after the Cold War ("Who Should Run Uncle Sam's radios", 1993, April 1). Specifically, they are as follows: 1) The U.S. Information Agency (USIA), which oversaw the VOA, proposed closing, or drastically reducing, RFE/RL, and bringing that surrogate operation under USIA; 2) some congressional members preferred to move VOA from USIA to the Board for International Broadcasting (BIB) where RFE/RL already resided; and 3), the Corporation for Public Broadcasting recommended taking over all international broadcasting emanating from the U.S. As Wood (2000) explains, at the time, international broadcasting efforts in the U.S. were directed by the Bureau for International Broadcasting (BIB) which was under the direction of the U.S. Information Agency. The BIB oversaw VOA, Worldnet TV, the Office of Cuban Broadcasting, and RIAS. In addition to these operations, there was the Board for International Broadcasting which was responsible for RFE/RL. The President's Task Force recommended allowing VOA and RFE/RL to continue under their respective agencies, with the only significant change being the movement of the Office of Cuban Broadcasting from USIA to the Board for International Broadcasting alongside RFE/RL (Wood, 2000). As much of the debates dealt with the continued existence of RFE/RL, and the creation of a new surrogate station for Asia, the next two sections will present in greater detail both of those debates. A detailed account of the Voice of America's experiences through the 1990s will then follow.

Radio Free Europe/Radio Liberty

The surrogate radio operations of Radio Free Europe/Radio Liberty was one aspect of U.S. international radio broadcasting that many felt had served its purpose, and should be retired in the early 1990s. In fact, such was the sentiment at the top of the U.S.

government as President Clinton personally wanted to terminate RFE/RL in the 1990s (Kirschten, 1999, May) by phasing the operations out RFE/RL over a three year period (Awanohara, 1993, March 25), and merging any left-over operations with VOA (Fisher, 1993, April 3). However, it should be noted that President Clinton was apparently not opposed to the concept of surrogate radio stations, as he voiced support for the creation of Radio Free Asia (Kirschten). He also approved of the creation of Radio Free Serbia in 1993 to broadcast more objective news and information than what was carried by the Yugoslavian media (McManus, 1993, June 21). Broadcasts were to be available only on shortwave, but initial plans included efforts to move to medium-wave (AM) as soon as facilities and transmitters could be established in the area. However, a Radio Free Serbia operation did not materialize. As will be discussed below, RFE/RL began to the functions for which Radio Free Serbia was conceived.

President Clinton and his administration were not alone in such thinking. The Advisory Commission on Public Diplomacy created to study the issue concluded that the Voice of America should continue operations, and it should replace operations seen as Cold War relics such as Radio Free Europe/Radio Liberty and Radio/TV Marti. Additionally, but in opposition to President Clinton, the commission also recommended that VOA cover the proposed Radio Free Asia mission ("Making waves", 1993, March 19). Alvin Snyder also felt that the VOA should take over the RFE/RL operation in order to eliminate what he felt was bureaucratic redundancy. While he still saw the need for U.S. international broadcasting, he felt that it was in need of drastic changes, claiming that most of the world was not listening to radio, and was instead watching television and videotapes (Snyder, 1993, March 24).

Those who opposed the elimination of RFE/RL, however, were not a few. Nor, as shall be shown, were they limited to this country. Starting in the U.S., opposition to the President on this issue was clearly present. For starters, Congress opposed the elimination of RFE/RL (Hopkins, 1999, July; Kirschten, 1999, May). It is possible that

congressional opposition may have been more politically motivated, and less motivated by genuine desires to keep these operations running. Even so, congressional opposition was present nonetheless. John Hughes also felt that Clinton's plan was "a very bad decision by mid-level budget officials who have not studied international broadcasting" (Awanohara, 1993, March 25, p. 29). Others felt that VOA's mandate was distinctly different from that of RFE/RL, and that it would be difficult at best for the service to assume the other tasks and responsibilities (Whitney, 1993, March 19). President Bush's Task Force on International Broadcasting shared the same sentiment, and proposed as much (J. Hughes; Chair of President Bush's Task Force on International Broadcasting—1991, and the Congressional Commission on Broadcasting to China—1992; personal conversation [telephone interview]; September 10, 2003). As was explained in another article, the Voice of America allocated about 15 percent of its broadcast time to local interests within a given target audience while RFE/RL devoted about 80 percent of its programming to such content (Fisher, 1993, April 3). This is how it was originally designed. Radio Free Europe was supposed to carry more accurate news and information about its target locations than they were receiving from locally controlled media. The Voice of America, on the other hand, has always been the international voice of the U.S. to the world (Fisher). Other opponents to closing the stations noted that communism had primarily ended in Eastern Europe, but democracy's success was still not certain in the early 1990s, and closing the stations would bolster nationalists as well as communists wishing a return to the previous system (Fisher; note the use of cross-border broadcasts to undermine nationalist thinking). And as a final point of support, research conducted at the time in Eastern Europe indicated that RFE/RL was more popular there than VOA and BBC World Service (Fisher).

Outside the U.S. borders, there were other voices calling for the U.S. to keep these surrogate stations on the air. According to one reporter, protests emanated from Eastern Europe in response to reports that the Clinton Administration would shut down RFE/RL

by 1995 (Whitney, 1993, March 19). Some big voices from the region came to RFE/RL's defense. Then Czech President Vaclav Havel expressed a need for the stations to continue operations (Whitney, 1993, March 19), and According to Alvin Snyder, Mikhail Gorbachev and Boris Yeltsin personally lobbied President Clinton not to cut RFE/RL operations ("U.S. broadcast services fight for survival", 1993, May 26).

In the end, the operations were not cut, nor phased out by 1995. According to Kevin Klose, then President of RFE/RL, the operation still continued to function strongly as a broadcaster to Eastern Europe ("Radio Free Europe", 1995, November 22). However, it was not left unchanged through the 1990s. The shortwave broadcasts from these services were reduced as RFE/RL was able to operate more freely on local AM and FM stations within Eastern Europe (Fisher, 1993, April 3; Whitney, 1993, March 19). Funding also affected operations. RFE/RL's biggest budget was \$220 million in 1988, but by 1998, it was down to \$72 million (Kirschten, 1999, May). In an effort to support the surrogate stations, Vaclav Havel rented the former parliament building in Prague to RFE/RL for \$1 a month, and RFE/RL moved its headquarters from Munich to Prague (Drogin, 1998, December 12). RFE/RL then began to focus more on Yugoslavia during the 1990s (Ahrens, 1998, December 18). As RFE/RL President in 1998, Thomas Kline explained, the "goal in the region we broadcast to is to maintain a dialogue with all those committed to democracy and free markets" (Clark, 1998, February 7, p. 1). At the turn of the century, RFE/RL was broadcasting to 24 countries in 24 languages, and was described as still being unpopular with authoritarian regimes (Kirschten). According to Kline, even though the Cold War is over, "there is still a war . . . about dictatorship vs. democracy" (Kirschten, p. 56).

Radio Free Asia

With feelings of success from surrogate broadcasting still fresh in the air, recommendations for other surrogates soon followed the collapse of the Soviet Union in the early 1990s. The idea for a Radio Free Asia began to surface as early as 1991

(Hopkins, 1999, July). From President Bush's Task Force studying international broadcasting at the end of the Cold War, it was noted that five of the six remaining Communist countries in the world were in Asia, and the Task Force strongly recommended that the US follow the successful example of RFE/RL and begin a "Radio Free Asia" operation (Wood, 2000). President Bush then asked John Hughes, who headed the previous task force, to lead a commission to examine the value and feasibility of creating a Radio Free China operation (Priest, 1992, February 24). According to John Hughes, the mission of RFA was to "broadcast truthful information to countries where the governments-of-the-day ban free expression by their domestic news operations" ("Radio Free Asia", 1997, September 17, p. 9). Radio Free Asia would follow a traditional journalistic standard much like RFE and RL did (or claimed to do), and report on those stories of interest to, and about, the target audiences censored by local regimes ("Radio Free Asia's task", 1996, October 9). Supporters of the RFA concept (including the Burmese opposition) explained that surrogate stations complement the VOA's operations as the VOA was designed to broadcast information about the U.S. and the world generally, while surrogate stations were created to cover material of interest to the receiving audience (Lintner, 1994, March 24).

However, the opposition to Radio Free Asia was not so easily won over. The idea of a Radio Free Asia was one of the most divisive among those associated with international broadcasting in the U.S. (Warren, 1992, January 5). As Hughes explains, the Commission on China broadcasts was sharply divided in their opinions and recommendations concerning the creation of Radio Free Asia (J. Hughes; Chair of President Bush's Task Force on International Broadcasting—1991, and the Congressional Commission on Broadcasting to China—1992; personal conversation [telephone interview]; September 10, 2003). According to Vivianne Warren who also served on President Bush's Task Force for international radio, seven members of the task force voted to establish such a service while "a rebellious minority of four" opposed the idea

(Warren, 1992, January 5, p. C4). Tom Korologos, chairman of the U.S. Advisory Commission on Public Diplomacy, also opposed the creation of Radio Free Asia, arguing that it was an effort to fight a newer type of conflict with an older strategy ("Getting the message to China", 1992, July 25).

Generally, those associated with the Voice of America strongly opposed the creation of Radio Free Asia/China. According to Tom Korologos, the VOA was more than sufficient and ready to be expanded to accomplish any broadcast needs into China ("Getting the message to China", 1992, July 25). Radio Free Asia was also opposed by USIA (which oversaw VOA at the time). Their argument was that VOA accomplished what RFA was being proposed to do. Officials at the Voice of America pointed out that the VOA had programming that specifically targeted Chinese listeners. For example, *China Focus* was a 30 minute program popular in China and throughout Asia. Topics covered included dissidents, democracy movements, human rights' issues, and emigration. Some at VOA felt that such programming efforts justified not having an RFA operation established (Awanohara, 1993, March 25). The VOA also proposed expanding its Mandarin service at a cost of \$10 million a year (Hopkins, 1999, July). Also, and perhaps more revealing, many at VOA and USIA resented the money spent on RFA as it would take funding away from the VOA (K.A. Elliot; Audience research analyst at the Office of Research of the U.S. International Broadcasting Bureau; personal correspondence [email]; September 8, 2003; Lintner, 1994, March 24), especially since VOA was enduring "a big huge cut" at the time of RFA's proposed start-up (Tempest, 1997, January 12, p. A4).

There was also opposition to RFA outside of VOA circles. According to Susan Shirk, a China specialist and then director of the University of California's Institute on Global Conflict and Cooperation at UC-San Diego, "local functionaries as well as high government officials [in China] start their day by listening to the top-of-the-hour news on the VOA" (Warren, 1992, January 5, p. C4). Catherine Dalpino, a Brookings Institute

scholar, was also critical of U.S. efforts to create RFA. She felt that the internet was the ideal medium through which to reach opinion leaders in foreign countries, particularly Asian countries (Kirschten, 1999, May). Diplomats associated with China opposed RFA feeling that it would upset the delicate relationship between Beijing and Washington D.C. (Tempest, 1997, January 12), while government officials *from* China, Laos, and Thailand voiced either concern or opposition to the creation of RFA (Lintner, 1994, March 24). Some felt that another station broadcasting to Asia was excessive as there were already numerous private and state-run operations broadcasting to mainland China in Mandarin (Zhang, 1994, June 13). One was the Voice of China, a U.S.-based radio show run by Chinese scholars and expatriates that presented political and social issues to mainland China (Pimentel, 1994, May 30). Taped in the U.S., the programs were broadcast to China from Taiwan on shortwave, and most of the operations funding came from the Foundation of China in the 21st Century, a private nonprofit organization of Chinese Americans, Hong Kong and Taiwanese business people, as well as scholars (Pimentel, 1994, May 30).

Despite the opposition to Radio Free Asia, it still managed to become a new surrogate broadcaster from the U.S. for listeners in Asia—but not without continued strong opposition, and not overnight. It took a number of years and multiple introductions to Congress before a bill to create Radio Free Asia became law. The first Radio Free Asia act was introduced February 21, 1991 in the House of Representatives where the bill went from the House Committee on Foreign Affairs to the Subcommittee on Asia and Pacific Affairs, and then appears to have died in committee (H.R. 1049, 1991). Then in 1992, another Radio Free Asia act was introduced March 25, 1992, this time in the Senate. Apparently, the RFA operation was to go through RFE/RL as funding was to be made available to RFE/RL "for radio broadcasting to the peoples of Asia, particularly the people of Cambodia, Laos, and Vietnam" (S. 2407, 1992). Ten million

U.S. dollars were to be appropriated for the RFA operation. This second act for RFA was read twice and then sent to committee where it too died.

In 1993, individual acts were introduced in both the Senate and the House. In the House, the Radio Free Asia Act of 1993 was introduced January 5, 1993. The People's Republic of China, Burma, North Korea, and Tibet were added to the target audiences, and funding was increased to \$30 million. This House version of the Radio Free Asia Act of 1993 was then referred to the House Committee on Foreign Affairs on January 5, 1993, and then the subcommittees on International Operations, and Asia and the Pacific. The bill then died there (H.R. 54, 1993). In the Senate, Senators Joseph Biden and Orin Hatch introduced the Senate's version of the Radio Free Asia Act of 1993 on March 25, 1993. In introducing the bill, Senators Biden and Hatch each offered their support for the bill. Senator Biden felt that the creation of RFA will "place the United States on the right side of history" (S. 659, 1993). From a letter written by John Hughes to Senator Hatch, the President's Commission on international broadcasting in 1991 conducted a number of hearings in the U.S. and Asia and heard numerous accounts calling for an RFE/RL model for Asia. Senator Hatch felt that a surrogate station for Asia would provide information to 1.5 billion people who were limited to communist or authoritarian suppression, and also felt that the VOA represents the State Department and its diplomatic concerns more than it could address the news and information needs of listeners in Asia. The bill was then referred to the Senate Committee on Foreign Relations where it died.

Finally in 1995, Radio Free Asia began to make some progress. This time it passed through the House as part of another bill—The China Policy Act of 1995. It passed the House with 416 votes, and was sent to the Senate, read twice, and then referred to the Committee on Foreign Relations. At that point, the bill died again (H.R. 2058, 1995), but at least it got a vote.

The following year, Radio Free Asia made it through Congress, and RFA went on the air September 29, 1996 (Tyler, 1996, December 27) under the direction of the U.S.

International Broadcasting Bureau (Clark, 1998, February 7). Initial broadcasts in Mandarin were 30 minutes long, and were heard in Beijing and Shanghai (Hughes, 1996, October 9), but plans were already being made to extend the broadcasts to five hours a day, and to include Tibetan, Vietnamese, Cambodian, and Burmese languages ("Radio Free Asia's task", 1996, October 9). By the end of 1996, RFA was broadcasting for two hours a day—one hour at 7 am, and the other at 11 pm (local or UTC was not specified; Tyler, 1996, December 27).

The originally proposed start up costs for RFA were requested at \$30 million, with annual operating costs estimated at \$35 to \$40 million. However, initial funding started out at only \$10 million (Hughes, 1996, October 9), hence the minimal broadcasting schedule. Hughes feels that when RFA finally passed congress, the restrictive funding may have stemmed from a sense of hesitation associated with the clear division of the China broadcasting commission (J. Hughes; Chair of President Bush's Task Force on International Broadcasting—1991, and the Congressional Commission on Broadcasting to China—1992; personal conversation [telephone interview]; September 10, 2003). Radio Free Asia was first headed by Richard Richter, a former ABC and PBS producer. Dan Southerland who formerly worked for the *Christian Science Monitor* and the *Washington Post* was named as RFA's first vice president in charge of programming ("Radio Free Asia's task", 1996, October 9). According to Richter, the biggest challenge for Radio Free Asia had been finding a country close enough to China that would allow RFA to broadcast to China (Tempest, 1997, January 12). Radio Free Asia broadcasts from the Armenian transmitter site were closed when Armenia refused to carry the broadcasts under pressure from China, so RFA ended up purchasing air time from Christian stations with transmitters in the vicinity of southeast Asia (Tempest).

Still there were protests. Soon after RFA began broadcasting, some described it as "stealth" radio as reception reports and quality were lacking. Many claimed the signal was too weak (Tyler, 1996, December 27). The diplomatic corp in China, with frequency

schedules, claimed to be unable to receive the programs (Tyler), while they and journalists in China and Vietnam claimed not to know of anyone who had heard RFA's broadcasts (Drogin, 1998, December 12). Alvin Snyder criticized the efforts of RFA, and claimed that the lack of reception success of RFA was to be expected ("Use satellite TV", 1997, January 1).

Even so, Radio Free Asia managed to expand during its first few years of broadcasting. Within the first year, RFA was receiving regular mail from listeners in China providing valid reception reports ("Radio Free Asia", 1997, September 17). Soe Thinn, head of RFA's Myanmar programming claimed to have received over 800 letters from RFA listeners in Myanmar (Drogin, 1998, December 12). One report indicated that RFA had been successful in reporting information that the Beijing government had tried to keep under wraps ("Murdoch tunes into China market", 1999, April 1). After broadcasting for one year, RFA was sending programming to Vietnam, Tibet, North Korea, Laos, and Burma, while also laying plans to begin broadcasting to Cambodia ("Radio Free Asia", 1997, September 17).

Richard Richter, President of RFA, explained that RFA was eventually broadcasting to China from five different directions on different frequencies, thereby making complete jamming nearly impossible (Drogin, 1998, December 12). Another report indicated that although the Armenia and Kazakhstan sites had been shut down, shortwave broadcasts were still being transmitted from "five sites in Asia" as well as the U.S. ("Radio Free Asia", 1997, September 17, p. 9). By the beginning of 1998, RFA appeared to be thriving. Congress agreed to increase its budget by more than doubling it to \$24.1 million (the House vote was by a 401-21 margin), broadcasts expanded to 24 hours a day in different languages, and RFA had established offices in Hong Kong, Phnom Penh, Taipei, Tokyo, and Daramsala (Clark, 1998, February 7). Even the Dalai Lama and Burmese opposition leader Aung San Suu Kyi were noted as strong fans and supporters of the operation (Clark, 1998, February 7).

For those at Radio Free Asia, as well as its supporters, shortwave still has a place in the post-Cold War, Information Age era (Clark, 1998, February 7). Though faced with opposition from conception to implementation, RFA joined the ranks of the other surrogate stations created earlier, and became one more international broadcaster from the U.S. to utilize the shortwave frequencies. Still, it cannot be denied that the opposition to creating RFA was formidable and nearly constant for a number of years. Additionally, when legislation to create RFA was finally voted into law, the funding was much lower than requested and in some ways needed. With this discussion of the creation of Radio Free Asia and the preservation of the European surrogates accomplished, attention can now be turned to the non-surrogate operation in the U.S.—the Voice of America.

Voice of America

Although the President's task force had determined that the Voice of America was still necessary, if not more, in a post-Cold War world, meaningful budget increases were not expected at VOA in the early 1990s (Priest, 1992, February 24). Even so, VOA continued a modernization program begun in 1984 and carried through 1995 that involved purchasing new transmitters for some of its sites, albeit with some modifications due to changes in world political structures (Wood, 2000). In 1992, VOA also celebrated its 50th anniversary on February 25 (Priest). Additionally, by 1992 VOA's budget was at \$231 million, it operated with 3,000 employees, weekly programming was at 1,080 hours in 46 languages, and it was estimated that listenership was at 120 million (Priest). One news report explained that before 1992, up to 10 different nations actively jammed VOA broadcasts, but by 1992, the total was down to two—China and Cuba (Priest). Either there was an error in the article, or a change in jamming, because by 1993, VOA was being jammed by China, Cuba, *and* Iraq and North Korea, according to another reporter (Solomon, 1993, March 26). Either way, it was a significant change from the days of the Cold War.

By 1994, The Voice of America still appeared to occupy a respected and popular position among listeners generally, as well as with the editors at *Passport* (*Passport*, 1994). On November 14, 1994, VOA began a live, international call-in show. Using phone lines, fax machines, and email, the program was a live call-in show for (hoped for) millions of listeners ("Trends", 1994, October 29). The program was on the air Monday through Friday between 1706 and 1800 GMT, and was targeted to Europe, Africa, South America, South Asia, East Asia, and the Middle East (Duffy, 1994, December 7). Then during the crisis of Cuban refugees in 1994, international broadcasting to Cuba, especially over shortwave radio from Radio Marti and VOA, was stepped up to encourage Cubans to stay in Cuba and proceed through established legal means in their efforts to enter the U.S. (Manegold, 1994, August 24). Apparently, four additional shortwave channels were added to VOA's Cuban broadcasts (Manegold). According to Joe O'Connell, VOA Director of External Affairs, Radio Marti was broadcasting over 17 shortwave frequencies warning that the chances of rescue for Cuban refugees at sea had diminished ("U.S. broadcasters keep Cubans posted", 1994, September 4).

During this time, the Voice of America made some of its first moves into the world of the internet. In 1994, transcripts of VOA began to be accessible to computer users with the modems and appropriate software. By the beginning of 1995, actual broadcasts could be heard with the emerging multimedia technologies (Schwartz, 1995, January 14). At the time, most of the 20,000 daily visitors were accessing transcripts since downloading sound files then was too time consuming. It took, on average, one hour to download a 10 minute sound file (Schwartz). However, most of this particular news article addressed concerns of the legality of VOA making its material available to the U.S. population, thereby circumventing the Smith-Mundt act of 1948 which forbade VOA from broadcasting the government's views to its own citizens (Schwartz). To illustrate the changes that have taken place in internet technology since that time, the VOA transcripts were then accessed at *gopher.voa.gov* (Schwartz).

There was also a shake-up of the government bureaucracy overseeing international broadcasting in the U.S. at this time. As Wood (2000) explains, the Bureau of International Broadcasting and the Board of International Broadcasting were discontinued, while the International Broadcasting Bureau (IBB) was created with oversight of VOA, the Office of Cuban Broadcasting, and RFE/RL. The IBB in turn fell under the direction of the USIA. In this restructuring, a number of RFE/RL shortwave facilities were dismantled and the equipment put to use elsewhere (Wood, 2000).

The Voice of America also waded through some challenges at this time. According to one VOA insider, "the Clinton administration, with its human-rights agenda, [was] embarking on a more aggressive broadcasting program which would further absorb the VOA into official policies at a time when the VOA [was] trying to become more independent in its reporting" (Lintner, 1994, March 24, p. 26). There were cuts in funding as well, as the VOA was cut 20 percent between 1994 and 1995 (Marks, 1995, November 1). According to *Passport* (1995), the Voice of America fell victim to "draconian cuts" by "well-meaning, but short-sighted political thinking" (*Passport*, 1995, p. 58). All language services were affected, with English suffering the least. For example, while traveling in St. Petersburg, Russia, Tom Rothweiler of Phoenix, AZ claimed to have heard one of the last broadcasts from VOA's European Service ("Voice worth keeping", 1995, October 28).

By 1996, some were describing the Voice of America as slow to adjust to the needs of an international broadcaster in the post-Cold War political landscape (Popham, 1996, January 17). According to *Passport* (1996), the VOA almost became the "Void of America" by this time as a result of budget cutting. However, it was still a functioning service and continued on after some reductions in its services (*Passport*, 1996). On a more positive side, VOA began to simulcast its live, radio call-in show over its Worldwide English Service and Worldnet Television's international satellite network (Merrill, 1996, March 20). Also, the U.S. built a 600,000 watt transmitter in Kuwait to

carry primarily VOA programming to Iran and Iraq. However, the transmitter would broadcast on medium wave in an effort to augment the shortwave broadcasts already reaching those countries. It was estimated that 11 percent of the Iranian population, and 20 percent of the Iraqi population listened frequently to VOA shortwave broadcasts at that time (Wright, 1996, May 17).

In 1997, VOA was still jammed by China (Long, 1997, November 21), and it experienced trouble with stations rebroadcasting VOA programs in the Balkans. During different crises in Serbia at that time, especially after local station B98 stopped broadcasting, VOA was forced to increase its output on shortwave to the former Yugoslavia, according to Kim Andrew Elliot ("London is still calling", 1997, February 23). Still, during air operations against Serbia, VOA and RFE/RL were listened to heavily by people in the Balkans (Kempster, 2001, April 1). Back in Washington, though, the Voice of America's parent organization, the USIA, was being absorbed into the State Department, and English services for Europe were noted as having been cut (*Passport*, 1997). As *Passport* (1997) summed it up, VOA's struggles had come from having to scratch a budget from a shrinking pool of funding that was also being divided up among the original surrogates at RFE/RL, as well as newcomers like Radio Free Asia, and proposed Radio Free Iran and Radio Free Africa. On the plus side, by 1998, according to VOA research, there were about 83 million listeners who weekly tuned into VOA's shortwave broadcasts (Drogin, 1998, December 12). Additionally, Paul Gobel, Washington spokesman for RFE/RL, felt that the surrogate stations, and international broadcasting generally, were enjoying more support in Congress and with the President than they had experienced five years earlier (Drogin, 1998, December 12).

Unfortunately for the Voice of America, this increased support for international broadcasting meant another surrogate station with which VOA had to share government funding. Radio Free Iraq, with a focus on Iraq and Iran, began broadcasting in 1998 (Drogin, 1998, December 12) on shortwave at five am Baghdad time on October 30, 1998

(Ahrens, 1998, December 18). This was accomplished under RFE/RL direction from their facilities in Prague (Hopkins, 1999, July), with programming developed by exiles and émigrés, as well as from information smuggled from the target countries (Drogin). Additional Iranian Persian broadcasts were also carried out as part of the Persian service of RFE/RL. Radio Free Iraq also began to specifically target Iran at the same time that RFI began. Its transmissions came via shortwave from Spain, Greece, Morocco, Germany, and Kuwait, and they were also carried over the internet (Ahrens).

Supporters of the Radio Free Iraq project hoped the station would facilitate the eventual removal of Saddam Hussein while also serving as a source of news "for information-starved Iraqis" (Johnson, 1998, August, p. 11). As with Radio Free Asia, the Voice of America opposed the creation of the Persian services, seeing them as a threat to their audiences in the two countries, which was described as "gigantic" by former VOA director, Geoffrey Cowan (Drogin, 1998, December 12). Also, Johnson (1998, August) criticizes the Radio Free Iraq efforts as an appearance of doing something in opposition to Hussein in the face of what he felt was the U.S.'s lack of will to actually deal with Hussein more effectively. *Passport* also criticized the creation of surrogate stations. According to *Passport* (1998), the additional surrogate stations "added fuel to the argument about who within American officialdom broadcasts when and to where" (p. 77).

With all this going on in U.S. international broadcasting, *Passport's* (1998) criticisms for VOA were increasing. As VOA went through some program changes to the irritation of its listeners, many of its feature programs were lost to what was described as a "rolling news" format similar to an ongoing breakfast show (*Passport*, 1998, p. 77). Additionally, a real threat to VOA was felt through political interference and what was labeled as leadership incompetence. *Passport* (1998) did not specify the exact nature, or source(s) of the interference or incompetence, but Kim Elliot does. Elliot argues that in 1996, "the appointment of Evelyn Lieberman as VOA director . . . turned VOA into a casualty of the pet projects of former first lady Hillary Clinton" (Elliot, 2001, June 16).

In 1999, some of the questions and debates concerning who would broadcast what, when, and to whom may have come to some resolution as significant restructuring took place. The U.S. Information Agency was moved over to the State Department (Barber, 1999, January 20; Kirschten, 1999, May), and the Broadcasting Board of Governors (or BBG, which had been created in 1994 to help coordinate U.S. international broadcasting) became an independent agency in October 1999 (Kirschten). All international broadcasting operations were moved to "a nonprofit corporation run by the Broadcasting Board of Governors" (Pool, 1999, March 8, p. B1), with the BBG acting as a semiautonomous agency, reporting to the President and Congress (Hopkins, 1999, July).

These moves of international broadcasting agencies were done to put a more secure barrier between foreign policy workers and the journalists striving for more objective reporting (Pool, 1999, March 8), or to ensure sufficient insulation of international broadcasting efforts from political interference (Kirschten, 1999, May). The BBG began to oversee the "international radio and television activities formerly conducted under the aegis of the USIA" (Kirschten, p. 59), specifically VOA, the Office of Cuban Broadcasting, Worldnet, RFE/FL, and RFA (Kempster, 2001, April 1; Kirschten). Lawmakers were committed to insulating the BBG through independence, while also requiring that the BBG act "[consistently] with broad foreign policy objectives of the United States" (Kirschten, p. 55). Marc Nathanson, CEO and founder of Falcon Cable in Los Angeles, was named to head the U.S.'s international broadcasting services (Pool, 1999, March 8). Nathanson was noted for his background in new communication technologies, as well as business and marketing, and was also well connected with the entertainment community (Pool). In beginning to oversee U.S. international broadcasting efforts, Nathanson started preparing the broadcasters for greater efforts with newer technologies such as television, satellites, digitalization, and the internet (Pool).

The BBG's independence, along with the restructuring of international broadcasting, came in opposition to those who still felt that such operations had outlived

their purposes (Kirschten, 1999, May). By the end of the decade, in light of CNN's success, there were still some who questioned the need for U.S. international broadcasting after the end of the Cold War (Pool, 1999, March 8). Still, nearly \$400 million was spent that year on U.S. sponsored international broadcasting, and the total of U.S. international broadcasting included VOA, RFE/RL, RFA, Radio Free Iraq, Radio and TV Marti, and Worldnet for a combined 2,000 broadcast hours each week in 61 languages (Hopkins, 1999, July).

For the Voice of America specifically, it was not all good news. According to one report, "VOA's onetime purpose to report objective news [was] being replaced by congressionally favored political programming with clear ideological agendas" (Hopkins, 1999, July, p. 44). Perhaps the insulating barriers of the BBG were still being established. Also, the increase in surrogates had led to a decline at VOA, especially in funding, and VOA's audience in Eastern Europe had greatly declined over the previous 10 years as well (Hopkins). Furthermore, the Voice of America had terminated its European bureaus, and began to focus primarily on third world listeners. For example, "about 20 percent of VOA's worldwide listenership [was then] in Nigeria alone" (Hopkins, p. 47). The Voice of America was also on the receiving end of more of *Passport's* (1999) criticisms. According to its editors, "the Voice of America has ceased to be the VOA of old" (p. 93). The complaints revolved mostly around the elimination of many of the music and entertainment shows that VOA once carried, which had been replaced by an increase in "rolling news" (p. 93). Still, VOA was broadcasting in 52 languages with about 86 million people tuning in each week (Pool, 1999, March 8). For some, perhaps, the glass is half-full, while for others it's half-empty. In either case, it is obvious that the glass was no longer full, or at least mostly full.

With the start of the new decade and century, the Voice of America was looking to the future, but still trying to lose associations with the Cold War (Campbell, 2000, September 8). The VOA was expanding along three media—radio, internet, and

television—but in spite of these expansions, shortwave was still considered "the backbone of VOA" (Campbell, p. 16). Audience distribution had also shifted during the 1990s. In 1994 about half of VOA's listeners were evenly split between Eastern Europe and Africa. By 2000, the percentage of listeners in Africa had increased by 40 percent, while listeners in Eastern Europe accounted for only 10 percent (Campbell). Overall, VOA Estimated to have 91 million listeners, mainly in China, Afghanistan, Nigeria, Ethiopia, and Bangladesh (Campbell).

However, there were more cuts and increasing limits in funding. Fifty-one positions were cut from VOA's European and East Asian divisions in early 2000 (Campbell, 2000, September 8). Most of those cut were émigrés that supported language services no longer seen as needed at VOA, with services to Eastern Europe particularly affected (Lancaster, 2000, February 24). As reported in the press, "the Broadcast Board of Governors . . . said the cutbacks will permit the expansion of services to areas where 'U.S. international broadcasting can have the greatest impact where democracy is either fragile or nonexistent'" (Lancaster, p. A19). According to VOA spokesman, Joe O'Connel, VOA had urgent priorities and limited funds, so "something [had] to give" (Lancaster, p. A19). For some, VOA had become "a demoralized political football" (*Passport*, 2000, p. 64). The ongoing rolling news format was criticized by listeners, while political management "at the highest level" was described as "clueless" (p. 65), and was credited with the pitiful state of the VOA organization. "Under fire from senators and criticized by listeners, it [had become] a shadow of its former greatness" (*Passport*, 2000, p. 82).

In the first year of the new millennium, it appears that the Voice of America was still wading through much of what had become familiar fare during the previous three or so years, namely struggling to meet the demands of politicians and needs of listeners with resources unable to cover it all. Brent Scowcroft, who previously viewed VOA as a Cold War relic, had become a strong supporter of the operation, feeling that it now helped

improve international attitudes toward the U.S. (Kempster, 2001, April 1). In fact, VOA was attempting to counter much of the anti-American attitudes that prevailed in the Middle East (Kempster), and along with the BBC World Service, it quickly expanded its broadcasts to Afghan citizens after the September 11 attacks (Faler, 2001, October 6). Additionally, the Voice of America began posting its Polish, Hungarian, and Czech programs online, and as a result, VOA director, Sanford Ungar felt that more people were receiving those language programs than before (Colker, 2001, May 22).

The Middle East expansions received clear attention in the news that year. The Voice of America began broadcasting to Arab listeners around the clock with special geographic emphases during morning and afternoon listening times specifically targeting the under-30 age group (Kempster, 2001, April 1). The new Arabic service would develop greater use of AM, FM, and digital satellite broadcasting in addition to its shortwave operations, and Tom Korologos, a member of the Broadcasting Board of Governors, expected opinion leaders to listen to the new Arabic service in order to get additional perspectives (Kempster). Bulgarian, Romanian, Slovak, Uzbek, Portuguese (targeting Brazil), Thai, Turkish, Armenian, Azerbaijani, and Georgian would all be reduced in order to cover the costs of the new Arabic service (Elliot, 2001, June 16; Kempster).

This too stirred up some negative reactions in the press, but apparently, only in Thailand. There it was reported that the U.S. Broadcasting Board of Governors had announced the closure of Thai services by the middle of 2001 due to a lack of listeners and a desire to use the \$400,000 spent on the Thai services elsewhere (Tansubhapol, 2001, February 6). Appeals to keep the service operating were sent from the U.S. ambassador to Thailand, as well as then Prime Minister Chuan Leekpai; the Foreign Minister, Surin Pitsuwan; Arsa Sarasin, the King's private secretary; and Nitya Pibulsonggram, the secretary for foreign affairs (Tansubhapol, February 6). Thai officials also threatened to obstruct, or cancel completely, VOA usage of a relay station at Ban

Dung if the Thai service was canceled (Tansubhapol, 2001, February 6). After receiving a sufficient amount of complaints and criticisms, VOA and the Board of Broadcasting Governors planned to re-examine its earlier decision to close down the Thai service of VOA (Tansubhapol, 2001, April 5). There was also some talk of carrying VOA programming over a local FM station owned by the Thai Foreign Ministry (Tansubhapol, 2001, April 5). By May, 2001, it was announced that the BBG had decided to keep VOA services to Thailand (Tansubhapol, 2001, May 19).

Other reports at the time were less positive. One news article reminded readers and listeners of VOA's elimination of its shortwave services to Central Europe (Colker, 2001, May 31). *Passport* (2001) noted that while VOA was still heard well in most parts of the world, programming from the Voice of America for Europe was practically non-existent, and that it was no longer the station it was 10 years and more before. "After years of incompetent management by friends of leading political figures, the VOA [was then] being guided by commercial broadcasting interests who [were] moving it away from its public-service mission" (p. 82; *Passport*, 2001), and like the BBC, increasing emphasis was on emerging technologies.

Conclusion

In conclusion, as one of the countries that came out on the victors' side of the Cold War, U.S. international broadcasting still managed to have its share of post-Cold War challenges. Not only were there numerous debates concerning future oversight of probably the largest, most varied, and perhaps most complex system of international broadcasting, but VOA passed the 1990s under the direction of a revolving door of directors, most staying less than two years (Hopkins, 1999, July). Clearly "politics pervades American global broadcasting" (Hopkins, p. 46). Over the course of those ten years, the Voice of America modified its programming and expanded further into other media outlets. The Voice of America also experienced its own share of budget challenges and cutbacks along with many of the Western broadcasters discussed in the previous

chapter. Unlike the other Western broadcasters, however, VOA shared the international broadcasting spotlight with other U.S. sponsored international broadcasting—namely the surrogates of RFE/RL. Their success in conveying news and information over the Iron Curtain during the Cold War led to the development of additional surrogate operations from the U.S. as such operations targeting the Middle East and Asia were established during the 1990s.

Though there were more surrogates, however, there was an ongoing decline in funding which was in turn divided among more agencies and/or operations. The Voice of America itself declined, and the new surrogates were poorly funded, thereby creating what were new shoe-string operations. Finally, programming and broadcasts became less of a voice of the U.S. state to the world and more of a voice of the state to limited, targeted areas.

Again, when considering the experiences outlined in the previous chapter, there is the impression that state-run international radio broadcasting was struggling. In the U.S., there is even the feeling that the state as a body was gasping to establish another voice of the state. In spite of those who did favor the creation of Radio Free Asia and other surrogates, there is the feeling that the opposition represents that part of the U.S. that was tired of all the different international broadcasting occupying U.S. bureaucracy. Additionally, the comments made by Thomas Kline, former RFE/RL President, offer a glimpse into the shift that was taking place. According to Kline, in 1998, his operation's goal was to foster an ongoing dialogue with those committed to democracy and *free markets*. The international voice of a nation was moving from ideological voice to market voice. It just feels as if the desire was not much there anymore and/or it was fading quickly, and/or the focus was shifting from the state to the corporation.

