Dealing with the FCC
How to Save Your NCE-FM CP
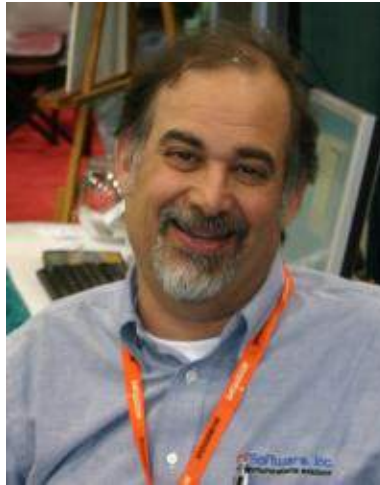
by Joseph DiPietro

[October 2010] Getting a Construction Permit is a major milestone on the way to building a broadcast station. However, there are still a number of hurdles to get past, including local zoning. The calendar is another potential enemy. Joe DiPietro shows how you might be able to salvage things, even when the clock is about to run out.

Three years may have seemed like forever when you received a Construction Permit from the FCC, but now two years and nine months seem to have zoomed by with blinding speed. With only three months left to build your NCE-FM radio station, you have not even begun.

First, here is the *news flash:* your CP is not a license! It is only the permit to build a station. Without a license, when your CP expires, you have nothing. What do you do now? The good news is that quite often there is a way to solve the problem.

GET A LICENSE AND GET ON THE AIR IN FOUR "EASY" STEPS

Even with just 90 days left on the clock, all may not be lost. Depending on the details of your Construction Permit grant, you may be able to save your CP in four "easy" steps. You just have to focus on the goal and get moving.

Your goal is, of course, *get a license and get on the air.* Keep that thought in mind.

There are some specific skills you will need in order to proceed. These are radio/computer technical skills and radio legal skills. If you are lacking in any of these areas you either will need to find volunteer help or hire consultants. However, to be clear: this is not the time to try to save a few dollars.

The four steps are:
- Identify a Viable Site and Move There.
- Design a Minimum Facility Station.
- Assemble the Station.
- Apply for the License-to-Cover.

STEP 1 - IDENTIFY A VIABLE SITE AND MOVE THERE

What is a minimum facility station at a viable site? It is one you can afford to build right *now*. It is:
- a location with no problems with access, permission or permits.
- a station you can build and put on the air *before* the CP runs out.

Remember the goal: *Get a license and get on the air.*

CPs are awarded on a competitive basis, so your original application was designed to cover as wide an area and as many people as possible. But if you were lucky there were no conflicting applications and you were awarded a CP right away. In this case, a minimum facility at a viable site may be enough to get you on the air and licensed.

Once on the air you should find it easier to generate interest and support for your station in the community, allowing you to solicit volunteer helpers and raise funds to build a larger facility.

It is likely that little or no consideration was given to the ease, cost or speed of construction of your radio station at the original site, so you will probably need to move to a viable site. The specific requirements for your minimum facility will vary depending on where your studio/transmitter/antenna are located.

GETTING A SITE QUICKLY

A viable site might be a business location in your community-of-license with an existing tower. It could be a place where you can negotiate a deal to trade rent and utilities for sponsorship announcements, "W@@@ is brought to you through the generous support of Larry's Plumbing Supply," for example. Or it could be someone's spare bedroom or garage next to an existing residential TV antenna tower.

Moving the location means filing another FCC Form 340 (minor modification of CP).

This is where the services of a good engineer will be indispensable. Find one and explain your situation; the engineer will understand. You are not the first person to find themselves in this dilemma. Ask him for an area-to-locate map that will allow you to operate at low power and height from a viable location. Use this map to find several possible new sites, and work with your engineer to pick a good one.

You will need exhibits for your CP's minor modification application demonstrating to the FCC that your new, smaller station still meets the minimum coverage requirements and does not interfere with any other authorization or application. Your engineer will be able to provide these.

Processing your application by the FCC could take *a month or more,* so it is really important to complete Step 1 quickly. Budget $1000 to $2000 for the area-to-locate and minor modification exhibits.

After you have determined that a minimum facility will work and you have filed a minor modification application, it is time for step two.

STEP 2 - DESIGN THE STATION

Here is what you must have to be ready to go on the air:
- Specific skills to plan and build the station.
- A programming source. Something to deliver content to your transmitter.
- A production facility. Someplace to create programming for broadcast.
- Audio processing to limit/process your audio.
- An Emergency Alert System (EAS) with at least two receivers and a printer.
- A transmitter, transmission line and antenna.

At this point you might ask "What about program content? What am I going to put on the air? How about promotion, public relations, office management, or sales/sponsorship?" The answer is, focus on your one and overriding goal: g*et a license and get on the air.*

KEEP YOUR EYE ON THE GOAL

If you already have a volunteer staff to handle some of these tasks, great! Get them involved in the design and construction of their station. Have them begin to prepare content for broadcast. But for the moment, what *you* need are those technical and legal skills.

You need to design a minimum facility, build that facility, setup/update your public file and apply for your license. You need technical skills to design the facility and you need legal skills to get all that messy FCC paperwork in order. Time is running out. You can deal with program content after you are ready to go on the air.

