

Public Interest Pirates: The History of the Micropower Radio Movement

Adam Marcus

Introduction

When the FCC issued its Report and Order authorizing the creation of the low-power FM (LPFM) license class in January 2000, it stated that it believed the service would “provide opportunities for new voices to be heard and will ensure that we fulfill our statutory obligation to authorize facilities in a manner that best serves the public interest” (Report & Order, MM Docket 99-25, 27 Jan 2000). Does the new LPFM service serve the public interest? Does it fulfill the FCC’s obligation?

In the middle of the campaign for the LPFM license class, the Telecommunications Act of 1996 was passed, allowing commercial broadcasters to consolidate their radio station holdings. As commercial radio stations become increasingly removed from their local communities, illegal micropower stations attempted to fill the gap.

Definitions

When most people think of pirate radio, they probably think of the movie “Pump Up the Volume” starring Christian Slater. In the movie, Slater’s character is a high school student who starts his own pirate radio station. He sits alone in his basement playing music and speaking his mind. But this is only one type of illegal broadcasting.

Lawrence Soley uses the term *free radio* to define any station operating without government approval, and further divides the genre into four categories: clandestine, pirate, micropower, and ghost stations (1-2). Clandestine stations usually operate on shortwave frequencies during times of civil unrest to advocate revolution. Pirate stations usually carry

music and entertainment programs catering to a niche audience, and sometimes carry advertising. Ghost stations intentionally interrupt the broadcasts of licensed stations. This paper is concerned with micropower stations. These stations are rarely operated solely by individuals, are almost always on the FM band, and operate with very low power levels and ranges (Soley 2-3). The new LPFM license created in 2000 had two classes of stations: 10 watt and 100 watt. For the purposes of this paper, any broadcasts of 100 watts or less are considered low-power.

The Beginnings of National Communications Policy

Before there was a FCC, and even before the FRC (the precursor to the FCC), land-grant universities pioneered broadcasting to the public as an embodiment of their mission to make higher education more of a community resource. The first broadcasting station in the world was operated by a professor at the College of Engineering and Wireless in San Jose, California in 1909 (Engelman 15). “By 1920 there were 15 times more amateur stations than all other types combined” (Engelman 17). These early stations broadcast news bulletins, weather forecasts, market reports, sporting events, dramas and concerts, and complete courses for college credit, phonograph records, and the occasional live singer (Engelman 15-17).

As more stations took to the airwaves, interference became a serious problem. In an effort to bring order to the chaos, Congress passed the Radio Act of 1912. A license was now needed for radio transmission, and the Secretary of Commerce was charged with assigning licenses. A license application couldn't be refused, but the Secretary had the authority to choose frequencies and time limits (Engelman 14-19). In 1923, then Secretary of Commerce Herbert Hoover established a hierarchy of stations that favored commercial stations over the “special-interest programming” of educational and non-profit stations (Engelman 19). In 1927, the “trusteeship model” was formalized in a new Radio Act based on the concept of “private interests serving the

public good in broadcasting with minimum governmental supervision” (Engelman 21). This act created the Federal Radio Commission (FRC). In 1928, the FRC published General Order No. 40, which was used to pressure educational and nonprofit stations off the air (Engelman 22-24).

During the Congressional debate leading to the Radio Act of 1927, the Association of College and University Broadcasting Stations (ACUBS) lobbied unsuccessfully to have a number of stations set aside for educational use (Engelman 22). Ten years later, the FRC was now called the FCC and the ACUBS which had reformed as the National Association of Educational Broadcasters (NAEB). In 1938, the FCC set aside several channels in what would later become the FM band for noncommercial stations. A pessimistic official at the National Committee on Education by Radio (NCER) predicted that the FCC would “let the educational stations do the experimental work, and then perhaps would take away the channels and allocate them for commercial use” (qtd. in Engelman 37).

The First Age of Low-Power FM Radio

When the FCC formalized the FM band at its current frequency range between 88 and 108 MHz in 1945, the NAEB was successful in getting it to set aside the 88 to 92 MHz frequency range (20% of the FM broadcasting spectrum) for non-commercial educational stations. The FCC could afford to be this generous because there was so little interest in FM compared to the coming television boom (Engelman 33-4).

In 1948, the FCC created the Class D license for non-commercial education stations (Anderson). To decrease the costs of starting and operating a radio station, Class D licensees had a number of exemptions from the rules governing commercial stations. One was that these stations could operate at power levels of 10 watts or less (Notes on Class D). Previously, all

stations needed to broadcast with a minimum of 100 watts or a reference distance equal to or greater than 6 kilometers (Code of Federal Regulations).

On January 23, 1949, the Radio Commission of the Southern Baptist Convention and the Executive Board of the Baptist General Convention of Texas submitted a petition asking the FCC to extend the privileges and exemptions for non-commercial educational FM broadcast stations to religious organizations. In December of that year, they submitted a supplemental petition expanding the classification to all “tax exempt non-profit organizations.” The FCC’s Report & Order acknowledged that the petitioners wanted a less-costly way to operate FM stations. In July of 1951, after receiving no comments from other organizations during a longer-than usual comment period, the FCC decided that there was not significant demand and denied the petition.