In addition to the U.S.'s Voice of America, Great Britain's BBC World Service also enjoyed the victors limelight after the end of the Cold War. In fact, as a result of its perceived journalistic integrity, for many the BBC World Service has been seen as the

most influential international broadcaster. Since the World Service occupied a significantly different social and political contexts in Great Britain than the VOA did in the U.S., the 1990s unfolded differently for the World Service. The next chapter takes up those experiences in detail.

Chapter Six

In many ways, the BBC World Service and the Voice of America stand together as the primary victors of the broadcasting battles that characterized much of the frontlines of the Cold War. However, by most accounts, the World Service stood noticeably taller than its U.S. ally. Through much of the Cold War, and especially during the 1980s, not only did the BBC World Service command a larger listening audience than VOA, it was almost universally seen as the most credible international station in the world. While both the World Service and the Voice of America were basking in the glow of an earned victory in many eyes, the praise and accolades afforded the BBC's international voice are more plentiful, and complimentary. Some saw the BBC World Service as "an institution as widely respected as Oxford University, Scotland Yard, [and] the British Museum" (Shane, 1996, August 18, p. 2A). Others described the World Service as Great Britain's "last remaining international asset" with no other broadcast service able to compete and compare to the World Service's excellence and reliability (Sinclair, 1996, August 19, p. 17). Furthermore, the World Service exceeded the quality of all the news services offered in places where freedom of the press is the norm (Sinclair). Along similar lines, Louis Friedland, a professor of journalism at the University of Wisconsin, described the BBC World Service as being more analytical with a wider perspective than CNN. In his words, the BBC style "is what Americans would think of as dry, [but] Europeans as serious" (Lippman & Tuohy, 1992, October 20, p. A10).

Testimonials from around the world were plentiful. Former hostages who listened to the World Service during captivity offered numerous accolades. Terry Anderson, former chief Middle East correspondent for the Associated Press, who also spent seven years in captivity in Beirut, felt that there was nothing like BBC World Service found in the U.S. (Hedges, 1995, May 30), while Thomas Sutherland, former hostage in Lebanon for over six years, described the World Service as "'a university of the air'" that is "'a tremendous service to the world'" (Shane, 1996, August, 18, p. 2A). A former KGB

Colonel, Oleg Gordievsky, also described the BBC World Service as a university over the airwaves for the Soviet people (Tusa, 1992, September 27), while John Tusa likened the programming of BBC World Service to "Knowledge Aid" to the world, especially those lacking in information sources (Popham, 1996, January 17). Still others found the BBC World Service to be "a refuge for people fleeing the dominance of American pop culture" (Shane, p. 2A).

By the end of the 1990s, some claimed that the World Service struggled for identity and funding after the end of Cold War (Whitaker, 2000, July 23). While it did have to endure some challenges concerning funding during the 1990s, such challenges were minor when compared to what other state-sponsored international broadcasters (such as Radio Canada International, KOL Israel, and VOA for example) passed through. Additionally, in 1992, retiring World Service chief, John Tusa, explained that the World Service began to redefine its identity in the late 1980s "so that it would not have to find a new theory of, and justification for, broadcasting internationally once the great ideological overlay of the Cold War . . . had vanished" (Tusa, 1992, December 12, p. 19). Apparently those efforts toward redefinition succeeded, for by 1995, World Service leadership had a clear idea of their organization. For example, Raymond Li, who became the head of BBC World Service's Cantonese service in 1995, did not see the BBC World Service as "British media at all" (Wallen, 1995, January 2, p. 2). Instead, Li described BBC World Service as "a leading international broadcaster" (p. 2), much like CNN.

This is worth noting, for as the decade after the end of the Cold War progresses, the BBC World Service moved from being the voice of Great Britain to the world in opposition to more totalitarian governments and institutions. Instead, the World Service emerges as an international voice in competition with commercial international broadcasting emerging at the time, primarily from the U.S.

This chapter will review some of the BBC World Service's significant experiences during the 1990s in order to account for the issues and transformations which took place at the World Service during the decade following the end of the Cold War.

Post-Cold War BBC World Service

Enjoying the Glow of Success

As with the Voice of America, the World Service was no longer blocked from formerly Communist countries in Eastern Europe. Soviet jamming of the World Service came to an end in January, 1987, and it appeared that Iraq and China were the only countries left actively jamming the World Service (Tusa, 1992, September 27). Additionally, the World Service operated a 24 hour service for most parts of the world, certainly Europe and North America (*Passport*, 1991). In his retirement speech in 1992, World Service Director, John Tusa, offered some counsel for his successors. For the future of the World Service, the BBC organization as a whole needed to be independent of outside influences, and the World Service should remain under the Foreign office. Also, the World Service needed to be free to determine the languages in which it broadcast, as well as the total output for each language. And finally, efforts to improve reception around the world should continue, and the World Service should not be cut or reduced in light of national budgets (Tusa, 1992, December 12).

With the end of the Cold War, the World Service not only began broadcasting directly to Russian citizens from transmitters on Russian soil, it also began leasing transmitters from Russia in order to beam programming more directly into China (Tusa, 1992, September 27). The BBC World Service was beginning what Tusa called the "Marshall Plan of the Mind" (Tusa, 1992, September 27). Then at the end of the year, the BBC World Service marked its 60th anniversary (Donovan, 1992, November 8). On December 9, 1992, dignitaries from diplomats, cabinet members, to Prince Charles gathered to celebrate 60 years of the BBC World Service (Donovan, 1992, December 6). It was a time when the BBC World Service was described as the gold standard for

international broadcasting as it was also making plans for greater expansion, including growth in newer "dissemination vehicles" (*Passport*, 1992, p. 70).

Some of that expansion was, shall we say, very down to earth. According to David Powers, a BBC journalist stationed in Tokyo, the BBC was aware of the poor sound quality of BBC's broadcasts to Japan via shortwave, so the BBC began carrying its programs over cable to listeners in Japan. Originating in London, the broadcasts were sent via satellite to Tokyo, and then carried over the Osaka Yusen cable network to subscribers ("BBC broadcasts available on cable", 1992, January 20).

But the bigger news was more up in the air. The BBC announced plans to begin an international satellite television news service by the end of 1993 (Bravin, 1992, April 17). Sir Michael Checkland, then Director General of the BBC, explained that it was "inconceivable [to] think of the BBC doing only shortwave radio (internationally) in the year 2000" (Bravin, p. F1), and suggested that the new venture was only a natural technological development in international broadcasting. Differing from the traditional BBC model of relying on government subsidies and fees paid by receiver owners, local broadcasters around the world would pay the BBC to run the World Service Television programs. These local broadcasters could then re-coup their costs through licensing fees or by selling advertising (Bravin). Many saw this as a direct response to CNN's then recent successes during the Gulf War. One reporter explained that the only perceived challenge to CNN's place as world news leader was at the BBC World Service's television effort that was just emerging (Lippman & Tuohy, 1992, October 20). Others saw the BBC's efforts as a direct response to CNN's international success in satellite television news, as well as CNN's then recent inroads into British audiences (Bravin). Yet from one more account, it was reported that the World Service Television was begun in 1992 "to provide a global television service to make . . . CNN look ridiculous" (Popham, 1996, January 17, p. 2).

Over the next few years, the BBC World Service began to make subtle changes in its broadcasting, and it also enjoyed some modifications to its structure within the British government. In 1994, in following John Tusa's advice perhaps, the Foreign Office turned over control of foreign language broadcasts to the BBC World Service (Donovan, 1994, November 27). Such oversight by the World Service allowed it greater flexibility in determining programming. The World Service was then able to begin and terminate language services based on needs and events as they occurred (Donovan, 1994, November 27). As part of the change, World Service officials began to meet regularly with the Foreign Office to discuss issues concerning different regions of the world, as well as approaches to deal with them through broadcast programming (Donovan, 1994, November 27). These changes came as the World Service evolved from a shortwave station broadcasting from London to a complex operation involving satellite networks, increased re-broadcasting by overseas local stations, and competition among international news television broadcasting. Many of these changes also resulted from the arrival to the BBC of management who were more "entrepreneurially minded" (Donovan, 1994, November 27).

There were some reductions, as well as some expansions documented during this time frame. The French language service was cut in 1995 (Popham, 1996, January 17), but in 1994, the World Service established its first FM relay in Africa in the Ivory Coast (Richardson, 1997, July 26). In the U.S., Pittsburgh station WWCS-540 AM began carrying the World Service between 5 and 11 am daily in 1993 (George, 1993, December 24). Additionally, the World Service's audience in the U.S. had grown since the end of the Gulf war by more than 100,000. According to one article, this brought the total regular listeners in the U.S. to over a million, not including those who picked up World Service news via AM or FM (Marks, 1995, November 1).

The BBC World Service Also Has Money Woes and Critics

Unlike the Voice of America at this time, the World Service was not challenged with significant reductions, nor was it forced to share resources with surrogate stations. But money was getting tighter at the World Service. Even though the BBC was level-funded for 1995, it amounted to a 3 to 4 percent cut when inflation was considered (Marks, 1995, November 1). Perhaps as a result, the World Service started moving toward programming more heavily news laden, with a decrease in cultural and entertainment fare (*Passport*, 1994). Even so, the World Service was described as the yardstick against which all other broadcasters were compared—"Easily the most popular of all international broadcasters" (*Passport*, 1994, p. 48). But by 1995, *Passport's* opinion of the World Service was becoming critical. Broadcasting hours and frequencies to North America were reduced. For example, gone was broadcasting on 15,260 kHz (*Passport*, 1995) which had been a staple for day-time reception in North America of the World Service for decades. Additionally, the World Service began to "stream" its programming, meaning that it no longer provided a 24-hour service worldwide, and instead began to broadcast different programs to different areas at different times. No longer were all programs clearly available to most audiences (*Passport*, 1995). Such changes led one listener from Basel, Switzerland to complain six years later as follows: "I've been a listener [to the World Service] for 15 years and am daily becoming more frustrated and disgusted with them. It began in 1995 when they went to regional 'streams,' which meant that in Europe we don't get as much African and Asian news as we used to" (Elliot, 2001, June 30).

By 1996, money was becoming even more of an issue at the World Service. From 1993 to 1996, the World Service budget was effectively reduced by eight percent which amounted to about six million Pounds (Thynne, 1996, January 17). Under these conditions, a restructuring of BBC operations was proposed that would affect the World Service. Generally, many of the operations done by the various BBC

organizations—particularly news gathering and production—were to be consolidated ("A world rallies," 1996, August 30; Shane, 1996, August 18; Sinclair, 1996, August 19). Specifically, John Birt, Director General of BBC in 1996, proposed to restructure the BBC into a news division that would do all news gathering, and a production division that would do all program production. These efforts were driven by the desire to reduce or eliminate the redundancies in those operations that existed across the BBC organizations (Ikuma, 1996, August 4). As part of the changes, Birt would also move the World Service from Bush House in central London to the BBC Television Center out in one of London's suburbs (Ikuma). A media researcher, Eric Reguly, explained that the BBC cannot raise license fees, nor can it air commercials, let alone raise air time prices. "The best they can do is reduce redundancy" (Ikuma, p. 17). While such issues directly affected the larger BBC organization *in terms of funding*, the World Service which was funded through the Foreign Office was not directly affected (Thynne, 1996, January 17). Even so, it was still proposed to merge World Service's news gathering and processing operations with that of the larger BBC organization—something that has been raised often, but fought committedly by the World Service (Popham, 1996, January 17). Critics, who included Mikhail Gorbachev, Archbishop Desmond Tutu, and the Dalai Lama, opposed the restructuring, feeling that such a move would dilute and erode the independent nature and quality of BBC World Service programming (Shane, 1996, August 18).

To further complicate issues, The Foreign Office had suspended its three year funding agreement with the BBC World Service (Popham, 1996, January 17) resulting in a budgetary decline at the World Service of up to 22 million Pounds between 1996 and 1999. (Goodwin, 1996, January 17; Landale, 1996, January 17). Although there was no direct evidence to suggest as much, it appears as if the Foreign Office was putting a little leverage on the World Service as part of the larger BBC's bidding. In any case, to help calm some of the complaining about the cuts from the Foreign Office, Jeremy Rifkind,

then Foreign Secretary, announced that he would allow the World Service to use money raised from private sources to improve transmitters in Oman so that expected cuts in the World Service's programming could be off-set (Goodwin, 1996, January 17). The project referred to by Rifkind was the Private Finance Initiative (PFI), and involved the building of transmitters with private funds, selling them off, and then have them leased to the World Service (Kirkbride, 1996, January 17; Thynne). The Private Finance Initiative would make 30 million Pounds available to the World Service to offset the cuts in Foreign Office funding ("BBC World Service pledge stops revolt", 1996, January 17). Additionally, Rifkind's announcement to allow PFI money to be used to offset World Service cuts was apparently done to accommodate some (conservative) Tory MPs who had aligned with the (liberal) Labour party in its protests over the cuts to the World Service (White, 1996, January 17). It seems the Brits have their own forms of political posturing around their international broadcasting as well.

There were also critics and concerns about this move as well. Generally, most of the concerns were about the use of money coming from private funds for the BBC World Service (Goodwin, 1996, January 17). Sir Edward Heath, a former Prime Minister, felt that the BBC World Service was an entity that should remain completely clear and free of any private funding (Shrimpsley, 1996, January 17). Some worried about the possibility of the Private Finance Initiative to become "invaded by Rupert Murdoch or by controversial Arab funds" ("BBC World Service pledge stops revolt", 1996, January 17, p. 6), and thereby taint or ruin the BBC World Service's credibility. On top of all this, senior BBC executives doubted that the anticipated 30 million Pounds from the PFI would in reality become available to the World Service as the money from private sources was not at that time technically "in the bank" and were instead still speculations about what the PFI would generate (Shrimpsley).

By the end of the year, though, the World Service was still generating pleasing statistics. The listening audience was estimated at 133 million, and this excluded

listeners in China, Burma, and Afghanistan (Popham, 1996, January 17). English speakers constituted 35 million, with Hindi (24 million), Urdu (16.5 million), and Arabic (11 million) following (Popham). Even in Great Britain, 1.3 million listened to the World Service at least once each week (Donovan, 1996, January 28). Between 1991 and 1996, the World Service cut the French, Japanese, and Malay language services, but also started services in Ukrainian, Azeri, Uzbek, Albanian, and Macedonian in an effort to juggle the language needs against available resources (Donovan, 1996, January 28). Additionally, *Passport* did not let the confusions and changes of 1996 go unnoticed. According to its editors, by 1997, the BBC had suffered "a series of 'Major' budget cuts" (*Passport*, 1996, p. 52), and was continuing with its "streaming" broadcasts, in spite of listeners' complaints. Some felt that the U.K.'s crown jewel was being turned into a "zircon" (p. 52) under new management. But on a positive note, an opinion published in *The Independent* felt that CNN could not compare to the BBC for "breadth and depth of news coverage" ("TV solution", 1996, January 18, p. 14). This same opinion, however, also added that the medium of choice for the future of the World Service should be television through satellite and/or cable.

A Balancing Act

During the next two years, comments about the BBC World Service indicate some reductions in programming while also enjoying other successes and praise. Attempts to move the World Service into the mainstream BBC domestic services were turned away by the Foreign Office. According to one member of the Foreign Office, "British editorial interference and macho management styles have no place in good broadcasting" ("London is still calling", 1997, February 23, p. 9). Also, Labour's victory in 1997 led to funding increases in 1998 and afterwards, reminding any skeptics that there was still a need for the World Service after the Cold War (Whitaker, 2000, July 23). One reporter claimed that the World Service and CNN were the only international news rivals, but due to the World Service's extensive news bureaus, the World Service was deemed more impressive

(Fisher, 1998, October 26). Another reporter added that for American journalists living in the United Kingdom, BBC news was seen as better than any of the American offerings (Cullen, 1998, February 22). In Albania, where there were still no independent domestic broadcasting stations, 70 (yes, seventy) percent of the population were reported to tune into the World Service's three daily Albanian broadcasts (O'Sullivan, 1997, March 24). Some former British colonies also held strong audience support for the World Service. Twenty-six percent of the adult population in Pakistan listened regularly to BBC World Service then (Shane, 1996, August 18), and "even in Taleban-held Afghanistan [the World Service's] Pushtu service [was] listened to avidly . . . , a reminder [for these listeners] that beyond the iron grip of Islamic fundamentalists another world exists" ("London is still calling").

There were also some cuts, or rearrangements, of services during these two years. World Service Cantonese broadcasts were cut in half from one hour to 30 minutes a day in 1997, while Mandarin was not affected and stayed at 4.5 hours a day ("BBC axe falls", 1997, March 9). Also, the Finnish language service on shortwave was terminated at the World Service after 57 years of operation. However, World Service news and analysis was still being sold to domestic Finnish stations ("End of Finnish", 1997, December 11). Concerning the Cantonese service, it became the first language service (other than English it is assumed) to be carried over the internet ("BBC axe falls"). And in response to concerns regarding the security of local rebroadcasts on local AM and FM stations in the more unstable parts of the world, Barry Langridge, World Service Regional Head for Africa explained that "there is always the risk of being cut off just when our programmes are most needed by the audience, [especially] during wars or periods of civil or political turmoil." Therefore, shortwave will remain "the backbone" of the World Service's broadcasting efforts (Richardson, 1997, July 26, p. 6). (As will be seen in the next chapter, however, that "backbone" may have begun crack, so to speak.)

According to *Passport* (1997) by 1998, the World Service had undergone restructuring efforts that led to the privatization of some of its services. Many preferred entertainment programs had been cut, and were replaced by independently produced programs. But the World Service was still considered the leader in global news coverage and analysis (*Passport*, 1997). In 1998, *Passport's* comments were minimal, and mostly complimentary, for in spite of complaints about program changes at the World Service, it still continued to be seen as the leader among the international broadcasters (*Passport*, 1998).

A Time for More Radical Changes

The year 1999 marks what is a significant turning point in the evolution of the BBC World Service after the end of the Cold War. It is evident that during 1999, the World Service began to eliminate programming that had been standard during the Cold War. Additionally, aggressive moves into different and newer media while also moving away from shortwave began. Back in 1998, Foreign Office funding for the World Service increased by 44 million Pounds, but this money was to be specifically used in the development of internet and local FM stations as outlets for the English language service (Gibson, 1999, February 11). Regarding the internet, Arabic and Chinese multimedia websites were begun in October of 1999, with more being planned at that time (Robins, 2000, March 21). As one report explained, the development of multi-media language services was done under the direction of Mark Byford, World Service General Director (Gibson). According to Byford, "By 2002, when over 300 million people around the world will be connected to the internet—World Service will be there with unrivaled news and information" (Gibson, p. 6). Also, local FM outlets were being cultivated alongside efforts to develop internet broadcasting. The World Service's goal was to have its programming carried over FM stations in every world capital by 2004 (Gibson). While the change from shortwave to FM would only happen where FM frequencies are available and safe, "shortwave . . . [was] to be reduced" (Gibson, p. 6). This may have led one

reporter from the *Washington Post* to explain that the World Service's strategy was to find U.S. broadcasters willing to carry only "portions of the BBC World Service," which were also described as "a pain to find on shortwave" (Barbash, 1999, March 1, p. F19). At this point in time, World Service broadcasts on shortwave were decreasing, at least in the U.S.

As it turns out, shortwave broadcasts in other languages were cut as well. As part of a three-year plan, German language broadcasts—which had been in operation for 50 years—were cut completely, and the Hungarian and Russian services were reduced (Gibson, 1999, February 11). BBC research conducted at that time concluded that about 25 percent of Berlin's opinion leaders listened to the BBC World Service, but that 90 percent of them listened to the English broadcasts (Leonard, 1999, February 11). Another report indicated that BBC in-house research concluded that the BBC "should target the 'cosmopolitan audience of opinion formers and decision makers in the developed world primarily through the English service'" (Gibson, p. 6). As a result, two streams of English programming were then made available via satellite and the internet for listeners in Germany (Leonard).

Furthermore, the English language lessons services were cut—not only to Germany, but to many other regions receiving World Service broadcasts. Of the 43 languages in which the World Service broadcasts, just over half would no longer carry English language lessons (Gibson, 1999, February 12). These and other cuts also came under the direction of Mark Byford (Gibson). According to a spokesperson for Byford, "Our research shows that stand-alone broadcasts [of English lessons] on shortwave aren't effective anymore, so we're dropping those" (Gibson, p. 16). Needless to say, *Passport* did not let these changes go unnoticed in their annual publication. "Mediocre management and some inept programs have left serious dents in the reputation of the BBC World Service" (*Passport*, 1999, p.87). Much of these complaints had to do with programming, that in the effort to become more "cool" became mediocre replacements for previous entertainment shows. It seems that the editors at *Passport* felt that the World

Service had gone back to the zirconian mines. *Passport* was not alone in such thinking. Former Deputy Director of VOA, Alan Heil, feels that over the last 10 years there has been a noticeable change among prominent state-run international broadcasters from the traditional format of heavy news and information in favor of formats more appealing to younger people—in other words, more entertaining (Personal conversation [telephone interview], September 4, 2003).

For 2000 and 2001, it was pretty much "second verse, same as the first" as the World Service continued to expand other media options. The World Service received a boost in funding in 2000 so that by 2003 World Service budget would rise to 210 million Pounds (Whitaker, 2000, July 23), and then the World Service received another increase in funding beginning in 2001 which was scheduled to continue through 2003 (Snoddy, 2001, March 30). By this time, the World Service global audience was up to 151 million (Robins, 2000, March 21), and 153 million by 2001 with broadcasts in 43 languages ("Audience at record levels," 2001; Snoddy, 2001, March 30). Other data at that time had also shown drops in listeners in Russia and Pakistan, but these were offset by increases among African, Middle Eastern, and Chinese listeners ("Audience at record levels"; Snoddy, 2001, March 30). The big surprise was finding that 3 million Americans tuned in weekly (Snoddy, 2001, March 30). However, it is unclear how many listened via shortwave, through rebroadcasts on FM or AM, or through the internet. Concerning shortwave overall, one reporter indicated that more than half of the World Service's listeners across the globe access the service through shortwave (Whitaker). Another reporter was more specific by explaining that shortwave broadcasts account for 75 percent of listening to the BBC World Service, with internet and local FM stations accounting for the rest (Donovan, 2000, January 2).

As indicated, the World Service had moved aggressively toward these additional media outlets for its programming. Almost all new money received at the World Service went to improving transmitters targeting the larger audiences, and for expanding World

Service online operations (Whitaker, 2000, July 23). Along the way, the greatest growth in listeners took place through local AM and FM rebroadcasts. From 5 million listeners in 1999, there were 36 million local AM/FM listeners by 2000 (Robins, 2000, March 21). But growth in those accessing World Service online was not weak either. Online hits to the World Service rose 300 percent to 22 million page hits a month by 2000 (Robins) as the service carried all 43 language services 24 hours/day online (Sweeting, 2000, April 24). The website success was expected to add to the debate whether the BBC should accept government funding. Some expected the website to be able to bring in billions of pounds of advertising fees (Whitaker). Additionally, there was concern about where the World Service was headed, as some felt that it appeared to be moving too fast in the direction of becoming primarily an internet broadcaster. However, Byford explained that the World Service did not "want to move from being a radio broadcaster to being a net broadcaster." Instead, the World Service wanted "to be the best-known and most respected voice on international broadcasting" (Sweeting, p. 6).

At this time, the BBC World Service made one particular change in its operations that appears to have generated more international response than any other change to date. In the late spring of 2001, the BBC announced that it was cutting its World Service shortwave broadcasts to parts of the old Commonwealth, as well as the U.S. (O'Connor, 2001, June 13). According to one account, internet simulcasting was cited as the force behind much of the reductions and cutbacks (Colker, 2001, May 31). In response to requests by listeners in these areas to have the World Service simply reduce some of the frequencies targeting these parts of the old Commonwealth and the U.S., the BBC explained that as a result of reductions in frequencies that had been going on over the previous ten years, further reduction simply required the termination of frequencies ("Couldn't the number of frequencies," 2001). By July, 2001, official broadcasts for the U.S., Canada, Australia, and New Zealand were terminated (*Passport*, 2001). Because of

the tremendous response generated by listeners and the press in the affected areas and around the world, this particular issue is discussed in more detail in the next chapter.

It was also at this time that *Passport* unloaded its strongest complaints about the World Service to date. World Service programming had become less unique 10 years after the end of the Cold War. What used to be "individualistic excellence" had become an "imitator's banality" (*Passport*, 2000, p. 57). The previously singular World Service had become a collection of program streams beamed to diverse locations. It was hoped that a recent change in management would turn things around at the BBC, but apparently no changes were observed in 2001. *Passport's* (2001) comments deserve full quotation:

This was the station that was. In recent years the BBC World Service has managed not only to reduce audibility in the Western Hemisphere and Australasia, but also to dumb down its content. With so many shows now being produced on the cheap—independently, rather than in-house—several long-running favorites have lost their sparkle. It's not as though the money isn't there. The BBC as a whole has managed to toss over a hundred million pounds into Internet schemes that haven't gone anywhere, while broadcasting basics have fallen to pot. As Bush House insiders put it, the highest levels of BBC management see themselves as visionaries, rather than managers, emphasizing early adoption of emerging technologies. [This] has deprived the world of what has arguably been its most effective civilizing influence. (*Passport*, 2001, pp. 76-77)

While others touted the money given the World Service for online developments, the editors at *Passport* obviously found offense.

Conclusion

For better or for worse, the BBC World Service was not the same station it was 10 years before. Still, only in the United Kingdom does the government spend so much on international broadcasting, and then not meddle in the programming (Whitaker, 2000, July 23). Additionally, global respect for the World Service is still strong. In Afghanistan for example, BBC correspondents were effectively treated as government

ministers, as many in that county would not believe any story until confirmed over the World Service (Whitaker).

Nevertheless, there are still indications of BBC World Service management adopting a mindset more familiar to that of a commercialized operation. Described as more entrepreneurially minded (see p. 131), World Service management began to define the World Service against CNN while at the same time they also oversaw the move from the traditional, informative programming of the past to more entertaining programming. Some even described the programming as more pop culture oriented (see pp. 138-139). Also, as BBC online began to expand and become increasingly popular, there was talk of commercializing the website, and not long after that, listeners in the U.S., Canada, Australia, and New Zealand were directed to the increasingly commercialized internet for full World Service programming. Finally, even some of the the World Service's programming was being contracted out to independent producers.

Overall, the spirit of trade and profit became increasingly present at the BBC World Service. What had once defined itself as the most journalistically trusted international broadcaster was beginning to define itself against the leading, commercialized, international broadcasters—CNN. The station that was started as the voice for the British empire began the move toward becoming known simply as an international broadcaster (see p. 128). Instead of being the voice of a nation, the BBC World Service was becoming a competitor with commercial, international broadcasters.

By the end of the 1990s, the nature of international broadcasting had changed. For much of its history, international broadcasting had been a field of competition between nation states and political ideologies. Ten years after the end of the Cold War, the competition over audiences between state broadcasters and commercial broadcasters became apparent. What was once nation-against-nation, and then East-against-West, became nation-sponsored-broadcasting-against-commercial/entertainment-broadcasting. In the past, as nations attempted to undermine each other over the airwaves, the concept

of national sovereignty was still on solid footing as nations went head-to-head against each other. However, as nation states have begun to alter their international broadcasting efforts to contend for audiences in opposition to commercially funded corporations broadcasting internationally, it is difficult not to think that the nation states have discredited themselves.

Still, in many ways, it is hard not to see the BBC World Service as the ultimate victor after the Cold War. It began the 1990s as the most respected service among the international broadcasters, and its own identity was firmly established while Radio Canada was sitting on the chopping block, Radio Moscow was starting to shrivel up, and bitter debates were surrounding the Voice of America. The World Service, however, received assurances of level funding, and it started its own international television satellite news service. It even managed to gain freedom from the Foreign Office to choose which languages it broadcast for how long and to whom. And even though money became temporarily tight for a brief spell, by the end of the 1990s, the World Service was enjoying funding increases as it worked to expand new media outlets on local AM and FM stations around the world, as well as the internet. Among the "Big 3" from the Cold War, after ten years, the World Service was the most defined and most in control of its future. But that still did not prevent the stir that surfaced in the face of their announcement to cut shortwave broadcasts to much of North America and Australasia. In many ways, this move was the World Service's most recent and aggressive move to compete with the commercial broadcasters. The next chapter will review that event in more detail.

Chapter Seven

By the beginning of the 21st century, the BBC was riding highest in any competition concerning the popularity of international broadcasters. Not only was the BBC World Service the most highly regarded among the international broadcasters, it had also done an excellent job of reaching larger audiences by reaching into other media markets. For example, by 2001, the World Service was being carried on 2,000 FM and MW stations worldwide ("Audience at record levels," 2001). It appeared that BBC World Service audiences just grew and grew.

Then came the announcement that felt like a bolt from the blue. On June 30, 2001, BBC was scheduled to terminate its shortwave broadcasts to the U.S., Canada, and areas of the Pacific Rim (Colker, 2001, May 22; Cuprisin, 2001, May 23). Beginning on July 1, 2001, the World Service would no longer broadcast on shortwave to the U.S., Canada, Australia, New Zealand, and the Pacific Islands. Listeners were directed to the online service of BBC World Service, and any local rebroadcasts available in the affected areas ("BBC radio switches off", 2001, May 29). One reporter editorialized his comments with his announcement that "The BBC have seen fit to shut down the shortwave transmitters that broadcast the World Service to the United States, Canada, Australia and New Zealand, depriving millions of loyal listeners of the corporation's greatest single contribution to civilisation" (Henderson, 2001, May 28, p. 4). Frequencies terminated to North America were 5965, 5975, 6135, 6175, 9515, 9590, 11865, 15220, and 17840 kHz, while those terminated to Australasia were 5975, 9580, 9740, and 11955 kHz ("Which frequencies," 2001).

As noted, listeners in these areas were directed to other media outlets such as the local AM and FM rebroadcasts of the World Service, the internet, and other shortwave frequencies targeting areas near the affected regions. Concerning the shortwave frequencies, the following frequencies and times were used to transmit to the Caribbean, Central, and South America: 5975 kHz from 2300-0400 GMT, 9915 kHz from 0000 to

0300 GMT, 12095 kHz from 2100 to 0300 GMT, 15220 kHz from 1100 to 1400 GMT, and 17840 kHz from 1400 to 1700 GMT ("Is it no longer possible," 2001). Western North America was also encouraged to try frequencies targeting East Asia ("Is it no longer possible"). Australasia was directed to the following frequencies: 9740 kHz from 1100 to 1600 GMT, 9660 kHz from 2200 to 2300 GMT, 11955 kHz from 2200 to 2400 GMT, 12080 kHz from 2200 to 2300 GMT, and 15360 kHz from 0500 to 1030 kHz ("Is it no longer possible").

Immediately, these announcements were not well received by the fans of the BBC World Service, and shortwave listeners generally. One account described the shortwave listening community of North America as being "rocked by the news" (Elliot, 2001, May 12). The BBC's announcement to terminate these shortwave broadcasts also surprised other international broadcasting and news organizations, and there was an immediate reaction among shortwave listener and email news groups, with the vast majority of the responses negative (Vernon, 2001, July 18). For those who listen to shortwave in the U.S., BBC World Service was by far the most favored international station (Elliot, 2001, May 12). Even so, the BBC World Service followed through with its decision, and on July 1, 2001, terminated shortwave broadcasts to North America and Australasia, according to one opinion, "without ceremony" (Elliot, 2001, July 7).

This chapter will closely examine the BBC World Service's announcement to cancel shortwave broadcasts to the U.S., Canada, and Australasia. Within this chapter, the background leading up to the BBC's announcement will be discussed in an effort to better understand the reasoning, or at least the timing, of the cuts. Additionally, the reactions to the cuts will also be detailed in an effort to determine some of the effects these cuts have had on the shortwave community. Much of the discussion concerning the reactions will outline the many criticisms made against internet radio, local AM/FM rebroadcasts, and satellite radio broadcasting as replacements for BBC World Service programming over shortwave.

BBC's Cancellation

The BBC's Move To Digitize

Recalling the earlier discussion on the emergence of internet radio after 1995, it can also be said that this new medium for international broadcasting did not go unnoticed by the BBC. In fact, a review of BBC press releases and other organizational artifacts from the 1990s indicates not only an awareness of digital broadcasting over the internet as a viable medium to exploit, there was also a change in that organization's orientation toward older technologies. While shortwave is never named specifically, it is hard not to feel that this older medium is targeted by the changing perspective. For example, according to the BBC, "the world into which the BBC was born and which it helped form—and most specifically the industry in which it is one of the world leaders—is changing rapidly and dramatically" ("BBC declares its public purpose," 1998, December 3). In order for the BBC to succeed in the newer and changing world, it too would have to "develop, adapt, and change." John Birt, who was the Director General for the BBC through much of the 1990s, particularly the second half, described the BBC overall as going through change from a monolith to providing more fragmented and specialized programming in the face of growing broadcasting competition within the U.K. (Birt, 1996, August 23). The nature of the broadcasting world within which the BBC was created and developed had changed, and in Birt's opinion, was "ending forever." The *analog technology* that dominated 70 years of international broadcasting was to "give way" to the new digital technology. In Birt's own words, "The impact will be seismic."

Birt then called upon the BBC to develop digital production facilities, to digitize the archives, and to create a digital delivery system for viewers and listeners (Birt, 1996, August 23). A later press release echoed similar language as it described greater emphasis on employing digital means of transmission ("BBC declares its public purpose," 1998, December 3). Universal access was touted, "in both traditional and new media . . ." as BBC Online and BBC World—BBC's global television network—were to be

employed in the development of an even greater international audience ("BBC declares its public purpose"). It should be noted against these announcements, that Birt referred to the older analog technologies as "shackles of scarcity."

By the turn of the new century, BBC Online had made considerable progress. BBC Online was averaging 180 million page impressions each month, and the BBC committed to developing multimedia channels as outlets for the national and international programming ("BBC appoints new Media Director," 2000, July 28). Much of this success was credited to Nigel Chapman who had served as Director of BBC Online during this time. He was described as "being at the heart of new media development in the BBC," while also "a strong supporter for both quality radio and new media" ("Nigel Chapman appointed Deputy Director," 2000, July 28). For this success with BBC Online, Chapman was promoted into the World Service. According to the BBC press release, Nigel Chapman, who formerly worked as Director of BBC Online, was appointed as Deputy Director of BBC World Service in July of 2000 ("Nigel Chapman appointed Deputy Director," 2000, July 28).

The Announcement of Cuts

Within one year of Chapman's promotion, it was announced that the formal shortwave broadcasts from the BBC World Service to the U.S., Canada, Australia, and New Zealand would be terminated. Listeners in those areas were directed to audio streaming of the World Service through BBC Online, as well as to local AM and FM rebroadcasts of the BBC World Service (Colker, 2001, May 22). According to Mark Byford, the decision to make the shortwave cuts to Australia, New Zealand, Canada, and the U.S. were "the result of observed trends in how people in developed countries access their media" (O'Connor, 2001, June 13, p. 8). One article simply noted that internet audio streaming was the force behind this announcement to cut these areas from shortwave (Colker, 2001, May 31). As explained in another news article, there had been a clear decline in shortwave listening over the previous eight years (O'Connor). The exact

wording is unclear, but it appears that 88 percent of listeners in the regions targeted for the cuts were accessing the BBC World Service via FM. About 1.5 million were using the internet to access the World Service with only 300,000 using shortwave, according to BBC research (O'Connor).

It appears that the "shackles of scarcity" associated with the old world technologies of international broadcasting that the BBC had pioneered were being removed. The following is the announcement as carried over the World Service's website:

From 1 July 2001, the World Service will be focusing its delivery in English to North America, Australia, New Zealand, and the Pacific Islands on its numerous re-broadcasting partnerships on FM and MW, together with 24 hour online audio output. This decision has been made in response to the real revolution in the way people in developed markets access their media. We know that our listeners have migrated away from shortwave and are now accessing us on FM, via the internet and also in some areas on satellite, cable and on mobile devices. In the U.S. twice as many people listen to us on FM as on shortwave and one and a half million users access the BBC online each month. To meet the continuing demand for improvements in audibility from listeners around the world the BBC must explore the newest technologies. The money saved by closing shortwave transmissions to North America will go towards funding this investment in the future. You can hear the World Service online. The programmes are of good quality and you can listen to programmes on demand as well as streamed live. The site also gives additional background information to programmes, as well as our different language programmes. You can also listen to us through our many re-broadcasting partnerships on FM and MW. The BBC is still deeply committed to shortwave. We are currently investing large amounts of money on upgrading the shortwave facilities covering the Middle East, the Gulf, and Asia as in these areas the majority of our audiences still use shortwave as a primary way of accessing our programmes. You should still be able to hear your favorite programmes, but if you are having problems do not hesitate to call our special information line for help on how to hear us: +44 207 557 1270. We are committed at the World Service to harnessing new distribution partnerships to provide our listeners with the programmes they want, when they want. The changes to our transmission services reflect our commitment to our role in a rapidly changing modern media world. (Byford, 2001).

