

- » Introducing Low Power FM
- » Starting your own station
- » Building on your dreams

Chapter 1

Getting High Impact from Low Power

Your radio is hungry. It craves life, music, and conversation. It longs to connect neighbors with one another and unite enemies with a song. Radio dreams of broadcasting the sound of community to the people who live there. At long last, a group of radio activists have emerged to energize and empower the FM airwaves. They have started a Low Power Revolution and they are seeking a few good recruits!

Radio is dangerous, it is live, raw, and pervasive. It is powerful and unstoppable, which may be why it became so inaccessible. For nearly a century, commercial interests have tied up the FM frequencies leaving little room in between for community voices. But not anymore! Thanks to an unlikely partnership between pirates and politicians, the *Local Community Radio Act of 2010* opened up these in-between spaces and put the power of radio into the hands of the people. If you've ever believed that you could change the world, you now have the opportunity. Take a deep breath and count to three, because an exciting journey lies ahead.

This chapter is your invitation to join the radio revolution and transform the FM dial one Low Power station at a time. Together we can bring real human voices back to the airwaves and discover new uses for this venerable medium. This chapter provides an introduction to the slow, complicated birth of the Low Power FM movement; looks at the rare, magical opportunity it has created; and considers the reasons why we must seize this chance to transform American media, one Low Power FM station at a time!

Getting to Know Low Power FM Radio



REMEMBER

Low Power FM refers to a specific class of radio stations on the American FM dial. They are licensed to nonprofit organizations to operate with 100 watts of power at 100 feet of Height Above Average Terrain or HAAT (a mathematical formula you find out more about in Chapter 4). Commonly referred to as LPFMs (as you discover throughout the pages of this book), these hyper-local broadcasters are often listener supported and volunteer driven. LPFM stations have sprung up across the country in all shapes and sizes, bringing a fresh, homegrown flavor back to America's FM dial.

Low Power FM stations have a strict limit on their broadcast power, although with the right location, 100 watts can reach thousands of people on a daily basis. Chapters 3 and 4 discuss developing an installation plan that will cover your community with the best signal possible. Just like all other stations on the FM dial, Low Power stations are regulated by the Federal Communications Commission (FCC) and have a code of law that they are required to uphold (explained in Chapter 10). This differs from those stations that stream online only; they are not required to have any kind of license or uphold FCC broadcasting expectations.

Most LPFM stations simulcast their programs via a web stream so that listeners all over the world have the chance to tune in online. Chapter 5 describes the easy steps for making this a reality. If you don't have a LPFM license, you will find that there are still many ways to amplify your voice. You can then move forward and take advantage of the rest of the information in this book about managing and maintaining a radio station. With the exception of Chapters 3, 4, and 10, the rest of the information in this book is applicable to online broadcasters.

THE MAGIC OF RADIO

The magic of radio is impossible to explain. After just one taste, you will want it again. Forever. For the rest of your life. You will sacrifice so much time and energy making it sound good, and keeping it moving forward. But radio will reward you — a million-fold as a lover and a lifesaver, a storyteller and a first responder. Radio is your trusted companion, old friend, and life on the other end of the line. Radio is a brilliant educator, a stunning entertainer, and a powerful activist. To find out more about how radio can help build communities, check out Chapters 12, 14, and 15.

Radio can be used to share music, exchange ideas, and plan revolutions. In fact, few things cannot be accomplished by speaking to thousands of people at once. Which is why radio is also so dangerous, and why regulation has previously been so strict.

Understanding the American radio landscape

There was a time — a very brief moment — when radio could have become so much more than it is today. Nikola Tesla began demonstrating the power of his new wireless invention at the dawn of the 20th century (see Chapter 17), and it would be years before anyone thought to regulate the airwaves. Many folks were experimenting with the science just to see what it could do; radio clubs, technological schools, and Boy Scouts across the country were setting up radio stations in their attics and classrooms with transmitters made from copper wire and cardboard tubes. These amateur broadcasters began friendly competitions with one another to see who could get the farthest reception, who could have the clearest sound, and so on. They also worked together, self-regulating the airwaves, scheduling airtime through local networks so that they would not interfere with one another's signals. It is hard to imagine what radio sounded like at that time. Or what might have happened had this free access of the airwaves been allowed to thrive.