What is curious about the FCC’s Report and Order is that it makes no mention of Pacifica Foundation’s KPFA-FM station, “the first noncommercial license that did not go to an educational or religious institution,” which went on the air April 15th, 1949 (Lewis & Booth, qtd. in Engelman, 44). Why didn’t the Pacifica Foundation, which went on to start four more radio stations across the country and now has over 60 affiliate stations, not file a brief in support of the amended petition?

It took 40 years for the NCER official’s prediction to come true, but that’s exactly what the FCC did. In 1978, the FCC decided that “the continued authorization of Class D stations precluded more efficient operations from larger facilities, which could serve more people and larger areas, and bring effective noncommercial radio service to persons then lacking it” (Notes on Class D). Class D stations that did not upgrade to at least a Class A license were classified as secondary stations and were left unprotected from interference from other (commercial) stations.

From this point forward, no new licenses would be granted for FM stations broadcasting at a power level less than 3,000 watts. In 1989, the minimum output power level was raised to 6,000 watts (Hazlett and Viani 10). The first age of low-power radio was over.

The Second Wave of Low-Power Radio

On May 27, 1981 the Moody Bible Institute filed a petition with the FCC requesting changes to the rules for FM translators (Memorandum Opinion & Order). At the time, FM translators could only re-transmit programming received via radio from a primary FM station or another FM translator, limiting translators to areas in range of a primary FM station (albeit at poor quality levels for regular radio receivers). The petition asked the FCC to allow translators to receive programming from microwave and satellite links, to broadcast programming intended for a national audience, and to broadcast unlimited hours of local and recorded programs. This change would make translator stations very similar to noncommercial stations in that they would have free reign over programming decisions, but would still be limited to nonprofit status and would be restricted on the types of advertising allowed on the station.

Ironically, the NAB filled comments that “expressed the concern that LPFM stations would divide the market by airing programming from satellites and distant microwave feeds causing local full service stations and their local programming to perish from the airwaves” (Memorandum Opinion & Order). The FCC, citing a number of ongoing spectrum management issues that would be impacted by such a ruling, denied the petition in 1984. In the ruling, the FCC points out that a number of FM translator applications have been recently submitted and speculates that the reason is the anticipation of a new low-power FM service that would make available frequencies increasingly scarce. The FCC also comments that it would be unable to

handle the “staggering application flow” that would result from a new LPFM service (Memorandum Opinion & Order).

In August 1997, President Clinton nominated William E. Kennard as chairman of the FCC and Michael Powell as a FCC commissioner (Digest). Their nominations were both approved in October (Kennard). At his confirmation hearing, Chairman Kennard stated that as commissioner he would be guided by three principles: competition, community, and common sense. Mr. Kennard stated “I will work hard to ensure that the communications revolution is inclusive -- not exclusive -- and that small businesses, women, and minorities are not left on the sidelines of the communications revolution” (Confirmation Hearing). Competition and community had been used in arguments *against* LPFM in the past. It seemed that this time, common sense would prevail.

In June 1997, Nikolaus Leggett, ham radio hobbyist from Reston Virginia, submitted a petition for a low-power FM service to the FCC. But as late as December 8, 1997, Chairman Kennard had stated that the FCC had studied and then rejected LPFM proposals because of concerns over interference (Lew). But something happened during the year 1998.

On January 28, 1999, the FCC issued a Notice of Proposed Rule Making to establish two new classes of low-power FM radio stations. In an accompanying statement, Chairman Kennard and Commissioner Tristani stated “As consolidation in the broadcast industry closes the doors of opportunity for new entrants, we must find ways to use the broadcast spectrum more efficiently so that we can bring more voices to the airwaves. The *Notice* adopted today proposes several ways to do so.” There was something besides the consolidation of commercial radio stations that must have influenced the FCC to establish a LPFM license.

Consolidation

A study of low-power radio would be incomplete without some comment on the changing face of commercial radio. At the same time the FRC was being formed, the two national commercial radio networks were started. The FRC was created by the Radio Act of 1927. NBC was formed in 1926 and CBS was formed in 1927 (Engelman 20).

After the FRC implemented General Order No. 40 in 1928, all but three of the 40 clear-channel stations were owned or affiliated with NBC or CBS (Engelman 23). “In the four years following the Radio Act of 1927, the percentage of radio stations affiliated with the two networks jumped from 6% to 30%. It has been estimated that NBC and CBS accounted for nearly 70% of American broadcasting by 1931, when number of hours broadcast and level of power are taken into consideration” (Engelman 23).