In response to this announcement, the BBC received a large volume of criticism (which will be addressed in detail in the next section). Though the BBC's responses to the criticisms were limited, and primarily repeated the original announcement generally, the BBC attempted to alleviate the concerns and complaints, while at the same time justifying its decision. For example, the BBC reminded listeners of some of their primary considerations in making its decision. Specifically, the World Service claimed that local rebroadcasts can adequately replace shortwave. Also, according to their research, more than three-fourths of World Service listening in the affected regions is done through local rebroadcasts. Therefore, only about 300,000 listeners would be affected by the cuts. Additionally, the BBC felt that the internet would be a viable replacement for shortwave, and that internet audio can be just as portable as shortwave. Finally, in the near future, satellite radio will be a viable replacement for shortwave ("Point-Counterpoint," 2001). Listeners were reminded that the World Service was not leaving North America. It was simply developing new delivery systems (Byford, 2001, July). Besides, Byford explained that the move to the internet for the North American and Australasian markets was done in response to listener behavior. According to Byford, most U.S. listeners access the World Service through FM anyway ("Transcript of BBC World Service," 2001, June 15). Gerald Timmins, head of the Americas Region of the BBC World Service, pointed out that there were 2.5 million FM listeners, 1.5 million internet listeners, and 1 million shortwave listeners at the time of the cuts (Vernon, 2001, July 18). Byford reported that three times as many people access the World Service through local radio than through shortwave, and 1.5 million access "us online each month" (Byford, 2001, July), while a BBC report that preceded the announcement of the cuts explained that online access grew "62 percent to 39.3 million monthly page impressions in March 2001" ("Audience at record levels," 2001). While this second report appears to refer to overall BBC hits, among the BBC reports of website hits or impressions, there has not been a clear indication of exactly what is being visited.

A number of explanations concerning the cuts were specifically directed toward shortwave listening. At the BBC World Service's website, it was explained that shortwave listeners were dropping off in developed countries "as listeners turn to the better sound qualities offered by the internet . . ." ("Why has the BBC," 2001). Greg Dyke, the new Director General of BBC, and therefore boss of World Service director Mark Byford, claimed that shortwave was used the least to access the World Service by listeners in North America. Also, funds saved as a result of the cuts were going to be used to develop FM outlets in developing parts of the world (Elliot, 2001, July 14). Finally, Gerald Timmins of the World Service's American section invited shortwave listeners to explore the other listening options, explaining that within one or two years they will be as attractive and functional as shortwave had been (Elliot, 2001, July 21). On top of that, the Sirius and XM satellite radio services were then completing development in the U.S. and would also be carrying the World Service starting sometime in 2001 (Byford, 2001, July; Vernon, 2001, July 18).

Some rumors surfaced about the World Service's emphasis on the internet. Due to the increasing costs associated with more listeners logging onto a website's audio streams, a rumor arose that the BBC would begin charging internet users to access its audio streams. The BBC discredited this rumor and explained that funds had been allocated to the World Service specifically to upgrade its services in anticipation of increased internet access (Elliot, 2001, July 21). Additionally, there were reports and editorials that expressed support for the BBC's move. One report explained that shortwave transmitters are expensive to operate, and in light of the growing use of computers in developed and developing countries, the move to the internet appeared to be a valid choice (Colker, 2001, May 22). In a *Dallas Morning News* editorial, Alan Goldstein expressed support for the World Service and claimed that the internet was a delivery system superior to shortwave. Goldstein also expected other broadcasters to rightfully follow the BBC's lead (Elliot, 2001, June 16). As it turns out, the BBC was following other's lead, as Swiss

Radio International had reduced its shortwave operations by 80 percent in favor of internet broadcasting (Colker, 2001, May 22). German, French, and Italian shortwave broadcasts had all been moved to the internet while English language broadcasts were all that was kept on the air by SRI.

Dan Forsling, a supporter of the BBC's decision, was also a broadcaster for station WOI out of Iowa State University in Ames, Iowa. He had this to say in support of the BBC:

Operating as we must, with a directional array and reduced power at night, we don't cover even an entire state. Nonetheless, I strongly suspect that more people hear the BBC [World Service from us] in a week than hear it in the entire state in two *months* on SW. When have I ever run across anyone but a fellow hobbyist who has listened to the BBC [World Service] on shortwave during the last ten years? Never. Not once. (Elliot, 2001, June 2).

Others simply felt that the BBC was justified, suggesting that even "nonprofit" operations are influenced by "profit and loss" concerns (Elliot, 2001, May 26).

Criticisms of the World Service's Proposed Cuts

To say that the BBC's announcement caught a lot of people's attention would be an understatement. Not only did the story occupy the press for months, many individuals the world over responded. The proposed cuts by the World Service were significant enough to place such news on the *Los Angeles Times* front page (Elliot, 2001, May 26). By June 12, 2001, the British press was beginning to take note of the World Service's decision, as well as the uproar resulting from it (Elliot, 2001, June 16), and into July, the BBC's cuts were still receiving attention, notably in the press (Elliot, 2001, July 7). Much of this was stirred by the fans and listeners of the BBC World Service. The change made by the BBC World Service was made in spite of a "tide of angry protests" ("Data can't ever get away," 2001, July 17), and according to BBC employees, "torrents of emails and letters [poured] into Bush House" ("Worries of declining British interests," 2001, July 3).

According to Bruce Winters, the program manager of Milwaukee radio station WUWM-FM 89.7, the regular audience of BBC World Service broadcasts is a very loyal group of listeners (Cuprisin, 2001, May 13). Gerald Timmins of the BBC did not expect the on-air announcements of the World Service's closures to be well received by World Service fans, whom he describes as being "enormously loyal" (Colker, 2001, May 22, p. A1). As Esmail Hozour, CEO of Grundig/Lextronix in California explained, "There is a romantic relationship between these listeners and the broadcasters. It would be a major mistake on the part of the BBC to alienate them by shutting down broadcasts to North America" (Vernon, 2001, July 18). And even the British Consulate in Atlanta, Georgia reported more phone calls about the World Service's cancellation than any other issue on record (Elliot, 2001, June 2).

The fans and listeners were not alone. Many of the BBC staff were in agreement with the offended listeners. One said, "It's just another stupid change by a stupid management" ("Our world is coming to an end," 2001, June 14). A senior journalist added, "It's completely mad. We've gone to a lot of trouble to build up an audience and they're ready to throw it away" ("Our world is coming to an end"). Much of the BBC staff expressed their desire for the World Service not to follow through on the proposed cuts. ("Worries of declining British interests," 2001, July 3). John Tusa, former Managing Director of the World Service from 1986 to 1992, also criticized the move to cut the broadcasts. He felt that the World Service's hopes about listeners moving over to the internet were "excessively hopeful" ("Coalition calls for moratorium," 2001, June 28). Elsewhere, Tusa argued that a person only needs to spend 48 hours in the U.S. to become aware of the lack of European coverage provided. He further felt that the quality and quantity of online access even in developed countries was such that a "crossover point" marking a successful move from one medium to the next was not at hand (Elliot, 2001, June 30). Graham Mytton, former director of audience research at the World Service, felt that "this decision . . . is very regrettable," and "if I had still been at the BBC I would have

opposed this move vehemently. I believe it is misguided and wrong" ("Comments posted to savebbc.org," 2001). On top of all this, concerns were also manifested by the Foreign and Commonwealth Office from fears that the cuts would be harmful to their efforts to demonstrate a strong presence and interest in the South Pacific ("Worries of declining British interests," 2001, July 3).

Additionally, the experts and writers in the area of international broadcasting offered their opinions as well. Larry Magne, editor of *Passport to WorldBand Radio*, said, "a new silence has fallen over the airwaves," which marks the end of a service enjoyed by "millions from Ed Murrow to David Letterman" ("Larry Magne's commentary," 2001). From Magne's perspective, such decisions to limit or eliminate shortwave broadcasts illustrate basic ignorance of the foreign policy impact of state-sponsored broadcasting over shortwave ("Larry Magne's commentary"). And finally, Kim Elliot, whose work is cited elsewhere in this project and who describes himself as an active listener of the World Service for 36 years, longer than the BBC has been calling its international arm the World Service (Elliot, 2001, May 12), had his own thoughts to add to the mix. As the host of *Communication World*, the Voice of America's weekly media show that covers issues and changes in the international broadcasting community, he was also privy to many listeners' responses to the cuts. He felt that the BBC was "forfeiting its unique advantage in a media-saturated world" by "eliminating the convenience of listening on a portable shortwave radio" ("Portable radio", 2001, May 31, p. 27).

A handful of listeners joined together, and created a website publicizing their dismay and their criticisms of the proposed cuts. The "Save the BBC World Service" website was created the week of June 2, 2001 (Elliot, 2001, June 9), and it called upon listeners to write to British Members of Parliament criticizing World Service's cuts in shortwave broadcasts ("Data can't ever get away," 2001, July 17). This coalition of listeners accused the BBC of using "sloppy statistical comparisons," and "selective . . . facts" that surfaced in repeatedly "discredited assertions" and called for a reversal of the

proposed cuts ("Coalition calls for moratorium," 2001, June 28). While the coalition to prevent the World Service cuts acknowledged the added value of additional media outlets for the World Service, they also pointed out that none of the other media outlets, alone or together, provide the extent, affordability, and portability of shortwave radio ("BBC to cut off 1.2 million," 2001, June 6). The remainder, and bulk, of this section covering the criticisms of the cuts recounts them as they pertain to the primary reasons the World Service had given for making the cuts. Specifically, these criticisms, or rebuttals, address the BBC's claims that it was losing shortwave listeners in the affected areas, and that the internet, local rebroadcasts, and satellite radio were viable replacements for shortwave.

Was the World Service Losing Shortwave Listeners?

Identifying shortwave listeners for accurate counts is difficult, if not nearly impossible at times (Browne, 1982). It is certainly easier to identify how many people are visiting a website. While the BBC claimed that there were only 300,000 shortwave listeners in the U.S., those who opposed the cuts pointed out that there were close to one million who listened to the World Service via shortwave and local radio combined ("Point-Counterpoint," 2001), and it is therefore possible that just over one million listeners in the U.S. were affected by the proposed cuts.

But sales of shortwave radios offered additional indications of a potentially larger audience of shortwave listeners than the BBC had been reporting. As one reporter pointed out, shortwave listening and shortwave radio sales had been on the increase prior to the BBC's decision (Vernon, 2001, July 18). Larry Magne echoed this claim when he argued that there had been increased sales in shortwave radios in the U.S., with radio manufactures reporting double-digit growth in sales, including one million portables sold by Grundig each year ("Larry Magne's commentary," 2001). Comments from officials at Grundig and Sony supported these claims. Esmail Hozour, the chief executive officer of Grundig/Lextronix in California reported that annual sales of shortwave receivers in the U.S. and Canada were well beyond 1 million in 2001. Since 1991, sales have grown

every year, in some cases at double-digit rates, while ninety-five percent of Grundig's customers were new to shortwave listening (Vernon, 2001, July 18). According to the owner of one radio specialty store, shortwave radio sales have been on the rise since the end of the Cold War, with Grundig leading the efforts with some rather aggressive advertising campaigns (F. Osterman; President/Owner of Universal Radio, Inc.; personal conversation [telephone interview]; September 19, 2003). Finally, according to Paul Sabo, marketing manager of shortwave products for Sony of North America, Sony had experienced 30 percent growth in shortwave sales between 1999 and 2001, with the most recent year showing the strongest growth (Vernon, 2001, July 18).

Kim Elliot chose to look more closely at the BBC's numbers. According to his analysis, the 1.5 million online listeners of the World Service in the U.S., as claimed by the BBC actually represents "those who access any BBC website, . . . text or audio, per month . . ." (Elliot, 2001, June 16). Included in this number are those who also listen to the World Service on shortwave. By using the figures and percentages used by BBC officials to justify their decision, Elliot concluded that there were around 430,000 listeners who used shortwave exclusively in the U.S.—a somewhat larger figure than the 300,000 claimed by the BBC. Also, Elliot pointed out that the BBC had not been clear as to the frequency of access by any of the media—FM, AM, internet, or shortwave. For example, did the claimed 300,000 shortwave listeners tune in the World Service daily, weekly, monthly, etc., and how often were the AM/FM or internet listeners tuning in or accessing the World Service? The BBC choose not to respond to any of Elliot's requests for confirmation or clarification of his figuring, or provide any clarifications to their calculations generally (Elliot, 2001, June 16).

Criticisms of Internet Broadcasting

As part of the shortwave radio show, *Communication World* carried over the Voice of America, most of the emails Elliot received in response to the BBC's decision were negative, and most who preferred to listen to the World Service via shortwave also

explained that they did not have access to internet audio (Elliot, 2001, May 26). Elliot later added that using the internet appeared to be problematic, at least at the time of World Service's cancellations. Access needed to improve as only six percent of the world's population had access to the internet then. Also, within developed countries, about 30 percent of those who could go online don't, and many around the world must pay for access by the minute making long-term listening expensive for the listeners (Elliot, 2001, June 23). Additionally, the point that Web radio listeners and shortwave radio listeners occupy different demographics, and manifest different listening habits (Vernon, 2001, July 18) leaves one wondering if the BBC was really thinking this decision through.

The Save the BBC World Service coalition drew from a then recent report by Arbitron on broadband usage to criticize the move to the internet. Arbitron concluded that "audio and video through the computer have not caught on and 'are not yet generating habitual use'" ("Internet not replacing radio," 2001, June 28). The study also concluded that most broadband access was through work (66 percent of regular broadband users), and most who use streaming do not even use it for audio streaming (63 percent). Finally, most of the heavy internet users felt that the audio quality of traditional radio was still superior to the audio quality of internet radio ("Internet not replacing radio"). Based on this comment in Arbitron's report, the coalition to prevent the World Service from terminating its shortwave services to North America and Australasia argued that the BBC's logic of moving to online broadcasts for these locations was unfounded.

Others argued that the internet was not a viable replacement for shortwave radio. Three years before the this issue erupted, Larry Magne of *Passport to World Band Radio* made an interesting point. Drawing from the histories of radio and television, Magne noted that consumers clearly opted for more portable radio and less tethered (to outlets) radio, while portable and tethered TV have done just the opposite. Therefore, he argued that tethered web radio will languish as console radio/phonograph/TV appliances did in

the mid 1950s. "So while Web radio makes engineering sense and has a certain novel appeal, it does not yet fit into the established pattern of human behavior" (Magne, 1998, p. 137).

A number of comments made at the time of the BBC's cancellation appear to validate Magne's conclusion. Some complained of unsatisfactory internet audio due to interruptions and rebuffering (Elliot, 2001, May 26). A listener of *Communication World*, Daniel Sloan of Dallas, Texas explained how he often had to return to his room where his PC was located in order to re-establish connections, or sort out other interruptions to his audio feeds. He was "mystified that the BBC [was] ditching a reliable way to get their message to people and relying on flawed and untested means to deliver their programming" (Elliot, 2001, June 16). In writing to the *Los Angeles Times*, Thomas Risher felt it was a mistake for the BBC to cancel its shortwave service to the U.S. He explained that he found his radio more portable and convenient to use than his computer ("BBC misses the mark", 2001, May 27). In a letter to the editor of *London's Daily Telegraph*, Elliot noted that he needs the shortwave broadcasts in order to have access to the full range of World Service offerings in a manner that does not tie him to his computer, nor tie up his telephone line ("Portable radio", 2001, May 31).

Other comments dealt with the so-called portable devices that were going to make internet listening just like listening to a portable radio. As Elliot explained on his show right after the BBC's announcement, some of the devices that are supposed to bring portability to internet radio have been slow in materializing, or have been canceled in some cases (Elliot, 2001, May 12). Two months later, Elliot added that the development of devices capable of making internet listening more like traditional radio listening was slow, and their costs rather expensive. One device being developed by Sony was expected to cost upwards of \$500, and would require a \$22 monthly subscription to Earthlink, an internet service provider. A product by Philips would require a broadband connection, and in all cases, it appeared that RealAudio would not be available in

portable devices (Elliot, 2001, July 14). However, as was noted in chapter 3, *Passport to WorldBand Radio—2001* began to review such devices used to broadcast internet audio to radios throughout the house on a locally unused radio frequency. However, *Passport to WorldBand Radio—2002* did not include any reviews for such products. The BBC even recommended that an MP3 player be used to download World Service broadcasts in order to listen to them with the portability of a Walkman style radio/tape player, but this would not provide the type of on-demand listening portability that a handheld shortwave receiver offers ("Point-Counterpoint," 2001). Such conditions left Derrell Neft feeling that the BBC was not only abandoning its listeners, but that those at the BBC who were instrumental in the cancellation decision were "living in a high-tech dream world" ("BBC misses the mark", 2001, May 27, p. M4.)

Additional comments pointed out how the technical limitation inherent in internet broadcasting made it inferior to traditional shortwave broadcasting. Due to bandwidth restraints, the number of listeners online is extremely limited—to tens of thousands if enough money and hardware are employed versus the unlimited number who can tune into shortwave once it is broadcast. As some opponents complained, "Simply put, the internet is not radio" ("BBC to cut off 1.2 million," 2001, June 6). For the broadcasters, expense increases as they try to accommodate more listeners online. Ten thousand listeners can begin to make the cost excessive. If the BBC World Service, and other international broadcasters, intend to use the internet as the future replacement for shortwave, and if such a system incurs increasing costs as more bandwidth is made available for more listeners to a website, Elliot (2001, June 23) found it difficult to see the logic of going to the internet as a cost savings measure for the future. Other critics claimed that the BBC World Service's website could only accommodate 20,000 listeners at one time ("Our world is coming to an end," 2001, June 14), and that internet audio suffers too much from network congestion that can limit the number of people able to access the programming ("Point-Counterpoint," 2001). In addition to technical

limitations, there were legal considerations (e.g. copyright laws) preventing many sporting events covered over shortwave from being carried over the internet. The World Cup was one example noted ("Our world is coming to an end").

Finally, even getting some of the internet audio software to work proved problematic for some, as did the thought of having one's computer monitored by outside entities. One shortwave listener who tried to use BBC's recommended audio software (Audiobasket) complained as follows:

Congratulations, BBC Half-a-World Service. You've taken a motivated listener who just happens to be a professional webmaster who has been building websites since 1993 and on the on the net since 1987, and who has a broadband internet connection and fast computer at home, and turned him into a raging lunatic. (Elliot, 2001, May 19)

Also, the Save the BBC World Service coalition pointed out that accessing radio broadcasts via the internet leaves traces for others (mainly overbearing governments) to follow, and thereby determine a person's online interests ("Data can't ever get away," 2001, July 17). Elliot (2001, May 12) summed up a number of feelings when he said, "there's something just not natural about listening to radio via the internet. Perhaps it is the audio compression that is subconsciously fatiguing. Radio is supposed to be the most intimate of the mass media, but listening to radio parked in front of a personal computer is not a cozy experience."

Criticisms of Local Broadcasting

The BBC's recommendation that listeners move to local AM/FM rebroadcasts also caused alarm for some. As explained in one report, local rebroadcasts of the World Service provide only a small portion of the World Service's offerings, and listening times were inconvenient (Vernon, 2001, July 18). Numerous listeners in Australia complained that the coverage provided by the World Service through Australian AM and FM stations was paltry when compared to the reach of shortwave (Elliot, 2001, May 26). One

reporter noted that although many international shortwave broadcasters have also been getting their programs on local AM and FM stations around the world, the amount of programming, and the geographical coverage is lacking when compared to shortwave (Colker, 2001, May 22). In practice and effect, the reach of these local stations leaves gaps in the World Service's coverage in the areas affected by the cut ("BBC to cut off 1.2 million," 2001, June 6). According to one Canadian shortwave listener, the World Service was not carried on six (almost half) of the 15 stations that BBC claimed were carrying the World Service (Elliot, 2001, May 26). And finally, one hundred of the 220 FM stations in the U.S. which carried the BBC World Service at the time of the cuts did so between midnight and six am. Many others rebroadcast only one hour of World Service programming each day, and some carry only 5 minutes of news bulletins ("Our world is coming to an end," 2001, June 14).

Kim Elliot may have caught the BBC in another numbers act. Earlier the BBC reported on their website that the ratio of FM listeners to shortwave listeners was three to one. After Elliot challenged the BBC's use of numbers, the website was revised to indicate that the ratio was in fact two to one (Elliot, 2001, June 30). He also argued that rebroadcasting World Service programs over local stations "brings the larger audience numbers that look good in the annual report" (Elliot, 2001, May 12), but that such listening is not representative of the original audience of shortwave listeners that assisted in establishing the BBC World Service as the premier international broadcaster. As Graham Mytton explained, those who listen to the World Service directly through shortwave were more of an audience value than those who picked up the tidbits often coming through local AM and FM station ("Coalition calls for moratorium," 2001, June 28). After it was noted on VOA's *Communication World* that the World Service was not being carried on all the AM and FM stations it was claiming to be re-broadcast over in the U.S. and Canada, the BBC quickly revised its website listing of stations carrying the World Service to more accurately represent its coverage. By doing so, the BBC called

into question any claims previously made by the World Service concerning how many access the World Service through local AM and FM stations (Elliot, 2001, June 9).

To summarize, local rebroadcasts would not contain the bulk, nor the variety, of BBC World Service programming. They usually consist of half-hour or hour news programs from the BBC World Service, the timing of the re-broadcasts often do not correspond to when they are broadcast from the BBC World Service, and often these are broadcast during late night and early morning hours between midnight and five am (Colker, 2001, May 22). Devoid of the music and arts programming common to the World Service's shortwave programming, rebroadcasts on local AM and FM stations left dedicated BBC fans feeling cut off.

Criticisms of Satellite Radio

As international broadcasting over satellite radio systems was still in its infancy, and as the BBC only made passing references directing listeners to such outlets as they became available in the future, the comments opposing satellite radio broadcasting as a replacement for shortwave broadcasting were few. But they were present nonetheless. Overall, there was a general feeling that the success of subscription radio (as is the case with satellite radio) was suspect (Vernon, 2001, July 18). To begin with, reception of satellite radio would not be free, as is the case with shortwave. Satellite radio would cost around \$10 each month (Elliot, 2001, May 12). Furthermore, at the time, of the two satellite radio services beginning operations in the U.S., one was being developed exclusively for use in automobiles. The Sirius satellite radio system was not planning a home satellite radio. Only XM was, and its radio would be confined to rooms with an unobstructed view of the southern sky (Elliot, 2001, May 12). And as a reminder that even satellite broadcasting does not have the sense of international broadcasting freedom found in shortwave, a Dr. Ari Solon from Brazil noted how the audio channel he accessed from his Sky satellite service did not carry the VOA programming he was familiar with, and preferred, on shortwave (Elliot, 2001, July 21). The coalition to save the BBC World

Service summed up the overall feelings about satellite broadcasts replacing shortwave reception of the World Service. According to them, Sirius and XM Radio were not fully functional at the time of the cut, and the receivers were primarily being installed in cars. There were no portable satellite receivers designed to receive Sirius or XM Radio, and both systems would require a monthly subscription fee between \$10 and \$15. This final point was apparently not known to Mark Byford of BBC World Service leading critics to question the informed nature of the decision, as well as its rationality.

Other Reactions and Response

Beyond the affected fans and experts of World Service broadcasts over shortwave, there were still others who reacted to the announced cuts. In response to the BBC's announcement to cut some of its shortwave services, other international shortwave broadcasters quickly announced their intentions *not* to follow the BBC's lead. Both Radio Netherlands and Germany's Deutsche Welle said they would not engage in similar cuts, even though both operate active and broad internet radio programming (Colker, 2001, May 22). Kim Elliot (2001, June 2) noted that Radio Netherland International began to openly express its intents to remain committed to shortwave. Eventually, some of the frequencies vacated by the World Service were picked up by Radio Netherland as "a publicity campaign . . . designed to recognize and support the millions of shortwave radio owners in North America who still believe in direct contact with Europe from across the Atlantic" (Elliot, 2001, June 30). Rajiv Thind, a listener in India reported that the World Service was heard on many frequencies throughout the day in India, and suggested that the BBC reduce some of that shortwave activity in order to keep sending to the U.S. (Elliot, 2001, June 2). Navin Gupta, another listener in India, felt "fortunate to be in the developing world, where BBC World Service [would] still be on shortwave for a long time to come" (Elliot, 2001, May 19). And from Malibu, California, Leslie Moss simply described the BBC's decision as "incomprehensible," and suggested that the BBC international service should now be called the Partial World Service ("Shrinking service",

2001, June 4). One listener managed to dig up an obscure quotation attributed to the BBC's Chief Accountant in 1929 that appeared to closely resemble some of the BBC's reasoning for cuts in 2001. It read, "I do not feel that we are justified in continuing a fairly expensive service for a few scattered individuals over the world" ("Data can't ever get away," 2001, July 17). The listener who provided the quotation then encouraged those involved and affected to imagine what might have become of the BBC if such reasoning was followed back in 1929.

None of this was wasted on the British Parliament either. Even though their efforts were not necessarily binding, or influential, they joined the discussion as well. Austin Mitchell, a Labour member of Parliament introduced an early day motion criticizing the BBC decision and asking them to reconsider. Soon after, another Labour party member, Derek Wyatt, introduced another early day motion voicing support for the BBC's decision. Early day motion garner signatures of support, but are not voted on, rarely become law, and are mainly used to voice opinions on an issue (Elliot, 2001, June 30). The wording of Mr. Mitchell's motion was carried over the Save the BBC World Service website. It is lightly edited as follows:

That this house is strongly concerned that well over a million devoted listeners to BBC World Service will be abandoned on 1st July by the BBC's ill considered proposal to drop its short wave service to North America, and the Pacific, . . . urges the BBC urgently to reconsider its decision and the Foreign and Commonwealth Office to persuade it not to do so . . . [N]otes that the service cannot be adequately replaced by the BBC website's very limited capacity . . . [C]ompelling arguments against the decision [have been] developed on the website www.savebbc.org, . . . effectively demolishes the BBC's entire case for the penny pinching folly of abandoning a devoted audience. ("Early Day Motion," 2001, June 7)

By July 7, the early motion criticizing the BBC had received 50 supporting votes, while the other motion was up to 35 (Elliot, 2001, July 7).

Following Through

As time wore on, and the two months between the announcement of the cuts and the actual cancellation dragged on, there were some responses by the BBC, accompanied by counter responses by the opponents to the cuts. Gerald Timmins of the BBC dismissed increases in shortwave radio sales to international travelers wishing to "stay in touch" (Vernon, 2001, July 18). It is assumed that the international travelers were staying in touch with home, but Timmins did not specify. Mark Byford of the World Service was not affected by the complaints from "what the BBC likes to portray as a band of shortwave hobbyists" ("Our world is coming to an end," 2001, June 14). As best that can be discerned from the data, Byford's responses rarely, if ever, addressed the specific criticisms leveled against the World Service, but instead appeared to repeat the often heard mantra about changes in listening patterns in the affected areas and managing costs (e.g., see Byford, 2001, July). John Figliozi, who was active with the Save BBC World Service website, called into question the label of "hobbyists" by the BBC, noting that sales of portable radios excel only in major program listening and not the reception of faint signals. Therefore, this strongly suggested a large, and growing market of shortwave listeners who were not necessarily hobbyists, but instead were program listeners tuning in major broadcasters, such as the BBC World Service (Figliozi, 2001, July).

The conclusion of the coalition was that the BBC's decision was premature and not based on legitimate data ("Internet not replacing radio," 2001, June 28). In Kim Elliot's opinion, the BBC's changes appeared to satisfy "the needs of BBC more than the needs of the BBC audience in the United States" (Elliot, 2001, May 12). And Ralph Brandi, webmaster of the Save BBC World Service website felt that the World Service's move was more oriented toward demonstrating new technology vision/savvy, with less of an eye toward actual fiscal concerns ("Transcript of BBC World Service," 2001, June 15). As a slight side note, Hungarian, Bulgarian, and Slovakian shortwave broadcasts were dropped by the World Service and moved online as well (Elliot, 2001, May 12).

The last shortwave transmission specifically targeting the U.S. and Canada took place on 6175 kHz from 0000-0700 GMT on July 1, 2001, while Australasia's final shortwave broadcast took place on 11955 from 0500-1100 GMT on June 30, 2001 ("Which frequencies," 2001). Radio Canada international began to use some of the World Service's frequencies that were originally scheduled to be abandoned (Elliot, 2001, July 21), and after successful use of the frequencies vacated by the BBC World Service, Radio Netherland expanded its North American broadcasts from 1030 to 1225 UTC on 5965, and from 1430 to 1625 UTC on 15220. The frequencies previously used by the World Service and temporarily used by Radio Netherland were returned "to nature after July 15th [2001]" (Elliot, 2001, July 14), or to anyone interested in them. And in what appears to be either an ironic or sympathetic gesture, the World Service began to beam to Mexico from 0000 to 0100 UTC on 11810 and from 0100 to 0500 on 11835—in English (Elliot, 2001, June 30). In *Passport's* words, "go figure" (*Passport*, 2001, p. 77).

What was once 24 hour coverage on numerous frequencies is now available scattered throughout the day on limited frequencies that may or may not come in clearly ("Is it no longer possible," 2001). To borrow directly from Figliozzi (2001, July), "There may come indeed a day when some technology or mix of technologies will provide what shortwave currently provides and provide it better. But that day did not come on July 1, [2001]."

Later

In commenting on the cuts two years later, the opinions among those involved in the international broadcasting industry vary across the spectrum, as has been the case with so many other issues in international broadcasting. Some of those working for private shortwave broadcasters found merit in the BBC's decision. Damien Centgraff of WSHB was not surprised by the World Service's cuts, suspecting that there were in fact more listeners online (D. Centgraff II, WSHB Chief Engineer, personal correspondence [email], August 18, 2003). George McClintock of WWCR is sympathetic to both side,

but can particularly appreciate and understand the World Service's need to move funding from one medium to another in the ongoing challenge to decide how to divide the money among increasingly different media outlets (personal communication [telephone interview], August 19, 2003). Those at Vatican Radio had also made similar cuts, feeling that shortwave was not popular enough in many of the English-speaking countries (S. Hults; Director of Communication, EWTN Global Catholic Network; personal correspondence [email]; September 15, 2003).

Some of the other international broadcasters also came down on the side of the BBC. According to Deutsche Welle staff, they too have terminated much of their shortwave broadcasts to the North American, Australian, and New Zealand markets and have made efforts toward planting rebroadcasts on local affiliates in the affected regions (Personal correspondence from the staff at Deutsche Welle [email]; August 29, 2003). And from Japan, there came not only understanding of the BBC's decision, but also an explanation that Radio Japan may also begin to examine the possibility of making such a decision in the future (S. Sato; Senior Associate Director for International Broadcasting, Radio Japan; personal correspondence [email]; August 29, 2003).

Finally, from those outside the realm of actual broadcasting, there was also support. David Gibson of Intermedia Research which specializes in audience research for international broadcasters felt that the World Service's move appeared economically justified in light of the small shortwave audience affected by the cuts (D. Gibson, Intermedia Research Specialist, personal conversation [telephone interview], August 20, 2003). Fred Osterman of Universal Radio felt the decisions were unfortunate, but probably appropriate regarding audiences in developed countries (F. Osterman, President of Universal Radio, Inc.; personal conversation [telephone interview]; September 19, 2003). From J. Fred Riley, Manager of Engineering Marketing at IDT-Continental, manufacturer of shortwave broadcasting equipment, came the comment that the BBC's move was really "a non-event" due to the programming available over the internet (J.

Riley; Manager of Engineering Marketing at IDT-Continental; personal correspondence [email]; October 1, 2003). And according to Alan Heil, former VOA Deputy Director, the World Service's decision to cancel shortwave and move to the internet was a "solid decision" (A. Heil; former Deputy Director of VOA; personal conversation [telephone interview]; September 4, 2003).

However, as has been the case with the opinions concerning shortwave broadcasting, there are other, diverging views. Larry Magne is still open in his criticism of the World Service's decision. It was an event that began when one "of the director's favored staff suggested it, the director approved it almost casually, and in hindsight both turned out to be misinformed and uninformed" (L. Magne, Publisher for International Broadcasting Services, Ltd. [*Passport to WorldBand Radio*], personal correspondence [email], August 20, 2003). Magne adds that the English language service being sent to Mexico over shortwave is actually a "de facto shortwave service going to North America" that is part of face saving efforts by the World Service. Don McLaughlin from High Adventure Gospel Communication Ministries feels that the World Service's cuts will actually be short-lived, and that as other, newer technologies for international communication are implemented, there will be a return to shortwave (D. McLaughlin, Director of Outreach for High Adventure Gospel Communication Ministries, personal correspondence, August 14, 2003). Kim Elliot feels that the move was premature, as the internet is still not a meaningful substitute for portable shortwave listening (K.A. Elliot; audience research analyst in the Office of Research, U.S. International Broadcasting Bureau; personal correspondence [email]; September 8, 2003). One of the editors at *Passport* still feels that the BBC's decision was "very silly" (C. Tyson, editor at *Passport to WorldBand Radio*; personal correspondence [email]; September 11, 2003), while Graham Mytton not only called the move a "daft thing" to do, he was certain that "everyone in the BBC" felt the same way (G. Mytton; Manager of the BBC World

Service's global audience research programme from 1982 until 1996; personal correspondence [email]; September 18, 2003).

Conclusion

By way of summary, internet radio broadcasting began to emerge in the 1990s as potentially another medium for international broadcasting. Not only did it prove to be a sufficiently viable broadcasting medium by 1996, a number of international shortwave broadcasters, particularly the BBC World Service, began to take notice, and eventually began broadcasting over it. Some simply employed internet broadcasting to augment their shortwave broadcasts. In the World Service's case, however, a strong vocal opposition was made as it announced the termination of shortwave broadcasts to the U.S., Canada, and Australasia, and that such shortwave broadcasts would be replaced with internet broadcasts, local AM/FM rebroadcasts of the World Service, and future satellite radio broadcasts. Naturally, due to the high measure of loyalty that the World Service generates among its listeners, these announcements were ill received by many in the shortwave community. Even so, by July 1, 2001, BBC officials followed through and shortwave broadcasts to the U.S., Canada, and Australasia were terminated.

As for the listeners, as time passed however, it became apparent that the cuts did not affect the shortwave audience as deeply as anticipated in North America, and probably in Australasia as well. An abundance of email responses were generated at the "DX Listening Digest," run and edited by Glenn Hauser for the magazine, *DX Listening*. While posts are made to the forum concerning the wide range of issues concerning shortwave across the globe, the ones concerning the World Service's cancellations were numerous. The bulk of the comments were posted during the summer of 2001, and by the middle of fall and winter, the "conversation" was dying down (Hauser, 2001). On July 2, 2001, a number of posts suggested that the vocalized concerns may have been a bit overkill as the BBC World Service appeared to be quite audible in much of the U.S. on a number of frequencies not directly targeting the U.S. In New York, John Figlioizzi

accessed a number of frequencies that were targeting South America, Europe, and the Middle East through the evening of July 2, 2001. Glenn Hauser felt the BBC World Service could "still be heard, well, and easily." Still, a number complained that they felt mishandled, not appreciated, or even insulted by the BBC's actions and handling of the initial responses and complaints (Hauser). By December, 2001, John Figliozi, who had been active in the SaveBBC website campaign, felt that "the reality [had] turned out to be far less dire than the initial expectation" (Hauser). Through the frequencies still being used to carry World Service programming to the Caribbean and South America, as well as new ones being established for Mexico, "one [could] still get 'their BBC' albeit not quite as easily as before" (Hauser). Others disagreed and felt that such opinions reflected a softening, or acquiescence, toward the BBC. Overall it seems that those who have been able to enjoy continued World Service reception on frequencies officially targeted elsewhere, the technical cancellation of shortwave broadcasts to the U.S. and Australasia has probably not been as irritating, or traumatic, as initially expected. Any devout fan of the World Service who initially and expectedly felt abandoned at first, more than likely is happy with any consistent reception he or she has been able to get.

With regards to the nation state, The BBC's move presents an interesting case. The BBC World Service is effectively competing with the commercial international broadcasters in its efforts to be the most listened-to international news service. As noted in the previous chapter, for the BBC World Service, the issue is no longer oriented around political ideologies, and probably has not been so for almost 20 years. Instead, the World Service is taking on the likes of CNN.

However, by competing against commercial broadcasters, nations weaken themselves. This is not what nation states are designed, or evolved to do. Unfortunately, those involved in state broadcasting have used the benchmark of audience size to justify their existence and funding. There is the feeling that the staffs, agencies, and politicians associated with international broadcasting are using such benchmarks as the guiding

rationale. In other words, the logic of market concepts, and not state/nation concepts, are driving the governance and programs of state-run international broadcasting. Therefore, the thinking of the actors and players in the nation state are thinking less like public servants and more like CEOs and middle managers at a corporation. As a result, the social and mental framework of the nation state construct is in decline as evidenced in the events and experiences of state-sponsored international broadcasting since the end of the Cold War, particularly at the BBC World Service.

As a result, something significant and noteworthy took place. As was noted in this chapter, Swiss Radio International had been moving much of its shortwave broadcasts to the internet before the World Service made these cuts. Additionally, for those in the U.S. who complained so vocally, they were reminded that The Voice of America was also caught up in a similar technological shift. Ukrainian transmissions from the VOA were dropped in July, 2001 and moved over to satellite feeds to affiliates in Ukraine (Elliot, 2001, June 30). Furthermore, some European VOA listeners responded to some of the American's complaints by pointing out how the VOA over shortwave had already been dropped from Western Europe for sometime by the summer of 2001. One response in particular is worth noting. John Adams from Watford, UK said, "I wrote to [VOA] some time ago about VOA pulling the plug on English to Europe. Pardon my schadenfreude at your interview with the BBC chap and your pained monologue [concerning the BBC's cuts] that followed. We have a saying that 'people in glass houses shouldn't throw stones.' Do you" (Elliot, 2001, May 19)? In that same vein, perhaps the poetry of Lester Bearcroft in the U.K. is the best way to "terminate broadcasts" with this chapter:

Auntie BEEB will cease to send shortwave programs to the USA.
 Angry reaction was very swift, as outraged listeners had their say.
 Emails flew about, thick and fast, considering this nasty measure.
 Few were PRO, many were CON, and ONE malicious pleasure.