TECHNICAL
STUFF

Instead, federal legislation beginning with the *Radio Act of 1914* strongly favored broadcasters who had learned to monetize the airwaves, fatten their wallets, and hire the best lobbyists. As radio clubs tinkered away, these capitalist networks pushed for stringent broadcasting laws that could protect their source of income and prevent interference during their sponsorship announcements. It wasn't until the *Communications Act of 1934* and the development of a government agency to police the radio waves that the new licensing rules were taken very seriously, but this time it was drastic. Under Herbert Hoover's direction, the radio spectrum was reallocated. The largest, clearest licenses were handed out to commercial networks. Educational stations operated by clubs, universities, and nonprofit organizations were corralled into a limited area of the spectrum. The complaints of listeners, broadcasters, and educators were met with federal agents assigned to enforce the new rules. In a matter of years, commercialization had conquered the airwaves. Advertisers invented schedules that they felt sold the most product and broadcasters began sculpting their programs around the latest sales theories. To this day, mainstream American radio broadcasters cater their programming to appeal to advertising dollars, not to listener interest.

Sailing on the open seas

Low Power FM was born out of the salty waters of the *pirate radio* movement. These countless unknown individuals have sailed the dark seas of the terrestrial dial for over 100 years, insisting on the constitutional right to broadcast with or without government permission. Forced into the shadows by threats of fines, property seizure, and federal imprisonment, these independent broadcasters may only be remembered in the minds of those who experienced their fleeting moments

on air. Their role in American history has vanished into the ether from which it emerged. Their work, however, broke through the barricades of federal regulation and finally made room for community voices on the FM dial.



WARNING

Operating a FM transmitter without a license is illegal in the United States.

Despite this, you might be surprised at how many unlicensed broadcasters you find in your area, on air, right now. Often belonging to churches or hobbyists, these micro stations rarely mean any harm. However, radio broadcasting can have a powerful effect on the community — both physically and mentally. For example, an untrained broadcaster providing inaccurate information can cause listener panic and put lives at risk (see Chapter 10 for federal laws on responsible radio reporting), and a broadcast antenna hung too close to an occupied space can create a radiation health hazard (Chapter 4 provides advice on installing your equipment safely). These regulations make sense. The counter-argument has been that FCC laws restrict the airwaves so much that they prevent the development of hyper-local radio, including rapid emergency response. Therefore, pirates argue that they have the potential to save lives with their broadcasts and can provide more local value than the national network beamed in from some distant location.



**TECHNICAL
STUFF**

In 1994 a pirate radio station named Free Radio Berkeley (freeradio.org), was caught by the FCC and fined \$20,000. Stephen Dunifer, who ran the station, refused to pay the fine and vowed to fight the judgment. Dunifer's actions were inspired by Mbanna Kantako of Human Rights Radio (humanrightsradio.net), who had previously been cited by the FCC for pirate broadcasting but refused to pay the fine — asserting that the First Amendment protected his right to free speech.

In defiance of the FCC raid on Free Radio Berkeley, Stephen Dunifer encouraged unlicensed broadcasters nationwide to take to the airwaves in protest of restrictive federal broadcast laws that made no room for community voices. He was represented in court by the National Lawyer Guild's Committee on Democratic Communications, in the case "U.S.A. vs. Stephen Paul Dunifer." The defense focused on the First Amendment and its insistence that the government agencies use the least restrictive means possible when governing the constitutionally protected Freedom of Speech. The Guild argued that the FCC was overstepping its bounds. U.S. District Judge Claudia Ann Wilkin found their case compelling and placed a hold on the fine as she reviewed the legality of the FCC licensing system, leaving the FCC virtually powerless against renegade broadcasters. An estimated 1,000 unlicensed stations went on air during the four-year review period that followed. When the judgment finally came in against Free Radio Berkeley on a technicality, the authority of the FCC was legally confirmed by the court. Pirate radio remained illegal, and enforcement resumed in full.

Switching on the LPFM light

From its home base in West Philadelphia, however, a pirate radio station called Radio Mutiny kept pushing full steam ahead, insisting on the people's right to access the airwaves. When the FCC came knocking on the station door in 1998, the Radio Mutiny Collective responded with a savvy media campaign saying: "Community Radio — It Makes Common Sense." The press showed up and it was the beginning of a full-court press on the Federal Communications Commission.

The pirate radio community knew that there was plenty of space for small stations in between the large commercial stations on America's FM dial. Radio Mutiny teamed up with other unlicensed broadcasters to host a Pirate Radio conference in Washington, D.C., in 1998. The conference culminated in a Pirate March on Washington which caught the attention of FCC Chairman William Kennard.

As the first African American to lead the agency, Kennard hoped to rectify the loss of minority-owned stations that had occurred with the passage of the *Telecommunications Act of 1996*. When the Pirate March came past his window, he saw an opportunity. Within months, the FCC opened rule-making to develop a system for licensing community organizations broadcasting on Low Power FM stations. The order was completed and passed in just under two years.