With the introduction of television, network control of radio stations decreased and outright ownership became the metric for consolidation. Until the passage of the 1996 Telecommunications Act, no single company or individual could own more than 40 radio stations across the country (Ness). The 1996 Act completely eliminated this limit, and mandated that the FCC issue annual Reviews of the Radio Industry examining changes as a result of the Act. The FCC’s 2001 Review of the Radio Industry provides ample proof that consolidation is happening:

Overall, there has been an increase in the number of commercial radio stations of 7.1 percent between March 1996 and March 2001. The number of radio owners declined by 25 percent during this five-year period. This decline is primarily due to mergers between existing owners. Over the same period, there has also been an increase in the size of the largest radio group owners. In 1996, the two largest radio group owners consisted of fewer than 65 radio stations each. In March 2000, the two largest radio group owners consisted of more than 440 radio stations each. In August 2000, the two largest radio groups merged, so that now Clear Channel Communications owns approximately 1,000 radio stations, with pending acquisitions before the Commission for over 200 additional stations. The

second largest group owner, Cumulus Broadcasting Inc, has approximately 250 stations.

At the local level, there continues to be a downward trend in the number of radio station owners in Arbitron Metro markets. Further, the top owners in each Metro market generally account for an increasing share of the total radio advertising revenues in these markets. The largest firm in each radio Metro market has, on average, 46 percent of the market's total radio advertising revenue. The largest two firms in each radio market have, on average, 73 percent of the market's radio advertising revenue. Overall, the variety of radio formats available to consumers had held steady. However, in recent years the average number of formats appears to have declined slightly for some of the large markets while increasing slightly for most of the smaller ones.

But what kind of effect does this ownership consolidation have on the listening public?

For one, there has been a loss of more than one radio news wire service per year in smaller markets since the passage of the 1996 Act (Chambers 310). Another effect is nationwide format oligopolies--when four or fewer owners control over 50% of the nationwide listeners for a single format. "If four radio station groups control the majority of listeners tuning to a specific music format, the opportunity to break a hit song is dramatically diminished and subject to the whims and wants of the format oligopoly members" (Wirth 261-2). Lastly, many stations are using technology called voice tracking to automate programming, eliminating the need for a live DJ in the studio. Voice tracking is used to simulate local DJs, using a single "air personality" on multiple stations in different areas (Breslauer). Owners like voice tracking because it saves money, but many listeners complain that automated programming is more generic and not focused on the local community (Toroian). There is also the question of whether commercial stations are still operating in the public interest.

The Public Interest

Until the passage of the Radio Act of 1927, radio was as accessible as the medium of print. Just as freedom of the press allowed anyone to publish a newspaper with total editorial

control, anyone could purchase some radio equipment and begin transmitting. In the debates that led up to the passage of the Act, the freedom of speech for broadcasters was pitted against the freedom of speech for individuals who might be discriminated against by broadcasters when attempting to purchase airtime. Congress also wanted to protect the freedom of listeners to receive a variety of viewpoints. Because of free speech concerns, the FCC was given no authority to censor programming (Benjamin 74-5). The fact that the FRC could revoke a license if a station was found to not be operating in the “public interest, convenience, or necessity” (PICON) was thought to be enough to insure that stations would not monopolize the airwaves (Benjamin 76).

Soon after its formation, the only confirmed commissioner, Eugene Sykes, addressed the radio audience over NBC announcing open hearings to help determine how to define “public interest.” (Benjamin 78). During the first three days of the hearings the dominant issue was interference. It was only on the last day that Morris Ernst of the ACLU raised the issue of free speech. He pointed out that censorship already existed in both how stations choose programs and how the Secretary of Commerce assigned licenses (Benjamin 78). In August 1927, the FRC issued its first explicit statement on the concept of “public interest.” The FRC acknowledged that “a precise definition of such a phrase which will foresee all eventualities is manifestly impossible” (qtd. in Benjamin 84). The statement included a few general principles:

- Freedom from interference
- Channel assignments should cover as wide a geographic area as possible
- Avoiding too much duplication of programming and programming types--“The commissioners also believed broadcasting’s limited facilities should not be used for service readily available in other forms, such as phonograph records. Presenting original material was a must” (Benjamin 84).
- Benefits “derived by advertisers must be incidental and entirely secondary to the interest of the public. Advertising should be only incidental to some real service

rendered to the public, and not the main object of a program” (qtd. in Benjamin 84).

- Stations should operate on a regular, published schedule and should not be used for private matters

On February 16, 1929, the FRC further clarified its definition of “public interest” in a document known as the Great Lakes Statement. It stated that stations having the longest period of service should be given priority, and stations should provide “well-rounded programming designed for the tastes, needs, and desires of all substantial groups of listeners” (Benjamin 85). “Since the broadcast band could not accommodate stations for every school of thought, ‘propaganda’ stations--or stations emphasizing one issue or one particular religious, political, social, or economic viewpoint--had less claim to the airwaves than did more general public service stations” (Benjamin 85). The PICON clause eventually became the Fairness Doctrine.

The Fairness Doctrine

The Fairness Doctrine as defined in a 1974 Fairness Report had two parts: “(1) broadcast licensees were required to provide coverage of vitally important controversial issues of interest in the community served; and (2), to provide a reasonable opportunity for the presentation of contrasting viewpoints of such issues (Jung 10).