Shortwave listeners are few in number, listening to a distant land.
Many listeners now use the net, or hear the BEEB on FM band.
It's a terrible blow if your favourite show no longer has an airing.
Just make a wish, get a satellite dish, and you will be past caring.

Use your computer we are told, the BEEB's a mouseclick away.
Audiobasket will your choice unfold, when RealAudio starts to play.
Getting your program is easy they said, in fact it's not all that bad.
If things go awry, don't start to cry, or you may go stark raving mad. (Elliot, 2001, July 7)

Chapter Eight

Recalling some of the comments made at the 1991 symposium conducted by the Center for Strategic and International Studies, Noah Samara had announced efforts to deliver satellite radio broadcasting to Africa. At that time, WorldSpace, as the operation came to be named, was devising a method whereby subscribing nations could lease the use of channels on satellites owned and operated by WorldSpace. Apparently, at that time, WorldSpace had also contracted with some electronics firms to develop and build radios capable of receiving their satellite broadcasts by 1993. The price of these radios was not to exceed \$50 (Samara, 1991).

Such a new medium of international broadcasting, which would specifically target the largest and most consistent audience of shortwave broadcasting, certainly should have some impact on shortwave radio broadcasting. Even though there are those claims in the literature of primary sources that WorldSpace is not interested in impacting or interrupting the shortwave broadcasting community (Mills, 1998, March 23), there are additional references that clearly indicate the opposite. According to Pierre de Bayse, business development manager at Alcatel (developer of the satellites used by WorldSpace), "In America there are 30,000 people to every radio channel. In Europe there are 70,000. But in the parts of the world where [WorldSpace] will be broadcasting there are [2 million] people for each radio channel that is currently available" (Buchan, 1995, January 27). As one reporter put it, "[WorldSpace's program] means a fundamental change in the amount of information available to these people and at a low cost to them" (Loyd, 1995, February 5, p. F1). Based on this figuring, the claim has been made that "satellite radio could cover the terrain better than shortwave radio. . . ." (Buchan, p. 8). Samara has noted that shortwave was the dominant medium for developing countries, but added that WorldSpace marks "the beginning of a new phase in globalisation and the opening of world markets" ("Significant advances", 1995, March 1, p. 14), implying that it might be time for shortwave to move on. From sources at Alcatel, the claim has been

made that Digital Audio Broadcasting via satellites will "be the most significant advance since the advent of the shortwave radio" (Buchan, 1995, January 27, p. 8). According to another reporter, since most of the area to be covered by WorldSpace relies on shortwave radio, WorldSpace services would allow local broadcasters as well as world broadcasters to carry their programming to a vast population over rugged terrain without all the land-based infrastructure associated with terrestrial broadcasting (Covault, 1996, January 1). More bluntly put, Samara hopes to offer more to those who rely only on "crackly shortwave radio" (Snoddy, 1996, January 15, p. 15). After listening to a simulation of WorldSpace's satellite broadcasts, one radio specialist was left to say, "so long shortwave radio" (Mills, 1998, December 14, p. F20). Added to this is Radio France International's Chairman/CEO Jean-Paul Cluzel who "predicted that digital radio sets would probably drive shortwave broadcasting . . . from the market within a decade" (Taverna, 2000, March 20, p. 76).

Clearly, there is reason to expect some changes in shortwave's largest audiences with WorldSpace's presence on the international broadcasting stage. One would think that with \$50 radios providing CD quality programming—free of charge—to most of the world's population, shortwave broadcasting to the same audience would need to make some noticeable adjustments in the least, if not outright closing of services completely. Something significant should certainly have happened if Samara's hope of providing such a service by 1993 had materialized.

As events turned out, Samara's hope of providing \$50 radios and a satellite broadcasting system by 1993 did not materialize. However, WorldSpace did not simply fade away either. What follows is an account of WorldSpace's effort to accomplish Samara's wish during the 1990s. Specific attention is made to the development of the system generally, as well as the satellites, the radios, and the programming for the system. And finally, the actual funding required to get WorldSpace off the ground, so to speak, is

detailed. It will be seen that WorldSpace has not had any marked impact on shortwave broadcasting over the last ten years.

WorldSpace

The System

Samara grew up in Ethiopia and Tanzania, the son of a Sudanese diplomat and Ethiopian mother (Bidoli, 1998, November 6). He studied the Renaissance in Graduate school at UCLA, and then moved on to Georgetown University where he earned a law degree. Later, he was employed by a Washington D.C. law firm where he worked as an international trade negotiator, as well as a legal and business advisor for the International Telecommunication Union's World Administrative Radio Conference (WARC; Mills, 1998, March 23; Samara, 1999, October 15). It was from this experience that Samara gained the insights necessary to establish his WorldSpace venture. Samara formulated his plan in 1990, received an experimental satellite license from the FCC by 1991, and then headed to Spain for the next WARC. There he put to use the lessons learned from WARC 1987, and on a shoestring budget was able to pull together a strong enough voting bloc to allocate the satellite frequencies needed for WorldSpace. This was no small feat, considering that the US, Russia, and most of Europe wanted the same frequencies for military purposes (Mills).

As a result of this ambitious project, the extent of which will be described shortly, Samara has been compared and contrasted to the likes of Rupert Murdoch and Ted Turner. One report describes Samara as the Rupert Murdoch of the southern hemisphere (Doward, 1998, May 31). Like Murdoch and Turner, Samara should have a global media reach. However, unlike his global media counterparts, Samara is African, does not have a formal business background, and appears not to be money motivated (Benady, 1998, June 1).

According to Samara (1999, October 25), a primary concern, if not *the* primary concern, behind WorldSpace's creation was the desire to reduce the spread of AIDS in

Africa. Samara feels that the key difference separating people is their access to information, and therefore, WorldSpace's goal has been to provide news and information to much of the world's populations who have been previously outside such "information" programming loops ("Digital music and downloads", 2000, October 29). As Samara explains, information affluence is the source of economic development, and therefore he was driven to develop an information infrastructure that would aid in information affluence for the Third World generally, and Africa specifically (Samara, October 25). In short, his goal has been to provide information to the informationally poor of the world (Ling, 2000, August 30), that through such access, physical and material wealth would increase among them (Bidoli, 1998, November 6).

In order to accomplish this task, WorldSpace's goal is to provide high quality satellite radio broadcasts that will be more attractive to listeners than the limited capacities of land radio, much like cable's and satellite's appeal over VHF and UHF television (Romero, 2000, July 17). Specifically, WorldSpace has been developed to help broadcasters in developing countries that struggle to reach their audiences through FM and shortwave transmissions (Jack, 1995, October 24). Such a target will place WorldSpace in a position to serve 80 percent of world's population ("Significant advances", 1995, March 1) by providing primarily free access to much of its programming. The listener only need to buy the satellite radio receiver (Bani, 2000, July 31).

Overall, WorldSpace's services consist of music, information, and entertainment (Samara, 1999, October 25) through three satellites providing coverage to more than 5 billion people on the planet (www.worldspace.com). For example, from Washington DC, weather information is being provided to WorldSpace, which in turn beams the information out to receivers all over Africa. Individuals with an appropriate computer are able to download the multimedia material onto their computers. Immediate uses have been made by farmers and herders in Niger who have now been given the additional

information concerning the weather that allows them to make better use of their time and energies invested in their respective livelihoods. Professor Peter Lamb, a climatologist at the University of Oklahoma describes the program as "and absolute first for Africa and for the developing world" (Shapley, 2001, June 19, p. 15). In addition to weather data, the satellites beam down various health and agricultural programs (McCormack, 2001, July 12; Shapley).

Although some of WorldSpace's satellite footprints reach areas beyond their intended Third World targets (McCormack, 2001, July 12), the organization claims to be "the sole provider of wireless satellite digital audio and multimedia to areas whose populations comprise 80 percent of humanity" (www.worldspace.com). Overall, analysts have not been concerned about WorldSpace's prospects for success noting that the "sheer scale of [the] intended audience makes up for ... [the] shortcomings" (p. F5) that most businesses avoid, such as the low buying power and limited access to goods common to many residents of the African continent (Mills, 1998, March 23). According to one report, "no one is quite sure just how big WorldSpace will be" (Doward, 1998, May 31, p. 7). Samara (1999, October 25) himself believes that there are upwards of 20 million households capable of buying the receivers and paying any additional fees for access to WorldSpace and its subscription services. As evidence of their success to date, Appendix E lists many of the current stations and programs carried over the WorldSpace systems.

Some final descriptions are worth noting. While ground-based radio stations cover about 400 square kilometers, WorldSpace's satellite beams can cover 14 million square miles (Shih, 1997, November 7). WorldSpace has been well aware of its ability to broadcast across many national borders, and with that in mind, Mike Ma Yuh-hung, Vice President of AsiaSpace (the Asia subsidiary of WorldSpace) points out that WorldSpace would go through the "legal and technical means to make governments comfortable with [their] services" (p. 9; Shih, 1997, November 7). Toward that end, encryption technology would be part of the receivers so that programming deemed undesirable by a nation could

be blocked. (Shih, 1998, June 5; details are unclear and not explained.) Additionally, Nicholas Brandon, Director of corporate communication at WorldSpace claims that it would be difficult to jam WorldSpace's signal, especially on a country-wide basis (Chapman, 2000, August 16). Along the way of WorldSpace's development, the organizations has received two patents for special formatting technology relative to subscription and encryption processes, as well developments in transmission techniques ("Patents issued", 1999, March), and in 1995, WorldSpace held the only US license for portable satellite services (Buchan, 1995, January 27). Finally, more than 30 governments have endorsed WorldSpace's efforts, and the countries of Kenya and Ghana planned to distribute the satellite receivers at low cost to their people (Shih, 1997, November 7).

The Satellites

Since Noah Samara's announcement at the International Radio Broadcasting symposium in early 1991, little attention was given to WorldSpace in the press during the early part of the 1990s. However, it appears that Samara was not wasting any time in making his dream a reality, as the FCC had granted WorldSpace permission in 1991 to operate the Afristar satellite, which was expected to become operational by 1993 ("A new star", 1991, July 3). By 1992, WorldSpace received the appropriate licenses to begin construction on their satellite system which would consist of four subsidiaries—Afrispace, Amerispace, Asiaspace, and Caribspace (Flagg, 1992, March)

It is not until the mid-1990s, however, that the press began to take increased notice of WorldSpace's efforts, perhaps from some of WorldSpace's press releases. In the fall of 1995, it was reported that the Afristar satellite would begin broadcasting by mid-1998, with Caribstar following in the beginning of 1999 and Asiastar by the second half of 1999 (Jack, 1995, October 24). Afristar would be launched in 1998 and placed in a geosynchronous orbit over Africa at 21 degrees East Longitude and its beams would cover all of Africa, Turkey, and the Middle East (Covault, 1996, January 1). Caribstar

would be launched in mid-1999 and would be positioned over the Pacific just off the South American coast. It would be located at 95 degrees West Longitude and would cover all of Mexico, Central America, South America, and the Caribbean (Covault). Finally, the third satellite, Asiastar would cover India, southern and eastern China, and the Pacific basin, and would be positioned at 105 degrees West Longitude (Covault, 1996, January 1).

To provide these satellite services, WorldSpace contracted with Alcatel to build its three satellites (Buchan, 1995, January 27), while Matra Marconi was selected by Alcatel to be its major subcontractor in developing the satellites for WorldSpace (Covault, 1996, January 1). Later, it was reported that a fourth satellite had been ordered by WorldSpace from Alcatel to be used as a spare or to augment system capacity ("WorldSpace: A worldwide service", 1998, June 1), or possibly to be used for the Commonwealth of Independent States (Doward, 1998, May 31). In any case, it was expected that the satellites would become operational by 1998 and 1999 (Chetam, 1996, December; Snoddy, 1996, January 15). It was intended that most of the channel space would be leased to broadcasters, with a portion saved for credit card holders in the reception areas who might desire paging, text, and video services (Snoddy, 1996, January 15). Concerning the actual channel usage, there was some confusion in the early reports with one claiming a total of 216 CD-quality channels available through the three satellites, with 126 available for national and international broadcasters (Covault, 1996, January 1). A slightly different account described each satellite as capable of 288 channels of talk radio, or 144 channels for mono-music, or 72 channels for digital quality stereo (Snoddy, 1996, January 15). A year later it was reported that the channel volume had increased to 432 mono, or 108 CD, or digital stereo, quality sound ("Digital radio for Africa", 1997, April 21). This is clearly an improvement from the 72 CD quality channels reported in 1996, lending some credibility to that particular claim.

By the middle of the 1990s, WorldSpace had fallen behind on its earliest hopes of being operational by 1995. In fact, it wasn't until 1997 that launch dates were actually set. The first satellite—Afristar—was scheduled to launch in June of 1998, according to Noah Samara ("Digital radio for Africa", 1997, April 21). Later reports indicated the launch of Afristar taking place in September 1998, while Asiastar and Ameristar (apparently changed from Caribstar) were scheduled for 1999 (Mills, 1998, March 23). As events unfolded, the Afristar satellite was loaded on an Ariane rocket, launched from the European space center in Kourou, French Guiana, and put into orbit on October 28, 1998 (Mills, 1998, October 29). This accomplishment led Noah Samara to explain, "The way I feel today, if I bottled up my feelings, I would put Viagra out of business" (Bidoli, 1998, November 6, p. 101).

Samara might have needed some of that enthusiasm later, as even the Afristar services would be delayed. At first it appeared that the Afristar service would begin in early 1999 (Nicolle, 1998, June 10), after about three months of testing (Mills, 1998, December 14). After three months of tests, however, WorldSpace's Afristar service was still not officially broadcasting. Such was the case after four, five, six months, and more. By August of 1999, it was reported that the complete Afristar services were delayed and not expected to be fully operational until October of 1999—one year after the launch (Shih, 1999, August 26). This date was apparently more realistic as this start date was reaffirmed in October (Behr, 1999, October 8), and services actually began on October 19, 1999 ("WorldSpace will inaugurate", 1999, October 18).

Like anything, or anyone, else waiting in line for its turn, the other services were also delayed as Afristar's launch and broadcasts were pushed back. The Asia service was set to begin in 1999 after the launch of Asiastar satellite (Shih, 1997, November 7), with the Asiastar satellite to be positioned above Singapore, according to John Sharp, Managing Director of WorldSpace Asia (Shih, 1998, June 5). However, as with Afristar (and most high-tech industries generally), the Asiastar satellite was not ready for its

previously scheduled launch date in 1999, and was rescheduled to go into orbit in March of 2000 ("Digital audio broadcasts", 2000, January 27; Shih, 1999, August 26). This target launch date proved to be more accurate, and by the end of March, 2000, Asiastar was launched (Taverna, 2000, March 20), and broadcasts began in September of 2000 (Ling, 2000, August 30).

The service was noticeably appreciated in the Indian press as it was reported there that WorldSpace would carry 26 channels of Indian content ("India: It's making new waves", 2000, December 2), including Hindi prayers (the Venkateswara Suprabhatham) to be sent out by WorldSpace from temples in India ("India: 'Thomala, archana, sevans'", 2000, December 27). And like Asiastar, and Afristar, launch of the Ameristar satellite was delayed until the spring of 2001 (Bani, 2000, July 31; Taverna, 2000, March 20), in spite of announcements of service beginning in 1999 (Shih, 1997, November 7). By 2004, WorldSpace was illustrating coverage maps that included the three satellite, but programming guides were available only for the other two satellite services (www.worldspace.com). According to their own historical account (as of early 2004), three satellites had been built, but only two launched.

The Radios

In addition to satellites, Samara also needed some type of radio that could process the programming beamed down from the satellites. Though announced early with the anticipation of successful operations by the mid-1990s (Flagg, 1992, March), the satellite radio development would follow a similar path as the satellites themselves. More than the satellites, the radios represented something that had previously not been done—namely the development and production of a commercial satellite radio receiver that was also portable. Early on, it was hoped that the satellites would begin beaming by 1998 to small radios called StarMan. The radios were to be developed by Motorola, "with a satellite antenna as small as a business card" (Buchan, 1995, January 27, p. 8). These receivers were described as hand-sized, and battery powered (Shih, 1997,

November 7), able to receive SW, MW, LW, and FM (Loyd, 1995, February 5), and capable of receiving digital audio, texts, and photographs via satellite ("Digital radio for Africa", 1997, April 21). Another article indicated that the new receiver would be able to receive AM, FM, and shortwave, but not land-based digital audio broadcasts (Marks, 1996, June 20). Perhaps the most optimistic report indicated that the radios would be size of a paperback book, be solar-powered, and would provide digital quality audio and video to "4 billion people once the system [was] on line in 1999" (Fleming, 1996, May 22, p. 1).

Along the way, multimedia technologies expanded along with the internet, and efforts were made to place these advances into the satellite radios. According to Tom Kashangaki, director of satellite systems at WorldSpace, there were plans to broadcast RealAudio over the airwaves in the effort to distribute internet radio broadcasts to those without computer connections (Marks, 1996, June 20). Similar reports followed in 1998 (Snoddy, 1998, December 10). By the end of 1999, there was some confusion among the press concerning the future availability of multimedia downloads. One account explained that multimedia PC connectivity would be available by the end of 1999 ("WorldSpace will inaugurate", 1999, October 18), while another report explained that such services would not be operational for another year (Behr, 1999, October 8). Apparently they were both wrong as work was still underway to provide multimedia services by the middle of 2000 (Ling, 2000, August 30; Taverna, 2000, March 20). Again the press was either confused, or WorldSpace was a bit too hasty in its press releases. In any case, according to one reporter, multimedia portion of WorldSpace's operations was finally functional in Africa by November of 2000 ("Digital music and downloads", 2000, October 29), while *The Guardian* reported that WorldSpace would be providing multimedia downloads by July, 2001 ("In brief", 2001, June 13). And two final notes about the multimedia services of WorldSpace (if they are functional) are worth noting. Unlike the radio programming that is free once the appropriate receiver is purchased, the multimedia access required a subscription fee ("Digital music and downloads"; Ling), and the multi-media data streams

from the satellites would be one-way in that users are limited to the websites that the WorldSpace satellites beam down ("Digital music and downloads").

How much for one of these new radios, the likes of which the world had never seen? That was the \$64,000 question, or dilemma. Back in 1991, Samara sounded adamant that the price be more than \$50.00 (Samara, 1991). According to one article, "The key to the success or failure of the venture, and the most difficult problem to solve, is ensuring that the digital radios are affordable for the potential audience" (p. 15, Snoddy, 1996, January 15). Dr. Karl-Heinz Brandenburg of the Fraunhofer Institute in Germany, and a digital radio specialist, felt that such a task was not impossible, but that it would require a measure of ingenuity and reliance on current technology (Snoddy, 1996, January 15). But the question remained—how much? As with the satellites' development and launch dates, the target price would start out optimistically (or naively) low, and would expand according to the reality of the project. Even by 1995, it was expected that these radios would sell for under \$100, and that by 2000, these radios would be 10 percent of all radios sold, *around the world* (Loyd, 1995, February 5, emphasis added). Through 1996, the hope was that the radios might initially cost \$100, but that the price would quickly come down to the neighborhood of \$50 once units began selling accordingly (Chetham, 1996, December 1; Fleming, 1996, May 22; Jack, 1995, October 24; Snoddy, 1996, January 15).

By 1997, expectations concerning the price of the radios was coming more in line with the reality of their development. Samara was still hoping to for a \$100 radio, to later drop to \$50, but was preparing for an original price of \$150 ("Digital radio for Africa", 1997, April 21). By June of 1997, the reports were indicating that the radios were to cost \$150 for the first three years from 1998 when Afristar would be launched, but the companies were expected to begin production of the radios well before Afristar's launch. Demand for the radios was expected to be between 10 and 15 million a year in the first years of production (Kynge, 1997, June 11). Within a few weeks, however, the

anticipated price appeared to be revised again. This time it was reported that the price of WorldSpace's satellite radio receiver would cost about \$200, four times the hoped for initial cost. According to Samara, "The prices will be around \$200 for a receiver - maybe less, maybe more. The point is that we are going on with a service and we feel confident about it. When the first CDs appeared on the market they were expensive but then their price dropped" (Josifovska, 1997, June 17, p. 3). By the end of that year, the upper threshold for how much the radios would cost had crept to \$250 (Shih, 1997, November 7), even though it was being reported in 1998 that the starting price of radios would be at \$200, with the expectation of the price to fall to \$50 after a few years (Doward, 1998, May 31). At the end of the year, however, the cost of the radios was estimated to be between \$250 and \$350 (Mills, 1998, December 14). Such market forces led Samara to first target the more affluent in the hopes that enough sales would soon bring the price of the receivers down (Snoddy, 1999, March 12). According to another reporter, even though the prices for the digital sets initially exceeded the hoped for introductory cost, they were still somewhat competitive with the price of most advanced portable *shortwave radios* (Taverna, 2000, March 20).

Sales of the receivers could probably be charted on a similar curve depicting the initial expectations changing as actual sales came into play. WorldSpace expected a market in the tens of millions within a few years of initial operations ("WorldSpace issues contract", 1996, September). The organization planned for one million people to buy the \$100 satellite radio receiver, with sales of another 183 million following over the next ten years of operations (Sparaco, 1996, October 21). Later, as the anticipated price increased to \$200, success of the radio was built around the hope that at least 300 million African residents would buy the radio. Samara claimed to need only 10 million sales to turn a profit. Analysts and satellite industry consultants estimated that WorldSpace only needed 20,000 to 30,000 initial users to spark the interest that would attract the needed program suppliers (Mills, 1998, March 23). Later, it was estimated that 22 million households in

Africa needed to buy a satellite radio for the venture to succeed (Doward, 1998, May 31), but apparently to be on the safe side, there was talk of WorldSpace planning to "seed the clouds" by giving away "hundreds of thousands of receivers" (Benady, 1998, June 1, p. M4).

Along similar lines, WorldSpace bought two million StarMan chips to better persuade radio manufacturers to build radios, despite the fact that there was no visible audience available for the programming and product (Mills, 1998, December 14). By early 1999, Samara was hoping to see 500,000 receivers in service by the end of the first year of operations (Snoddy, 1999, March 12). As it turned out, by the time Afristar began operations, only 30,000 customers had purchased the satellite radio receivers by late 1999, but were selling at a rate of 50 per day in Nigeria (Behr, 1999, October 8). Total sales were expected to reach 2 million by end of 2001 (Taverna, 2000, March 20). Even so, as recently as 2003, some still felt that the receivers were too expensive, and would be the main hurdle for future WorldSpace success (O. Cip, Chairman of HFCC; personal correspondence [email]; September 11, 2003; C. Tyson, Editor at Passport to WorldBand Radio; personal correspondence [email]; September 11, 2003).

The actual manufacturing of the radios began with chips that were developed for the satellites' unique operation. SGS Thompson and ITT Intermetall were selected to provide the micro-integrated circuits for the WorldSpace satellite receivers. Each company received orders for one million chips ("WorldSpace issues contract", 1996, September). By the end of 1997, samples of the StarMan chips for WorldSpace's receivers were provided by SGS-Thompson in November of 1997 ("StarMan for WorldSpace," 1997, November 10), and within one year, the chips for the radios had been tested and proved successful, and the first radio prototypes were expected to be available by August of 1998 (Snoddy, 1998, June 26). Just before the chips were delivered to WorldSpace for testing, however, Samara announced that Hitachi, Matsushita Electric Industrial, Sanyo Technosound, and Victor Company of Japan would be the four

producers of WorldSpace satellite radios ("Digital radio for Africa", 1997, April 21; Kyng, 1997, June 11; Uhlig, 1997, June 24). Additionally, since so many in the hoped for audience of WorldSpace's services do not have electricity, WorldSpace took up a 10 percent share of BayGen, maker of the Bayliss wind-up, battery free radio (Benady, 1998, June 1) who worked to incorporate a solar panel into the final product ("A new generation of business", 1998, December 12).

After the delays, it was announced that the receivers were to be available by April of 1999 (Bidoli, 1998, November 6). Toward that end, the satellite radio receivers were presented before the public for the first time on December 9, 1998 (Snoddy, 1998, December 10), even though the receivers were not yet in contact with the Afristar satellite launched three months earlier (Mills, 1998, December 14). These radios were capable of being powered by battery and even solar panel if needed ("Digital music and downloads", 2000, October 29). By the beginning of the next century, Electronics manufacturer PT Hartono Istana Teknologi (HIT) of Jakarta, Indonesia was selected to manufacture satellite receivers for WorldSpace. Initial plans were to simply add the proven WorldSpace receiver technologies to a multi-band radio already being made by HIT, with plans to manufacture 500,000 units each year for Indonesian and international markets ("Hartono, WorldSpace tie up", 2001, February 9).

Programming for WorldSpace

In addition to building a satellite broadcasting system, including the radios that would receive the satellite broadcasts, WorldSpace faced a chicken-and-egg situation of needing to attract a large number of broadcasters who, of course, wanted to see a large audience before committing. Naturally, the large audience needed some amount of broadcasting to attract their attention and become the audience desired by the broadcasters (Doward, 1998, May 31). Early on, and through 1996, there was talk of some big names in international broadcasting signing on with WorldSpace, only to find later accounts indicating that many of these were either still negotiating with WorldSpace,

or were not joining the venture at all. As early as 1992, the public was informed that since 1991, CNN, Kenya TV Network, and London-based Anadola Radio Television Corporation (ART) had all secured channels on WorldSpace satellites at what appeared to be \$5 million agreements (Flagg, 1992, March). Nothing more is said about potential broadcasters on WorldSpace until 1996 when it is reported that Samara had just signed an agreement with the Ghana Broadcasting Corporation, and was in discussions with the World Health Organization (WHO). He also hoped that the BBC would contract with WorldSpace (Snoddy, 1996, January 15). Additionally, only two major shortwave broadcasters - Radio Netherlands and Voice of America - had officially signed up for the satellite service (Chetham, 1996, December 1; Covault, 1996, January 1).

However, later indications in the press suggest that some of these broadcasters were not actually signed on with WorldSpace. Toward the end of the decade, VOA and Radio Netherlands were still in negotiations with WorldSpace (Mills, 1997, July 23; Snoddy, 1998, June 26). But there were others who did sign on, and helped the channels to fill up. The BBC, VOA, and Bloomberg News had been in contact with WorldSpace (Yang, 1997, June 30), and within a month, Bloomberg News signed on to WorldSpace to provide business news to the approximately 300 million upper- and middle-class homes in Afristar's target audiences (Mills, 1997, July 23). During this time, 20 percent of the satellite capacity was filled, and it was expected that BBC and VOA would join after the successful launch of Afristar (Mills, 1998, March 23). A year later, Sanya FM in Uganda and the Liberian Broadcasting System had signed on by 1998, as well as Radio Keldu of Mali, Radio One of Lebanon, and the Egyptian Radio and Television Union (Snoddy, 1998, June 26), and it was announced that public service programming options for organizations such WHO would be provided free (Doward, 1998, May 31). By the end of 1998, some of the principle organizations that had signed on included CNN, Bloomberg News, the Kenyan Broadcasting Corporation, and "other services based in Africa" (Mills, 1998, October 29, p. C2), in addition to KayaFM and Safari Radio and some internet

providers (Bidoli, 1998, November 6). Additionally, 50 percent of Afristar's channels had been reserved by the time of Afristar's launch (Bidoli, 1998, November 6). Still, a number of channels needed to be occupied (Doward, 1998, May 31), and WorldSpace was still looking to the BBC World Service, Deutsche Welle, and Radio Netherland to come on board and give some needed credibility to the project (Snoddy, 1998, June 26).

Within two years, some of that needed credibility was found, but from a different broadcaster. Radio France International signed on with WorldSpace by March 2, 2000 (Taverna, 2000, March 20), and the BBC World Service, after finalizing negotiations in the spring of 2000 (Taverna), signed on to the Afristar satellite, and would also broadcast from Asiastar when it became operational in the later part of 2000 (Chapman, 2000, August 16). It was also announced that the Broadcasting Network Thailand signed on with WorldSpace, and agreed to provide music programs for four channels on the Asiastar satellite (Amnatcharoenrit, 2000, August 16). As a final note, Samara also claimed to have also been in contact with Michael Jackson and Quincy Jones, but neither of the stars would validate the claim (Yang, 1997, June 30). This may have been wishful thinking, but their lack of presence did not appear to hurt things as 70 percent of transponder space was leased (Taverna, 2000, March 20) to over 30 content providers broadcasting on Afristar by 2000 (Amnatcharoenrit). However, Deutsche Welle did not join the WorldSpace effort at the time, and was still considering the possibility as recently as the summer of 2003 (Personal correspondence from the staff at Deutsche Welle [email], September 15, 2003).

Paying for WorldSpace

In order to accomplish such a monumental undertaking—building satellites, developing a new type of receiver, locating and contracting with programming sources, etc.—Samara needed substantial funds. Early on Samara was planning on going public in 1995 with the expectation of turning a profit before the satellites were launched. This was apparently based on some of the commitments made by broadcasters who were then

expressing an interest in the service (Jack, 1995, October 24). However, by the end of 1995, \$650 million had been raised from private contributions, and talk of going public was oriented toward raising an additional \$200 million (Snoddy, 1996, January 15). Though WorldSpace did not go public, over the next four years, investors added more than \$350 million to the coffers. WorldSpace was up to \$850 million by the middle of 1997 (Mills, 1997, July 23), and \$950 million almost a year later (Mills, 1998, March 23). By 1998, \$1.1 billion had been raised from investors alone (Benady, 1998, June 1; Shih, 1997, November 7).

Concerning the sources of these funds, one report simply explained that most of the cash raised was from "various satellite and electronics companies" (p. 7; Doward, 1998, May 31). Other reports were more specific. Samara's backers were described as "publicity shy" North Americans, Japanese, and Koreans, with French telecommunication giant Alcatel having a "10 percent stake in the company" (Benady, 1998, June 1, p. M4). More specific still, most of the financial backing appears to have come from "several very wealthy, very private Middle Eastern investors" (Mills, 1998, March 23, p. F5), including one "majority investor whom Samara [would] not identify" (Mills, 1998, October 29, p. C2). Though Samara would not disclose who WorldSpace's investors were, "*Business Week* [had] reported that much of [WorldSpace's] money [came] from a wealthy Middle Eastern family" (Mills, 1997, July 23, p. D10), and in spite of the secrecy, "Middle Eastern investment bankers [said] that the Bin Mahfouz family, which handles the Saudi royal family's finances, had invested in WorldSpace (Yang, 1997, June 30). As a result of what appears to be strong support by Middle Eastern investments, some have questioned the advertised philanthropic motives of the overall WorldSpace operation (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003).

All this money, however, was needed simply to get the business going. After that, money needed to be made, at least to cover costs. To earn this money, Samara and

WorldSpace were looking to those who would lease the channels on WorldSpace's satellites. According to one account, future revenue was expected to come from subscription and advertising fees (Shih, 1997, November 7), while another indicated that money would be made by leasing channels to commercial broadcasters, as well as through commissions from pay-per-listen subscriptions (Doward, 1998, May 31). According to Mike Ma Yuh-hung, Vice President of AsiaSpace, channels would be offered to operators at \$80 an hour. Ma quickly noted that terrestrial radio cost between \$300 and \$1500 per hour, with an even more restricted coverage than WorldSpace would offer (Chetham, 1996, December 1). This approach remained consistent as later news articles pointed out that WorldSpace would make money by selling satellite time (channels) to program providers (Yang, 1997, June 30). It was also reported that channels would be leased to commercial broadcasters, with additional revenue coming from commissions associated with pay-per-listen subscriptions (Yang).

This was all hoped for revenues, and the pinch of needing these revenues was becoming obvious by the end of 1998. At that time, several hundred million dollars were still needed to see the company through to the profitable stage yet to come—all in addition to the one billion already drummed up (Mills, 1998, December 14). As WorldSpace was preparing for the launch of its first satellite in 1998, it was still not clear whether the money needed to fund continued WorldSpace operations would come from advertising or from programming subscriptions to be paid by listeners (Mills, 1998, March 23). By mid-1999, things appeared even tighter. According to Judith Pryor, Vice President for corporate affairs at WorldSpace in Washington, D.C., the break even point for WorldSpace appeared three to five years away, and the organization was then needing "an urgent injection of cash" (Mills, 1998, March 23, p. F5). Apparently, WorldSpace was encountering greater difficulty than earlier expected in its efforts to reach the profitable stage. The needed influx of money was to help pay operating costs (Shih, 1999, August 26). One year later, it was explained that WorldSpace was expected to

break even between 2003 and 2005, but by 2000, it had used up most of its \$1 billion funding raised to date. As a result plans were again being discussed to list WorldSpace on the NASDAQ exchange by 2001 (Ling, 2000, August 30).

Originally, Samara thought that he could succeed by simply leasing out channels to African governments and other major broadcasters like the BBC and VOA. However, later market research indicated that a more commercially oriented focus was needed, and plans were modified to include some of the commercial music stations then emerging in Africa (Snoddy, 1998, June 26). As one news article noted, the financial realities of getting WorldSpace up and running had forced Samara to drift from his original goal of primarily providing news and information for the information-deprived poor (Snoddy, 1999, March 12). Another report explained that there would be a clear commercial nature to the service and suggested that it may be impossible to keep the influences of Western consumerism and democracy away (Benady, 1998, June 1). By the end of 1999, WorldSpace was able to reserve only five percent of its channel capacity for nonprofit access in an effort to keep all the satellite programming from being overtaken by commercial interests. In some ways, this allowed Samara to keep a small measure of his original intent to provide important informational programming for African residents whose location and/or lack of literacy leaves them isolated from beneficial news and information. Some of the possible programs that were being considered included a noncommercial news program similar to the U.S.'s National Public Radio, but of African origin instead. Additional programming was being developed with women and families as the target audience in order to provide a measure of information to women that have traditionally been excluded in the past (Caruso, 1999, October 11). But by this time, WorldSpace had turned into something resembling over-the-air broadcasting in the United States—most of the channels are occupied with commercial fare, with a small percentage taken up by locally supported public programming.

As a result of the commercial programming with which WorldSpace has filled its channels, WorldSpace has introduced one more offering into the international broadcasting ecology that is not of a public service nature. Though originally designed as a public service broadcaster, and even though five percent of its channels have been reserved for public service broadcasting, WorldSpace is one more platform providing international commercial broadcasting. It is more like the CNNs of international broadcasting, and much less like the VOAs, World Services, Deutsche Welles, etc. Obviously, WorldSpace has not been able to carry the broadcasts of national governments, be they Third World or Western, over its satellite radio system. At best, a few state-sponsored broadcasters have leased channels from WorldSpace while the bulk of its channel space has been taken up by commercial broadcasters.

Conclusion

By way of conclusion, it can be seen that WorldSpace has not had a clear impact on shortwave broadcasting to the developing world since the end of the Cold War. In fact, in shortwave listener research, the impact of WorldSpace has hardly been noticed. At best, one percent of respondents make reference to satellite radio broadcasting at all, let alone WorldSpace by name (D. Gibson, Intermedia Research Specialist, personal conversation [telephone interview], August 20, 2003). True, Noah Samara has succeeded in assembling an impressive satellite broadcasting system to broadcast to what may be considered the information poor of the world. He has also received considerable donations and investments from private sources that have enabled the building and launching of at least two satellites, as well as the development of portable satellite radio receivers. And to complete the picture, Samara has been able to lease out more than a simple majority of the channels on the WorldSpace satellites. Overall, Larry Magne describes Samara's efforts as "nothing short of superb," and "vastly better than . . . any mortal could possibly do" (L. Magne, Publisher for International Broadcasting Services, Ltd. (Passport to WorldBand Radio), personal correspondence [email], August 20, 2003).

However, in contrast to his earlier hopes and aspirations, much of the programming secured has turned WorldSpace more into a commercial medium instead of a public service medium. Additionally, the time required to get where WorldSpace is today has taken about ten years longer than desired. Samara himself admits that the efforts took longer and cost more than initially anticipated (Samara, 1999, October 25). In addition to the setbacks encountered from developing so much new technology, there were some initial delays resulting from the difficulties of reallocating frequencies, as well as opposition made by some terrestrial broadcasters (though none are specifically mentioned; Sparaco, 1996, October 21). Later on, WorldSpace needed to upgrade from an experimental FCC license to a permanent, commercial license, and while efforts were made to accomplish this in a timely fashion, it seems that WorldSpace encountered some opposition along the way (Mills, 1998, December 14).

When most of these concerns had become part of the past, there was talk of WorldSpace expanding into Europe, which was actually already covered by much of Afristar's footprint (Taverna, 2000, March 20). After all, in early 1999, during Afristar's testing phase, the satellite radios for WorldSpace were being used by people in Great Britain, and Afristar's signal was performing so well that it was clearly available to listeners in Europe. Digital radio from Johannesburg was received in St. James Park in central London with little or no difficulties (Snoddy, 1999, March 12). With these results, WorldSpace may have attracted the more than two million listeners it hoped for by the end of 2003 (Ling, 2000, August 30). If so, then the time to identify its impacts on shortwave broadcasting is still about ten years away. The next chapter will take a closer look at WorldSpace's future, as well as international broadcasting generally, including shortwave broadcasting.

Chapter Nine

As John Tusa was retiring from the BBC World Service in 1992, he pointed out that many of the World Service's competitors were in the process of finding their identity at the end of the Cold War (Tusa, December 12). Ten years later, this appeared to still be the case. According to Monroe Price, professor of Law at Princeton University's Institute of Advanced Studies, the international broadcasting industry, as characterized by the state-sponsored broadcasters, was still unsettled by the spring of 2001, and that many of these international broadcasters were acting as if nothing, or little, had changed in global media ("The Voice of America: Searching for a new doctrine," 2001). Furthermore, Price explains that international broadcasting was still passing through great pressures in an effort to move beyond the Cold War and adapt to an increasingly complex environment of international mass communication ("The Voice of America: Searching for a new doctrine").

