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Hardware Handshake: Listserv forms Backbone of National Free Radio Network

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Abstract

The most significant grassroots challenge to media consolidation since the creation of the Federal Communications Commission (FCC) is the Free Radio Movement. Using a network of email, listservs, and websites, this diverse movement debates, informs, and communicates with itself and the world. The ability of Micro Radio operators and advocates, especially lawyers and engineers, to communicate and share resources quickly and inexpensively has had a major impact on the effectiveness of the Free Radio Movement. Moreover, the ability of the public to access this network continually adds newmembers to the ranks of the Free Radio advocates. This capacity for near instantaneous communication has given the movement the ability to respond in a timely and coordinated fashion to actions by the FCC as well as answer calls for assistance for technical and legal problems, equipment, and information on howto access the complicated processes of communication regulations and rule-making. This spontaneously-created network has turned scattered and isolated "pirate" radio stations and their supporters into a force with the ability to challenge the status quo of American broadcasting.



Background

On January 20, 2000, much to the surprise of both opponents and supporters of community Low Power Radio, the [Federal Communications Commission \(FCC\)](#) voted to create a Low Power Radio Service. This ended a 22-year ban on licensing FM radio stations under 100 watts and was the result of a grassroots battle waged by activists since 1986 to revive low cost community radio. Low Power FM (LPFM), also known as Micro Radio, is technically defined as stations which broadcast over the 100 milli-watt experimental limit and under the 100-watt minimum power required prior to legalization by the Federal Communications Commission (FCC). In contrast, full power stations transmit at 6000 watts and higher. The FCC had not issued licenses to radio stations that broadcast under 100 watts since 1978 (69 FCC 2d 240).

Unlicensed radio stations, known popularly as "pirates," have existed since the regulation of radio began. Until recently, their numbers were few and their locations scattered around the country. There was no unifying theme or organization that connected these stations. Most of these stations came and went of their own accord or with some assistance from the FCC. Many people who later followed careers in legal broadcasting started out with a small-watt pirate station in their college dorm room or parents' garage. With a few notable exceptions, these broadcasters created little or no concern among the ranks of federal regulators or licensed broadcasters. Until the 1980s, most pirate activity was concentrated on the short-wave band. These radio hobbyists had clubs, swap-meets and newsletters, but mainly concentrated on listening in (known as DX'ing) and exchanging

equipment and technical information. This type of activity was focused more on the technical act of producing a quality broadcast, rather than a political act of defiance. (Coopman, 1998; Yoder, 1990).

The modern period of unlicensed or Micro Radio began in 1985. A blind African American named Mbanna Kantako in Springfield, IL, coined the term for his small station that served the sprawling housing project he lived in. After a half-hearted attempt by the FCC in 1989 to shut him down, he faded into the background, happy to simply run his station and serve his community. [The National Lawyers Guild](#) offered to make him a test case but he declined. This kind of FM activity remained low throughout the rest of the decade. However, the combined forces of increasing media concentration and a dissatisfaction with the quality and coverage of mainstream media began to raise interest in Micro Radio. This culminated with the media coverage of the Gulf War in 1989-90. Activists were so appalled by what they saw as a media white-wash, they took action. Stephen Dunifer, a life-long activist and electronics expert living in Berkeley, CA began broadcasting [Free Radio Berkeley \(FRB\)](#) intermittently to the East Bay. He was soon followed by San Francisco Liberation Radio (SFLR) on the peninsula. These broadcasters joined forces with the [Committee for Democratic Communication \(CDC\)](#), part of the National Lawyers Guild, to challenge the FCC's prohibition against low-power FM. Soon, other broadcasters around the Bay Area and the nation, encouraged by their stand, came on the air. The FCC took notice of FRB broadcasts and started actions against Dunifer in the spring of 1993. When the FCC attempted to get a restraining order to stop Free Radio Berkeley the CDC challenged it on Constitutional grounds (Coopman, 1998; Shields & Ogles, 1992).