Of course, before you can apply for a license, your station must be *ready* to go on the air. This does not mean you need a top-of-the-line, fully equipped control room, news room, production facility and performance room. You just need to have the minimum facility necessary to produce local content and put it on the air.

Stations have gone on the air with 100 Watts through an antenna 50 feet above the ground using a home-made studio-in-a-closet. So again, we emphasize the goal: g*et a license and get on the air.*

A MINIMUM FACILITY

Here are some ideas on what constitutes a minimum facility, allowing you to move towards your goal:

Program Source: This can be as simple as a computer and sound card using free or inexpensive auto-mation software.

Production: The initial production work can be done on your personal computer using free software. Scavenge a microphone and stand or use a headset with a built in microphone. Let your friends set up their own basic production facilities at home. It will be rude and crude without a studio and mixer board, but it can be done. Just do not forget the goal: *Get a license and get on the air.* The fancy stuff will come later.

Processor: A very nice low-end processor can be purchased new for under $1500. Other options include buying a used processor on eBay, or borrowing one from another station or from an engineer.

EAS: Beg, borrow or rent one. If you must buy, then you will need to spend $2000-to-$3000. If you do not have an in-house technician/engineer you are better off buying something new or factory refurbished.

Transmitter: Again, beg, borrow or rent one. As with EAS, if you do not have a technician/engineer on your team, get a unit with a warranty. Buy a transmitter from a manufacturer who will certify that the device complies with FCC rules.

Transmission Line: If your transmitter site will only be needed for a very short time, RG-213 ($0.69 per foot) will do. If the site is going to be used for more than a year, get better feedline.

Antenna: Stay away from the pirate radio station style vertical antennas. Unless you are protecting a channel-6 TV station you will not be permitted to operate with vertical-only power. On the other hand, horizontal-only power is permitted and, at the cost of reduced perform-ance, will allow you to use a smaller, less expensive, transmitter. If you can afford a slightly larger transmitter then a good ring-stub or double-V single bay antenna can be had for $500 to $700.

THE TAB FOR MINIMAL

Assuming you need to buy everything, typical equipment cost might be:

One or two Computers with headsets and microphones:	$600 -to- $1250
Production and Automation Software:	$0 -to- $500
Audio Processor/Limiter:	$500 -to- $1500
EAS with Receivers:	$2500 -to- $3000
Transmitter:	$2000 -to- $4000
Transmission line and Antenna:	$500 -to- $1000

For an equipment total of:	<u>$6100 -to- $11,250</u>

Costs can be reduced by finding good used or donated equipment. Generally speaking, the less in-house technical support you have the newer your equipment should be. New equipment will be easier (read as less expensive) to install and maintain.

In addition, you will need something to support your antenna at a reasonable height above the ground (a tower or rooftop), someplace to put the equipment (a cabinet or shelf), someplace to sit and work (a tabletop or desk), a copy of the FCC Rules, all of the necessary papers and files (see your copy of the FCC Rules) and a telephone and/or Internet connection. Your main studio must have a telephone number that is local to your community.

It would be best if your transmitter site and main studio were at the same location. If this is not possible you will need some method of getting your programming from the studio to the transmitter. This involves more cost in both equipment and labor and more time, but also can be accomplished quickly if you have an Internet connection at both ends.

STEP 3 - ASSEMBLE THE STATION

Unless you or your helpers have specialized test equipment and knowledge you will need to pay an engineer to setup and adjust your processor, EAS, transmitter and antenna. Count on it costing $3000 to $5000 for installation and setup. If your antenna needs to be installed on a commercial tower or rooftop you may need to budget an additional $1000 to $2000 for installation by an experienced and insured tower crew.

Technical and Engineering expenses include:

Area-to-Locate Map and Exhibits:	$1000 -to- $2000
Equipment Installation and Setup:	$3000 -to- $5000
Antenna Tower Installation Crew:	$0 -to- $2000
The bill for technical and engineering services:	$4000 -to- $9000

Another very important point to keep in mind: FCC Rule 73.1690 (you do have your copy of the Rules, right?) might prohibit construction of a tower or installation of your antenna until the FCC has granted your minor modification application. Be sure to have your legal adviser check the Rules for your situation – do not jump the gun! It could be fatal to your application.

STEP 4: APPLY FOR THE LICENSE-TO-COVER

As we mentioned at the beginning your CP is not a license, it is only the permit to build and test your new station. Once you are ready to go on the air you need to file an application for a license to cover your construction permit, FCC Form 302-FM.

The engineer who set up your equipment will supply the technical details needed for this application. If you got to this point and your CP has no special restrictions, there is good news: once you have filed for a license you can go on the air!

That was easy, was it not? Well, at least you did not lose the CP and you are now on the air.

Next Installment: I have got a licensed station on the air. What do I do now?!!

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Joe DiPietro is the Principal Engineer at rfEngineers in Gainsville, FL. You can contact Joe at: joed@rfengineers.com or on the Internet at www.rfengineers.com

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