Needless to say, the environmental mix in which international broadcasters—who were formerly shortwave broadcasters often contending against opposing political/economic ideologies—began to operate became in many ways unpredictably more complex. It has often been the case with international shortwave broadcasting that periods of crisis increase listening around the world ("Soviet media," 1991, August 2). By 2001, international broadcasters appeared to be applying that principle as they were jumping from crisis to crisis, trying to establish territory and identity ("The Voice of America: Searching for a new doctrine," 2001). Some have described international broadcasting as having become more specialized. In some cases, operations evolved into targeting remote audiences lacking reputable media sources, while also reacting more to crisis listening. Such operations function around core staff that are augmented by personnel whose services are contracted for a set period in a form of flex-response broadcasting (D. Gibson, Intermedia Research Specialist, personal conversation [telephone interview], August 20, 2003).

Ten years after the end of the Cold War, as international broadcasters were looking to the future, these experiences and concerns were ever-present. Jamie Metzel, former senior coordinator for International Information at the U.S. Department of State, has called for peace broadcasts that will provide reliable informational broadcast into crisis areas, while Alan Heil has suggested that international broadcasters can serve to assist countries during political/economic transitions with informational broadcasts ("The Voice of America: Searching for a new doctrine," 2001). Monroe Price was a bit more specific by recognizing the need to redefine, and make more concrete, the enemy, or enemies. As Price explained, there have been some trends to simply redirect international broadcasts as each crisis occurs, or as each target (or "enemy") is defined. He adds that some enemies could include health issues or natural disaster issues, and not just a given nation state ("The Voice of America: Searching for a new doctrine"). Metzel went so far as to outline five possible directions, or goals, international broadcasters could/should use to define themselves and their operations in the future. Specifically, they can 1) continue as one additional voice in competition with others (such as CNN), 2) serve as the national mouthpiece of their respective governments, 3) provide gap filler/sub-elite filler by serving smaller, important markets that other sources cannot (i.e. reach below the level of commercial viability), 4) provide strategic news services by inserting reliable information into crisis areas, and 5) enhance government agencies ("The Voice of America: Searching for a new doctrine," 2001).

Whether international broadcasters move forward in these directions or not is still yet to be seen, as is how they will define themselves and evolve through the next ten years. More than likely, changes will happen in a more unpredictable manner as unforeseen issues, values, demands, and technologies emerge and come into play in the international broadcasters' environments. However, as this project is concerned with the international broadcasting as carried over shortwave transmitters and receivers, attention can be paid to the future of that particular form of international mediation, and this

chapter will specifically address that issue first. As many have discussed the future life or death of this medium, attention will first discuss those arguments as they have unfolded more toward the end of that first decade following the end of the Cold War. Additionally, as portions of this project have been occupied with newer technologies that have affected international broadcasting over shortwave during the 1990s, those newer technologies as future media of international broadcasting will be discussed as well. Specific attention will be made to the future of the internet, satellite broadcasting, and Digital Audio Broadcasting (DAB). And finally, the chapter will conclude with a general discussion of some of the thoughts from the field of international broadcasting as to how such mass communication might be mediated in the not-too-distant years to come.

The Future of International Radio Broadcasting

Shortwave: Dead Or Alive?

The first issue to discuss is the state and future of shortwave broadcasting. At the end of the Cold War, some called for the death, or termination, of shortwave broadcasts while others advocated its continued existence. After ten years to hopefully sort things out, one would think that the question could be asked again, and this time receive a clearer answer. Unfortunately, this is not the case, and the debate going on in 1991 appears to have been going just about as strong ten years later. This next section will review again, the two sides of the argument as it was presented through the 1990s beginning first with those comments suggesting the end of shortwave, and then followed by those who saw no need for its termination as a medium of international broadcasting. These arguments will then be followed by a discussion that addresses more of a redefinition process which those in international shortwave broadcasting currently navigate.

The Dying Breed

In his review of international broadcasting after the end of the Cold War, Wood (2000) suggests that the need to broadcast state-supported Western programming has

decreased since 1990, and that the Voice of America has concluded that worldwide shortwave audiences are declining. In Eastern Europe where so much Western shortwave broadcasting was targeted during the Cold War, the end of that conflict "has left an empty market for shortwave" (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003). Those who once constituted a large and healthy audience for international shortwave broadcasts (Browne, 1982) have dwindled to DXing hobbyists (K.A. Elliot, Audience research analyst in the Office of Research of the U.S. International Broadcasting Bureau; personal correspondence [email]; September 8, 2003). Additionally, recall Mark Byford's comments that English World Service broadcasts were to become available on FM in "every capital in the world within five years [from 1999]" and that shortwave broadcasting was to be reduced (Gibson, 1999, February 11, p. 6). According to Alan Heil, other societies in the world, such as the Middle East, are moving to other media such as FM and TV ("The Voice of America: Searching for a new doctrine," 2001).

A decline in international shortwave broadcasting is captured in others' responses as well. Audience coverage through shortwave is simply not being increased, and for those locations where freedom of the press is well entrenched, "plans are either already implemented or being made to reduce [shortwave] coverage (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003). Also, two former employees of the Voice of America see declines in shortwave. Though Alan Heil, a former VOA Deputy Director, still sees international broadcasting as a substantial enterprise that will most likely grow in the future, shortwave broadcasting as a part of that enterprise is on the decline (Personal conversation [telephone interview]; September 4, 2003). Finally, Kim Elliot who once hosted VOA's *Communication World* program (before it was recently terminated), feels that the internet and satellite television offer more attractive forms of international media for audiences around that world, thus leaving shortwave to decline in importance (K.A.

Elliot, Audience research analyst in the Office of Research of the U.S. International Broadcasting Bureau; personal correspondence [email]; September 8, 2003).

Some have also commented on the generational factor that is perceived as a threat to international shortwave broadcasting. Sarkis Garjarian, a shortwave listener and Bulgarian university student in New York City, felt that shortwave listening in the U.S. was declining "because the young generation . . . does not know how to use shortwave" (Elliot, 2001, June 30). George McClintock from WWCR observes an increase in younger people around the world who are not growing up with shortwave because of an increase in FM stations offering more programming that resembles Western pop entertainment (G. McClintock, WWCR General Manager, personal communication [telephone interview], August 19, 2003). According to Larry Magne, the Boomers and Xers who are replacing the GI generation are less and less familiar with shortwave. Magne senses that there is a lack of "fundamental understanding of international broadcasting or even non-music radio for international broadcasting to succeed . . . A whole new generation of managers needs to learn lessons anew, and in the meantime shortwave is likely to continue to be widely seen as little more than a temporary necessity for Africa and other parts of the 'Third World' hinterland" (L. Magne, Publisher for International Broadcasting Services, Ltd. [*Passport to WorldBand Radio*], personal correspondence [email], August 20, 2003).

One listener responding from Greece to the BBC's decision to terminate shortwave broadcasts to the U.S. expressed dismay with the BBC's decision, as well as Swiss Radio International's, to be completely off shortwave. The listener's response continued, "This seems like the thin end of the wedge" that would culminate in the end of shortwave completely (Elliot, 2001, July 7). Another shortwave listener in Caracas, Venezuela responding to the same issue worried that his shortwave radios were soon becoming useful only as museum pieces (Elliot, 2001, June 9). Others were not surprised and expected not only more listeners to move to the internet as bandwidth increases, but

to also see more video streaming, which will probably lead to less and less listeners to shortwave and more private and governmental stations closing (D. Centgraff II, WSHB Chief Engineer, personal correspondence [email], August 18, 2003).

The Resilient Breed

Opposite of these views and expectations, there were those who still felt that shortwave broadcasting had a strong place in the mix of international media. In the mid 1990s, the editors of *Passport* (Lawrence Magne, Tony Jones, and Jack Elliot) devoted an entire section of the *Passport—1995* issue to the status and future of shortwave broadcasting. The arguments that "ye olde shortwave is dead" were still circulating, if not growing, and they added that similar predictions for a dying shortwave were heard in the 1970s when the concept of relay broadcasting over local AM and FM was first tried and beginning to grow. Yet shortwave did not die then, and instead it greatly expanded (*Passport*, 1994). Furthermore, those arguing for the demise of shortwave are usually unfamiliar with the nature of broadcasting as well as the complexities of media systems. In short, broadcasting interrelationships are more complex than either-or and zero-sum linear thinking comprehends. While newer, alternative distribution formats for international broadcasting emerged in the 1990s, sales of shortwave receivers continued to reach all-time highs (*Passport*, 1994). "Shortwave receiver manufacturers, such as Grundig, are chuckling all the way to the bank as their sales in the United States—arguably the most media-rich country in the world—set new . . . records year after year" (*Passport*, 1994, pp. 70-71).

However, *Passport's* comments were made back in 1994, before the internet broadcasting revolution began. It is possible that attitudes, perspectives, and even sales have changed since then. Not according to *Passport*. And others. *Passport* (2001) noted a change in the shortwave receivers during the ten years following the end of the Cold War, particularly in the North American market. Cheap knob-and-dial radios have fallen away to become a very small portion of the market, and in their place have emerged

reasonably priced (\$90 to \$500) portable radios with precise digital tuning and LCD frequency read-outs. Most of the marketing effort for these radios has been spent on the U.S., where shortwave radio sales has experienced "double-digit growth" (*Passport*, 2001, p. 91). Between one and 1.5 million shortwave radios are sold in the U.S. each year now. Canada and the UK were to be the targets of similar marketing efforts for 2002, with Europe, East Asia, and South Africa following in subsequent years (*Passport*, 2001). As was reported in the press at the same time, Grundig, a German manufacturer of shortwave radios, reported a strong increase in sales shortly after the September 11 terrorist attacks. According to John Smith, the director of operations for Grundig in the U.S., sales of portable shortwave receivers jumped 100 percent within the first week after the attack. By November sales had risen 500 percent. At the time, Smith was quoted as saying, "Now, we're getting orders so fast that we aren't sure what groups these new buyers come from" (Wendland, 2001, November 6, A10).

Data such as this have led some to reply (to the criticisms and calls for termination) that "shortwave, for all its faults and degradations, is a robust and time-proven medium" (Elliot, 2001, May 12). It may be old technology, "but it remains the most cost effective means of reaching masses of people, for the least investment . . . Shortwave is here to stay" (D. McLaughlin, Director of Outreach for High Adventure Gospel Communication Ministries, personal correspondence, August 14, 2003). Alan Heil also points out that some areas of the globe are still heavily shortwave dependent, and that international *radio* broadcasting reaches that portion of the world where many have yet to make their first telephone call ("The Voice of America: Searching for a new doctrine," 2001). As part of a U.N. shortwave project, a study by Deutsche Welle indicated that only 2 percent of the Bolivian population has a telephone while 60 percent have radios (Vo, 1998, November 5). Wood (2000) also reminds the critic that to its credit, shortwave is the only medium that can reach any international audience without the use of any third, or middle party. In China as recently as 1999, the government had

succeeded in inhibiting, and/or blocking satellite broadcasts, *and* access to some websites. For example, access to "the BBC World Service website [had] been blocked" ("Murdoch tunes into China market," 1999, April 1, p. 19). However, "China has long since lost the battle to stop people listening to foreign shortwave radio broadcasts . . ." ("Murdoch tunes into China market"). In what stands as one more testament to radio's strength, while the Taliban were in control, "radio [was] the only form of unfettered mass communication left in Afghanistan" (Faler, 2001, October 6, p. 3085).

Finally, in what may appear as great irony or doublespeak, at the very moment it was terminating shortwave broadcasts to the U.S. and elsewhere, the BBC denied that shortwave broadcasts *per se* were at risk by noting that 153 million across the globe listen to the World Service solely on shortwave (O'Connor, 2001, June 13). Either the BBC was fumbling with its data again, or the reporter was a little confused, as nearly all other reports of the World Service's audience indicate that the 153 million listeners in 2001 came from *all* media used by listeners to access the World Service. Usually, something around 70 percent of the its listening audience is through shortwave. Even so, the World Service was still investing 50 million pounds in shortwave broadcasting through 2004 (O'Connor).

So it does not appear shortwave is going anywhere soon, particularly if the parties involved read *Passport* at all. According to its editors, shortwave should stay operational because there is an audience that listens, the broadcasters have the greatest control in programming dissemination, and the costs are relatively very affordable (*Passport*, 1994). Also, shortwave broadcasts should not be terminated or drastically cut, nor should they be held in the background "in case of future crises" because the audience that would tune in would be lost while shortwave waited for the crises to arise. Broadcasters ought to just keep shortwave broadcasts up and running so the broadcasts and audiences will continue to be there for each other (*Passport*, 1994).

Finding the "Reality"

When stuck between what appears as two conflicting claims that may be equally plausible, often it is wise to locate a position somewhere in the middle. A number of comments from respondents to surveys and interviews, as well as those printed in the press during the ten year period following the end of the Cold War, do capture that middle ground, and they are worth mentioning. Generally, these comments acknowledge a decline in shortwave listening and broadcasting around the world, but at the same time they describe a place and role for shortwave in the international broadcasting mix.

The Voice of America's director, Sanford Ungar, felt that shortwave would be around for the visible future, but that "its days as a major medium for state-owned international broadcasters probably are numbered" (Colker, 2001, May 22, p. A1). According to Jerry Timmins, head of the Americas region for the BBC World Service, shortwave was not dead, "but a shift [was] happening, no question about it" (Colker, 2001, May 22, p. A1). Kim Andrew Elliot, producer of *Communication World* for the VOA, felt that "shortwave [wasn't] dying, but it [had] begun its long slow denouement" (Marks, 1995, November 1, p. 1). Also, due to the size of world population still dependent on shortwave, it was expected to be prominent for "decades to come" (Colker, 2001, May 31, p. T1).

Others voiced similar thoughts earlier in the 1990s. George Jacobs, a broadcast engineer in Washington D.C., felt that shortwave would be around "for at least the next several decades" (Binder, 1994, August 28, p. D6). Because of the force of momentum of the interests involved in international shortwave broadcasting, making any significant changes will be slowed due to the bulk of the forces involved. Therefore, any declines with shortwave will not happen quickly. According to Tom Rogers, a communication specialist heading the Sophron foundation, "You can't just create [or erase] 600 million of anything" (Binder, 1994, August 28, p. D6) in an instant. Therefore, to borrow from one reporter, "shortwave will hold on at least for the foreseeable future . . . [but] its days

as a major medium for state-owned international broadcasters probably are numbered" (Colker, 2001, May 22, p. A1).

From many of those working within the international broadcasting industry, the observation of shortwave has been that it is being more narrowly defined. One inherent strength of shortwave that many have commented on concerns the ability of shortwave broadcasts to always get through. As Craig Tyson of *Passport* explains, all of the other international media are at greater risks to third party gatekeeping, or sabotage, thus making shortwave the medium that should "never be written off" (Personal correspondence [email]; September 11, 2003). While the staff at Radio Japan do expect a continued decline in shortwave listeners, and will therefore continue to explore other delivery options, they feel shortwave is still needed as a last resort in times of crises (S. Sato, Senior Associate Director for International Broadcasting, Radio Japan; personal correspondence [email]; August 29, 2003). Some in the transmitter industry also see shortwave as "the delivery mechanism of last resort" and expect that the major broadcasters will continue to keep shortwave operational, even at a reduced level (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003).

Still others describe what amounts to be a specialized use of shortwave within the mix of international media. Particularly for those who do not have access to the newer international media technologies, or who are still living under some form of oppressive government which significantly restricts the flow of news and information, shortwave will still be the medium of choice (in some cases by default). According to Alan Heil, shortwave will be around for as long as there are those who do not have quantity and quality access to other media (Personal conversation [telephone interview]; September 4, 2003). Heil adds that shortwave is king in Africa, but that it really doesn't have a place in Europe and North America. In places like Cuba, North Korea, China, Iran, and Syria, shortwave is still held up as the medium that can provide citizens the information that

their own countries will not provide (S. Hults, Director of Communication-EWTN Global Catholic Network; personal correspondence [email]; September 15, 2003).

Some have called for its demise. Others have steadfastly defended it. New technologies have emerged that provide additional means of conveying international broadcasts to target audiences. As a result, many among the world's audiences have moved more toward those technologies, and many among the broadcasters have called for increasing use of these newer technologies at the expense of shortwave. Others have opposed such ideas, and instead still see shortwave as a viable medium, and in some cases still the ideal medium for international broadcasting. In between, others see shortwave as an additional part of the mix of media being used by the international broadcasters. In such a situation, shortwave is becoming viewed as the medium of last resort after the others have failed, or become disrupted. Clearly, though, international broadcasting over shortwave is not as it was during the Cold War, and there is little reason to believe it ever will be again (F. Osterman, President of Universal Radio, Inc.; personal conversation [telephone interview]; September 19, 2003).

The Newer Technologies

As shortwave broadcasting has clearly passed through a period in which it was affected by the emergence of newer technologies, the remainder of this chapter will discuss the future of those technologies as other media for international broadcasting, and therefore, as competing and/or complementing media for international shortwave broadcasting.

The Internet

According to Kim Elliot, "the BBC World Service and other international broadcasters have indicated their commitment to the internet as the successor to shortwave for international broadcasting" (Elliot, 2001, June 23). Another report indicated that shortwave was losing to the cheaper, more convenient (according to the reporter at least) internet, and that it offered more than the local AM and FM stations

could provide (Colker, 2001, May 22). Alan Heil even expects big growth in the internet, and notes that usage is very high in China in spite of governmental efforts to block certain web material (Personal conversation [telephone interview]; September 4, 2003). The Global Catholic Network has also experienced "a huge increase in traffic from the Third World via [their] internet website (S. Hults, Director of Communication-EWTN Global Catholic Network; personal correspondence [email]; September 15, 2003).

By 1997, those at *Passport* had taken enough of a serious look at Web radio that they published a Web radio book modeled after their worldband radio books. In their first edition, *Passport to Web Radio—1997*, they attempted to organize stations according to region (roughly by continent) first, and then whether the station was oriented toward local, national, or international audiences. As a result, a number of international shortwave broadcasters who were also simulcasting over the internet were listed among the other web radio stations (*Passport to web radio*, 1997). Therefore, when using the book it was difficult to ferret out the traditional international broadcasters from the other local AM and FM stations that were commercially driven.

Additionally, an effort was made to promote the coordination of programming around the Universal Time Coordinate (UTC), or Greenwich Mean Time (GMT) in the new *Passport to Web Radio*. The editors acknowledged that the concept was active among world band broadcasters and listeners (and even mariners), but it had not become prevalent, or even apparent, among web radio broadcasters (*Passport to web radio*, 1997). One is left with the feeling that the old was trying to offer some tips for the young. Apparently the young did not take to the older traditions of temporal coordination for international broadcasting, and/or the old decided it was all too far removed from the younger world because after only two editions (1997 and 1998), *Passport to Web Radio* either took a hiatus, or it was abandoned as no further editions have been printed.

Web radio has not been without its challenges and critics either, thereby potentially affecting its future use by international broadcasters. At the end of the 1990s,

radio webcasting was not making money for the majority of the private stations involved, but most treated it as an investment in the future development of the technology (Kommando, 1998). Financing internet radio operations at the turn of the century was falling on advertising (Campbell, 1998), but that too was not just a simple, plug-in solution as advertising on high-traffic webcasting sites really only benefits those industries and businesses with a market reach farther than what local, traditional stations cover (Kommando, 1998). This almost sounds similar to commercial broadcasting over the shortwaves in the 1930s, as U.S. commercial stations begged the government for authorization to advertise over the shortwave. It didn't take long to learn that advertising products marketed only in the U.S. to low-income populations without access to such goods would be a loss for the broadcasters. In the case of the internet, there does exist a *global market for some products and services*, but not all. As a result, internet advertising really only works for those goods and services that have already established a global market.

Additionally, some have argued that the experience of listening to the radio over a PC may not be conducive enough to audio broadcasts to sustain the internet as a replacement for traditional radio, in all its forms, including shortwave. One argument has been that online access for listeners is practical only in the U.S. where the ease and affordability of online access are apparent. In many countries, user access to the internet is more expensive as users must pay for each minute that is used (Colker, 2001, May 22). Additional problems with internet listening include not being able to successfully run the appropriate software, as well as the lack of convenience that computer radio listening offers (Colker, 2001, May 22). After all, as *Passport* has noted, Web radio is wired radio—it is plugged into a fixed location (*Passport*, 1996), and the development and implementation of devices that make internet radio as portable, or even almost as portable, as traditional radio have not been forthcoming (Elliot, 2001, June 2).

As the BBC World Service was preparing to terminate its shortwave broadcasts to the U.S., Canada, and Australasia, those opposing the cuts used data from an Arbitron study of broadband users to criticize the BBC World Service's decision. However, there is difficulty in applying Arbitron's findings completely to the World Service issue, as the nature of Arbitron's study, and its findings, do not completely apply directly to shortwave broadcasting issues. The universe of focus for the Arbitron study, and from which their sample was derived, consisted of those who had regular access to broadband connections. Two-thousand respondents were sampled nationally through surveys, with 200 being used for additional, in-depth interviews. Again, these were all regular users of broadband internet access. Therefore, the findings from this sample are best generalized to the population of regular broadband users. With that said, any conclusions drawn to shortwave listeners regarding their use of audio streaming to attack or defend the World Service must be done with extreme caution and careful reading of the data. Even so, some data from Arbitron's study bears reporting here as some pertains to habits of audio streaming through personal computers.

In support of the BBC World Service, nearly 60 percent of broadband users find the audio quality of broadband connections acceptable, and the vast majority (almost 90 percent) do not feel their computers are slowed down by the streaming ("Broadband revolution 2," 2001). On average, 20 percent of broadband users would media multi-task while online. Those who identified themselves as heavy users of *any other* media while away from the computer were 10 percent more likely on average to multi-media task while online. However, much of that multi-tasking involved *traditional* forms of media *as opposed to streaming over the computer*. For example, only one in five broadband users would listen to the radio (AM or FM) or watch TV while also online. Also, one in three broadband users would listen to CDs, tapes, or records (believe it or not) while online ("Broadband revolution 2," 2001).

Furthermore, most of the sampled broadband users had their access at work (64 percent), and most of them (70 percent) indicated no plans of getting a broadband connection at home. Additionally, most of the broadband users (75 percent) treated such access to the internet as access to an information source, while 63 percent of them had never tried audio streaming. This suggests that such users probably treat the internet as a source of print information, or visual information (e.g., through still pictures), at least. With only 12 percent accessing audio streams within the week previous to being surveyed, audio streaming was determined to *not* be an habitual behavior among the broadbanders. Most often, lack of portability and excessive time consumption were noted as reasons for not streaming audio ("Broadband revolution 2"). These and other findings led Arbitron to conclude that overall, media streaming is not habitualized among broadband users, nor is there any perceived threat of broadband streaming to traditional broadcast media. Whether that really applies to shortwave is hard to say since much (if not all) of what the study treats as traditional media include only local television and local radio ("Broadband revolution 2").

However, the report does give insight into the nature of broadband users' multimedia habits with their personal computers in 2001, and it provides data that actually supports both sides of the issue concerning the World Service's move to the internet. In support of the BBC, most broadband users felt the quality of audio broadcasts are more than adequate, nor were their computers slowed as a result of the streaming. In support of the shortwave enthusiasts, media streaming over the computer is not a habituated behavior. The results reported by Arbitron indicate a need for future changes and/or emphases by simulcasters and stand-alone Web broadcasters to cultivate and encourage greater multimedia habits among broadband users. Considering the low findings of multimedia use by broadbanders, and considering that broadband access to internet broadcasts is only one method of access, it appears that stable and entrenched

multimedia usage through personal computers and the internet was not an established media habit yet, at least in 2001 at the time of Arbitron's study.

In fact, those at *Passport* project that PCs will not even be the primary future instrument through which people access the internet. "Personal computers are an historical survival from the pre-internet period [and they] fit uneasily with it" (Campbell, 1998, p.130). Campbell suggests a device that does not require Windows software, nor the need to type in "http://" addresses. The future device will clearly employ more user-friendly features than current PCs use. Additionally, future success will more than likely require the type of portability and flexibility associated with radios. The expectation is for web radio now available over the PC to be accessible anywhere a Walkman can be taken, anticipating something that might be called a "Webman" (Campbell, 1998) that will provide a "wireless" access to internet streamed radio, and possibly television (S. Hults, Director of Communication-EWTN Global Catholic Network; personal correspondence [email]; September 15, 2003; D. Walcutt, former Worldwide Frequency Manager for RFE/RL from 1981 to 2001; personal correspondence [email]; August 19, 2003). But more on that below.

Satellite Broadcasting

Throughout the last 40 years, many have pointed to the July 10, 1962 launch of the Telstar communication satellite as the beginning of the end of shortwave radio (Colker, 2001, May 22). In 1996, *Passport* also referred to satellite radio as a recent innovation that many expected to replace shortwave broadcasting (*Passport*, 1996). In support of such claims, there are numerous comments by those associated with international broadcasting to indicate that there is a significant interest around the globe in satellite broadcasting, particularly among those on the receiving end of such broadcasts. For example, in 2001, Radio Sweden's *MediaScan* program was dropped from the air after a 53 year run, the longest program on shortwave devoted to broadcasting concerns for listeners. Originally called *Sweden Calling DXers*, the radio

version which began as a show for shortwave listeners had become increasingly devoted to *satellite broadcasting*, and was moved to the web as a text format. *MediaScan* follows a number of other similar programs devoted to reception issues that have been dropped as well (Elliot, 2001, June 23). In discussing satellite broadcasting as another medium of international broadcasting, it is important to note that satellite broadcasting includes both television and radio broadcasting. As satellite broadcasting for television preceded the development of consumer satellite radio systems, this section will address satellite broadcasting for television first.

The increasing presence of satellite dishes in society, both in the U.S. and abroad, leaves little doubt as to the growing use of this medium around the world. This growth, in turn, has had a clear impact on shortwave listening as many immigrants and expatriates are moving from shortwave to satellite television to keep in touch with home (Elliot, 2001, May 26). Individuals staying in their home-countries are also increasingly moving to satellite broadcasting as well. For example, satellite dishes have proliferated in mainland China, in spite of government orders in the early 1990s to stop their spread ("Murdoch tunes into China market", 1999, April 1). Additionally, Alvin Snyder has advocated the change from shortwave, which was, in his words, experiencing a "precipitous decline", to satellite television because people in "even in the most remote village outposts now watch television via satellite" ("Use satellite TV", 1997, January 1, p. A38).

Even so, supporters of international shortwave broadcasters point out that even though CNN, MSNBC, and the BBC have established international cable and satellite operations, their broadcasts are mainly (if not exclusively) in English, and include little (if any) coverage of local concerns for the consumers of their programming. Also, these services are primarily available only in affluent homes or hotels (Kempster, 2001, April 1). As Alan Heil explains, CNN broadcasts to hotel lobbies, but not to refugee camps; and in only three languages, not 50, as the VOA does ("The Voice of America: Searching

for a new doctrine," 2001). Still, VOA has a TV channel similar to BBC World TV and CNN, and it is carried by satellite with a footprint covering about 65% of world ("The Voice of America: Searching for a new doctrine," 2001).

Moving to the late comer in satellite and international broadcasting, satellite radio also shows potential as an international broadcasting medium that ought to impact shortwave broadcasting practices. XM satellite radio had begun testing its system in 2001, and it was planning to carry the BBC World Service, or at least one of its streams (Elliot, 2001, July 14). In recent editions of *Passport*, XM Satellite Radio has advertised its services, as well as the fact that it carries BBC World Service programming (*Passport*, 2002). Broadcasts are limited to "coast-to-coast U.S. coverage" as the service "is licensed to broadcast only within the U.S." (p. 41). Sony was marketing the DRN-XM01 which would function as a home or car satellite radio receiver by plugging into the home or car stereo, and cost was expected to be around \$300 (Elliot, 2001, July 14). Concerning anticipated success of both XM and Sirius satellite radio services, some on Wall Street expect positive results. Noted Wall Street analysts expect XM and Sirius satellite radio operations to have four million subscribers by 2004 (Elliot, 2001, June 9). Others feel that one will win out over the other, with XM as the anticipated winner because of its commercial support. As Sirius operates from subscriptions only, it is seen as the weaker of the two, and more likely to fold (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003).

A few comments concerning WorldSpace's performance, and possible success, have been made as well. Apparently, some who had begun the move to WorldSpace and its satellite receivers were feeling less than satisfied. Falling victim to arbitrary choices of management between VOA and WorldSpace, a number of VOA programs were deleted from some of the feeds. In other cases, the VOA was not carried at all. According to Kim Elliot of VOA's *Communication World*, "there [were] no plans for VOA to be added to WorldSpace . . . in the near future" (Elliot, 2001, May 26). Ken

Alyta, an American expatriate living in Seoul, South Korea, reported that he was using his WorldSpace satellite receiver more and more, but that the World Service and parts of VOA programming were not carried on WorldSpace's east beam from Asiastar (Elliot, 2001, July 14).

Some in the international broadcasting industry feel that WorldSpace's future success hangs on the satellite radio receivers themselves. There are those who feel the enterprise is a good idea, but do not expect the satellite receivers to become affordable enough for those in the target audience (D. McLaughlin, Director of Outreach for High Adventure Gospel Communication Ministries, personal correspondence, August 14, 2003). Damien Centgraff of WSHB explains that without a low-cost receiver, there simply will not be the listeners (personal correspondence [email], August 18, 2003). Others feel that WorldSpace will not truly succeed as it was intended because there are, and will be, too many in the world who simply do not, and will not, have access to the proper receiving equipment (G. McClintock, WWCR General Manager, personal communication [telephone interview], August 19, 2003). For these people, radio is, and will be, preeminent (G. McClintock), and others expect that satellite radio will not be a real replacement for shortwave broadcasts (D. Gibson, Intermedia Research Specialist, personal conversation [telephone interview], August 20, 2003).

By 2003, WorldSpace was still striving to get its third satellite, Ameristar, launched and located over the Western hemisphere. Concerning that satellite, some feel that there will be strong opposition from broadcasting interests within the U.S. who may lobby to prevent WorldSpace from being allowed to broadcast to the U.S. In Fred Osterman's opinion, it will be a cold day in hell before WorldSpace transmissions reach the U.S. unobstructed (F. Osterman, President of Universal Radio, Inc.; personal conversation [telephone interview]; September 19, 2003).

There are also those who question the long-term success of WorldSpace. Some see the situation at WorldSpace as still very murky, and suggest that it may even be on the

way out. It does not appear to be making money, and some of the original, key staff have been leaving (A. Heil, former Deputy Director of VOA; personal conversation [telephone interview]; September 4, 2003). Graham Mytton feels that the project was begun ten years too late, and that the deregulation of radio, particularly in Africa, will make WorldSpace's efforts to date a moot point (G. Mytton, Manager of the BBC World Service's global audience research programme from 1982 until 1996; personal correspondence [email]; September 18, 2003). Should WorldSpace fold, it is possible that a "consortium of major international broadcasters would want to operate the system (K.A. Elliot, audience research analyst in the Office of Research of the U.S. International Broadcasting Bureau; personal correspondence [email]; September 8, 2003). On the other hand, should it succeed, "there is nothing to prevent WorldSpace from graduating to television, paid for by advertising and fees" (D. Walcutt, former Worldwide Frequency Manager for RFE/RL from 1981 to 2002, personal correspondence [email], August 19, 2003).

Digital Audio Broadcasting

There is one more, newer technology of international broadcasting, and even radio broadcasting, that has surfaced in the literature, press, and other sources that deserves attention—namely Digital Audio Broadcasting, or DAB. It should not be confused with the digital audio that is associated with satellite broadcasts, internet audio streaming, or compact discs. According to Wood (2000), DAB differs from the rest in that it involves the creation of digital signals carried over frequencies common to current radio broadcasting—medium wave (MW), shortwave (SW or HF), and very short waves (VHF) associated with FM and portions of television broadcasting. However, as will be explained, in the case of shortwave transmissions, there is still the possible need to develop and market new receivers capable of demodulating the newer DAB signals.

Two formats of DAB have been identified. One is Ibiquity, and the other Digital Radio Mondiale (DRM). The significant difference between the two is that Ibiquity has

been designed to be compatible with current (analogue) receivers, while DRM requires the use of new receivers specifically designed to receive DRM broadcasts (D. Walcutt, former Worldwide Frequency Manager for RFE/RL from 1981 to 2002; personal correspondence [email]; August 19, 2003). Additionally, Ibiquity is focused on providing digital broadcasts for AM and FM broadcasting only within the U.S. and is not concerned with the shortwave market (www.ibiquity.com), while DRM on the other hand is oriented to broadcasting below 30 MHz (30,000 kHz) which includes the shortwave segment and excludes FM broadcasting (D. Walcutt). Therefore, the remaining discussion of DAB will center around the DRM format.

According to the DRM website (www.drm.org), DRM is "a worldwide initiative to bring AM radio into the digital era." Additionally, "with near-FM quality sound that offers dramatic improvement over analog AM, DRM will revitalize the AM broadcasting band below 30 MHz in markets worldwide." Digital Radio Mondiale roots its origins in a casual gathering in Paris in 1996 of a handful of international broadcasters and manufacturers who concluded that the days of national and international AM broadcasting below 30 MHz (where all international shortwave broadcasting takes place) were numbered, and so they turned to the concept of DAB. As explained on DRM's website, representatives from Radio France International, Deutsche Welle, Voice of America, and Thomcast were at this first gathering. Within six months, in the spring of 1997, DRM held its first formal meeting, and has been working on the issue of digital audio broadcasting since then. Currently more than 70 organizations are represented from across the globe, and in 2002, DRM was endorsed by the International Telecommunication Union for broadcasting on longwave, medium wave, and shortwave.

Wood (2000) personally feels that it is the medium of choice for international broadcasting in the future. As reports in the press indicate, he's not alone. In 1995, the BBC also felt that DAB would be the future of radio, and was even experimenting with it in the London area at that time (Snoddy, 1995, September 20). Beyond the experiments,

the BBC planned to have DAB covering 60 percent of Great Britain by 1998, and was also working with other international broadcasters to see how DAB might overcome the common reception difficulties of shortwave (Snoddy, 1995, September 20). While there will be a need for newer transmitters in some cases, the conversion of post-1990 transmitters should be relatively easy and require minimal costs (A. Heil, former Deputy Director of VOA; personal conversation [telephone interview]; September 4, 2003). In 1998, the BBC World Service entered into an international agreement with major radio manufacturers to develop standards and technologies that would allow for interference-free digital shortwave broadcasting. The standards were to be ready for ITU ratification by 2000, with radios ready for market in 2003 ("BBC World Service plan", 1998, March 4). However, all that has been reported in the press since then is an observed, but slow spread of DAB in Great Britain by 2001 (Snoddy, 2001, March 30).

Even so, there are some professionals within the international broadcasting community who feel positive about the future of DAB, particularly as a replacement for standard, analog shortwave. According to Don McLaughlin of High Adventure Gospel Communication Ministries, the "new digital technology that is emerging will radically change shortwave broadcasting and . . . listening (D. McLaughlin, Director of Outreach for High Adventure Gospel Communication Ministries, personal correspondence, August 14, 2003). McLaughlin adds that through the new DAB technology, shortwave broadcasting will become more competitive, and some governments have even adjusted their focus more in favor of shortwave. In his own words, as a result of DAB, "shortwave is in transition, but not out—just up." Staff from Deutsche Welle used similar language, explaining that through the DRM system, shortwave will change, and it will continue to be used as a vibrant form of international, and intranational communication (Personal correspondence from the staff at Deutsche Welle [email]; September 19, 2003). Others describe DAB as a "dream come true for the engineers" of shortwave (A. Heil, former Deputy Director of VOA; personal conversation [telephone interview]; September 4,

2003), and that it "will most likely revolutionize shortwave and lead it into the 21st century" (C. Tyson, Editor, Passport to WorldBand Radio; personal correspondence [email]; September 11, 2003). There are expectations that China may even adopt the DRM format "exclusively for internal and external transmissions within ten years (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003).

Perhaps the most interesting comments about DAB came from Graham Mytton, who formerly worked at BBC World Service's audience research program. In his own words:

International radio broadcasting remains an important medium. The advent of DRM will give it further strength and potential for growth, possibly in the commercial field also. Indeed DRM may be the route whereby commercial broadcasters begin also to use shortwave . . . , and we may see the arrival of commercial broadcasting on the international scene. (G. Mytton, Manager of the BBC World Service's global audience research programme from 1982 until 1996; personal correspondence [email]; September 18, 2003)

Fred Riley of IDT-Continental Electronics does not specifically suggest commercial possibilities through DRM, but his own thoughts support Mytton's. In Riley's own words, ". . . DRM . . . may open up the spectrum to widespread use of shortwave for program delivery services not envisioned today" as it "remains to be seen what new applications digital transmission may bring about" (Personal correspondence [email]; October 1, 2003). We may see the unfolding of these new applications fairly soon as regular DRM broadcasting on shortwave by major international broadcasters began on June 15, 2003, and "wide availability of receivers and transmitting equipment is expected during 2004 with wide acceptance" (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003).

In the not so distant past, it was perceived that there were no real commercial interests in the shortwave frequency range other than the few private shortwave stations. According to Ken Donow from the International Broadcasting Bureau, these frequencies are too unstable to be used for consistent industrial/commercial usage, and so the risk of significant private interests lobbying for their use is minimal ("The Voice of America: Searching for a new doctrine," 2001). With the successful application of DRM to those shortwave frequencies, that may change. Should DRM succeed sufficiently, private interests may express an interest in commercial broadcasting over shortwave. Global telecommunication and transportation infrastructures are in place to support international advertising, and should DRM succeed, it is difficult not to imagine private interests wanting to broadcast commercially over shortwave, especially if the state-run operations seem to tire of the "older" shortwave technology generally. We may be on the verge of not only witnessing greater commercialization of international broadcasting generally, we may even be witnessing the beginning of the commercialization of that broadcasting spectrum that has been so impervious to commercialization for so long.