Administrative wrangling over rules, jurisdiction, and procedures continued until January 1995 when 9th Circuit Court Judge Claudia Wilken denied the FCC's request for a preliminary injunction against FRB citing possible Constitutional issues. Dunifer spread the news of this victory to activists across the nation and called for the people to "seize the airwaves" and to let "a 1000 transmitters bloom." During this time Dunifer himself had been selling transmitter kits to hobbyists and potential broadcasters all over the world. His combination newsletter and catalog, "Reclaiming the Airwaves," was printed and distributed to 1000 or more subscribers. It was here that his email address was first listed. The movement was still small on a national scale, but in the Bay Area, central and northern California, it expanded rapidly. Regular meetings, conferences, and workshops were held and local micro broadcasters had a wealth of resources. Moreover, the movement's early association with grassroots organizations such as Food Not Bombs and the [Industrial Workers of the World \(IWW\)](#) helped to spread the word and gave access to a national network (Coopman, 1998; Memorandum and Order, January 30, 1995).

As more and more people heard about Micro Radio, the movement became more extensive and diversified to include a wide variety of groups and individuals. This culminated in popular pressure on the FCC that ultimately overcame the powerful media lobby's and lead to the creation of a Low Power Radio Service. Activists seeking to spread the word about Micro Radio became early adopters of the fastest, cheapest communication medium since radio--[the Internet](#). Inexpensive and nearly instantaneous, the Internet enhanced the ability of the Free Radio Movement to react to actions by the FCC, respond to requests for technical and legal assistance, and created a forum to build consensus on the issues facing Micro Radio, as well as members of the movement

Early Use/Existing Networks

The members of the Micro Radio community were early email adopters. However, the first real attempt to communicate to a broader audience was through existing listservs, news groups, and special interest websites. For example, [Rock & Rap Confidential \(RRC\)](#) is an intermittent mass mailing list. It is an outgrowth of a website of the same name and primarily covers "music and politics..., culture, politics, funk and country, hip-hop and heavy metal, racism and revolution, jazz and reggae, folk music and ska, censorship and the phony war on drugs" (Rock & Rap, 1998) Lee Ballenger, an RRC editor, was an early supporter of Micro Radio, attending the [first conferences](#) in Oakland and San Jose, CA in 1996. Occasional Micro Radio posts would come over the Rock & Rap list, usually concerning up-dates and bulletins about micro stations, as well as announcements of conferences and protest actions against the FCC. The Radio Resistor's Bulletin was a newsletter that went electronic, died-off, and then came back as a website called the Free Radio Press (currently out of service). Originally based out of Bellingham, WA, it started in response to the consolidation of public and educational broadcast stations in that area. As it grew, it expanded to cover a wide range of broadcasting issues including the [re-organization and crisis](#) at the [Pacifica Network](#) and Micro Radio. The Free Radio Press has again passed into the ether, probably to resurface at a later date.

Indexing websites, usually run by radio hobbyists, were the first tools that allowed far-flung Free Radio advocates to contact each other. Sites like [Bry's Ham Radio and Hockey Page](#) provided an overwhelming number of links to various radio websites. Although it started off with a concentration on traditional ham and short-wave pirates, it has expanded to include most of the emerging Micro Radio scene. Although index sites were a great way to find other Micro Radio advocates, it still did not provide a unifying network that would allow the scattered members of the emerging Micro Radio movement to efficiently communicate.

Fledgling Networks

As the Micro Radio scene started to heat up in the San Francisco Bay Area, Dunifer began to have trouble finding the time to publish "Reclaiming the Airwaves." His energies shifted to his court battle with the FCC and developing the [Free Radio Berkeley \(FRB\) website](#). Paul Griffin, a member of the FRB collective, moved to fill the void with the Association of Micro Power Broadcasters (AMPB) Report. Although it started off as a couple of Xeroxed sheets of paper, he quickly moved it on-line. Using email addresses collected at Micro Power conferences, he started to issue reports to keep those interested informed of FRB court case and related issues. These reports have come out on a semi-regular basis since 1994 (personal communication, Paul Griffin, September 29, 1998). From 1994 to 1997, mass emailed lists were the normal means for widespread communication in the Micro Radio community. Often these mass mailings were forwarded to other lists and individuals, enlarging the network and leading to more and widespread communication. This included posting on AMEND1-L, a listserv sponsored by the [American Communication Association \(ACA\)](#) focusing on First Amendment and Free Speech issues. However, up to the end of 1997, no medium existed that would allow fast, easily accessible communication among all interested parties.