The early history of the Fairness Doctrine is murky, but the first clear outline for the doctrine was in the Third Annual Report, released in 1929: “public interest requires ample play for the free and fair competition of opposing views, and the commission believes that the principle applies not only to addresses by political candidates but to all discussion of issues of importance to the public...” (qtd. in Simmons 32). At this point, the FCC could only review stations to see if they were following these guidelines when it was time for license renewal. In 1945, responding to a license renewal request for a station that had settled a disagreement with local labor groups who contested the renewal, the FCC stated that it was “the duty of each station

licensee to be sensitive to the problems of public concern in the community and to make sufficient time available, on a nondiscriminatory basis, for full discussion thereof, without any type of censorship which would undertake to impose the views of the licensee upon the material to be broadcast” (qtd. in Simmons 39). These two halves of the Fairness Doctrine were combined in a 1949 Report on Editorializing created by the FCC for broadcasters. Although somewhat lengthy, it is worth restating here:

It is axiomatic that one of the most vital questions of mass communication in a democracy is the development of an informed public opinion through the public dissemination of news and ideas concerning the vital public issues of the day. Basically, it is in recognition of the great contribution which radio can make in the advancement of this purpose that portions of the radio spectrum are allocated to that form of radio communications known as radiobroadcasting. Unquestionably, then, the standard of public interest, convenience and necessity as applied to radiobroadcasting must be interpreted in the light of this basic purpose. The Commission has consequently recognized the necessity for licensees to devote a reasonable percentage of their broadcast time to the presentation of news and programs devoted to the consideration and discussion of public issues of interest in the community served by the particular station. And we have recognized, with respect to such programs, the paramount right of the public in a free society to be informed and to have presented to it for acceptance or rejection the different attitudes and viewpoints concerning these vital and often controversial issues which are held by the various groups which make up the community. It is this right of the public to be informed, rather than any right on the part of the Government, any broadcast licensee or any individual member of the public to broadcast his own particular views on any matter, which is the foundation stone of the American system of broadcasting.

qtd. in Simmons 42

The main instrument of compliance was the threat of not renewing a stations license. Up until 1981, the term of licenses for radio stations was 3 years. In 1981, it was extended to 7 years, further weakening the threat of non-renewal.

When Marc Fowler became FCC Chairman, he changed the FCC’s regulatory model from one of trusteeship to a marketplace. In an April 1982 *Communications News* article he

stated “the Commission should defer to a broadcaster’s judgment about best to compete for viewers and listeners. ...the public’s interest defines the public interest in broadcasting” (qtd. in Jung 43). In 1985, the FCC stated that the Fairness Doctrine “operated to chill broadcaster speech on controversial issues and that recent increases in broadcasting outlets undercut the need for the doctrine” (qtd. in Rowland). The FCC repealed most aspects of the doctrine in 1987, eliminating most opportunities for diverse issues to be heard on commercial radio.

Oppositional Economics

Those who oppose creating a new low-power license have a very short list of arguments: more stations will increase interference for existing stations, and more stations will devalue existing stations. Many, including the FCC itself, have also warned that pirate stations pose a threat to air traffic communications. The first argument was attacked by FCC Chairman Kennard himself who said “This is not rocket science. We have studied the way FM signals propagate around the country. The interference argument is being used as a smokescreen to mask an historic battle by incumbents who want to protect their markets” (qtd. in Labaton). While technical interference issues may not be rocket science, dealing with the economics of radio is a whole lot worse.

Existing broadcasters are concerned that each new radio station, whether full-power commercial station or low-power community station, is a threat to its existing market share. They complain that they need to air advertisements to pay for their operations, and are upset at the fact that low-power stations have all sorts of exemptions to make operating a station less costly. They say that anyone who wants to have a radio station should just go out and buy one.

In 1954, 187 radio stations changed hands in radio-only transactions for a total dollar value of \$10,224,047. In 1999, 382 radio stations changed hands in AM- or FM-only transactions

for a total dollar value of \$1,718,000,000 (transactions involving groups of both AM and FM stations are not included in the 1999 figures; transactions involving both radio and television stations are not included in either figure) (Bowker). Based on these figures, the average cost of a radio station in 1954 was \$54,674 and the average cost in 1999 was \$4,497,382. Even if someone could afford to pay over \$4 million for a radio station, they would probably not be able to make a profit as a solitary station. If a single company owns a majority of stations in a market, it can monopolize advertising. A company with a large number of stations across the country can use the savings due to economies of scale to reduce advertising on a station in a head-to-head competition with a smaller station. And companies that own a majority of stations nationwide in a single format can negotiate special treatment from record labels such as concert tickets and celebrity appearances for even greater competitive advantage (Wirth 252-3). For all of these reasons, it became increasingly impossible for small businesses and minorities to own radio stations.

By the 1990s, buying a radio station was not an option for community groups. Because of the FCC's strict rules preventing interference, there is little room for new stations in major urban areas. The repeal of most of the fairness doctrine in 1987 virtually eliminates public access to commercial stations. And the lengthening of license terms makes decreases the opportunities for challenging stations license renewal. The opportunities for public involvement in the creation of media seemed bleak indeed.