Satisfied with this government action, Radio Mutiny spokesperson Pete Tridish announced that they were going legit. The Mutiny collective retooled and relaunched as the Prometheus Radio Project (prometheusradio.org), a nonprofit organization with the mission of helping nonprofits acquire FCC licenses and get on air nationwide. They acquired grants, hired employees, and traveled across the country hosting workshops while launching new stations.

Just as soon as things got moving, a series of legal attacks were launched against the LPFM movement. Among these was the *Radio Preservation Act*. This legislation, introduced by the National Association of Broadcasters (NAB) and National Public Radio (NPR) and passed by Congress in 2000, used exaggerated interference concerns to tie up urban airspace and prevent the construction of Low Power stations within heavily populated areas. Prometheus pushed forward with building stations throughout communities in rural areas while simultaneously lobbying Congress to pass another bill — the *Local Community Radio Act (LCRA)* — that would open more frequencies for LPFM stations. The collective took many creative approaches to bringing attention to community broadcasting, including assembling a hodge-podge of portable radios in front of the U.S. Capitol (shown in Figure 1-1) — perfectly symbolizing the array of unique radio stations that would take to their airwaves after the LCRA was passed. Ultimately, the new bill took 10 years, 20 attempts, and 50 handmade hula hoops to finally make way for legal community broadcasting in the United States. In late 2010, the LCRA finally got the support needed to pass Congress and head to the president's desk.

FIGURE 1-1:
A number of creative demonstrations organized by the Prometheus Radio Project led to the passage of the *Local Community Radio Act*, opening spaces on the FM dial to community broadcasters.



© Pete Tridish.

Introducing the Local Community Radio Act



REMEMBER

On January 4, 2011 — thanks to a decade of tireless work by organizations such as the Prometheus Radio Project, Georgetown Law, the Future of Music Coalition, REC Networks, Free Press, the National Hispanic Media Coalition, and others — the *Local Community Radio Act* was finally signed into law by President Obama. As a result, thousands of LPFM radio stations would take to the air across the country.

But this great accomplishment did not happen without its sacrifices. Within the text of the LCRA is specific language that makes room for Low Power community broadcasters on the American dial so long as certain conditions are met. Among the stipulations is “no pirates allowed”; the law states that no one who has engaged in unlicensed radio may serve on the board of a Low Power FM station (find out more in Chapters 2 and 3). So although the pioneers — Stephen Dunifer, Pete Tridish, and Mbanna Kantako — were officially, purposefully, excluded from the new Low Power legislation, their sacrifice cracked open the American airspace and made room for community broadcasters nationwide. From this point on, no longer would community members be excluded from the terrestrial airwaves! No longer would they be forced to listen to programming dictated by corporate sponsors. Now they had choices! At long last, American citizens became

free to sculpt the airwaves to reflect their personalities and use them to amplify their concerns — but only those that seize the opportunity! And that’s what this book is all about.



REMEMBER

Thanks to those early years of activism, thousands of LPFM radio stations are now on air across the United States. They come in all varieties, with studios of all shapes and sizes. Some are on university campuses, some are in community centers, some are in churches, and still others are in the basement of the station founders’ homes. You do what you have to do in community radio and often you have to improvise. Somehow, it always seems worth the effort. My hope is that the number of Low Power stations will increase dramatically after the FCC opens the next application window (described in detail in Chapter 3). With any luck, your station will be one of those.



TIP

Many organizations and individuals are mentioned in this book who are willing to help. As a whole, the LPFM community is very supportive. Don’t be afraid to call on them when you have questions. They understand that working with the FCC can be a complicated process. They understand that you don’t have a lot of radio experience. They also understand how important it is to get local voices on the air, and they are committed to making it happen. If you want to do this you can. I believe in you! Take it step by step and one day at a time and suddenly you will be there, driving around, listening to your own community station on the FM dial!

Envisioning Your Radio Station

Radio can be everything. And more. It morphs with each moment and can turn on a dime. Outer space to underwater — I’ll meet you there in an instant! It’s easy to travel through sound. Yet, today, where there should be communication highways, there are black holes. Empty spaces of static and chaos that jolt the senses as you scroll across the FM dial.

Tune in the static and listen for a moment. Then, imagine this cacophony of noise slowly fading out and the voices of your friends and neighbors slowly fading in. Imagine they begin playing your favorite songs, dedicating them directly to you; soon they are talking about issues that affect your life directly, things that are happening in all the places you know. Would you ever turn to the dial again? Maybe not. Perhaps this is why corporate media resisted community radio for so long. The vibrancy of the people’s broadcast can never be emulated by broadcasters who are doing it for the money.