There were several furtive attempts to create special purpose listservs, first through the [Industrial Workers of the World \(IWW\)](#) with the Free Radio List, then with the Free Radio Emergency Response List. While both of these lists are used and technically remain in operation, they still primarily serve the purpose of a bulletin board, with requests for information or up-dates posted by those involved with Micro Radio. However, this changed in January 1998 with the introduction of

the Micro Radio Network or MRN.

The Micro Radio Network

Dear Micro-power Broadcasters and Supporters,

We have created a list specifically for communications to further the micro radio movement, and to support one another in our efforts. The list, it is hoped, will be a tool in assisting with organizing politically, legally and technically for our mutual defense against the current stepped up campaign of attacks by corporate media and their government allies.

[First MRN post by Lyn Gerry, Sunday, January 4, 1998]

The origins of The Micro Radio Network (MRN) can be traced back to October 1996 with the establishment of the [Radio4all](#) website. According to Gerry, the site was originally set-up in response to the [series of crisis at Pacifica Radio](#), the nation's first non-commercial radio network. In response to media market pressures, Pacifica had made programming changes that eliminated many of its more controversial programmers. This was seen as a move to silence certain segments of the community and elicited a strong response by activist broadcasters as well as listeners. In many ways, the disruption of Pacifica added fuel to the fire of Micro Radio as those who were shut out or quit in protest sought other outlets for their viewpoints. These people also brought with them years of media and activist experience. Since Radio4all had already become a popular index and information site, MRN caught on immediately. "I perceived that there was a need for a nexus of information, and expanded the site accordingly," Gerry stated. Micro broadcasters and their supporters from all over the U.S. were now able to communicate in an open forum. This activity helped to increase traffic at the Radio4all site, which has been averaging 400 hits per day since January 1998 (for a total of around 1/2 million hits). Gerry estimated the number of subscribers to MRN, as of August 1998, to be about 119 with 1 or 2 people adding every week. Due to the transient and dynamic nature of those involved with Free Radio current enrollment is difficult to estimate. Switched addresses and sharing accounts is common place. Based on earlier projections, estimated list enrollment, as of March 2000, is around 200. Although this number is not very impressive alone, it is important to remember that many members of this movement live at or below the poverty line and often Micro Radio stations only have one point of internet access (Lyn Gerry, personal communication, August 17, 1998 and March 12, 2000).

A Market Place for Ideas

With a diverse list of email contacts for Radio4all, word of MRN quickly spread. Until the list was

established, most of the dialogue in the Micro Radio community revolved around a base of California stations and activists. Many of these were accustomed to meeting each other at regional radio conferences that had been occurring over the past few years. There were a few exceptions, such as Napoleon Williams for [Black Liberation Radio](#) in Decatur, IL, who made a trip out and others scattered around the country. Up until this point, most of the visible members of the Micro Radio movement fit the activist model. Radio was a tool for organizing, a printing press. This followed the tradition of European Free Radio Stations (Billy, 1999; Coopman, 2000a; Radio Patapoe).

Although radio stations with political agendas had existed in the US in the past (primarily on the short-wave spectrum), for the most part, this was a deviation from the traditional pirate. Even Daniel Emrick, Chief of Enforcement for the Compliance and Information Bureau (CIB) of the FCC, did not consider normal band (FM/AM) unlicensed broadcasters as pirates(Appendix A). As MRN grew, it became evident that there were many unlicensed stations scattered throughout the nation. Many of these stations do not fit the leftist/activist model of Free Radio Berkeley and similar stations. There are militia-style stations, community-based moderate stations, small commercial outlets that sell advertising, and the traditional "person in her/his garage" operations. Many stations do not consider themselves activist or political, and there has been tension at times between different ideologies. However, all those involved have discovered quickly they share a basic common goal: the belief that they have a right to access the airwaves and are willing to fight for that right. As in previous lists, there are still alerts and bulletins on FCC actions, and articles on Micro Radio and related items from papers all over the country. Although ideological and political conflicts flare at times, most discussions focus on utilization of meager resources. These mostly concern technical, legislative, and legal issues (Coopman, 2000b).