The Start of a Revolution

To begin building a better world, we must first achieve democracy—the process by which whole communities may meaningfully participate in decision making. And to make intelligent, well formed decisions, we must be able to receive, produce, debate, and share information openly and freely. It is for this reason that a public access media system is a non-negotiable demand in the struggle for democratic society.

Greg Ruggiero, *Microradio and Democracy*, pg. 13

Mbanna Kantako was a blind black man living in the projects of Springfield, Illinois who felt the existing media did not serve the black community. Kantako's decided to use radio because a large portion of the black community was illiterate. "Given technology today, using print is like using the pony express instead of air freight" he was quoted as saying (qtd. in Coopman 1996). In November of 1986 he started a half-watt radio station in his living room. He also prepared and widely distributed a 20-minute video showing others how to set up a micro radio station--a term he invented. Kantako had no faith in the system and advocated for others to start illegal micropower stations (Sakolsky 5-6).

The FCC issued a Notice of Apparent Liability with a \$750 fine in 1990, which Kantako ignored and refused to pay. In 1994, Kantako upgraded to a 13-watt transmitter with a range of 4 miles. After the FCC issued two cease-and-desist orders and a federal court issued one, the station was finally raided in November of 2000 (Yoder 253). The station had broadcast illegally daily for 14 years. As of March 2001, he was back on the air (Townsend). Kantako's story was an inspiration for the many FM micropower stations that followed (Yoder 253-6).

The most important of those that followed in Kantako's footsteps was Stephen Dunifer and Free Radio Berkeley. Dunifer has been called the Johnny Appleseed of LPFM, because he not only operated a pirate FM station, he designed, built, and sold compact low-power transmitter kits to other micropower radio enthusiasts around the world. While Kantako encouraged others to start illegal micropower stations, Dunifer wanted to change the law to legalize low-power community radio. Dunifer's vision for how his system would work is as follows:

... you find a frequency that is usable, fill out the paper forms, and notify the FCC that you have registered the use of that frequency. Then, follow

the rules of the road in terms of interference, channel spacing and equipment and filtering and all that. As long as you follow the rules of the road, then there's no problem. That way it keeps it a much less formal way of dealing with it.

Dunifer, qtd. in Tarleton

Dunifer began Free Radio Berkeley in early 1993 as a response to the complete acceptance mainstream media had of the U.S. government's Gulf War campaign. He soon teamed up with the Center for Democratic Communications of the National Lawyer's Guild (CDC) on a strategy to challenge the FCC's authority to shut down micropower broadcasters. They would practice "electronic civil disobedience": broadcasting in the open without a license, *wanting* the FCC to come after them so they could challenge the FCC's policy of not licensing transmitters under 100 watts in court (Coopman 1997).

The micropower radio movement hoped to follow the example of Citizens-Band radio. The Citizens-Band was originally envisioned as something to be used by businesses. At first, the FCC required users to obtain a license from the FCC. When demand from individuals skyrocketed, the FCC started charging an application fee, hoping to discourage personal use. By 1976, the FCC received 4.8 million applications but others estimate no more than half of the country's users bothered to obtain a license (Walker). Buckling under the weight of the applications, the FCC eventually gave up licensing users.

Dunifer finally got his wish on June 1, 1993 when the FCC issued a Notice of Apparent Liability with a fine of \$20,000 (Hiken 1993). The CDC quickly replied to the FCC, and Dunifer faxed a release to local and national media outlets (Yoder 257). After ignoring the CDC's response for over a year and a half, the FCC went to federal court seeking an injunction to shut the station down. On January 30, 1995, Federal District Judge Claudia Wilken denied the FCC's request for an injunction against the station and ordered the FCC to respond to the CDC's

administrative appeal. The FCC's final response was that because Dunifer had not actually applied for a license and asked for a waiver of the FCC's minimum power level rule, he had no standing to challenge the injunction (Center for Democratic Communications). Free Radio Berkeley was no more.

Illegal Community Support

A central tenet of the micropower radio movement is community involvement. "Our focus is on empowering communities with their own collective voice, not creating vanity stations. Why imitate commercial radio?" says Dunifer ("Technical Primer"). In at least one instance, an illegal micropower station broadcast city council meetings after a commercial station stopped doing so (Hiken 1998). Many city councils have issued resolutions in support of micropower radio and have even submitted comments to the FCC in support of the low-power radio petitions ("Resolutions in Support of LPFM Community Radio").

One of the first stations to receive a low-power FM license is WRYR 97.5 FM, based in South Arundel County, Maryland. The station is licensed to South Arundel Citizens for Responsible Development, which according to its Web site, "sees WRYR 97.5 FM radio as a new and creative means of reaching out to the Chesapeake Bay community. WRYR's programming reflects the mission and goals of SACReD and also includes local news, health and lifestyle information, music and entertainment, talk on issues of local interest, and other programming of interest to the community served by the station." According to Michael Shay, a member of SACReD, the station has already recorded 35 hours of locally-produced programming and is developing a lot more. Shows include an alternative health show, two gospel shows, two organic farming shows, storytelling for children, a show on birding, a show on Chesapeake Bay area art, a local history show developed with the Salem History Museum, an

authoritative history of African-American watermen, a dating call-in show, and daily weather and fishing bulletins for the local Chesapeake Bay fishermen. The station plans to have no more than half of the programming devoted to music, and even the music is non-conformist. One show was solely about cowboy music from around the world. This compares sharply with the typical commercial radio station.