Most seem to agree, however, that DAB faces a challenge similar to WorldSpace in that there will be the need for the newer DAB shortwave receivers to be affordable enough to get the market to grow at a pace fast enough to promote its survival—something that will need to happen within the next few years (D. Centgraf II, WSHB Chief Engineer, personal correspondence [email], August 18, 2003; D. McLaughlin, Director of Outreach for High Adventure Gospel Communication Ministries, personal correspondence, August 14, 2003; M. Wiberg, Frequency Manager for Swedish radio station, personal correspondence [email], November 6, 2002). The need for an affordable receiver that needs to be purchased by a minimum number of people leads George McClintock of WWCR to feel skeptical of DAB's future success, however (personal communication [telephone interview], August 19, 2003). Fred Osterman of Universal Radio is also keeping a somewhat skeptical eye on DRM, as he is

not convinced that DRM will be the panacea for shortwave that many in international broadcasting expect (or hope), feeling that audience concerns surrounding shortwave are more complex than just fuzzy reception and static. By his own account, however, much of that skepticism was reduced after Sangean (a Taiwanese shortwave receiver manufacturer) lent him a new DRM capable radio, and he found the performance impressive (F. Osterman, President of Universal Radio, Inc.; personal conversation [telephone interview]; September 19, 2003).

Some General Expectations For the Future

Of course, making any predictions about the future is fraught with uncertainty. With that in mind, it is helpful to think that the future may bring something (or many things) to international broadcasting, and shortwave broadcasting, that are not in the current field of vision or conceptualization. Still, there are those who expect state-run international broadcasting, regardless of the media, or medium, to be a continuing part of the global landscape. In discussing the Radio Free Asia issue back in 1992, Tom Korologos, former chairman of the U.S. Advisory Commission on Public Diplomacy felt that "international broadcasting will continue to be a big part of" the diplomacy in Asia ("Getting the message to China", 1992, July 25, p. A21). We can probably feel confident that such a sentiment applies to the rest of the world as well. While Korologos' comment suggests the continuation of state-sponsored international broadcasting worldwide, it is also a reminder of the changes taking place in the media landscape that will most likely continue to take international broadcasting away from radio's (mainly shortwave's) exclusive association with international programming. During the 1991 symposium on international broadcasting, the acronym tossed around was *IRB*, for International Radio Broadcasting. Already in 1992, the term "international broadcasting" was being used. This newer term was also the clear choice at the International Communication Association's pre-conference seminar, "The Voice of America: Searching for a new doctrine for international broadcasting" which was held at the 2001 at the International

Communication Association conference. IRB has become IB, with radio but one of the players.

With regards to shortwave broadcasting, other media options in countries where shortwave use to dominate have become more attractive to the audiences in those countries (K.A. Elliot, audience research analyst in the Office of Research of the U.S. International Broadcasting Bureau; personal correspondence [email]; September 8, 2003). As a result of changing media mixes around the world, many of the state-sponsored international broadcasters have increased their delivery options in an effort to tailor their media offerings to each target audience according to local media conditions (A. Heil, former Deputy Director of VOA; personal conversation [telephone interview]; September 4, 2003). As a result, in terms of the near future, "program delivery will be through whatever broadcast outlets are in place in any given country at any given time" (D. Walcutt, former Worldwide Frequency Manager for RFE/RL from 1981 to 2002, personal correspondence [email], August 19, 2003).

Even so, it is not just a simple equation of exploiting the newer media that are being used by audiences around the world. It is true that as societies around the world have become more open with their media, a number of the state-run international broadcasters have been able to place portions of their programming on media outlets in these increasingly open societies. However, there is also an increase in demand for "pure music and entertainment programs" in those places that have been enjoying greater media openness than was experienced during the Cold War (D. Walcutt, former Worldwide Frequency Manager for RFE/RL from 1981 to 2002, personal correspondence [email], August 19, 2003). As Walcutt explains, in Moscow and Bucharest, for example, non-stop music stations are by far the most popular.

In another example, Fred Riley of IDT-Continental Electronics explains how the Chinese government appears to be taking advantage of increased entertainment in order to pull its citizens away from the state-sponsored broadcasters.

The Chinese have been very effective in providing entertainment to their population in urban areas through private broadcasters like STAR TV. The operating theory seems to be that if you give them Bart Simpson, the lack of accurate local news isn't a great loss. The Chinese leadership may be right. Their apparent plan seems to be working. (J.F. Riley, Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003)

So even though many of the state-run international broadcasters have been able to expand into other media delivery systems, and have been working to tailor the delivery of their programs according to the media needs of their audiences, these audiences are also enjoying greater programming choices than they have enjoyed in the past. As a result, future international broadcasting is expected to face growing entertainment programming found in many of their target audiences throughout the world.

Concerning this new and changing environment of media technologies, a number of comments have been made about what might be expected, with some particularly addressing shortwave. Some expect that the biggest potential challenge to traditional radio will come after the implementation of cellular/PCS networks that will allow wireless internet access. Even then, Larry Magne of *Passport* (Magne, 1998) expects that traditional, AM and FM broadcasting over the airwaves will successfully coexist with global web radio, if for any other reason than the local advertising and audiences that it serves. But Magne noticeably said nothing of global shortwave radio coexisting with global web radio. Perhaps the shortwave broadcasts will move to the internet completely should such a system emerge.

Others envision a day when international radio and TV programming will meld with the computer and be carried over the internet (Kommando, 1998), or through satellite transmissions (Hopkins, 1999, July). That future may have come to the present already as WorldSpace has already marketed a PC card that "allows reception of

WorldSpace radio channels and web-based content on a computer" (Elliot, 2001, July 21). It was unclear whether the card would transform the PC into a satellite radio receiver, or just allow access to WorldSpace's web-based programming. From Elliot's wording, it appears to be more of the latter. Cost for the card was set at \$100, with first sales going to Kenya.

Still others imagine something not yet thought of. There is the possibility of developing a universal receiver for AM, FM, shortwave, satellite, and internet modulation (IM; Vernon, 2001, July 18), bringing new meaning to the term "All-Wave Receiver" used to describe the radios marketed in the U.S. in the 1930s that combined shortwave and medium wave reception into one set (Berg, 2000). David Walcutt expects a receiver to be developed that will be compatible with both the DRM and Ibiquity formats using Digital Audio Broadcasting (D. Walcutt, former Worldwide Frequency Manager for RFE/RL from 1981 to 2002; personal correspondence [email]; August 19, 2003), suggesting still more capabilities that might need to be added to a future "all-wave" receiver. Others vaguely describe some new technology that will be portable, affordable, and will supplant shortwave—something like a \$30 pocket computer that is linked to satellites (Chandwani, 1996, December 9).

Conclusion

In conclusion, a look to the future of international broadcasting also reveals a weakening of the nation state concept. Some state-run operations are in the midst of jumping from crisis to crisis still in search of their identity. Others are sharing delivery platforms such as WorldSpace and the internet with numerous commercial broadcasters that can effectively drown out the state-run operations. Also, the potential for commercialization of shortwave through Digital Audio Broadcasting threatens the strength and position of the state in the realm of international broadcasting. Finally, entertainment found on the newer forms of international broadcasting are turning local audiences away from state broadcasters, as evidenced in China. In all, these factors

combine to indicate the challenge facing state-broadcasters and the concept of the nation state in an increasingly commercialized environment of international broadcasting.

In what appears to be a state of near, if not complete, oblivion to the preceding concerns, ten years following the end of the Cold War, shortwave proponents and opponents were still hashing it out. Some still called for its retirement, while others claimed it was still healthy, wealthy and wise. One subtle change was apparent, however. In 1991, many who still saw a future for shortwave broadcasting saw no clear end to its presence as an international medium. Through the 1990s, some who saw a future for shortwave began to measure that future in years, usually decades. As for other media of international mass communication, it can be expected that they will grow and expand.

By some accounts, Web radio is still somewhat up in the air. Considering the past experiences with tethered radio, and the research of Arbitron, it does not appear that audio streaming over personal computers is as prevalent as some might suggest or hope. Still, with all the PCs that have the software and hardware to receive internet broadcasts, and considering the number of stations broadcasting over the internet, Web radio will be around. But whether it will replace standard shortwave broadcasting is still up in the air. Even though some notable services have moved some of their programming online and stopped carrying some of that programming over shortwave, these moves have taken place within the last three years. Furthermore, other noteworthy broadcasters have openly criticized such moves, and have also vocalized their continued commitment to shortwave.

Satellite radio broadcasting does not appear to be a replacement for shortwave either. Both U.S. operations are subscription driven, and both are more oriented to entertainment programming with a very limited service of news and information when compared to shortwave. WorldSpace does not offer a service that can directly replace shortwave broadcasting either. Though originally intended to be something that could replace international shortwave broadcasting for people in developing countries (see previous chapter), WorldSpace did not do so in the 1990s as it took so long to develop

and implement. Additionally, during its development, the original business plan mutated under financial pressure to become a commercial broadcaster instead of a public service broadcaster.

About the only new technology that can be promoted as a viable replacement for traditional shortwave is Digital Audio Broadcasting. However, its implementation is just emerging, and with listeners required to purchase new receivers, it is difficult to determine if the clarity provided by DAB will be sufficient to move the market of listeners worldwide in that direction.

However, the other question that should be asked concerning the relationship of these newer media to the future of international shortwave broadcasting is not whether one or more can or will replace traditional shortwave broadcasting. The question to ask is if any one, or all, will *displace* international shortwave broadcasting. Turning to the final chapters of this project, that question will be addressed in more detail.

Chapter Ten

After reviewing the data, it can be seen that international broadcasting over shortwave has certainly not vanished away, or even been radically decimated, *per se*. The sales of shortwave receivers continues to grow, and the number of state-run broadcasters on the air is still significant, if hardly changed since 1991. Still, there have been changes nonetheless—changes that taken together mark the beginnings of a transformation in international broadcasting that will prove to be a significant departure from the international broadcasting carried over shortwave for so much of the 20th century.

Through the 20th century, international shortwave broadcasting was synonymous with the nation-state. Not long after amateurs successfully demonstrated the capacity to easily broadcast long distances over shortwave, most developed nations of the world established international broadcasting operations over shortwave. Some used these airwaves to strengthen the ties between mother country and colonies, while others carried broadcasts from home to expatriates abroad. It was not long, though, before most countries began more aggressive broadcasting efforts to promote their "public policy" abroad. So began the radio wars that led up to World War II, continued through the war, and quickly picked up again during the Cold War. As a result, international radio broadcasting over shortwave has been intertwined particularly with war, and therefore with the state.

By the end of the Cold War, the potential for changes in shortwave broadcasting, and international broadcasting was apparent. As the Cold War served to structure much of what transpired over the international airwaves for so long, the period following 1991 represents a time for new structures to possibly emerge and re-orient international broadcasting. Generally, this project has examined some of those issues and concerns, and in this chapter, the findings concerning the research questions posed for this project are summarized.

The Research Questions

Research Question One: WorldSpace

At the beginning of the 1990s, the creation of WorldSpace appeared to be a significant event that would offer an additional international medium for those in the Third World who were almost exclusively tied to shortwave. Here was an emerging organization, driven by one man's dream to provide African residents access to free radio programming that would come in crystal clear through satellite radio broadcasting. Through affordable satellite radio receivers, those in the Third World would be able to move from crackly shortwave to clearer information programming. All this was going to happen by 1993, at least according to WorldSpace founder, Noah Samara. Under these conditions, it would appear that shortwave listening in the Third World would be significantly impacted.

In response to the first research question, it can now be seen that WorldSpace did not develop and unfold as initially planned, or expected. As it turned out, hardly any of the WorldSpace project was even close to getting off the ground by 1993. In fact, it is not until 1995 that any actual progress was made toward the development and building of the satellites that were to be used, with the first contracts to have the satellites built going out that same year to Alcatel. After that, it was not until the fall of 1998 that the first satellite—Afristar—was launched, and the actual services from Afristar did not start broadcasting until one full year after its launch. Additionally, Asiastar, originally scheduled for a 1999 launch, was also pushed back. It did not launch until the spring of 2000, and then began broadcasting in the fall of the same year.

The receivers also followed a path of high initial hopes to be followed by a more realistic unfolding of events. Originally scheduled to be on the market before 1995, and costing well under \$100, these radios met neither their target marketing date, nor their initial target price. The first contracts for making the chips necessary for the new receivers were not issued until after 1995, and the actual contracts to manufacture the

radios were not issued until 1997. By late 1998, some of the earliest radios were presented to the public, but were still not completely operational as the Afristar satellite was still going through broadcast testing. By this time, the price for the new receivers had increased substantially beyond the initially hoped for \$50, and eventually reached a cost of almost \$300. Not only did things take longer than originally hoped for, they were costing more as well.

Programming also took longer to fill, and in the end, it turned out not to be the programming Samara had originally intended. Some of the hoped for broadcasters delayed their sign-on dates with WorldSpace, while others never signed on at all. Furthermore, most of these broadcasting services were commercially oriented, instead of the public/informational services originally hoped for. Even though Radio France International and the BBC World Service had signed on by 2000, the vast majority of the programming carried over WorldSpace is commercially oriented. The financial forces involved in getting the satellite system developed and operational led Samara to step back from his original intentions of providing free informational broadcasts to those with the satellite radio receivers. In the end, only 5 percent of WorldSpace's channel capacity was reserved for not-for-profit broadcasts.

As can be seen, due to delays in development and challenges in contracting programming for the satellite channels, WorldSpace did not begin broadcasts as early as hoped, nor has it become the service originally desired. With all its delays, WorldSpace has not been in any position to pull listeners away from shortwave broadcasts, at least not until 1999 at the earliest. More realistically, 2000 and 2001 were likely to be the *beginning* when Third World listeners *possibly* might begin moving from shortwave radio broadcasts to WorldSpace satellite radio broadcasts.

Additionally, since WorldSpace's original programming ideas never materialized, a broadcasting system very different than what comes over shortwave has been created. According to his original descriptions, Noah Samara very much appeared to be

developing a satellite service that would mirror the general international broadcasting network that had become common to shortwave by 1991—a bountiful collection of stations providing informational broadcasting to anyone who could pick them up. By the time the Afristar and Asiastar satellites were up and operational, the WorldSpace services had become a collection of commercial radio broadcasting. It had become to radio, what direct satellite broadcasting had become to television—numerous channels carrying commercial broadcasts from a variety of stations. With much of the commercial programming oriented to entertainment, WorldSpace has not become the source of broad information originally intended.

To summarize, in many ways Noah Samara has succeeded in developing, putting into motion, and broadcasting from, a satellite radio broadcasting system. Samara has generated large sums to develop and build satellites and radios for a satellite radio broadcasting system, complete with programming, for the Third World. Taking the bulk of the 1990s to develop and implement, this satellite radio broadcasting system has not evolved into the system it was originally intended to be. Instead of providing free access to informational, public service programming, WorldSpace broadcasts are commercial/entertainment programming, with little space left to public service. Due to its lengthy development, costly receivers, and commercial programming, the WorldSpace system has not led to any noticeable changes in shortwave listening among Third World audiences.

Research Question Four: The State of Shortwave Broadcasting

The international broadcasting that was once almost exclusively state-run operations primarily carried over shortwave began in the 1990s to move into other delivery platforms. A number of the larger broadcasters began to have portions of their shortwave broadcasts carried over local AM and FM stations around the world. On the plus side, such local rebroadcasts have allowed the state-run broadcasters to reach those listeners that did not listen to shortwave. Yet on the negative side, these local

rebroadcasts placed a gatekeeping third party between the state-run broadcasters and their audiences. In some cases, broadcasts have been terminated. In nearly every case, the quantity of the rebroadcasts rarely equals what the listener can get over shortwave.

There was also a mix of reductions and expansions among the government-funded broadcasters, with the number of reductions exceeding the expansions. Among Western countries nearly all broadcasters passed through some form of budget reductions during the 1990s, while in the East, especially in Asia, there were expansions in facilities and broadcasts to accompany changes in programming to sound more Western. Web radio also emerged as a new medium for international broadcasting. By the end of the 1990s, many state-run broadcasters had added Web radio to their growing forms of international delivery systems.

A range of different experiences were encountered among the three broadcasters that were considered the most dominant and influential toward the end of the Cold War. For Radio Moscow, the Voice of America, and the BBC World Service, the 1990s brought different experiences to each. As a result of the many economic challenges in Russia through the 1990s, Radio Moscow passed through the most difficult budgetary experiences of the three. Additionally, Radio Moscow changed its name to the Voice of Russia. While the U.S. was not plagued with the same economic problems, the Voice of America found itself enduring reductions in funding. Also, the U.S. expanded surrogate radio operations thereby creating even more demands on the funding for international broadcasting. The World Service experienced the most stable financial and political contexts after the end of the Cold War. While there were some brief budgetary issues, overall the World Service was well supported by the British government. Furthermore, the World Service has expanded its operations in a meaningful way, and has seen fit to take on CNN as a global provider of international news. By the end of the 1990s, the World Service had expanded significantly into online broadcasting, and this in turn led to one of the more publicly discussed issues concerning shortwave broadcasting in the

1990s—namely the World Service's termination of shortwave broadcasts to the U.S., Canada, Australia, and New Zealand.

A final issue with international broadcasting to surface during the 1990s concerns the identity struggles experienced by the state-run broadcasters. As the Cold War ended, these operations lost much of the social and political framework within which their general identities had been developed. Identities which had been cultivated in war—the Cold War, World War II, and the radio wars of the 1930s—were suddenly searching for meaning in a post-Cold War environment. While some of the most prominent broadcasters gravitated toward developing identities similar to commercial broadcasters, critics called on them to recall the public service nature of international (shortwave) broadcasting prior to the end of the Cold War. This issue will be discussed in greater detail in the next chapter.

Research Question Two: BBC Cuts in Shortwave

The BBC World Service terminated its broadcasts to the U.S., Canada, Australia, New Zealand on July 1, 2001 and directed listeners in those areas to tune in the World Service via the internet, and local rebroadcasts if possible. The announcement came as a surprise to the shortwave community, both among the professionals and the listeners. This move by the BBC can be traced at least back to 1995 when internet audio broadcasting was first emerging as an international medium. There were those at the BBC, particularly John Birt, its Director General, who felt that the nature of analog broadcasting, of which shortwave is a part, was in the process of changing, and that it was time to part with the past, and embrace the new digital changes that were evolving in broadcasting generally, and international broadcasting particularly.

From 1996 onward, the BBC began working toward digitizing its archives, as well as its production. By the year 2000, BBC Online was functioning very successfully. In fact, the director of BBC Online was promoted to Deputy Director of The BBC World Service in July, 2000. Within one year of the promotion, the shortwave transmissions to

the U.S., Canada, and Australasia were cut, and listeners there were primarily moved to online World Service broadcasts. According to BBC claims, only 300,000 shortwave listeners would be affected by the cuts. The BBC also claimed that it was not abandoning the shortwave listener, *per se*. Instead, the BBC was simply developing a new delivery system. Those who rose up in opposition to the cuts included listeners, journalists, broadcasters, and current and former BBC personnel who expressed dismay at the BBC's thinking.

Some listeners and professionals banded together to form the Save the BBC World Service Coalition. As part of their efforts, they managed a website with information and updates about the pending cuts. Many who opposed the BBC's decision claimed that World Service programming on AM and FM outlets was a poor substitute for the continuous programming available over shortwave. Rebroadcasts were usually small portions of World Service programs, often just one hour at most. If there was any continuous rebroadcasting of the World Service, such programming was often placed on the graveyard shift and used as filler programming from midnight to sunrise.

For the critics, internet broadcasts were an insufficient replacement for shortwave broadcasts as well. Listeners trying to consistently access the World Service online experienced software difficulties in addition to delays and disconnects resulting from internet traffic that would vary through the course of the day. Finally, many shortwave listeners were critical of online listening because it just did not offer the convenience that was inherent to traditional shortwave listening, especially with portable radios.

As it turned out, the BBC World Service was not lost to listeners in the areas affected by the cuts, as programming targeted to nearby areas proved sufficient, at least in North America. Furthermore, other international shortwave broadcasters, particularly Radio Netherland International, openly expressed their commitment to shortwave. Perhaps greater average Americans (non-shortwave hobbyists) will encounter and/or access the World Service through online streaming (broadband or dial-up). However, the

average active listener of the World Service on shortwave may not access such programming over the internet. If the BBC World Service was striving to reach a greater American audience through its online source alone, evidence of their success is undetermined at this point, though local AM/FM rebroadcasts have added to audience size beyond what was only a shortwave audience before. In any case, in the process of terminating some key shortwave services, the BBC clearly offended, irritated, and discouraged for a time their listeners who were once regularly tuned into the World Service on shortwave in the U.S., Canada, Australia, New Zealand, and the South Pacific. Whether the internet becomes the new medium for international broadcasting, time will tell.

Research Question Three: The Future

Moving through the 1990s, state-sponsored shortwave broadcasters started the decade in a state of confusion with the Cold War concluded. Ten years later, with newer technologies involved in international broadcasting and continued uncertainty as to global geopolitics, state-sponsored international broadcasters were still trying to find their way. One certainty has been that state broadcasters have increased the number of media outlets used for their broadcasts, but at the same time this increased the complexity of the situation. What were once radio stations have become broadcasting operations/services with a mix of radio and television services provided over the airwaves, satellites, the internet, and cable in some cases. Additional challenges for international broadcasters has come from the deregulation of state media around the world, in that such actions have put greater local media products before those who were heavily served by shortwave broadcasts in the past.

By 2001, questions concerning the status of shortwave broadcasting was in many ways as unanswered as it was in 1991. There were those who still felt that it was an outmoded, older technology that had been surpassed by satellite broadcasting, or any other newer form of international communication technology. As newer media outlets

continued to develop around the globe, and as younger generations become increasingly unfamiliar with shortwave broadcasting, it was argued that shortwave was on its way out.

Opposite these calls for shortwave's end were those who still saw no reason for international shortwave broadcasting to decline. Shortwave receiver sales have increased throughout the 1990s, and by 2001, sales were still growing. Furthermore, this growth in sales was primarily a U.S. phenomenon, and shortwave manufacturers have begun to target other parts of the world with similar marketing campaigns. Between these two arguments, there are those who felt that shortwave would be around for the "near" future, but that its days as an international broadcaster were beginning to come to an end. Some offered some rough estimates of shortwave's remaining life span, and those were usually measured in decades.

Yet the future of shortwave's "competing" media are operating with some of their own uncertainties as well. The internet appears to be the least expensive medium through which to send out international programming. However, the realm of Web radio differs substantially from the realm of shortwave broadcasting in that there are so many other types of stations carried over the internet that compete with the state-run shortwave broadcasters' simulcast programs. *Passport* made early attempts to annually document the world of international Web radio, but after two editions, they have not continued the *Passport to Web Radio* series. Stand-alone internet radio broadcasters were falling to advertising to meet the bills. Research into multimedia access by broadband users indicated that such access had not become habitual among most with broadband access in 2001. However, the report offered advice as to how broadband providers could market multimedia access and encourage subscribers to use their broadband connections more effectively toward that end. As a medium for broadcasting, the internet will not fade away as there appear to be plenty of commercial interests involved in promoting its success.

Satellite broadcasting has emerged in the last 20 years to be a viable medium for television broadcasting, while satellite radio broadcasting for consumer consumption has significantly emerged in the 1990s. The three prominent satellite radio broadcasters—WorldSpace, XM, and Sirius—were not operational until between 1999 and 2001 as most of the 1990s was spent developing these satellite services. With portable receivers that are not too expensive, satellite radio can offer a new and clear offering of programming from well beyond the traditional reach of local AM/FM. Some are critical of the need to pay monthly subscription fees, but that may turn out to be a non-issue in the U.S., and WorldSpace does not require a subscription fee for its basic service, which is not lacking in terms of channels.

In both cases—XM/Sirius and WorldSpace—neither is a replacement for traditional shortwave broadcasting. Little of what is found over shortwave can be found over any of the satellite radio services. As currently manifested, satellite radio and television have not provided media that could directly replace shortwave. If anything, satellite television may *displace* shortwave listeners as such listeners replace their radios with dishes and all the programming that dishes bring.

Conclusion

In summary, the first decade after the end of the Cold War certainly did bring changes to the world of international broadcasting. New technologies, and changes in the political landscape led to searches for identity as well as the emergence of different delivery systems. WorldSpace, one of those newer delivery systems, has not impacted state-run broadcasting, if at all. At least not yet. The WorldSpace systems have taken longer to develop and market than originally imagined. Additionally, the burden for the consumers in the form of prices for the satellite radio receivers has been much heavier than was initially expected and planned. Furthermore, the operation appears not to have been able to generate a significant profit as of yet, and may still be relying on donations from wealthy investors. With some of the original staff jumping ship, one is left to

wonder if WorldSpace has stalled, if not for the moment, for good. Regardless, satellite radio broadcasting most certainly will not fade as evidenced by XM's and Sirius' success in the U.S. Also, it is doubtful that some organization, or consortium of organizations would not assume responsibility for the system that Noah Samara and his employees have succeeded in developing thus far.

Even though WorldSpace has not significantly impacted international state broadcasting, there has been plenty of shifting and changing going on among state broadcasters since the end of the Cold War. Most state-run stations have reduced their operations overall, and shortwave specifically, since the end of the Cold War. With the emergence and application of newer international communication technologies, shortwave broadcasts have often become one medium among others competing for funding to carry international broadcasts. Overall, there has been a decrease in the type of blanket broadcasting that was common to many of the broadcasters during the Cold War, particularly during the 1980s. Instead there is more focused/flexed forms of international broadcasting, especially on shortwave, as state-run broadcasters target different regions and peoples depending on the needs of the broadcasting state. And finally, with the end of the Cold War, there appeared a clear search for identity for state-sponsored broadcasters. Within the framework of war, such broadcasting has operated under a clear sense of purpose pretty much since its earliest broadcasts in the late 1920s and early 1930s. At the end of the Cold War, it appears that the new framework adopted by the state-run international broadcasters has been the structure of commercial broadcasting as most stations have become focused on audience size. Instead of adopting a framework of public broadcasting, the state-run broadcasters have adopted the CNN framework.

The BBC World Service, more than the other state-sponsored broadcasters, has been most aggressive within such a structure. In its efforts to continually reach increasing audiences in the face of declining shortwave listeners, the World Service has actively developed alternative media for their broadcasts. Over 2,000 local AM and FM stations

in cities around the world have begun to carry segments of World Service broadcasts, thus allowing the World Service to reach beyond traditional shortwave. Additionally, the BBC was one of the early developers of an online operation to carry news and broadcasts over the internet. As a result, the World Service eventually terminated shortwave broadcasts in those regions where it was felt that shortwave listeners was a minor portion of the World Service's overall audience. Namely, shortwave broadcasts from the World Service to the U.S., Canada, Australia, and New Zealand were officially terminated on July 1, 2001, and listeners in these areas were directed to local broadcasts and internet simulcasts. In spite of an incredible outpouring of complaints and criticisms concerning the BBC's decision, the actual fallout was minimal as many committed shortwave listeners have been able to receive World Service shortwave broadcasts targeting neighboring regions. Still, overall, the BBC World Service epitomizes the move from public policy broadcaster of the past to more commercially oriented broadcaster of the post-Cold War era.

Finally, there is the future. When considering the future of international broadcasting, it is expected that there will be a continuation of juggling among different delivery systems depending on the target audience and the levels of funding enjoyed by the broadcaster. It can be expected that fiscal concerns will be ever-present, and that state-run broadcasters will not enjoy the high levels of funding enjoyed during the Cold War. As a result, there will be more targeting of broadcasts. Also, it can be expected that there will be more and/or newer delivery systems through which international broadcasting is accomplished. It may be that the number of media for international broadcasting increases, thereby stretching (and stressing) the already limited funding of state-run operations. It is also possible that some, if not all, of these media converge into some yet-to-be-developed device through which such broadcasts may be transmitted.

Regardless, if trends continue as they have over since the end of the Cold War, one might expect a new economic/political structure to emerge in the form of a

corporate/nation state. This possibility is addressed in the following, and final chapter, along with other issues and considerations generated by this project.

Chapter Eleven

Recall how back in the late 1920s, Frank Conrad of Westinghouse traveled to Europe in order to participate in experiments and conventions dealing with the application of longwave broadcasts to distant transmissions. While the experimenters and engineers contrived the needed hardware to broadcast and receive long distances with longwave, Conrad would retire to his hotel room each evening and with a device the size of a breadbox, he would tune in experimental shortwave broadcasts from Westinghouse in Pennsylvania. It might be a slight hyperbole, but while the engineers worked with equipment that filled rooms, Conrad sat in his room with a breadbox and listened to baseball scores coming from the U.S. For the next 60 years, nations battled over these same airwaves as ideologies clashed, and citizens listened, often in secrecy, and sometimes in crisis.

Just as more came from Conrad's own little experiments, more than just the originally posed research questions has been addressed through the research conducted for this project. It has been observed that significant political, economic, and social factors and concerns are associated with the realm of international broadcasting, and some of these factors and concerns will now be discussed. As will be seen, the first decade following the end of the Cold War marks a period of change not only in the concept of international broadcasting, but also the idea of the nation state and state-sovereignty. These change will also be discussed, along with the potential for future research.

Considerations

The Changing Face of International Broadcasting

From the early 1930s until the early 1990s, the concept of international broadcasting was for all intents and purposes synonymous with shortwave broadcasting operated by prominent nation-states. By the end of the 1990s and the 20th century, this association began to change. Many of the state-run broadcasters developed additional

delivery platforms beyond shortwave. A number began to have portions of their programming carried over local AM and FM stations. Some of the state-run broadcasters also developed satellite television systems and programming. Many have added audio streaming over the Web as an additional medium to carry their international broadcasts, and some have moved almost completely to the internet (e.g. Swiss Radio International). Finally, with the advent of satellite radio broadcasting, some stations have explored that new medium as well. Overall, the international broadcasting that was shortwave broadcasting by the nations of the world has moved beyond shortwave alone in the last decade and is now accomplished over multiple media.

Additionally, the international broadcasting that was once entirely dominated by state-supported broadcasters (with the exception of a few private religious broadcasters) has seen an increase in private and commercial broadcasters. With the growing popularity around the globe of satellite television, and with the advent of satellite radio, private and commercial programming can now be found in addition to the state-sponsored programming that was once the only international broadcast programming available. It should come as no surprise then that during this time, the state-sponsored stations struggled with their identity among the growing private and commercial international broadcasters. An identity as soldiers of war born out from the experiences of three wars (World War II, the Cold War, and the European cold war of the 1930s) and close to 60 years was lost. Also lost, or never really tightly grasped, was an entrenched identity of state-run broadcasters as public service broadcasters. Under these conditions, international broadcasting has seen not only an increase in commercial broadcasters, but the focus of the state-run broadcasters has also become more oriented toward commercializations. As a result, these changes evidence a decline in the pure nation state formed on the heels of the printing press.

Commercialization of International Broadcasting

As noted, increasing commercialization of international broadcasting began in earnest during the 1990s. Early in the 1990s, Ted Turner's CNN enjoyed visible international broadcasting success during the Persian Gulf War. Since that time, international television broadcasting organizations have continued to grow as television satellite receiving equipment have continued to spread across the world. Additionally, XM and Sirius satellite radio systems have emerged. While Sirius does not carry commercials, XM does, and both are still private (or publicly traded) organizations oriented to profit making. WorldSpace openly broadcasts commercial programming in an effort to meet its costs and debts. Also, stand-alone Web radio stations have been turning to advertising to help stay afloat and pay the bills. Even state-run international broadcasters that have turned to the internet have turned to a medium that has become increasingly commercialized since the early 1990s.

As can be seen, international broadcasting is increasingly taking on the appearance of commercial broadcasting generally. Even the private international broadcasters that are not commercialized, such as Sirius and any stand alone Web broadcaster, must make some money. Whether commercialized or private, these operations must win audiences who will pay some form of subscription fee. This realization helps to draw a primary distinction between public and commercial/private broadcasting. All commercial broadcasting is done, and all such programming is created, for the purpose of creating an audience that can be sold to the advertisers, or at least pay subscription fees. Under these conditions, the programming is developed to accomplish that task, and generally, the more attention-getting the programming, the more successful it is at creating larger audiences thereby commanding larger commercial revenues from advertisers. Though some private broadcasters are not commercialized, the principle still applies. The more captivating the programming, the larger the audience, and the more subscription fees that can be earned.

As Postman (1992) explains, "there is a calculus of technological change that requires a measure of even-handedness." (Postman, 1992, p. 7). Furthermore, he adds that technologies change our meaning system—our worldview, and these changes take place quietly and silently (Postman, 1992). We have witnessed a calculus to the technological changes in international broadcasting since the end of the Cold War. While audiences in some regions have declined, others have remained steady, or perhaps have grown. Sales of portable shortwave receivers have increased during this time. Yet stations have generally cut back and reduced their shortwave broadcasts to some degree. Furthermore, other international broadcasting outlets and media have emerged. Satellite radio and Web radio have both emerged as new international media since the end of the Cold War.

Has "a measure of even-handedness" been employed in their development and entry into the realm of international broadcasting? The response to that question depends of who you ask. While *Passport* editors probably feel that there has been little or no measure of even-handedness in the calculus of emerging international broadcasting technologies since the end of the Cold War, the BBC and WorldSpace probably think otherwise.

Regardless, it is important to remember that every tool (technology) contains an ideological bias, a predisposition toward some social constructions, and an opposition to others (Postman, 1992). The advent of newer technologies for international broadcasting illustrates how the bias of television has become an integral part of international broadcasting. According to Postman (1985), the bias of television derives from the biases of the telegraph and photography which in turn offer a new "language" in which interconnectedness, context, history, and expository explanation are replaced by image and instantaneity. With television, fascination takes the place of coherence and complexity. In short, the new television medium became the perfect medium for entertainment. The bias of television, therefore, is that of entertainment—what Postman describes as a peek-

a-boo world where events pop in and out of view. And like the infants game of peek-a-boo, television is itself very entertaining. "The problem is not that television presents us with entertaining subject matter *but that all subject matter is presented as entertaining*, which is another issue altogether" (Postman, 1985, p. 87, emphasis added). Put another way, playing peek-a-boo is a perfectly fine game to play. Postman (1985) likens it to building castles in the air, which is also fine to do. However, if we try to *live* in the castles in the air, or think that all of life should be a game of peek-a-boo, then we have problems. Such is the bias issue with television. Mediated entertainment is not the concern. Instead, as the new medium of television becomes the primary form of discourse and mediation in society, the bias of entertainment then became the influential force in structuring society. To use Postman's terminology, the bias of the new medium becomes the metaphor through which life is interpreted, structured, and accomplished.

In reviewing the transformations that have taken place in international broadcasting since the end of the Cold War, it can be seen that the bias of television and entertainment have been present all along the way. As early as 1994, *Passport* was trying to get the state-run broadcasters to see that it was not their place to play the audience/commercialized/entertainment game that television has so perfected and does so well. It was as if the parties involved in what had shortly before been international shortwave broadcasting were acting as if the bias of television was the norm. It was as if it was not even questioned. Postman (1985) saw this in U.S. society generally, and expresses it effectively as follows:

Television has become, so to speak, the background radiation of the social and intellectual universe, the all-but-imperceptible residue of the electronic big bang of a century past, so familiar and so thoroughly integrated with American culture that we no longer hear its faint hissing in the background or see the flickering gray light. This, in turn, means that its epistemology goes largely unnoticed. And the peek-a-boo world it has constructed around us no longer seems even strange. (p. 79)

As evidence, international broadcasting has moved toward the bias of television and entertainment with that bias as an imperceptible background noise dictating future direction. The epistemology of television has gone largely unnoticed as international broadcasters moved toward greater entertainment and commercialization.

The analogy of the truck smuggler comes to mind. A customs official routinely stopped and inspected the trucks of a known smuggler in an effort to find some contraband that the customs official was certain the smuggler was transporting. Regularly, the smuggler would pass through, and regularly the official would stop him and inspect the trucks for contraband. After many years of repeated inspections, and after consistent failure to find any suspected contraband, the official neared retirement. On his last inspection of the smuggler, the official begged the smuggler to reveal his contraband that the official was never able to discover, with the promise of not turning the smuggler in. "Simple," replied the smuggler, "trucks."

So it has been with television and its bias. Near countless studies have been conducted in the effort to determine television's effects. Like a customs inspector, researchers have tried to determine how violent, intelligent, dumb, etc. television makes us. What we have missed is the bias this technology carries with it as television has been given room in society. That bias which has entered our lives silently and imperceptibly is the bias of entertainment, and its sibling (if not twin, perhaps fraternal) of commercialization. What this study has illustrated is that the bias has finally gone international.

The Decline of the Nation State

In the process of all these changes, the nation state has gone into decline. Ironically, it was the practically uncontrolled bypassing of national boundaries by shortwave propaganda broadcasts in the early 20th century which started this decline (Mowlana, 1996). Still, during much of that time, state-supervised media operations

promoted, and were the voice for, the national ideals of the sponsoring state (Mosco, 1993). Today, however, privatized media no longer speak for the state in the same way as the state-run operations. While the state-run media have as their main goal the representation and presentation of the national identity, privatized media are profit and market driven. In other words, the marketplace has displaced politics as the center of society (Barbero, 1993) at an international level. Barbero adds that "the media themselves are losing their communicative identity [as] their relation to the social movements is no longer their capacity to mediate . . ." Instead, they are part of "the new space of industrial reconversion" (p. 144).