On-line Tech Support

The lack of competent technical support has always been a major obstacle for Micro Radio stations. Most engineers work for licensed stations or other commercial enterprises and have no desire to assist a station that is technically breaking the law. Although transmitter kits have become much simpler and easier to maintain and operate, they do require some electronics skills to make them operate properly. This has been a primary reason why traditional pirates tended to be hobbyists or otherwise technically inclined. There are, of course, electricians and engineers who will help, although they are few and scattered around the country. What MRN allows is for these engineers to offer technical support and direct stations to the nearest sympathetic technician. Moreover, those who already have some technical experience can be schooled in and connected to those who have the specialized knowledge in broadcasting. There is also a dedicated technicians list that allows the technicians and engineers to communicate among themselves and share their experiences, short-cuts and innovations. New designs and strategies for relay stations, filters, and boosters bounce around the country. Valuable personal experience, particularly in mobile broadcasting, is shared, allowing many stations to skip the trial and error approach that was the norm before the communication network was active. Answers can be had in a matter of hours, instead of days or weeks. Personal contacts are not needed; just a general post for assistance.

MRN Legal

Communications law is an elite profession, according to Luke Hiken, a lawyer of the Dunifer

defense team. The Committee for Democratic Communication (CDC), part of the National Lawyers Guild, has been handling the Dunifer case and the challenge to the FCC's regulatory scheme (Appendix A). The CDC lawyers are working on the case pro bono, supported by CDC members and donations. This type of legal help is difficult to find. Although the [American Civil Liberties Union \(ACLU\)](#) and other organizations and individuals have legal experience and were willing to help, the type of knowledge needed to face the FCC in court is difficult to come by. In the early days of MRN, lawyers and individuals who had run afoul of the FCC or simply wanted to be prepared flooded MRN with requests for information and direct assistance. Members of the Dunifer legal team and several legal scholars helped to field questions, direct stations to the nearest sympathetic lawyer, and offer case materials. Eventually, a network of lawyers working on defending stations around the country moved to a new secured list, MRN Legal, to discuss strategies and share information. This was done in part to clear the list a little of traffic, but mostly as a security measure when the archives of the list were used in a [National Association of Broadcasters \(NAB\)](#) comments concerning the request for authorizing Micro Radio. Moreover, logon records on the [Radio4all website](#) showed ever-increasing visits by the FCC and NAB. Details were omitted from general postings when it became apparent that not everyone on MRN were proponents of Micro Radio.

One-Stop Shopping Cooperative

The main weapon used against a micro station is the seizure of equipment. Most stations run on a shoe-string budget, so despite the relative low cost of transmitting and related gear (\$800-\$1500) the loss of such equipment is a major blow. Through MRN, borrowed and built equipment is traded, donated, or sold around the country. Donations are also collected for seized stations and other causes that allow interdicted stations to get back on the air. Stephen Dunifer builds and sells transmitter kits, as well as being a micro activist, and often sends equipment to stations with a simple request that people send him some cash to help cover the cost. The URLs for free programs of all types are regularly posted on MRN. Special sites, such as the [A Info's Radio Project](#), collect archive programming and make it available free. This allows a depth and variation of programming that most stations could not access or afford.