As an example of the community involvement of commercial radio stations, this researcher examined the public file of a new commercial station in the South Florida area: WPYM - Party 93.1 FM. WPYM was created when Cox Radio Inc. purchased a classical music station from Marlin Broadcasting Inc. and changed the format to dance music (Media Access Pro). The station's "Community Issues and Programs List" states that "the new format of the station was designed to address the needs of the growing new generation of Hispanic residents in the Metro [area]," but there is little evidence of this. The station has no written mission statement, but according to the station's "Community Issues and Programs List," members of the station spoke with area residents and identified three areas of community need: youth in trouble, unemployment, and drug abuse.

To serve the first two needs, the station staffed booths at the Dade County Youth Fair and job fairs at local colleges. In conjunction with these events, the station aired a total of 327 public service announcements. To combat drug abuse, the station hosted a music festival with a drug-free message. In conjunction with the event, the station aired 72 public service announcements and 10 hours of live broadcasting from the event.

The public file contained no details about the meetings with residents other than to specify the communities the residents were from. It also contained no details on the content of the public service announcements or how long the announcements were. Assuming that each

In July of 1998, MAP filed comments with the FCC in support of the creation of a low-power radio service (“Reply Comments”). They weren’t the only ones. According to the Congressional Research Service, there were over 3,300 comments received on the FCC’s initial LPFM proposal (Bass and Nunno).

The large number of comments was due to the huge national movement in support of a LPFM license class. City councils and members of congress supported LPFM (“Resolutions in Support of LPFM Community Radio” and “Letter to the FCC From Congressmembers in Support of LPFM”). There was even a protest of 50 micro power radio activists in front of the FCC building in Washington DC in October of 1998 (Ahrens). Together, these actions and the electronic civil disobedience of the micropower broadcasters pushed the FCC to issue its LPFM Notice of Proposed Rule Making in January 1999.

The Digital Radio Threat

One of the reasons the NAB and Congress worked so hard to maintain third channel adjacency protection is the imminent introduction of a digital terrestrial radio standard known as In-Band On-Channel digital audio broadcasting (IBOC-DAB). IBOC is more sensitive to interference than regular analog broadcasts. The IBOC standard works by transmitting a digital simulcast of the analog audio on a sideband (AKA sub carrier channel) of the station’s existing transmission. Presently, radio stations use sidebands for additional services such as radio reading services, Muzak, paging, and data services. Using IBOC, AM stations can transmit FM-quality sound on a digital sideband, and FM stations can transmit CD-quality sound. If the FCC requires broadcasters to eventually transition to IBOC, it will increase the start-up and operating costs for radio stations and require wider spacing between channels, further reducing the number of available frequencies for LPFM stations.

The Case for Continued Electronic Civil Disobedience

Between January 1999 and March 2001, there was a protracted battle between Congress and the FCC as to the details of the LPFM service. The FCC's proposal would create approximately 1000 new stations. Members of Congress were pushing to maintain third adjacent channel protections for full-power stations, which would limit the number of LPFM stations to 600. Congress eventually won the third channel adjacency protections. But one study calculated that with only second adjacent channel protection, there is capacity for 97,701 new 100-watt stations (Hazlett and Viani 12-3). With this in mind, there is little need to examine the details of the battle between Congress and the FCC.

Of course, from the FCC's perspective, LPFM serves a dual purpose; it allows the agency to say it's serving the public interest while giving it more credence to pursue a crackdown on unlicensed microbroadcasting. For FM pirates, LPFM has definitely been a 'carrot and stick' kind of issue. Some shut down in hopes of playing by the rules, but then the rules changed.

Anderson

The current LPFM service is too little too late, and is inaccessible to many of the people who worked so hard for its creation. The service specifically excludes anyone found to have been operating a station illegally. "Not granting Mbanna Kantako or Stephen Dunifer a license would be like not letting Rosa Parks sit in the front of the bus" (Ruggiero 35). It also gives preference to organizations that have existed for more than 2 years, which excludes many of the micropower activist groups.

Of the 3,300 LPFM applications received, the FCC estimates that only a third will be approved (Janssen). Of those, many will go to churches and traveler information services operated by transportation departments. This is not the community involvement that the micropower activists had hoped for.

Even if everyone who wanted one could get a LPFM license, there would still be radio pirates. For one, there is the almost completely separate world of shortwave radio. Shortwave signals can travel across oceans, something that FM signals just can't do.

There are also a number of rules for LPFM broadcasters that would some people are not willing to follow. The most obvious is the restriction against using obscene language. But there are other rules.