Through this examination of international broadcasting since the end of the Cold War, it has been illustrated that the growth and applications of international communication and media have been more focused on the interests of the (mainly corporate) international players at the expense of civil society on the global scale (Hamelink, 1993). The private enterprises that Schiller (1993) describes as gargantuan are what the state-run broadcasters are competing against. As Mattelart (2003) explains, a large share in the growth in the idea of a techno-global world has been accomplished through large multimedia groups and global advertising agencies. Schiller is more explicit:

These integrated cultural colossi have become the educators and guardians of the social realm. They select, or exclude, the stories and songs, the images and words that create individual and group consciousness and identity. They do this for commercial gain, and this in itself produces grave distortions. However, they have also become so entwined with the industrial engines of the market that increasingly all spheres of human existence are subject to the intrusion of commercial values. (p. 466)

As we have seen, even the state-run international broadcasters have become subject to these intrusions of commercial values. Formats have changed and continue to change in

order to become more popular to younger audiences. In others words, what used to be insightful, analytical have become increasingly oriented to popular culture.

The result, as has been noted periodically throughout this paper, is a decline in the nation state and its sovereignty. With the emergence of a "transnational temporality," the nation state has begun its decline toward "out-of-date . . . sovereignty" (Barbero, 1993, p. 144). As Innis (1986) explains, "states are destroyed by lack of culture," and culture is often the victim of mass production and standardization (p. 168). In international broadcasting, the product has moved from expressions from diverse and varied nation states to the common and simplified voice of standardization and entertainment. Though there still be segmented communities, increasingly they follow global logics instead of national logics. According to some management theorists, regional and *national* differences are now fading into the past as national communities have become, or are becoming, consumption communities (Mattelart, 2003). It bears watching, as "it is over [the] corporate notion of globalization that the fate of a battle for the interpretation of history is being decided" (Mattelart, 2003, p. 551).

The End of Shortwave's Golden Age

Finally, through the decade of the 1990s, shortwave listening has clearly followed a trend described not only at the beginning of the 1990s, but also observed in the 1980s—specifically, as other media outlets increase and improve in a given area, shortwave listening declines ("Audience Research," 1991; Browne, 1982; Demitz, et al., 1991). In 1991, Demitz, et al. suggested that there was reason and evidence indicating that with more radio and TV media at shortwave listeners' disposal, shortwave listening would naturally decline, and that this should lead to substantial changes in shortwave broadcasting sooner than later. It is not hard not to look at the changes which have taken place in the 1990s and see the substantial changes. Local rebroadcasting has increased, the internet has become a second outlet that can carry all of an international broadcasters programming, external shortwave broadcasting has been almost entirely abandoned by

Swiss Radio International and Radio Australia, and the BBC World Service has officially terminated some of its shortwave broadcasts to what once must have been some of its most important regions. According to David Gibson of Intermedia Research, the primary challenges to shortwave broadcasting after the Cold War have come from the growth of reliable local news sources for listeners, the growth of successful FM stations in previously media poor areas, and overall greater media freedom for listeners. Generally, increasing numbers of more reliable media outlets has overshadowed shortwave which was once an only medium for many prior to 1990 (D. Gibson, Intermedia Research Specialist, personal conversation [telephone interview], August 20, 2003).

With such descriptions in mind, it is easy to see similarities and comparisons to the changing face of AM (medium wave) broadcasting in the U.S. during the 1950s and 1960s. By the 1950s, medium wave broadcasting in the U.S. had expanded as much as possible within the frequency range assigned to such broadcasting (Sterling & Kittross, 2002). By the 1980s, shortwave broadcasting was also bursting at the seams in terms of frequency allocation. It was simply packed with international broadcasters trying to squeeze into the bands allocated to international broadcasting over shortwave, and at the WARC-92 conference, the congestion on shortwave was a topic of much attention.

Returning to AM broadcasting,, through the 1950s and 1960s in the U.S., FM radio and television broadcasting expanded and forced medium wave broadcasting to make significant adjustments (Sterling & Kittross, 2002). In the case of AM broadcasting in the U.S., one of the more significant changes was the loss of network affiliation as the networks quickly moved their programming to television. In short, AM radio no longer held a monopoly of U.S. audiences after the early 1950s.

For shortwave, the period between 1950 and 1980 has been described as its Golden Age (Mytton, 1986). Yet through the 1990s, the information from the experiences of shortwave broadcasting indicates that shortwave's Golden Age began to decline. Even though other media for international broadcasting had emerged prior to the

1990s, that decade marks the period when shortwave changed from really holding the monopoly on international broadcasting to becoming one media among many. In the case of the state-run broadcasters, shortwave is used alongside local rebroadcasts, the internet, satellites radio, and some satellite TV broadcasting to carry international broadcasters' programming around the world. Furthermore, there are increasing numbers of media outlets and media organizations around the world offering programming to people previously dependent on shortwave and state-run programming alone. Simply put, shortwave and state-sponsored broadcasting have become one offering among many at the start of a new century of international mass communication, and in many ways the 1990s mark the beginning of the end of the Golden Age of international shortwave broadcasting—a Golden Age that lasted for the better part of 40 years.

Future Research Considerations

In terms of future research, there are technological as well as social concerns worth following. Concerning technological issues, the international broadcasting technologies that have emerged since the end of the Cold War ought to be monitored in order to document their evolutions. For example, it can be expected that Web radio will move beyond desk-top connections and should move toward greater portability. Digital Radio Mondiale's success in generating sufficient buyers of digital shortwave radio receivers is still undertermined, and should therefore be followed.

From a more social angle, the implementation of these, and yet to be developed, technologies of international broadcasting needs to be monitored as well. Should DRM succeed in becoming a potent form of international shortwave broadcasting, the commercialization of the shortwave spectrum is a very real possibility. This should be documented, particularly any debate that may surround such efforts. And if there be no debate, that in itself would need to be accounted for. Overall, as an extension of this project, the conversion of international broadcasting from an ideologically based activity to an entertainment based activity needs to be further observed and documented. It is

possible, to borrow from Postman (1985), that we will find that we have turned international broadcasting into one more place where we simply amuse ourselves to death.

Conclusion

State-sponsored international broadcasting will continue in the future. It has become too much of part of global diplomacy to be done away with. However, the media over which it is carried will continue to evolve. Much of what is going on today and much of what has happened since the early 1990s represents the beginning of something new to international broadcasting which is still evolving as significant parties and players negotiate the media environments they create and occupy. As some suggest, some new device or devices will emerge that seamlessly combine a number of media and will allow clear and easy access to not only the international broadcasters, but also to any other broadcaster out there.

As Monroe Price explains, the concept and practice of international broadcasting developed in war—first, the propaganda war in Europe of the 1930s, and then primarily the Cold War of the last half of the 20th century. These contexts can be characterized as having set directives and technologies, and with the end of the Cold War, that structure changed drastically, leaving those involved striving to search for a meaningful transformation within the changing structure ("The Voice of America: Searching for a new doctrine," 2001). No longer was there one primary enemy against which to define identity and operations. Additionally, as these broadcasters were beginning to redefine themselves against the loss of that defining opposition, other technologies rapidly entered the international communication media framework. Where broadcasters formerly identified themselves by the medium that carried their messages, they have been faced with exploring newer forms to convey their message, with each form carrying the potential to redefine the sender using it.

Furthermore, there are additional media outlets competing for the attention of international broadcasters' audiences. According to Jamie Metzel, who once served as a senior coordinator for International Information at the Department of State, nationally-sponsored international radio broadcasting faces the greater challenge of competing with multiple media in order to effectively convey public policy, as there is currently a greater measure of multiple, mediating means through which people around the world can obtain information ("The Voice of America: Searching for a new doctrine," 2001). As explained in the BBC's annual report for 2000/2001, the BBC was facing increased challenges to maintain its audiences worldwide in the face of increasing media competition resulting from deregulation efforts around the world (Elliot, 2001, July 7).

If one clear certainty has evolved, it would be the condition of growing needs and demands being placed on state-run broadcasters suffering from increasingly limited resources. With the end of war, the ability of international broadcasters to feel a sense of greater access to the government purses has declined, if not disappeared. While politicians controlling the flow of funding may have been more inclined to channel money to the international broadcasters in the face of a threatening enemy, with the loss of that enemy and an undefined global context, the money has become less forthcoming. According to Alan Heil, former Director of programs at VOA, much of what concerns government-sponsored broadcasting is a drive to save money ("The Voice of America: Searching for a new doctrine," 2001). *Passport* also saw this. As its editors note, the source of major changes, and/or any declines in shortwave broadcasting comes down to money. During times of financial exigencies, coupled with the presence of newer delivery technologies, the funds are stretched more and more. As a result, money saving efforts are employed such as reductions in languages or frequency usage (*Passport*, 1994).

As noted, the increases in media outlets stretch the money spent on international broadcasting more and more. As Heil reminds us, international broadcasting currently

includes many media sources such as television, internet, and radio ("The Voice of America: Searching for a new doctrine," 2001). In defense of its choices to terminate shortwave services to North America and Australasia, Mike Cronk, Controller for Distribution and Technology for the World Service, explained that the World Service utilizes 12 different delivery platforms, and cannot afford to use every platform everywhere it desires to send its programming (Elliot, 2001, June 16). John Figliozi, one of the vocal critics of the recent World Service's cuts, and active on the SaveBBC website, recognized the challenges of international broadcasters as they are increasingly forced to choose between various media to broadcast internationally. "With too few resources chasing too many tasks, the pressure to find the right mix is tremendous" (Figliozi, 2001, July). Even Heil has questioned the Voice of America's capacity to maintain shortwave broadcasts while also developing multimedia channels with concerns of bandwidth changes and/or expansions, the recording and archiving of broadcasts, developing increasing interactivity, and adapting to the convergence of these and future technologies ("The Voice of America: Searching for a new doctrine"). Others expect an increasing effort by the major state-run broadcasters to evaluate and incorporate more international broadcasting *over all possible media outlets* (F. Osterman, President of Universal Radio, Inc.; personal conversation [telephone interview]; September 19, 2003).

Still, there are more changes in the air. Will Digital Audio Broadcasting take off as hoped for and thereby re-establish AM broadcasting across shortwave again, and possibly lead to significant commercialization of shortwave? Or will the internet replace shortwave as the medium for access to international radio in the near future, and possibly international television in the long-term? Perhaps an appropriate receiver will be developed that will bring all these media in one package to the listener/viewer. Perhaps international television will simply eclipse international radio in all its forms. We are reminded that there is not an absolute outcome here. What will happen with shortwave broadcasting is being negotiated among many parties with many perspectives and values.

As a body, they are negotiating what the reality is, and what the reality will be, for shortwave broadcasting specifically, and international broadcasting generally. Some changes have taken place, and there will be more changes in the future. Whatever, happens, only time will tell, and ten years from now might present another opportunity to examine exactly what has taken place.

Appendix A

Secondary Sources (listed chronologically, then alphabetically)

Journal Articles

Krugler, D.F. (1999). Radio's Cold War sleight of hand: The Voice of America and Republican dissent, 1950-1951. *Historical Journal of Film, Radio and Television*, 19, 27-38.

Wilson, H. (1999). The space of radio in the network society. *Australian Journal of Communication*, 26 (3), 99-110.

Cone, S. (1998). Presuming a right to deceive: Radio Free Europe, Radio Liberty, the CIA, and the news media. *Journalism History*, 24 (4), 148-156.

Dunaway, D. (1998). Community radio at the beginning of the 21st century: Commercialism vs. community power. *Javnost—The Public*, 5 (2), 87-104.

Hanson, W. (1998). The original WWW: Web lessons from the early days of radio. *Journal of International Marketing*, 12 (3), 46-56.

Boyd, D.A. (1997). International radio broadcasting in Arabic: A survey of broadcasters and audiences. *Gazette*, 59 (6), 445-472.

Salwen, M.B. (1997). Broadcasting to Latin America: Reconciling industry-government functions in the pre-Voice of America era. *Historical Journal of Film, Radio and Television*, 17 (1), 67-89.

Forge, S. (1996). The radio spectrum and the organization of the future: Recapturing radio for the new working patterns and lifestyles. *Telecommunication Policy*, 20 (1), 53-75.

Katz, E. (1996). And deliver us from segmentation. *Annals of the American Academy of Political and Social Science*, 546, 22-33.

Rawlensley, G.D. (1996). Cold War radio in crisis: The BBC overseas service, the Suez crisis, and the 1956 Hungarian uprising. *Historical Journal of Film, Radio and Television*, 16 (2), 197-219.

Scannel, P. (1995). For a phenomenology of radio and television. *Journal of Communication*, 45 (3), 4-19.

Headrick, D.R. (1994). Shortwave radio and its impact on international telecommunications between the wars. *History and Technology*, 11(1), 21-32.

Gallimore, T. (1993). Radio and television broadcasting to Cuba: U.S. Communication policy and the International First Amendment. *Gazette*, 52 (1), 43-56.

Randall, V. (1993). The media and democratisation in the Third World. *Third World Quarterly*, 14 (3), 625-646.

Religious Broadcasting. (1993). *Intermedia*, 21, (4/5), 47-57.

Cull, N.J. (1993). Radio propaganda and the art of understatement: British broadcasting and American neutrality, 1939-1941. *Historical Journal of Film, Radio and Television*, 13 (4), 403-432.

Alexandre, L. (1992). Electronic invasion in the post-cold war. *Media, Culture, & Society*, 14 (4), 523-540.

Caristi, D. (1992). The 1992 World Administrative Radio Conference: A survey of the U.S. delegation and recommendations for the future. *Telecommunications Policy*, 17 (6), 407-415.

Forrester, C., Gill, N., & Mytton, G. (1992). BBC audiences in India: 50 yeas of research. *Indo-British Review*, 20(2), 10-21.

Holmes, P.A. (1992). The Voice of America in Liberia: The end of the road. *Liberian Studies Journal*, 17(1), 79-93.

Król, M. (1992). Listening through the jamming. *American Scholar*, 61(3), 431-435.

Sung, L. (1992). WARC-92: Setting the agenda for the future. *Telecommunication Policy*, 16 (8), 624-634.

Boyd, D.A., & Asi, M. (1991). Transnational radio listening among Saudi Arabian university students. *Journalism Quarterly*, 68, (1/2), 211-215.

Gladney, G.A. (1991). Technologizing of the word: Toward a theoretical and ethical understanding. *Journal of Mass Media Ethics*, 6 (2), 93-105.

Manaev, O. (1991). The influence of Western radio on the democratization of Soviet youth. *Journal of Communication*, 41 (2), 72-91.

Rampal, K.R., & Adams, W.C. (1991). Credibility of the Asian news broadcasts of the Voice of America and the British Broadcasting Corporation. *Gazette*, 46 (2), 93-111.

Berresford, J.W. (1989). The impact of law and regulation on technology: The case history of cellular radios. *Business Lawyer*, 44 (3), 721-735.

Elliot, D. (1989). Too many voices of America. *Foreign Policy*, winter, 113-119.

Mytton, G., & Forrester, C. (1988). Audiences for international radio broadcasting. *European Journal of Communication*, 3, 457-481.

Warlaumont, H.G. (1988). Strategies in international radio wars: A comparative approach. *Journal of Broadcasting and Electronic Media*, 32 (1).

Mytton, G. (1987). Keeping tabs on the BBC's 100 million listeners. *Radio Database International*.

Boyd, D. (1986). International radio broadcasting: Technical developments and listening patterns in the developing world. *Space Communication and Broadcasting*, 4, 18-27.

Mytton, G. (1986). Audience research for international broadcasting. *Intermedia*, 14(2), 35-39.

Wasburn, P.C. (1985). International Radio Broadcasting: Some considerations for Political Sociology. *Journal of Political and Military Sociology*, 13(1), 33-51.

Elliot, K.A. (1982). Programme preferences of North American short wave listeners. *Gazette*, 29 (3), 197-208.

Nason, J.O.H. (1977). International broadcasting as an instrument of foreign policy. *Millennium: Journal of International Studies*, 6(2), 128-145.

Hollstein, M. (1974). Tiny Holland's mighty radio voice. *Journalism Quarterly*, 51(3), 486-489.

Ronalds, F.S. (1971). The future of international broadcasting. *Annals of the American Academy of Political and Social Science* (398): 71-80.

Books

Berg, J.S. (2000). *On the short waves, 1923 - 1945: Broadcast listening in the pioneer days of radio*. Jefferson, NC: McFarland & Company.

Krugler, D.F. (2000). *The Voice of America and the domestic propaganda battles, 1945-1953*. Columbia, MO: University of Missouri Press.

Wood, J. (2000). *History of international broadcasting, Volume 2*. London: Peter Peregrinus.

Boyd, D.A. (1999). *Broadcasting in the Arab world: A survey of electronic media in the Middle East* (3rd. ed.). Ames, IA: Iowa State University Press.

Hatchen, W.A. (1999). *The world news prism: Changing media of international communication*. (5th ed.). Ames, IA: Iowa State University Press.

Shingler, M., & Wieringa, C. (1998). *On air: Methods and meanings of radio*. New York: Oxford University Press.

Mohammadi, A. (Ed.). (1997). *International communication and globalization*. Thousand Oaks, CA: Sage.

Nelson, M.K. (1997). *War of the black heavens: The battle of Western broadcasting in the Cold War*. Thousand Oaks, CA: Sage.

Urban, G.R. (1997). *Radio Free Europe and the pursuit of democracy: My war within the Cold War*. New Haven, CT: Yale University Press.

Barfield, R. (1996). *Listening to radio, 1920-1950*. Westport, CT: Greenwood Press.

Mowlana, H. (1996). *Global communication in transition* (2nd ed.). Thousand Oaks, CA: Sage.

Rawnsley, G.D. (1996). *Radio diplomacy and propaganda: The BBC and VOA in international politics*. New York: St. Martin's Press.

Streeter, T. (1996). *Selling the air: A critique of the policy of commercial broadcasting in the U.S.* Chicago: University of Chicago Press.

Critchlow, J. (1995). *Radio-hole-in-the-head/Radio Liberty: An insider's story of Cold War broadcasting*. Washington, D.C.: The American University Press.

Daniel, A. K. (1995). *Voices of nations: A comparative analysis of three international radio news editorial orientations: Voice of America, All India Radio, and British Broadcasting Corporations*. Doctoral Dissertation. Cincinnati, OH: The Union Institute.

Hodge, E. (1995). *Radio wars: Truth, propaganda and the struggle for Radio Australia*. Melbourne, Australia: Cambridge University Press.

Fortner, R.S. (1994). *Public Diplomacy and International Politics: The Symbolic Constructs of Summits and International Radio News*. Westport, CT: Praeger.

He, Z., & Zhu, J. (1994). The "Voice of America" and China: Zeroing in on Tiananmen Square. Journalism Monographs, No. 143. Columbia, SC: Association for Education in Journalism and Mass Communication.

McChesney, R.W. (1994). *Telecommunication, mass media, and democracy*. New York: Oxford University Press.

Frederick, H.H. (1993). *Global communication and international relations*. Belmont, CA: Wadsworth.

Nordenstreng, K., & Schiller, H.I. (Eds.). (1993). *Beyond national sovereignty: International communication in the 1990s*. Norwood, NJ: Ablex.

Bookmiller, K.N. (1992). *The war of words within the war: Radio Moscow, The British Broadcasting Service and the Voice of America in the old and new international order*. Doctoral dissertation.

k, D.R. (1991). *The invisible weapon: Telecommunications and international politics—1851-1945*. New York: Oxford University Press.

Wedell, G., & Crookes, P. (1991). *Radio 2000: The opportunities for public and private radio services in Europe*. Manchester, UK: Manchester University Press.

Schwock, J. (1990). *The American radio industry and its Latin American activities, 1900-1939*. Urbana, IL: University of Illinois Press.

Macpherson, A. (1990). *International telecommunication standards organization*. Norwood, MA: Artech House.

Wallis, R., & Baran, S. (1990). *The known world of broadcast news*. New York: Routledge, Chapman and Hall.

Howell, W.J. (1986). *World broadcasting in the age of the satellite: Comparative systems, policies, and issues in mass communication*. Norwood, NJ: Ablex Publishing.

International shortwave broadcasting in Asia and the Pacific. (1986). Conference Proceedings, Singapore, September 1-5, 1986.

Head, S. (1985). *Broadcasting systems: A comparative analysis*. Philadelphia, PA: Temple University Press.

Browne, D.R. (1982). *International Radio Broadcasting: The limits of the limitless medium*. New York: Praeger.

Deutschman, W. (1982). *Handbook for international broadcasting*. Philadelphia, PA: Temple University Press.

Toubia, N.B. (1982). *A descriptive history of international broadcasting from its origins to 1932*. Master's thesis: Bowling Green, OH: Bowling Green State University.

McPhail, L. (1981). *Electronic colonialism: The future of international broadcasting and communication*. Beverly Hills, CA: Sage.

Hale, J. (1975). *Radio power: Propaganda and international broadcasting*. Philadelphia, PA: Temple University Press.

Barnouw, E. (1968). *The golden web: A history of broadcasting in the United States—Volume 2 - 1933 to 1953*. New York: Oxford University Press.

Barnouw, E. (1966). *A tower in Babel: A history of broadcasting in the United States—Volume 1 - to 1933*. New York: Oxford University Press.

Childs, H. (1942). *Propaganda by short wave*. Princeton, NJ: Princeton University Press.

Appendix B

Serial Publications as Primary Sources

BBC Worldwide: The BBC World Service Magazine. BBC World Service, P.O. Box 76, Bush House Strand, London WC2B 4PH, England.

Worldradio, Inc. MHR Publishing Corporated, 2122 28th Street, Sacramento, CA 95818.

The DX Bulletin. P.O. Box 50, Fulton, CA 95439.

Worldradio News. Worldradio, Inc., 2120 28th Street, Sacramento, CA 95818.

World Radio Report. P.O. Box 360, Wagontown, PA 19376-0360.

World Radio TV Handbook. Soliljevej 44, 2650 Hvidovre, Denmark.

Traveller's Guide to World Radio. Watson Gupthill Publications, P.O. Box 2014, Lakewood, NJ 08701.

Review of International Broadcasting. P.O. Box 1684, Enid, OK 73702-1684.

Appendix C

Telephone Interview Contacts

<u>Contact</u>	<u>Position and Organization</u>
Tom Harle	Sales Director, Harris Corp.
George McClintock	General Manager, WWCR
Larry Magne	Chief Editor, <i>Passport</i>
David Walcutt	Former Frequency Mgr. for RFE/RL
Kenneth Donow	International Broadcasting Bureau
Alan Heil	Global Issues Consultant
David Gibson	Research Mgr., Intermedia
Monroe Price	Professor, Institute of Advanced Study at Princeton
Fred Osterman	Owner - Universal Radio, Inc.
John Hughes	Editor, Deseret Morning News

Phone Interview Questions

1. Please describe your association with shortwave broadcasting. How have you been involved, and in what capacities?
2. A little over ten years ago, the Cold War came to its surprising end. Much of that Cold War was fought through the airwaves, particularly through the shortwave frequencies. As the Cold War came to an end, can you recall what were the circulating attitudes toward continued shortwave broadcasting? What were your thoughts and feelings then? What about the thoughts and feelings of your peers in the "industry?"
3. Consider the last ten years. Concerning international shortwave broadcasting, what are some of the events or episodes that stand out in your memory?
4. Ever since the first communication satellites were launched in the 1960s, some have talked of shortwave's anticipated demise. What are some of the challenges that

shortwave broadcasting has faced in the last ten years since the end of the Cold War? Do you feel that satellite television, for example, has impacted shortwave broadcasting?

5. Are there positive events, or particularly notable successes that shortwave broadcasting has experienced in the last ten years?
6. In the early 1990s, Noah Samara began an effort to launch a network of satellites that would broadcast exclusively to the Third World (called WorldSpace). Some have identified this effort as a primary competitor with shortwave broadcasting. What are your thoughts generally about Samara's efforts and its possible effect on shortwave broadcasting?
7. In the mid 1990s, the technology to simulcast radio programming over the internet was developed. Recently, the BBC dropped formal shortwave broadcasts to the U.S., Canada, New Zealand, and Australia and directed listeners in these areas to listen over the internet. What are your thoughts concerning the BBC's move? Do you agree or disagree with the BBC's decision? Why or why not?
8. How do you feel about the state of international broadcasting on shortwave today? What are its strengths as an international medium today? What are its weaknesses?
9. Take a moment to consider the future. What issues and possible events are close on the horizon that shortwave broadcasting may encounter? Where do you see international shortwave broadcasting ten years from now? Do you think WorldSpace will seriously affect international shortwave broadcasting? Do you think that other stations will follow the BBC and begin to cut some of their shortwave broadcasts in favor of internet simulcasting?
10. Do you have any additional thoughts you'd like to add that have not been covered?

Appendix D

Countries with shortwave stations to which surveys were sent

People's Republic of China	Australia
United Kingdom	Albania
Russia	Romania
Germany	Spain
Egypt	Portugal
Iran	Cuba
India	Italy
Japan	Canada
France	Poland
Netherlands	South Africa
Israel	Sweden
Turkey	Hungary
North Korea	Czech Republic
Bulgaria	Nigeria
Taiwan	Norway

Religious broadcasters to whom surveys were sent

C. Ed Evans - Senior Station Manager Herald Broadcasting Syndicate 1030 Shortwave Lane Pineland, SC 29934	Harold Camping - General Manager WYFR - Family Radio Family Stations, Inc. 290 Hegenberger Road Oakland, CA 94621
Glenn W. Sink - Assistant Vice President for International Operations Trans World Radio International Headquarters P.O. Box 8700 Cary, NC 27512-8700	Paul Johnson - General Manager KVOH - High Adventure Global Broadcasting Network P.O. Box 100 Simi Valley, CA 93062
Thom Price - Dir. of English Programming WEWN - EWTN Global Catholic Radio 1500 High Road P.O. Box 176 Vandiver, AL 35176	Dr. Paul F. Crouch - Managing Dir. KTBN - Trinity Broadcasting Network P.O. Box A Santa Ana, CA 92711
Pete Sumrall - Vice President WHRI - World Harvest Radio LeSEA Broadcasting P.O. Box 12	Dale Ward - Executive Producer KNLS - New Life Station 605 Bradley Court Franklin, TN 37067

South Bend, IN 46624

Adam W. Lock, Sr. - General Manager
WWCR - World Wide Christian Radio
F.W. Robbert Broadcasting Co.
1300 WWCR Avenue
Nashville, TN 37218

Don Jacobsen - President
Adventist World Radio
12501 Old Columbia Pike
Silver Spring, MD 20904-6600

Shortwave Transmitter Manufacturers Which Received Surveys

GEC Marconi (U.S.)
Thomcast (France)
Harris Corporation (U.S.)

Telefunken Sendertechnik (Germany)
Continental Electronics Corp. (U.S.)

Survey Questions

1. What is your association with shortwave broadcasting?
2. Please describe your personal history with shortwave broadcasting.
3. Please take a moment to describe some key events associated with shortwave broadcasting that have taken place in the last ten years.
4. How has shortwave broadcasting changed since the end of the Cold War?
5. What are some of the major challenges that shortwave broadcasting has experienced in the last ten years?
6. What are your thoughts concerning WorldSpace's efforts to establish a satellite radio system for the Third World?
7. What are your thoughts concerning the BBC's recent decision to cut shortwave broadcasts to North America, Canada, New Zealand, and Australia?
8. How would you describe the current state of international broadcasting on shortwave?
9. What is your assessment concerning the future of international shortwave broadcasting?
10. Please offer any additional thoughts you might have concerning shortwave broadcasting that may not be covered by the previous questions.

Appendix E

Services broadcasting over WorldSpace (www.worldspace.com)

94.7 Highveld Stereo from Johannesburg

AMI Satellite Broadcasting, Inc. Music, News, and Information "oriented on Christian values.

BBC news and information in English and Arabic; described as "beam tailored news.

Bloomberg News on finance, business and economic issues.

Broadcast Network Thailand offering Thai music.

Canal Educative Francophone; provides basic and formal distance education.

Capital Radio from Turkey with contemporary Turkish and English Pop.

Channel Islam; "edutainment and infotainment for . . . the Muslim home."

CNN news in English.

Egypt-1, -2, -3 from the Egyptian Radio and Television Union providing a broad range of content.

Golfe FM offers a mixture of music, news, and discussions relevant to West Africa.

Jacaranda 94.2 FM popular music for contemporary adults.

Kaya-FM Local news, information, and urban music from Johannesburg.

Kenya Broadcasting Company; mixture of Swahili and English broadcasts of music and information.

Kosmos Digital; music, news, and information in English and Afrikaans.

Kosmos Digital; news, current affairs, sports, and music from the Kosmos International Broadcast Centre in Gauteng, South Africa.

La 7 FM; contemporary music and African hits in French from Senegal.

Manila Broadcasting Corporation; mixture of music, national news, and entertainment with localized news and bulletins.

Masima; from Indonesia, music and information in English and French.

Medi-1; from Morocco with a mix of news, talk, sports, and popular music in Arabic and French.

Menon Impex; music and talk from India in various Indian languages.

Metro East-FM; from Nairobi, Kenya, music and talk in English and various Indian languages.

MTV Asia; the Asia version of MTV's music, news and information from popular music artists.

Radio Asia; based in Paris, programming to Tamil-speaking persons in West Africa.

Radio Corporation of Singapore; music, news, information, and entertainment in Mandarin and Malay.

Radio Exterior de Espana; from Madrid, Spain, news, information, and entertainment concerning Spanish culture and interests.

Radio France International; news and information in French, English, and Arabic.

Radio Lusofonia; educational, sport, family, and community programming for Portuguese speaking communities in Southern Africa.

Radio Mid Day; pop music in English and Hindi for the 18 to 35 age bracket.

Radio One - Lebanon; Pop music in English from Beirut.

Radio Voyager; adult contemporary music with news and information in English for Africa and the Middle East.

Sud FM; News and music (African, Latin American and World music) from Senegal in French and Wolof.

VRG; music and information in Tamil.

World Radio Networks 1 & 2; News and information from London based organization in English and various other languages.

WLAF FM; full service of news, information, and entertainment for primarily Islamic listeners; originates in Senegal.

References

Secondary Sources

Alexandre, L. (1988). *The Voice of America: From Detente to the Reagan doctrine*. Norwood, NJ: Ablex Publishing.

Anderson, J.A. (1996). *Communication theory: Epistemological foundations*. New York: Guilford Press.

Appleby, J., Hunt, L., & Jacob, M. (1994). *Telling the truth about history*. New York: Norton.

Barbero, J.M. (1993). Modernity, nationalism, and communication in Latin America. In K. Nordenstreng & H.I. Schiller (eds.), *Beyond national sovereignty: International Communication in the 1990s* (pp. 132-149). Norwood, NJ: Ablex.

Barnouw, E. (1966). *A tower in Babel: A history of broadcasting in the United States, Volume 1 - to 1933*. New York: Oxford University Press.

Barnouw, E. (1968). *The golden web: A history of broadcasting in the United States, Volume 2 - 1933 to 1953*. New York: Oxford University Press.

Barnouw, E. (1970). *The image empire: A history of broadcasting in the United States, Volume 3 - from 1953*. New York: Oxford University Press.

Barzun, J., & Graff, H.F. (1977). *The modern researcher* (3rd ed.). New York: Harcourt Brace Jovanovich.

Berg, J.S. (2000). *On the short waves, 1923 - 1945: Broadcast listening in the pioneer days of radio*. Jefferson, NC: McFarland & Company.

Bertman, S. (2003). *Handbook of life in ancient Mesopotamia*. New York: Facts on File.

Bookmiller, K.N. (1992). *The war of words within the war: Radio Moscow, The British Broadcasting Service and the Voice of America in the old and new international order*. Doctoral dissertation. University of Virginia.

Boyd, D.A. (1986). International radio broadcasting: Technical developments and listening patterns in the developing world. *Space Communication and Broadcasting*, 4, 25-32.

Boyd, D.A. (1997). International broadcasting in Arabic: A survey of broadcasters and audiences. *Gazette*, 59, 445-472.

Boyd, D.A., & Asi, M. (1991). Transnational radio listening among Saudi Arabian university students. *Journalism Quarterly*, 68, 211-215.

Briggs, C. (1986). *Learning to ask: A sociolinguistic appraisal of the role of the interviewer in social science research*. Cambridge, UK: Cambridge University Press.

Browne, D.R. (1982). *International Radio Broadcasting: The limits of the limitless medium*. New York: Praeger.

Brzezinski, Z. (1970). *Between two ages: America's role in the technotronic era*. New York: Viking Press.

Burns, E.M., & Ralph, P.E. (1974). *World civilizations: Their history and their culture* (5th ed.). New York: W.W. Norton & Company.

Daniel, A. K. (1995). *Voices of nations: A comparative analysis of three international radio news editorial orientations: Voice of America, All India Radio, and British Broadcasting Corporations*. Doctoral Dissertation. Cincinnati, OH: The Union Institute.

Drake, W.J. (1993). Territoriality and intangibility: Transborder data flows and national sovereignty. In K. Nordenstreng & H.I. Schiller (eds.), *Beyond national sovereignty: International Communication in the 1990s* (pp. 259-313). Norwood, NJ: Ablex.

Elliot, K.A. (1982). Program preferences of North American shortwave listeners. *Gazette*, 29, 197-208.

Fontana, A., & Frey, J.H. (1994). Interviewing: The art of science. In N.K. Denzin & Y.S. Lincoln (eds.), *Handbook of qualitative research* (pp. 361-376). Thousand Oaks, CA: Sage Publications.

Gebser, J. (1985). *The ever-present origin*. Athens, OH: Ohio University Press.

Hamelink, C.J. (1993). Globalism and national sovereignty. In K. Nordenstreng & H.I. Schiller (eds.), *Beyond national sovereignty: International Communication in the 1990s* (pp. 371-393). Norwood, NJ: Ablex.

Hatchen, W.A. (1999). *The world news prism: Changing media of international communication* (5th ed.). Ames, IA: Iowa State University Press.

Headrick, D.R. (1991). *The invisible weapon: Telecommunications and international politics—1851-1945*. New York: Oxford University Press.

Hodder, I. (1994). The interpretation of documents and material culture. In N.K. Denzin & Y.S. Lincoln (eds.), *Handbook of qualitative research* (pp. 393-402). Thousand Oaks, CA: Sage Publications.

Hodge, E. (1995). *Radio wars: Truth, propaganda and the struggle for Radio Australia*. Melbourne, Australia: Cambridge University Press.

Holstein, J.A., & Gubrium, J.F. (1995). *The active interview*. Thousand Oaks, CA: Sage.

Innis, H.A. (1951). *The bias of communication*. Toronto: University of Toronto Press.

Innis, H. A. (1986). *Empire & communications*. Toronto: Press Porceplic.

James, W. (1911). *Memories and studies*. New York: Longman.

Kramer, E.M. (1997). *Modern/Postmodern: Off the beaten path of antimodernism*. Wesport, CT: Praeger.

Król, M. (1992). Listening through the jamming. *American Scholar*, 61, 431-435.

Krugler, D.F. (1999). Radio's Cold War sleight of hand: The Voice of America and Republican dissent. *Historical Journal of Film, Radio and Television*, 19, 27-38.

Krugler, D.F. (2000). *The Voice of America and the domestic propaganda battles, 1945-1953*. Columbia, MO: University of Missouri Press.

Lindlof, T.R. (1995). *Qualitative communication research methods*. Thousand Oaks, CA: Sage.

Manaeu, O. (1991). The influence of Western radio on the democratization of Soviet youth. *Journal of Communication*, 41, 72-79.

Mattelart, A. (1994). *Mapping world communication: War, progress, culture*. (S. Emanuel and J.A. Cohen, Trans.). Minneapolis, MN: University of Minnesota Press. (Original work published 1991).

McLuhan, M. (1962). *The Gutenberg galaxy: The making of typographic man*. New York: New American Library.

Mercier, J. (1994). Looking at organizational culture, hermeneutically. *Administration & Society*, 26, 28-47.

Meyrowitz, J. (1985). *No sense of place: The impact of electronic media on social behavior*. New York: Oxford.

Mostert, Jr., A.J.E. (1969). A history of WRUL: The Walter S. Lemmon years, 1931 to 1960. Master's thesis. Provo, UT: Brigham Young University.

Mowlana, H. (1993). New global order and cultural ecology. In K. Nordenstreng & H.I. Schiller (eds.), *Beyond national sovereignty: International Communication in the 1990s* (pp. 394-417). Norwood, NJ: Ablex.

Mowlana, H. (1996). *Global communication in transition: The end of diversity?* Thousand Oaks, CA: Sage.

Mumford, L. (1934). *Technics and civilization*. New York: Harcourt Brace.

Mumford, L. (1961). *The city in history*. New York: Harcourt Brace.

Mytton, G. (1986). Audience research for international broadcasting. *Intermedia*, 14(2), 35-39.

Mytton, G., & Forrester, C. (1988). Audiences for international radio broadcasting. *European Journal of Communication*, 3, 457-481.

Nelson, M.K. (1997). *War of the black heavens: The battle of Western broadcasting in the Cold War*. Thousand Oaks, CA: Sage.

Nerone, J. (2003). Approaches to media history. In A.N. Valdivia (ed.), *A companion to media studies* (pp. 93-114). Malden, MA: Blackwell.

Novick, P. (1988). *That noble dream: The objective question*. Cambridge, UK: Cambridge University Press.

Ong, W. (1982). *Orality and literacy: The technologizing of the word*. London: Methuen.