Debate

As increasingly diverse groups of people joined MRN, the effort to legitimize Micro Radio started to take several different forms. The movement had been based on the idea of electronic civil disobedience. Stations operated in the open in defiance of the FCC and only entered the legal/regulatory arena when confronted. The Dunifer case got before a federal judge to challenge FCC regulations in this way. Although initially successful, this approach proved to be only moderately effective and eventually FRB lost in court (the case is being appealed). Before this happened however, different segments of the community began efforts to broaden the battle. Stations sought the support and protection of their cities and towns as well as the support of influential individuals. Several rulemaking petitions to change FCC regulations went before the Commission. Other stations stayed true to their activist roots, organizing actions and demonstrations. The most recent event involved a march on the FCC building and the Washington, DC, headquarters of the NAB involving over 100 people. The NAB flag was taken down and replaced by the Jolly Roger and the activists broadcast from a micro transmitter on the steps of the FCC, daring FCC officials to arrest them. This was followed by a debate at the Freedom Forum. Micro Radio stations were set up at the [World Trade Organization \(WTO\) protests in Seattle](#) in

November of 1999. Lawsuits were also filed by stations in Tennessee, Texas, and New York. All these actions were debated and discussed over MRN.

Rulemaking

In 1998 two petitions calling for the establishment of a Low Power Radio Service were filed, one by J. Rodger Skinner and the other by Nickolaus Leggett, Judith Leggett, and Donald Schellhardt (collectively, "Leggett"). Both of these petitions were developed outside the traditional base of Micro Radio and included items that many in the movement opposed, especially a commercial service in addition to a non-commercial service. After the first rulemaking petitions went before the FCC, the [Committee for Democratic Communications](#) sought to gain consensus on the movement's goals and present them as the Movement's comments. The CDC comments were the result of a wide-ranging and at times heated debate as to the movement's goals. Technical, legal, and regulatory issues were debated and voted on. Most of these, including limiting station ownership, regulatory guidelines, and broadcasting power limits were widely supported. The most contentious debates, however, involved whether to have both commercial and non-commercial micro stations or if the proposed service should be purely non-commercial. There were strong opinions on both side. A majority of the activists were staunchly opposed to commercialism in Micro Radio, but many stations saw the need of the revenue created to operate their stations and make a living. Alternate schemes were discussed and discarded. Eventually, a majority of the participants elected to push for a purely non-commercial service. The commercial advocates, although electing to maintain their participation in MRN and continue giving aid and support, went on to support alternative comments. Despite differences between factions, having a common forum did yield some successful compromises and coordinated actions. The [Joint Statement on Micro Radio](#) was a document I drafted that combined the bare essentials needed for a viable low power radio service. All major factions and many individuals signed onto this document. The Joint Statement on Micro Radio garnered 30 organizations and 101 individuals from 17 states in less than three weeks--entirely on-line.

Low Power Radio Service

Despite threats from some Congressional members and protests by the NAB and NPR, the FCC issued a Report and Order creating a Low Power Radio Service in early 2000. While there are many positive aspects to this service that reflect the comments made by pro-LPFM advocates, each of the major factions were defeated on critical points. The FCC elected to create a non-commercial service and also refused to grant amnesty to those who broadcast illegally. These two provisions excluded not only those who brought the issue to the nation's attention in the first place but those who filed the rulemaking petitions to make LPFM legal. Both factions are appealing. However, many of the "Micro Radio Pioneers" have vowed to never get a license and continue in the unregulated tradition of Free Radio. Considering the difficulties of keeping these stations off the air, illegal Free Radio will be with us for some time to come.

Campaigns

Also organized by Radio4all and spread by MRN are several action networks and other campaigns. The "Don't Let Them NAB our Airwaves" banner campaign lets those with a web presence show their support and provide a gateway to information about the National Association

of Broadcasters (NAB) efforts to destroy Micro Radio . The banner campaign's logo is based on the neighborhood watch signs that have sprouted all over America. It was instigated by the NAB's call for its members to actively locate any unlicensed stations and report them to the FCC.



Of a more practical sort, the "Micro Radio Bust Response Network" logo on a micro radio supporter's website indicates the site sponsor is part of the network. When a station is busted or warned by the FCC, the network is notified and members call, email, and snail mail the FCC and members of Congress in protest.