Under the LCRA, small spots on the radio dial are pried open to make room for new 100-watt LPFM stations licensed to area nonprofits. Since its passage, nearly

2,000 LPFM stations have taken flight nationwide. Beaming with character and overflowing with personality, what these stations lack in electrical wattage, they make up for in human energy.

If you feel a little hesitant about applying for a LPFM license, I assure you that can get it done! It will be a challenge, but truly, you will get so much out of the experience that it is worth every bit of your time. Just take it on your own terms, keep it as basic as necessary as you get started, and build it up as you move along. It might not be perfect at first but just remember, anything sounds better than static, well, almost! (Discover critical things to avoid in Chapter 10.) To get started with your license application, pay attention to Chapters 2 and 3.



TIP

Few things are more rewarding than planting a garden and watching it grow. You can have a concept in mind when you start out, but it is impossible to predict exactly what your LPFM station might look like, how it might sound, or all the ways it will affect your listeners. There is no way to measure how many ears it will reach, minds it will change, hearts it will stir, or lives it will save. However, a community station *will* do all of these things and you *will* feel it happening. Flip to Chapter 18 to read the inspirational stories of ten LPFM station founders.

Why radio?

You have dozens of radio stations on your FM dial but you might think they were all the same. As you turn the dial all you find is commercials . . . and songs that lead into commercials. A few exceptions exist: sports stations, religious stations, and news stations broadcasting programming almost entirely piped in from distant locations. It's increasingly rare to find a live human voice on the radio, maybe coming from a college or high school station. When you do, hold on to it! Support it! Let them know that you are out there listening.

Imagine a different life . . . waking up each morning, excited to turn on your radio, tune into any one of your favorite stations, and look forward to what surprises you might hear. Perhaps you want something chill and ambient to ease into the day. Perhaps you need something rowdy to get you out of bed and off on assignment. If you like waking up to the news, of course, you can find that, too. But what if you want an astronomy lesson? Yes! A history discussion? Yes, please! Philosophical debate? Sure, radio can do that, too! Everything is right there, just with the turn of a dial. No service plan, no pop-ups, no data tracking, just pure uninterrupted sounds enriching and educating your community. If radio sounded like this, we would be lifetimes ahead. For more programming ideas, check out Chapter 11.



REMEMBER

Some people ask whether FM radio is dying, or if it's an outdated medium. We've been hearing these arguments since the dawn of TV, and now with the advent of the Internet, it started up all over again. Radio is a survivor. Streaming audio now allows stations to be heard all over the world (find out more in Chapters 5 and 15) and it is wonderful! Podcasting allows programs to be heard at the listener's convenience. And none of this undercuts the validity of FM radio. Quite the opposite, in fact, as an FM broadcast increases the value and accessibility of an online broadcast. It provides the credentials necessary for getting serious attention. The FM frequency keeps your signal from getting lost in the multitudes of online choices. But most important of all, radio keeps the voices of your community saturating the airwaves, freely accessible for everyone within it to hear.

Why now?

Nonprofit organizations cannot compete in frequency bidding wars with national radio networks, and therefore they find little space on the FM dial. The FCC does not provide local nonprofit groups with opportunities to get on the airwaves very often. The rare opportunity to do so is the result of a decades-long battle by individuals and organizations who understand the importance of public access to the airwaves (outlined earlier in this chapter).

It's remarkable that communities now have a chance to build a radio station and get it on the terrestrial dial. However, there are not many spaces left on the FM band, especially in urban areas. If we don't claim and fill them with the voices of the people, they will be lost into the abyss of corporate repeaters. Chapter 3 tells you more about applying for one of those rare spaces.

Why you?

If not you, then who? First of all, not too many people know about this opportunity. With this book, upcoming conferences, and country-wide campaigns, this is something the grassroots radio community is trying to change. We need to get the word out and hopefully you will help.

The fact that you know about the LPFM movement places some responsibility upon you to take advantage of the situation. If you don't, and no one does, then all the activism and hard work will eventually have been for nothing. Radio will continue to create its own demise, and down with it will go our freedom of speech.

If you step up to this challenge, however, you will do so not only on behalf of your own community, but also that of people nationwide whose very freedom depends on open avenues for making their voices heard. In short, you should do this! The wonderful thing is, you don't have to do it alone. This book is your first step towards joining the radio revolution.