As currently defined, LPFM licenses are granted to organizations, not individuals. Many pirate stations are run by a single person. Another possibly onerous aspect of a LPFM license is that you can't obtain one anonymously. This is specifically so that the FCC can ensure that a license is not granted to any former pirates. In the eyes of the FCC, once a pirate always a pirate. This rule alone may extend the time of radio pirates for a long time.

There are financial burdens on LPFM stations that pirate broadcasters can ignore. Pirate broadcasters do not need Emergency Alert Systems. Pirate broadcasters do not need to pay ASCAP and BMI licensing fees for the broadcast of copyrighted music. And pirate broadcasters do not need to use FCC approved equipment.

Pirate broadcasters can also operate at whatever power level they choose. Some may want to broadcast at less than 10 watts. Many will want to broadcast at more than 100 watts. They can also construct larger antennas to achieve greater range. They can also decide to maliciously interfere with licensed stations--what Soley calls ghost broadcasts (3).

Licensed LPFM broadcasters, and all broadcasters for that matter, are tied to a specific physical location. But LPFM transmitting technology has become so advanced, it is possible to carry all the equipment necessary to broadcast in a backpack. If one wanted to do a temporary broadcast in conjunction with an event such as a concert the legal way, they would need to pre-

empt the normal broadcasting on a licensed station and would still need some sort of mobile link between the concert and the station. A cellular phone would work, but it is expensive and could have very low audio quality. A pirate micropower station is a perfect solution. Such a station could give out traffic and parking details, last-minute schedule changes, advisories on what items can and cannot be brought in to the concert, etc. Stephen Dunifer himself used a portable transmitter to broadcast underground rock shows (Yoder, 256).

And speaking of the march of technology, it is now easier than ever to obtain and operate the equipment needed for pirate broadcasting. Low-power FM transmitters, J pole antennas, power supplies, and other necessary equipment specifically designed for low-power broadcasts are now available online from a number of manufacturers. There are also freely available tutorials on what all the different pieces of equipment are for and how to use them.

For all of these reasons and others not even thought of, pirate FM broadcasters will continue to exist. The real public interest pirates are the commercial broadcasters.

Works Cited

- Ahrens, Frank. "Yo Ho Ho and A Battle of Broadcasters." *Washington Post*, D02. 6 Oct 1998.
- Anderson, John. *The History of LPFM*. About.com.
 <<http://pirateradio.about.com/library/weekly/aa121599.htm>>
- Bass, Gwenell L. Waters, and Richard M. Nunno. "Low Power FM Radio Service: Regulatory and Congressional Issues." Congressional Research Service. 5 Jan 2001.
- Bowker. *Broadcasting & Cable Yearbook 2001*. New Providence, NJ: Bowker, 2001.
- Breslauer, Brenda. "Virtual Radio." *NOW With Bill Moyers*. PBS. 26 April 2002.
 <http://www.pbs.org/now/transcript/transcript_clearc.html>
- Center for Democratic Communications of the National Lawyer's Guild. "The History of Free Radio Berkeley's Legal Battle with the FCC (1993 - 1999)."
 <<http://www.nlgcdc.org/briefs/dunifer.html>>
- Code of Federal Regulations. Title 47 Part 73.211. <<http://frwebgate.access.gpo.gov/cgi-bin/get-cfr.cgi?TITLE=47&PART=73&SECTION=211&YEAR=2001&TYPE=PDF>>
- Coopman, Ted M. "Pirates to Micro Broadcasters: The Rise of the Micro Radio Movement." Paper presented at the 1997 Western States Communication Association Convention, Monterey, CA. <<http://www.roguecom.com/rogueradio/TCoopman.html>>
- . "Regulation and Emerging Micro Media: FCC Enforcement Difficulties with Micro Radio." Paper presented at the 1996 annual meeting of the Speech Communications Association.
 <<http://www.roguecom.com/roguescholar/micromedia.html>>
- Digest*. The Washington Post. E1, 7 Aug 1997.
- Dunifer, Stephen. "Micropower Broadcasting - A Technical Primer."
 <<http://www.freeradio.org/frb/primer.pdf>>
- Engelman, Ralph. *Public Radio and Television in America: A Political History*. Sage Publications. Thousand Oaks, California. 1996.
- Federal Communications Commission. "Notice of Proposed Rule Making: In the Matter of Creation of a Low Power Radio Service." MM Docket No. 99-25, FCC 99-6 (January 28, 1999).
- . "Report and Order: In the Matter of Creation of a Low Power Radio Service." MM Docket No. 99-25, FCC 00-19 (January 20, 2000).
- Free Speech vs. FCC. 12 May 1998.
 <<http://artcon.rutgers.edu/papertiger/nyfma/str/lawsuit.html>>
- Hazlett, Thomas W. and Bruno E. Viani. *Legislators v. Regulators: The Case of Low Power FM Radio*. AEI-Brookings Joint Center for Regulatory Studies. February 2002.
 <http://www.aei.brookings.org/publications/working/working_02_01.pdf>

Hiken, Louis N. "Re: In the Matter of Stephen P. Dunifer; NAL/Acct. No. 315SF0050; SF-93-1355." 28 June 1993. Letter.