The Internet and Free Radio

As the Micro Radio matures and develops into a full fledged media reform movement, MRN remains the primary forum for the organization and communication for its far-flung members. Information is disseminated, advice is given, actions are organized, and issues are debated that allow this diverse movement to continue to thrive and survive. A variety of factors have led to the emergence of Micro Radio as a force in American broadcasting. These factors include the political climate, broadcast consolidation (especially after the [Telecommunications Act of 1996](#)), the perceived coopting of public broadcasting and the Pacifica Network, and the increasing familiarity with, and willingness to, embrace emerging and existing technologies. However, without the Internet, and the access and instantaneous communication it affords, this movement likely could not have consolidated and maximized its resources enough to form the significant challenge to the status quo that it is today. Not only has the internet allowed communication and organization of Free Radio on a wide scale, it has also served as a pipeline for programming. [Radio4all](#) and the [A Infos Radio Project](#) are developing a independent news cooperative to augment their programming offerings. As with the A Infos Site, anyone can up-load or down load programming for free. Several stations are also experimenting with webcasting, such as First Amendment Radio in Houston and [Free Radio Santa Cruz](#), either as an alternative or as part of their unlicensed operation. A station can protect its studio and shield most of its staff by having their programming pulled of a webcasting feed and rebroadcast on FM by an individual "unassociated" with the station. Having been schooled in the workings of the FCC's [Electronic Comments and Filing System \(ECFS\)](#), advocates are challenging full power FM station applications and attempts by the broadcasting lobby to tighten their grip on the spectrum through [digital conversion](#) of FM and AM radio.

The Battle Continues

Micro Radio has gone from being a non-issue in 1993 to the defeat of the National Association of

Broadcasters (NAB) by the creation of a Low Power Radio Service in 2000. Both Democratic Presidential candidates have endorsed LPFM. Debates have been held concerning Micro Radio at the NAB National Convention, the [Cato Institute](#), the Freedom Forum, in the mainstream as well as the trade press, and in the halls of Congress. In the 1993, when I began my research on Micro Radio, there was little or no mention of Micro Radio in the mainstream or national press. Now the issue has been presented in media arenas ranging from [National Public Radio](#) to [CBS](#). Micro Radio activists have held protests and conferences from coast to coast. The FCC states it has shut down over 500 stations, yet estimates of existing stations run from the hundreds to over 1000. There were massive busts in Florida where over 15 stations were shut down, yet the dial there is still filled with Micro Radio. San Francisco Liberation Radio and [Free Radio Berkeley](#) went off the air after losing a round in court. After a year "in the dark" both stations have begun broadcasting again. FRB as Berkeley Liberation Radio.

As of Spring of 2000, the NAB and NPR has counterattacked by lobbying Congress to kill LPFM before it can get started. The Radio Broadcasting Preservation Act of 1999 (HR 3439) was passed in the House on April 13, 2000 and has been submitted to the Senate and would vastly restrict such a service. The number of frequencies available would be reduced to a handful nationwide, most of which reside outside the major population centers. The NAB has also filed in Federal Court to block Low Power Radio. The Movement is split on the response to these challenges. Some feel that the new service is flawed and that Free Radio can do better. The ability of the broadcasting lobby to kill LPFM in Congress would be seen by some activists as a perfect example of the corruptness of the system and a rallying point for resistance. Others are working hard to ensure its defeat.

No matter what the outcome is, Micro Radio is not going to go away. Legal or not, with the connectivity provided by the Micro Radio Network and other Internet resources, it will remain a national consolidated movement for some time to come.

**"There will always be
pirate radio."**

*-Paul Griffin (a.k.a. Captain Fred) in
Free Radio, A Documentary by Kevin Keyser*



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Federal Communications Commission Documents

69 FCC 2d 240, 1978; FCCLEXIS 947 (FCC 78-384)



Appendix A

Daniel S. Emrick, Chief of Investigations Branch, Enforcement Division, Compliance and Information Bureau, Federal Communications Commission. Interview conducted at 1919 M St., Washington, DC, January 10, 1995.

Louis Hiken, Attorney for Stephen P. Dunifer, Member of Committee for Democratic Communication. Interview conducted at One Sansome St., Ste. 900, San Francisco, CA, February 15, 1995.



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