Creating Your FM Dreamscape



REMEMBER

Low Power FM radio is by its very nature a team effort. The licenses are awarded to organizations not to individuals and they should be developed as such. A healthy station finds the perfect balance between management and self-governance. Ruling with an iron fist will never work with LPFM. Chapter 12 provides advice on building a great team that can help your station grow.

The American public owns the American airwaves. LPFM frequencies are licensed by the federal government to nonprofits for a certain period of time. That time must be used wisely or future renewals will be denied. Although building a station should be a collective effort, it does make sense for those who put in the work of bringing frequency to life to maintain rules and expectations for those who get involved.



WARNING

Although it can take years to get an FM frequency, it can take just moments to lose it. Violating FCC rules can result in fines that are too substantial for most nonprofits to withstand. While sharing the airwaves with your community, you must be cautious about who you let on board, make sure that you train them well, and catch them immediately when mistakes are made. At the same time, you can't be afraid to take chances on unique personalities — or their big ideas. The FCC spends its time pursuing blatant violations of federal law. Don't freak about minor accidents, just make a correction and keep moving forward. Chapters 10 and 11 help you stay within the lines while pushing the boundaries.

Radio never sleeps. The most unbelievable things will happen. There is simply no way to fully prepare. You just have to be able to think on your feet and roll with all the punches. Chapter 13 provides some problem-solving advice.

Aside from that, the most important skill you can have is the ability to delegate. Of course, part of delegating is knowing who is up for the task. It is also knowing how to keep people motivated, even when there is no money involved. You must be nimble and flexible. Volunteers are reliable, until they are not. You must know every job and always be prepared to pick up the slack. Chapter 12 helps you master these tasks.

Community radio is fertile ground for new talent. It is a space where people with little media experience can get their hands on the equipment and try out new ideas. Chapter 11 provides creative tips for developing ideas into radio programs. Sometimes these ideas work, and sometimes they fail miserably. Programs that sound good on paper may not always live up to expectations, and shows that sound dull may light up the airwaves with surprise characteristics. You may find that people with fun personalities in real life have no vibrancy on the mic at all. And vice versa: Introverted individuals often light up on air and unleash a personality they keep locked inside. It goes to show that you never can tell.



TIP

Have a vision for your station and always keep it in sight. Perhaps you are an activist building a station to spotlight community issues and broadcast from local events. Maybe you are a musician who wants to highlight the music of your region and host on-air performances. Perhaps you represent a cultural group looking to broadcast health and voter information in multiple languages. Perhaps you are an athlete who wants to broadcast local sporting events. Maybe you are part of an artist collective that wants to stretch the FM possibilities to the outer limits. Perhaps you want to do all of this — and more — with a new free-form frequency. There are so many ways to envision a LPFM station. It is truly an open canvas, and the beautiful thing is that there is no right or wrong way to approach it.

Although there are some laws to follow, your own organization dictates the content on your station. Get creative! Chapter 16 suggests unusual ways to fill the air, and Chapter 17 will inspire you with some amazing moments in American radio broadcasting.

No matter how much you plan, your station will become different things at different times. You'll be astounded at how much it can change depending on what is happening in the world or which DJ is on the air. Holidays, for instance, are always fun to celebrate on the radio (Chapter 11 helps stir on-air programming ideas). Special shows will fill the airwaves, and suddenly your station may take on a whole new character. Emergency situations, of course, become a lot more intense (Chapter 4 looks at the Emergency Alert System you must install for such situations). As important as it is to have a vision for your station, it is also important to allow your station the flexibility to be all the things it wants and needs to be.

Raising a station is very much like raising a child. It's a lot of guesswork and a lot of improvising, but you will figure it out as you move along. Every organization will do it their own way and each young station will emerge with its own unique personality. I can't wait to hear about them all! You will have visions for your station and it will take on a mind of its own. Like a child, a radio station takes all the time, energy, and love you have, but no matter how exhausted you become, you still want to give it more. Chapters 8 and 9 help you understand what kind of resources your station will need to thrive while providing creative fundraising activities to help you acquire them.

You will love watching your station grow and will understand that the rewards are greater than the sacrifices. The amazing moments will make you forget all the struggles and you will know the true joy of seeing your dreams come true.

Challenges will be there for sure, but serve your listeners and they will serve you in exchange. Don't be afraid to call on them for the support, supplies, and donations that keep you going.

Make your station comfortable and welcoming and it will become a meeting place for your community. A place where friendships are made and collaborations are formed! Projects will take flight! Musical ensembles, theater troupes, and lifelong partnerships will be forged within your studio walls! Plans will be laid and ideas will be hatched! Magnificent things will happen! You will tune in, sit back, and wonder how it all came to be.

And then you will remember — it all started with you!