<http://www.nlgcdc.org/briefs/microradio_nal_response.html>

---. "Constitution and Democracy" Paper presented to the National Association of Broadcasters. 6 April 1998. <<http://www.freeradio.org/legal/condemo.html>>

Hoover, Stewart M. and George C. Conklin. "Parker, Everett C."

<<http://www.mbcnet.org/archives/etv/P/htmlP/parkerevere/parkerevere.htm>>

Janssen, Mike. "In low-power FM fight, who's more local?" Current. 8 April 2002.

<<http://www.current.org/tech/tech0207lpfm.html>>

Jung, Donald J. The Federal Communications Commission, the Broadcast Industry, and the Fairness Doctrine, 1981-1987. University Press of America. Lanham, MD. 1996.

Kennard, William E. and Gloria Tristani. Joint Statement of Chairman William E. Kennard and Commissioner Gloria Tristani. 28 Jan 1999.

<<http://www.fcc.gov/Speeches/Tristani/Statements/stgt903.html>>

Kennard, William E. "Statement of William E. Kennard Upon Confirmation As Chairman of the Federal Communications Commission." 29 Oct 1997.

<<http://www.fcc.gov/Speeches/Kennard/Statements/stwek702.html>>

Labaton, Stephen. "F.C.C. Heads for Showdown With Congress Over Radio Plan" New York Times. C1. 27 Mar 2000.

"Letter to the FCC From Congressmembers in Support of LPFM." 10 Mar 1999.

<<http://www.radio4all.org/news/bonior.html>>

Lew, Julie. "Radio's Renegades." New York Times. D12. 8 Dec 1997.

Lloyd, Mark. Advisory Committee On Public Interest Obligations Of Digital Television Broadcasters, Washington, D.C. 5 Dec 1997.

<<http://www.ntia.doc.gov/pubintadvcom/decmtg/transcript-am.htm>>

Media Access Project. "About MAP." <<http://www.mediaaccess.org/about/>>

---. "Issues." <<http://www.mediaaccess.org/programs/civdisc/>>

---. "Reply Comments of Media Access Project and the Center for Media Education." Submitted to the FCC 24 July 1998.

<http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=2116870001>

Memorandum Opinion and Order. Docket 19918. Federal Communications Commission. Adopted 11 April 1984. <<http://www.fcc.gov/fcc-bin/assemble?docno=840518>>

Ness, Susan, FCC Commissioner. "Meeting the Challenge of Change." Speech given to the NAB Policymakers Breakfast. 11 Oct, 1996.

<<http://www.fcc.gov/Speeches/Ness/spsn617.html>>

Notes on Class D Noncommercial Educational Stations. FCC.

<<http://www.fcc.gov/mmb/asd/bickel/d-aside.html>>

“Resolutions in Support of LPFM Community Radio.”

<<http://www.radio4all.org/news/resolutions.html>>

Rowland, “Brian M. Media Fairness; Regulation, Diversity, Reality.” 31 Jan 2001.

<http://www.brianrowland.com/html/MEDIA_FAIRNESS_ARTICLE.htm>

Ruggiero, Greg. Microradio & Democracy: (Low) Power to the People. New York: Seven Stories Press, 1999.

Sakolsky, Ron. A Passion for Radio: Radio Waves and Community. Comunica. 2001.

<<http://www.comunica.org/passion/>>

Shay, Michael. Personal Interview. 10 April 2002.

Simmons, Steven J. The Fairness Doctrine and the Media. University of California Press, Berkeley. 1978.

Slade, Margot and Eva Hoffman. “F.C.C. Cuts Radio's Regulatory Strings.” New York Times. 4-8. 18 Jan 1981.

Soley, Lawrence. Free radio: electronic civil disobedience. Westview Press. Boulder Colorado. 1999.

South Arundel Citizens for Responsible Development. Web site. <<http://www.wryr.org/>>

Supreme Court of the United States. “Red Lion Broadcasting Co., Inc. v. Federal Communications Commission.” 395 U.S. 367. 9 June 1969.

<http://www.epic.org/free_speech/red_lion.html>

Tarleton, John. “Interview with Stephen Dunifer, Microradio Pioneer.” June 2000.

<<http://cybertraveler.org/dunifer.html>>

Toroian, Diane. “Human vs. Machine.” St. Louis Post-Dispatch. F1. 3 Mar 2002.

Townsend, Mike. “Kantako Rises Again.” Urbana-Champaign Independent Media Center. 21 Mar 2001. <http://www.ucimc.org/front.php3?article_id=351>

Walker, Jesse. “Rebel Convoys: Civil disobedience changes FCC policy--again.” Reason. April 2000. <<http://reason.com/0004/fe.jw.rebel.shtml>>

Yoder, Andrew. Pirate Radio Stations: Tuning in to Underground Broadcasts in the Air and Online. McGraw-Hill. New York. 2002.