Perry-Giles, S. J. (1994). The Eisenhower administration's conceptualization of the USIA: The development of overt and covert propaganda strategies. *Presidential Studies Quarterly*, 24, 263-276.

Pearce, W.B. (1989). *Communication and the human condition*. Carbondale, IL: Southern Illinois University Press.

Postman, N. (1985). *Amusing ourselves to death: Public discourse in the age of show business*. New York: Penguin Books.

Postman, N. (1992). *Technopoly: The surrender of culture to technology*. New York: Random House.

Rampal, K.R., & Adams, W.C. (1990). Credibility of the Asian news broadcasts of the Voice of America and the British Broadcasting Corporation. *Gazette*, 46, 93-111.

Rawnsley, G.D. (1996). Cold War radio in crisis: The BBC overseas service, the Suez crisis, and the 1956 Hungarian uprising. *Historical Journal of Film, Radio and Television*, 16, 197-219.

Salwen, M.B. (1997). Broadcasting to Latin America: Reconciling industry-government functions in the pre-Voice of America era. *Historical Journal of Film, Radio and Television*, 17, 67-89.

Sterling, C.H., & Kittross, J.M. (2002). *Stay tuned: A history of American broadcasting* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.

Stewart, D., & Mickunas, A. (1990). *Exploring phenomenology: A guide to its field and literature* (2nd ed.). Athens, OH: Ohio University Press.

Storey, W.K. (1999). *Writing history: A guide for students*. Oxford: Oxford University Press.

Toubia, N.B. (1982). *A descriptive history of international broadcasting from its origins to 1932*. Master's thesis: Bowling Green, OH: Bowling Green State University.

Tuchman, G. (1994). Historical social science: Methodologies, methods, and meanings. In N.K. Denzin & Y.S. Lincoln (eds.), *Handbook of qualitative research* (pp. 303-326). Thousand Oaks, CA: Sage Publications.

Warlaumont, Hazel G. (1988). Strategies in international radio wars: A comparative approach. *Journal of Broadcasting and Electronic Media*, 32(1), 43-59.

Wasburn, P.C. (1985). International radio broadcasting: Some considerations for political sociology. *Journal of Political Sociology*, 13, 33-55.

Wasburn, P.C. (1992). *Broadcasting propaganda: International Radio Broadcasting and the construction of political reality*. Westport, CT: Praeger.

Wood, J. (1992). *History of international broadcasting*. London: Peter Peregrinus.

Wood, J. (2000). *History of international broadcasting, Volume 2*. London: Peter Peregrinus.

Primary Sources

A new generation of business: Technology self-powered products. (1998, December 12). *Financial Times* (London), 12 (Technology section).

A new star. (1991, July 3). *Flight International*, 5.

A real news service. (1994, October 5). *The Jerusalem Post*, 6 (Opinion section).

A world rallies to keep the 'Beep.' (1996, August 30). *The Toronto Star*, A21 (Opinion section).

Ahrens, F. (1998, December 18). Radio Free Iraq's strong signal. *The Washington Post*, D2.

Amnatcharoenrit, B. (2000, August 16). BNT in pact with satellite firm to expand radio show. *Bankok Post*, 1.

Audiences at record levels but tough challenges ahead says BBC World Service Annual Review 2000/1. (2001). BBC News Release (www.bbc.co.uk/info/news/news330.htm) (downloaded 7/24/01).

Audience research and market realities: Who listens and why? (1991). In M.O. Garcia (ed.), *Turning up the volume on international radio* (pp. 69-88). Washington, D.C.: Center for Strategic and International Studies.

Auf Der Maur, N. (1996, December 8). RCI gives Canada powerful bang for its buck overseas. *The Gazette*, A2.

Awanohara, S. (1993, March 25). United States: Battle of the broadcasters. *Far Eastern Economic Review*, 156, 28-29.

Balzar, J. (1995, October 22). The power of Africa's airwaves. *Los Angeles Times*, A1.

Bani, E. (2000, July 31). New era of digital audio broadcasting by January. *Business Times* (Malaysia), 12.

Barbash, F. (1999, March 01). To download a sleeping pill: An insomniac learns why he can't take his favorite show to bed. *The Washington Post*, F19.

Barber, B. (1999, January 20). U.S. Information Agency chief to step down. *The Washington Times*, 1.

BBC appoints new Media Director. (2000, July 28). BBC News Release. www.bbc.co.uk/info/news/archives.shtml. Downloaded July 2001.

BBC axe falls on Cantonese. (1997, March 9). *South China Morning Post*, 2.

BBC Broadcasts available on cable. (1992, January 20). *The Daily Yomiuri*, 10.

BBC declares its public purpose for the new millennium (1998, December 3). BBC News Release. www.bbc.co.uk/info/news/archives.shtml. Downloaded July 2001.

BBC misses the mark in moving broadcast. (2001, May 27). *Los Angeles Times*, M4. (Opinion section)

BBC radio switches off. (2001, May 29). *The Dominion* (Wellington), 2.

BBC to cut off 1.2 million listeners on July 1. (2001, June 6). Save BBC World Service press release. www.savebbc.com/press/6_june_1002.html. Downloaded July 2001.

BBC World Service plan to develop digital radio by 2003. (1998, March 4). *South China Morning Post*, 4.

BBC World Service pledge stops revolt. (1996, January 17). *The Herald* (Glasgow), 6.

Behr, P. (1999, October 8). WorldSpace ready for radio service. *The Washington Post*, E3.

Belsie, L. (1992, March 11). Radio poised for high-tech leap. *The Christian Science Monitor*, 14.

Benady, A. (1998, June 1). Clockwork meets satellite in a revolution for Third World radio. *The Independent* (London), M4.

Bidoli, M. (1998, November 6). Reaching for the skies. *Financial Mail* (South Africa), 101 (Infotech section).

Binder, D. (1994, August 28). Shortwave radio: More preachers, less propaganda. *The New York Times*, D6.

Birt, J. (1996, August 23). A glorious future -- Quality broadcasting in the digital age. The James MacTaggart Memorial Lecture delivered to the Edinburgh International Television Festival.

Blackwell, G. (1999, April 1). "Radio Days" revisited. *The Toronto Star*, Media section.

Boone, M. (1995a, February 25). Budget anxiety dampens Voice of Canada's 50th year. *The Ottawa Citizen*, A13.

Boone, M. (1995b, February 25). Happy (?) birthday RCI: Radio Canada International turns 50 today, but does the respected service have anything to celebrate? *The Gazette* (Montreal), C1.

Bravin, J. (1992, April 17). BBC seeks to capture the world. *Los Angeles Times*, F1.

Bridges, T. (1995, April 29). N.O. station brings nazis' views to world. *The Times-Picayune*, A8.

Broadband revolution 2: The new media world of speedies. (2001). www.arbitron.com/downloads/broadband_2.pdf. Downloaded July 2001.

Broadcast technologies: The future is now. (1991). In M.O. Garcia (ed.), *Turning up the volume on international radio* (pp. 35-52). Washington, D.C.: Center for Strategic and International Studies.

Broadcasting from 40 fathoms. (1993, May 7). *Journal of Commerce*, A6 (Editorial section).

Buchan, D. (1995, January 27). Alcatel wins Dollars 500m US digital satellite contract. *Financial Time* (London), 8 (World Trade News section).

Byford, M. (2001). Changes in receiving BBC World Service in English. www.bbc.co.uk/worldservice/schedules/010518_byford.shtml. Downloaded July 2001.

Byford, M. (2001, July). A message from Mark Byford, Director BBC World Service. Monitoring times. Online. Available: www.grove-ent.com/mtclosingbbc.html.

Campbell, J. (1998). Web radio's unexpected future. In *Passport to web radio* (2nd ed.), pp. 124-131. Penn's Park, PA: International Broadcasting Services, Ltd.

Campbell, K. (2000, September 8). Will VOA extend its reach? *The Christian Science Monitor*, 16.

Caruso, D. (1999, October 11). How can technology investors move into areas like Africa? One entrepreneur sees the answer in satellites. *The New York Times*, C5.

Cashman, G.F. (1991, August 1). Israel Broadcasting Authority forced to slash shortwave programs despite pleas. *The Jerusalem Post*, 1.

Chandwani, A. (1996, December 9). Ottawa must tune in to magic bang it gets from RCI. *The Gazette* (Montreal), A2.

Chapman, M. (2000, August 16). BBC extends digital service with WorldSpace. *Network News*, 2.

Chetham, A. (1996, December 1). Radio looks to heaven to secure life after TV. *South China Morning Post*, 3.

China Policy Act of 1995. H.R. 2058. 104th Congress. (1995).

Clark, J. (1998, February 7). Sounding out the state. *South China Morning Post*, 1.

Coalition calls for immediate moratorium on BBC World Service transmission cuts (2001, June 28). Press Release. Save BBC World Service. www.savebbc.com/press/29_june_2001.html. Downloaded July 2001.

Colker, D. (1995, December 8). Cyburbia: Bringing the world news to your ears. *Los Angeles Times*, E3.

Colker, D. (2001, May 22). From shortwave to new wave: BBC pulls plug on 1930s technology by moving its World Service to the internet in North America. *Los Angeles Times*, A1.

Colker, D. (2001, May 31). Shortwave portables: The world in your hands. *Los Angeles Times*, T1.

Collins, L., & Kaplan, A. (1992, October 1). VOA's station's fate still unclear. *The Jerusalem Post*, News section.

Comments posted to savebbc.org by Graham Mytton, former head of BBC World Service audience research. (2001). Press release. Save BBC World Service. www.savebbc.com/graham_mytton_comments.html. Downloaded July 2001.

Couldn't the number of frequencies have been reduced instead? (2001). BBC World Service website. www.bbc.co.uk/worldservice/shedules/010525_reduceinstead.shtml. Downloaded July 2001.

Covault, C. (1996, January 1). Alcatel picks Mantra for WorldSpace satellite. *Aviation Week and Space Technology*, 144 (1), 28.

Crossette, B. (1992, July 19). Burmese opposition gets Oslo radio service. *The New York Times*, A11.

Cullen, K. (1998, February 22). At 75, voice of Britain has a new accent. *The Boston Globe*, A1.

Cuprisin, T. (2001, May 13). British invasion: These days, English accents are heard all over the United States. *Milwaukee Journal Sentinel*, E1.

Cuprisin, T. (2001, May 23). BBC to drop shortwave transmissions to U.S. *Milwaukee Journal Sentinel*, 12B.

Data can't ever get away. (2001, July 17). Save BBC World Service. Downloaded July 2001. www.savebbc.com.

Demitz, S.H., Fox, E., & Gibson, D. (1991). International broadcasting faces the challenge of the new media. In M.O. Garcia (ed.), *Turning up the volume on international radio* (pp. 173-182). Washington, D.C.: Center for Strategic and International Studies.

Digital audio broadcasts in India soon. (2000, January 27). *The Hindu*, 1.

Digital music and downloads on satellite radio. (2000, October 29). *The Jakarta Post*, 1.

Digital radio for Africa nears. (1997, April 21). *Financial Times* (London), 24 (Marketing/Advertising/Media section).

Donovan, P. (1992, November 8). Hard of hearing. *Sunday Times*, Features section.

Donovan, P. (1992, December 6). Sixty years of global warming. *Sunday Times*, Features section.

Donovan, P. (1994, November 27). Talk in tongues. *Sunday Times*, Features section.

Donovan, P. (1996, January 28). All's well with the world? *Sunday Times*, Features.

Dougan, D.L. (1991). Somewhere over the horizon: International radio in transition. In M.O. Garcia (ed.), *Turning up the volume on international radio* (pp. i-vii). Washington, D.C.: Center for Strategic and International Studies.

Doward, J. (1998, May 31). Media: Will WorldSpace come up beaming? *The Observer*, 7 (The Business Page).

Donovan, P. (2000, January 2). Praise be. *Sunday Times* (London), Features section.

Drogin, B. (1998, December 12). Resiliency of U.S.-sponsored radio networks speaks volumes. *Los Angeles Times*, A10.

Duffy, T. (1994, December 7). Helping single expats adjust. *USA Today*, A9.

Early Day Motion regarding BBC transmissions. (2001, June 7). Press release. Save BBC World Service. www.savebbc.com/edm26.html. Downloaded July 2001.

Elliot, K. (2001, May 12). Communication World script: 12 May 2001. On-line. Available: www.trcs.com/cw/cw_20010512.html.

Elliot, K. (2001, May 19). Communication World script: 19 May 2001. On-line. Available: www.trcs.com/cw/cw_20010519.html.

Elliot, K. (2001, May 26). Communication World script: May 26, 2001. On-line. Available: www.trcs.com/cw/cw_20010526.html.

Elliot, K. (2001, June 2). Communication World script: 2 June 2001. On-line. Available: www.trsc.com/cw/cw_20010602.html.

Elliot, K. (2001, June 9). Communication World script: 9 June 2001. On-line. Available: www.trcs.com/cw/cw_20010609.html.

Elliot, K. (2001, June 16). Communication World script: 16 June 2001. On-line. Available: www.trcs.com/cw/cw_20010616.html.

Elliot, K. (2001, June 23). Communication World script: 23 June 2001. On-line. Available: www.trsc.com/cw/cw_20010623.html.

Elliot, K. (2001, June 30). Communication World script: 30 June 2001. On-line. Available: www.trsc.com/cw/cw_20010630.html.

Elliot, K. (2001, July 7). Communication World script: 7 July 2001. On-line. Available: www.trsc.com/cw/cw_20010707.html.

Elliot, K. (2001, July 14). Communication World script: 14 July 2001. On-line. Available: www.trsc.com/cw/cw_20010714.html.

Elliot, K. (2001, July 21). Communication World script: 21 July 2001. On-line. Available: www.trsc.com/cw/cw_20010721.html.

End of Finnish. (1997, December 11). *The Times*, Home news section.

Faler, B. (2001, October 6). Shortwave soldiers, *National Journal*, 33, 3085.

Familiant, A. (1991). International broadcasting. In M.O. Garcia (ed.), *Turning up the volume on international radio* (pp. 108-111). Washington, D.C.: Center for Strategic and International Studies.

Feran, T. (1992, October 15). Voice of America Reporter spreads U.S. diversity overseas. *The Columbus Dispatch*, E8.

Figliozi, J. (2001, July). The BBC should reconsider. *Monitoring Times*. On-line. Available: www.grove-ent.com/mtclosingbbc.html.

Fisher, M. (1993, April 3). From communism to Clinton: U.S. Radio Free Europe switches to new focus. *The Washington Post*, A19.

Fisher, M. (1998, October 26). Battle of the news networks. *The Toronto Sun*, 15 (Opinion section).

Flagg, A.L. (1992, March). New satellite for Africa. *Black Enterprise*, p. 13.

Fleming, J. (1996, May 22). Poor nations leapfrog to future via new technologies. *The Christian Science Monitor*, 1 (International Section).

For the record. (1992, February 27). *The Washington Post*, A18 (Editorial page).

Foreign radio stations remain favored alternative. (1999, April 25). *The Jakarta Post*, News section.

Fox, D. (1997, December 24). Internet needs to clear the airwaves to stop headaches. *The Times*, Features section.

Franklin, J.L. (1992, April 17). Fund use was known to few; Christian Science trust tapped. *The Boston Globe*, 17.

French, H.W. (1994, November 21). Africa tunes into a BBC beacon. *The New York Times*, D5.

Garcia, M.O. (ed.). (1991). *Turning up the volume on international radio*. Washington, D.C.: Center for Strategic and International Studies.

George, D. (1993, December 24). Tuned into the BBC. *Pittsburgh Post-Gazette*, Weekend Magazine, 23.

Getting the message to China. (1992, July 25). *The Washington Post*, A21 (Editorial section).

Gibson, J. (1999, February 11). World Service's three-year plan: BBC to cut its German broadcasts. *The Guardian* (London), 6.

Goddard, P. (1995, December 17). RCI's independent edge upsets the control freaks. *The Toronto Star*, B3.

Goddard, P. (1996, December 14). How RCI carries on Frank Zappa tradition. *The Toronto Star*, G14.

Goodwin, S. (1996, January 17). Rifkind promises to keep 'beacon of freedom' alight. *The Independent* (London), 4.

Green, F. (1993, January 9). Shortwave radio long on news and views. *The San Diego Union-Tribune*, A2.

Green, S. (1993, October 20). RA boosts profile in Asia. *South China Morning Post*, Media page.

Greenberg, J. (1998, February 20). Israel Radio often finds best friends are Iranian. *The New York Times*, A11.

Hartono, WorldSpace tie up. (2001, February 9). *The Jakarta Post*, 1.

Hauser, G. (ed.). (2001). DX listening digest: May 8, 2001 to January 29, 2002. Online. Available: www.angelfire.com/ok/worldofradio/Dxldmid.html.

Hedges, C. (1995, May 30). BBC World Service: A cultural lifeline to educated people. *The New York Times*, C16.

Henderson, M. (2001, May 28). Glories pass away in Brighton's raving madness Monday commentary. *The Daily Telegraph* (London), 4.

Hopkins, M. (1999, July). A babel of broadcasts. *Columbia Journalism Review*, 38, 44-47.

Hughes, J. (1991, August 29). Moscow witnesses an information revolution. *The Christian Science Monitor*, 18.

Hughes, J. (1991, December 26). When words are better than weapons. *The Christian Science Monitor*, 19.

Hughes, J. (1996, October 9). Radio Free Asia's task is daunting, but its mission is good. *The Christian Science Monitor*, 19.

Ikuma, M. (1996, August 4). Restructuring, financial challenges confront BBC. *The Daily Yomiuri*, 17.

In brief. (2001, June 13). *The Guardian* (London), 22.

India: It's making new waves, the world over. (2000, December 2). *The Hindu*, 1.

India: "Thomala, archana, sevans" suspended at Tirumala. (2000, December 27). *The Hindu*, 1.

Internet not replacing radio, Arbitron finds. (2001, June 28). Press Release. Save BBC World Service. www.savebbc.com/press/28_june_2001.html. Downloaded July 2001.

Is it no longer possible to hear BBC World Service on short wave? (2001). BBC World Service website. www.bbc.co.uk/worldservice/schedules/010525_swnolonger.shtml. Downloaded July 2001.

Jack, A. (1995, October 24). Alcatel in Dollars 650m radio satellite deal. *Financial Times* (London), 6 (World Trade News section).

Jacobs, G. (1991). Shortwave broadcasting in the 21st century. In M.O. Garcia (ed.), *Turning up the volume on international radio* (pp. 113-118). Washington, D.C.: Center for Strategic and International Studies.

Jensen, D. (1997, December). The demise of commercial shortwave broadcasting. *Popular Electronics*, 14 (12), 15.

Johnson, H. (1998, August). Radio Free Iraq. *Middle East*, 281, 11.

Josifovska, S. (1997, September 17). WorldSpace receivers sell at twice the price. *Electronics Weekly*, 3.

Keep those radios on. (1993, March 23). *The Christian Science Monitor*, 20 (Editorial section).

Kempster, N. (2001, April 1). Voice of America will retool for Arab world. *Los Angeles Times*, A4.

Kirkbride, J. (1996, January 17). Broadcasting good news on cuts for BBC World Service. *The Daily Telegraph*, 6.

Kirschten, D. (1999, May). Broadcast news. *Government Executive*, 31, 54-59.

Komando, K. (1998). Webcasting: Can it pay? In *Passport to web radio* (2nd ed.), pp. 132-143. Penn's Park, PA: International Broadcasting Services, Ltd.

Kynge, J. (1997, June 11). Japanese win real deal. *Financial Times* (London), 6 (World Trade Section).

Lamb, D. (1994, September 6). VOA vies for ears of the world, tests water in new markets. *Los Angeles Times*, A5.

Lancaster, J. (2000, February 24). Voice of America: Once it was Cold War. Now it's just the cold. *The Washington Post*, A19.

Landale, J. (1996, January 17). Rifkind calms Tory fears over World Service cuts. *The Times*, Features section.

Larry Magne's commentary, NPR's Morning Edition 2 July 2001. (2001). Press Release. Save BBC World Service. www.savebbc.com/magnenpr.html. Downloaded July 2001.

Leonard, T. (1999, February 11). BBC to close German-language service. *The Daily Telegraph* (London), 22.

Levy, M. (1993, March 14). The wide world of shortwave digital technology and lower prices give you the planet in the palm of your hand. *The Buffalo News*, 6 (Buffalo Magazine).

Ling, T. H. (2000, August 30). Digital radio service to go on air in Southeast Asia in 2 weeks. *Business Times* (Singapore), 13.

Lintner, B. (1994, March 24). Heavy static: Washington's Radio Free Asia runs into trouble. *Far Eastern Economic Review*, 157, 26.

Lippman, J., & Tuohy, W. (1992, October 20). Tuning in the global village: Who will rule the news? *Los Angeles Times*, A10.

London is still calling. (1997, February 23). *Scotland on Sunday*, 9.

Long, K. (1997, November 21). China to hear of new U.S. citizen. *The Seattle Times*, B3.

Loyd, C. (1995, February 5). Satellites will beam radio to the Third World. *Sunday Times*, F1.

Macqueen, K. (1993, March 7). Shortwave radio's just the cure for bored flu-bug sufferer. *The Ottawa Citizen*, B1.

Making waves: Dispute flares over plan to ditch Radio Free Europe, Radio Liberty. (1993, March 19). *Star Tribune*, A2.

Magne, L. (1998). Is traditional radio doomed? In *Passport to web radio* (2nd ed.), pp. 136-137. Penn's Park, PA: International Broadcasting Services, Ltd.

Manegold, C.S. (1994, August 24). Flight from Cuba: On the airwaves. *The New York Times*, A14.

Marks, A. (1995, November 1). Shortwave tunes into a changed world. *The Christian Science Monitor*, 1.

Marks, P. (1996, June 20). Radio link spins out another web. *The Guardian* (London), 7 (*The Guardian Online Page*).

Martin, S. (1997, March 4). Albanian crisis may unleash Balkan chaos. *The Irish Times*, 8.

McCormack, L. (2001, July 12). Lauren McCormack on the "must have" technologies for today's professionals. *The Daily Telegraph* (London), 6.

McManus, D. (1993, June 21). U.S. plans Radio Free Europe in bid to weaken Milosevic. *Los Angeles Times*, A4.

McNeil, D. (1996, February 16). This \$40 crank-up radio lets rural Africa tune in. *The New York Times*, A1.

Merrill, C. (1996, March 20). U.S. writer tour. *USA Today*, A8.

Milliken, R. (1997, February 10). Voice of Australia shouts to stay on air. *The Independent* (London), 8.

Mills, M. (1997, July 23). Bloomberg to provide news for D.C. satellite radio firm. *The Washington Post*, D10.

Mills, M. (1998, March 23). Ready to launch a global radio network: WorldSpace aims programs at Third World. *The Washington Post*, F5.

Mills, M. (1998, October 29). Satellite launched for DC firm's radio venture. *The Washington Post*, C2.

Mills, M. (1998, December 14). A radio service from outer space. *The Washington Post*, F20.

Murdoch tunes into China market. (1999, April 1). *South China Morning Post*, 19.

Muzzling dissent in Serbia. (1998, October 22). *The New York Times*, A26 (Editorial section).

Nicolle, L. (1998, June 10). Radio revolution for Third World. *The Times*, 1 (Features section).

Nigel Chapman appointed Deputy Director BBC World Service. (2000, July 28). BBC News Release. www.bbc.co.uk/info/news/archives.shtml. Downloaded July 2001.

O'Connor, A. (2001, June 13). BBC lobbied over cuts to shortwave broadcasting. *Financial Times* (London), 8.

Osterman, F. (1997). Real radios glow in the dark. In *Passport to world band radio - 1998* (pp. 67-82). International Broadcasting Services, Ltd.: Penn's Park, PA.

O'Sullivan, J. (1997, March 24). Got to get a message to you. *The Independent* (London), 8.

Our world is coming to an end. (2001, June 14). Daily Telegraph, Media Section, 12. www.savebbc.com/telegraph-6-14.html. Downloaded July 2001.

Owen, R. (1997, March 4). Shoot-to-kill crackdown in Albania. *The Times*, Overseas section.

Passport to Web Radio. (1997). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to Web Radio (2nd ed.). (1998). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 1990. (1989). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 1991. (1990). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 1992. (1991). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 1993. (1992). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 1994. (1993). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 1995. (1994). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 1996. (1995). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 1997. (1996). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 1998. (1997). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 1999. (1998). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 2000. (1999). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 2001. (2000). Penn's Park, PA: International Broadcasting Services, Ltd.

Passport to World Band Radio - 2002. (2001). Penn's Park, PA: International Broadcasting Services, Ltd.

Patents issued: US Patent & Trademark office grants patent on WorldSpace digital audio broadcasting system. (1999, March). *Intellectual Property Today*, 14.

Pimentel, B. (1994, May 30). China alternative radio originating in East Bay program is antidote to government media. *The San Francisco Chronicle*, A15.

Point-Counterpoint with the BBC World Service. (2001). Save BBC World Service. www.savebbc.com/point-counterpoint.html. Downloaded July 2001.

Pool, B. (1999, March 8). Cable chief broadens his audience. *Los Angeles Times*, B1.

Popham, P. (1996, January 17). The Empire talks back. *The Independent* (London), 2.

Portable radio. (2001, May 31). *The Daily Telegraph*, 27.

Powledge, F. (1994, September 18). A shortwave to civilization. *St. Petersburg Times*, E1.

Priest, D. (1992, February 24). For Voice of America, a benchmark and a changing world. *The Washington Post*, A15.

Private international radio broadcasters: A global market? (1991). In M.O. Garcia (ed.), *Turning up the volume on international radio* (pp. 53-68). Washington, D.C.: Center for Strategic and International Studies.

Purton, P. (1992, March 6). Discord rules the airwaves. *The Times*, Features section.

Radio Free Asia deserves a first birthday present. (1997, September 17). *The Christian Science Monitor*, 19 (Editorial section).

Radio Free Asia Act of 1991. H.R. 1049. 102nd Congress. (1991).

Radio Free Asia Act of 1992. S. 2407. 102nd Congress. (1992).

Radio Free Asia Act of 1993. H.R. 54. 103rd Congress. (1993).

Radio Free Asia Act of 1993. S. 659. 103rd Congress. (1993).

Radio Free Asia's task is daunting, but its mission is good. (1996, October 9). *The Christian Science Monitor*, 19 (Editorial section).

Radio Free Europe: A stable medium. (1995, November 22). *The Christian Science Monitor*, 20 (Editorial section).

Richardson, I. (1997, July 26). Bonjour - this is London calling. *The Daily Telegraph*, 6.

Riga, A. (1998, June 10). Connect with the world of radio. *The Gazette* (Montreal), F1.

Rimer, S. (1995, April 27). Terror in Oklahoma: New medium for the far right. *The New York Times*, A1.

Robins, J. (2000, March 21). The man who hugged Birt. *The Independent* (London), 10.

Romero, S. (2000, July 17). Poor country, rich country: Two very different fronts of growth in the satellite radio industry. *The New York Times*, C4.

Samara, N. (1991). Satellite sound broadcasting: A perspective from WorldSpace. In M.O. Garcia (ed.), *Turning up the volume on international radio* (pp. 125-131). Washington, D.C. Center for Strategic and International Studies.

Samara, N. (1999, October 25). Remarks delivered to the African Information Society. Ethiopia.

Schwartz, J. (1995, January 14). Over the Net and around the law? U.S. computer users gain access to Voice of America broadcasts. *The Washington Post*, C1.

Shane, S. (1996, August 18). Will the sun set on the BBC World Service? *The Sun* (Baltimore), 2A.

Shapley, D. (2001, June 19). A weather eye on Africa: Western forecasting is bringing help to the people of Niger. *Financial Times* (London), 15 (Inside Track section).

Shih, T.H. (1997, November 7). Huge broadcast radio satellite service on the way. *Business Times* (Singapore), 9 (Asia Section).

Shih, T.H. (1998, June, 5). Singapore is Asia hub for US radio satellite system. *Business Times* (Singapore), 2.

Shih, T. H. (1999, August 26). Radio satellite broadcaster hits snags. *Business Times* (Singapore), 4 (Singapore at Home & Abroad section).

Shrimley, R. (1996, January 17). Rifkind retreats over BBC World Service cuts. *Financial Times* (London), 6.

Shrinking service. (2001, June 4). *The Daily Telegraph* (London), 21.

Significant advances in radio broadcasting. (1995, March 1). *Financial Times* (London), 14 (Review of Information and Technology section).

Sinclair, K. (1996, August 19). Threat to the BBC's quiet voice of sanity. *South China Morning Post*, 17.

Snoddy, R. (1995, September 20). Survey of the radio industry. *Financial Times* (London), 36.

Snoddy, R. (1996, January 15). Media futures: A renaissance of radio for emerging markets - Information affluence for all is nearer. *Financial Times* (London), 15.

Snoddy, R. (1998, June 26). Africa set to go radio gaga. *The Times*, 1 (Features section).

Snoddy, R. (1998, December 10). WorldSpace in radio first. *The Times* (London), 1 (Business section).

Snoddy, R. (1999, March 12). Little voice making big waves. *The Times* (London), 1 (Features section).

Snoddy, R. (2001, March 30). On top of the world. *The Times* (London), Features section.

Snyder, A. (1993, March 24). Tuning U.S.'s radio voice. *The Christian Science Monitor*, 19 (Editorial section).

Solomon, M.J. (1993, March 26). Global village, USIA's voice. *The Washington Post*, N59.

Soviet media: Crackling with competition. (1991, August 2). *The Washington Post*, A24.

Sparaco, P. (1996, October 21). WorldSpace's DAB network to enter service in 1998-99. *Aviation Week and Space Technology*, 145 (17), 46.

Spotts, P.N. (1992, February 3). World radio conference to allocate frequencies. *The Christian Science Monitor*, 7.

StarMan for WorldSpace. (1997, November 10). *Electronic Times*, 72.

State broadcasters: New programs and new politics. (1991). In M.O. Garcia (ed.), *Turning up the volume on international radio* (pp. 1-34). Washington, D.C.: Center for Strategic and International Studies.

Sweeting, A. (2000, April 24). It's the BBC but not as we know it. *The Guardian* (London), 6.

Tansubhapol, B. (2001, February 6). VOA to review closure; US envoy pleads case for Thai broadcasts. *Bangkok Post*, (no page number provided).

Tansubhapol, B. (2001, April 5). Voice of America: Board reviews plan to shut down service. *Bangkok Post*. No page identified.

Tansubhapol, B. (2001, May 19). Pressure forces board to continue broadcasting VOA service. *Bangkok Post*, no page cited.

Taverna, M.A. (2000, March 20). WorldSpace set to orbit second digital radio satellite. *Aviation Week and Space Technology*, 152 (12), 76.

Tempest, R. (1997, January 12). Radio Free Asia is generating static. *Los Angeles Times*, A4.

Thynne, J. (1996, January 17). Politics: Pessimism over private funding. *The Daily Telegraph*, 6.

Transcript, BBC World Service Newshour interviews of Save BBC World Service Coalition Webmaster Ralph Brandi and BBC World Service Director General Mark Byford. (2001, June 15). www.savebbc.com/newshour-transcript.html. Downloaded July 2001.

Trends. (1994, October 29). *The Phoenix Gazette*, A2.

Trumen, P. (1994, May 14). Tropical heat waves: Around the world in 80,000 kilohertz. *The Toronto Star*, SW10.

Truman, P. (1994, June 25). Down the tubes. Have CBC number crunchers pushed Radio Canada International to the brink of disaster - or over it? *The Toronto Star*, SW7.

Tusa, J. (1992, September 27). Now Russia helps BBC to beat the China jam. *South China Morning Post*, no page noted.

Tusa, J. (1992, December 9). Media: Britannia rules the airwaves. *The Independent* (London), 19.

TV solution for the World Service. (1996, January 18). *The Independent* (London), 14.

Tyler, P. E. (1996, December 27). U.S. radio aiming at China 'tyranny,' but few can hear it. *The New York Times*, A1.

Uhlig, R. (1997, June 24). Connected: Digital sets to make radio truly global. *The Daily Telegraph*, 3.

U.S. broadcast services fight for survival. (1993, May 26). *The San Francisco Chronicle*, A21 (Editorial section).

U.S. broadcasters keep Cubans posted in crisis. (1994, September 4). *The New York Times*, D10 (Editorial section).

Use satellite TV for U.S. broadcasts to China. (1997, January 1). *The New York Times*, A38 (Editorial section).

Vernon, T. (2001, July 18). BBC fans suffer SW withdrawal. Radio World Newspaper. RW Online. www.rwonlinw.com/reference-room/special-report/rwf-bbc-july18.shtml. Downloaded July 2001.

Vo, M.T. (1998, November 5). Live, from New York, it's . . . UN radio? *The Christian Science Monitor*, 15.

The Voice of America: Searching for a new doctrine for international broadcasting. (2001). International Communication Association pre-conference seminar, May 24, 2001. Washington, D.C.

Voice worth keeping. (1995, October 28). *The Phoenix Gazette*, B8 (Editorial section).

Wallen, D. (1995, January 2). Chief rules out BBC propaganda. *South China Morning Post*, 2.

Warren, V.M. (1992, January 5). . . . but Voice of America should ring truer, cost less. *The San Diego Union-Tribune*, C4 (Opinion section).

Wee, L. (1995, February 4). Radio station is big on shortwaves. *The Straits Times* (Singapore), 5.

Wendland, M. (2001, November 6). Shortwave radios gaining popularity in the U.S. again. *Detroit Free Press*, A10.

Which frequencies are being cut when? (2001). BBC World Service website. www.bbc.co.uk/worldservice/schedules/010525_whichfreqs.shtml. Downloaded July 2001.

Whitaker, R. (2000, July 23). How to speak British in 42 languages. *The Independent* (London), 23.

White, M. (1996, January 17). Rifkind heads off revolt by Tory MPs over World Service cuts. *The Guardian* (London), 3.

Whitney, C.R. (1993, March 19). Free Europe's entreaty: Don't tune us out now. *The New York Times*, A4.

Who should run Uncle Sam's radios? (1993, April 1). *The Christian Science Monitor*, 19 (Opinion section).

Why has the BBC World Service cut direct short wave to North America, Australia, New Zealand & the Pacific Islands? (2001). BBC website. www.bbc.co.uk/worldservice/schedules/010525_swcutswwhy.shtml. Downloaded July 2001.

WorldSpace: A worldwide digital audio communication service. (1998, June 1). *Aviation Week and Space Technology*, 148 (22), 19.

WorldSpace issues contract for microchips. (1996, September). *World Broadcasting News*, 10.

WorldSpace website. www.worldspace.com. Accessed on October 15, 2001.

WorldSpace will inaugurate a revolutionary digital radio service in Johannesburg. (1999, October 18). *Aviation Week and Space Technology*, 151 (16), 31.

Worries of declining British interest in the Pacific (2001, July 3). Press Release. Save the BBC World Service. www.savebbc.com/press/3_july_2001.html. Downloaded July 2001.

Wright, R. (1996, May 17). U.S. making radio waves in Mideast. *Los Angeles Times*, A9.

Yaakov, Y. (1996, April 26). The selling of America. *The Jerusalem Post*, 22.

Yang, C. (1997, June 30). Media mogul for the Third World. *BusinessWeek*, 10.

Zhang, W. (1994, June 13). United bid to offer radio news. *South China Morning Post*, 5.

Interviews

D. Gibson (Intermedia Research Specialist, personal communication [telephone interview], August 20, 2003).

A. Heil (former Deputy Director of VOA, personal communication [telephone interview], September 4, 2003).

J. Hughes (Chair of President Bush's Task Force on International Broadcasting—1991, and the Congressional Commission on Broadcasting to China—1992; personal communication [telephone interview]; September 10, 2003).

G. McClintock (WWCR General Manager, personal communication [telephone interview], August 19, 2003).

F. Osterman (President of Universal Radio, Inc.; personal communication [telephone interview]; September 19, 2003).

Surveys

D. Centgraff II (WSHB Chief Engineer, personal correspondence [email], August 18, 2003).

O. Cip (Chairman of High Frequency Coordination Conference; personal correspondence [email]; September 8, 2003).

Deutsche Welle (Personal correspondence from the staff at Deutsche Welle [email], September 19, 2003).

K.A. Elliot (Audience research analyst in the Office of Research of the U.S. International Broadcasting Bureau; personal correspondence [email]; September 8, 2003).

S. Hults (Director of Communication - EWTN Global Catholic Network; personal correspondence [email]; September 15, 2003).

D. McLaughlin (Director of Outreach for High Adventure Gospel Communication Ministries, personal correspondence [email], August 14, 2003).

L. Magne (Publisher for International Broadcasting Services, Ltd. [*Passport to WorldBand Radio*], personal correspondence [email], August 20, 2003).

L. Magne (Publisher for International Broadcasting Services, Ltd. [*Passport to WorldBand Radio*], personal correspondence [email], September 3, 2003).

G. Mytton (Manager of the BBC World Service's global audience research programme from 1982 until 1996; personal correspondence [email]; September 18, 2003).

M. Price (Professor of law at the Institute of Advanced Study at Princeton; personal correspondence [email]; September 14, 2003).

J.F. Riley (Manager of Engineering Marketing for IDT-Continental Electronics; personal correspondence [email]; October 1, 2003).

S. Sato (Senior Associate Director for International Broadcasting, Radio Japan; personal correspondence [email], August 29, 2003).

C. Tyson (Editor, *Passport to WorldBand Radio*; personal correspondence [email]; September 11, 2003).

D. Walcutt (former Worldwide Frequency Manager for RFE/RL from 1981 to 2002, personal correspondence [email], August 19, 2003).

M. Wiberg (Frequency manager for Swedish radio station, personal correspondence [email], November 6, 2002).