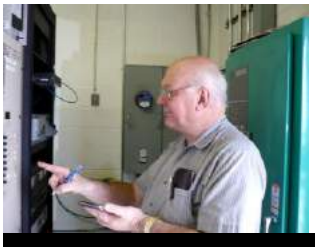

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Focus on Regulation

The FAA and FCC Program to Lower Your Tower Light Bill

By Hal Kneller

[October 2012] Among the most frequent violations cited by FCC field agents is failure to maintain the tower lighting specified in the license. Since many stations spend more on electricity for tower lights than the actual transmitted power, any ability to reduce electrical consumption is welcome.

Perhaps you have heard about the new initiative the FCC and the FAA have instituted with regard to tower lighting changes. This could well be beneficial to your stations.

FOR THE BIRDS

The main point is that FAA studies have determined that birds are more likely to strike a tower at night as they apparently are somewhat more attracted to steady-burning red lights as opposed to flashing beacons or strobes. To that end, the FAA published a paper a few months ago outlining this finding after years of study.

While some may feel that making any changes in lighting to help save birds is worthwhile, others may find it a benefit to be using a "green" technology, as the station's carbon footprint is reduced. At least that is how it worked out on my two towers: 660 Watts (on each tower) of steady-burning lights have been legally turned off.

In my case, we have two A2 systems, both the towers are in the 380-420 foot range. Each had two sets of three side markers (L-810), and middle and top flashing red beacons (L-864). Only the L-810 lights are impacted.

THE PROCESS

Here is a step-by-step guide which will take you through the process.

1. File your application at the FAA.
2. After FAA approval, file with the FCC.
3. After the FCC grants permission, you may turn off the side lamps.
4. Once you turn off the lights, you go back to the FCC and inform them that it is mission accomplished.

There is no paper filing permitted here, all of it must be done on line.

STEP BY STEP

For the first step, go to the FAA web site here.

You will need to register to obtain a user name and password to access the site and perform your filing. Never mind that the site says you can do this by filing a Form 7460-1 by mail; trust me, you cannot do it that way – I had mine returned with a letter telling me it had to be an electronic filing.

Next complete the linked *"off airport"* Form 7460-1. You will need your old ASO number as well as your information from the FCC tower registration form. Having this handy will make things go much quicker.

The FAA will request you verify the tower location on a map, but if you have all the pertinent information at hand, the process should not take more than 15 minutes.

Be sure to use the "remarks" area to tell the FAA what it is you want – and cite the FAA document *DOT/FAA/TC-TN12/9* that is the basis for your request.

If you wish, you can look at my completed 7460-1 at this link and see how I answered the questions.

FAA APPROVAL

The FAA will send you an email when they complete their work giving you information about where to find their authorization letter (which, as you can see, is an attached PDF in my 7460-1).

I filed my form on June 29th and received approval on August 3rd of this year.

KEEP THE LIGHTS ON!

Remember, you may not turn the lights off yet – even though the FAA has no problem with you doing so – because until you receive FCC approval, you could be fined for improper tower lighting.

Once you receive the FAA email with the good news, you then proceed to the FCC ASR management website. You will be using your existing FRN and password for this FCC site (we assume you have been there before to register your tower in the first place, right?).

Log in to the FCC site and

1. Select *"Manage ASR Numbers."* In my case it required me to update some Java programs on my PC before I could go any further.
2. A large box with lots of options appears, and you will select *MD (Modification of an Antenna Structure Registration)*
3. Then click *Continue*.
4. Highlight and select the tower you wish to work on and click *Continue*.
5. From there, just follow the on-screen directions.

The good news is there is no fee when you file for this change in tower lighting.

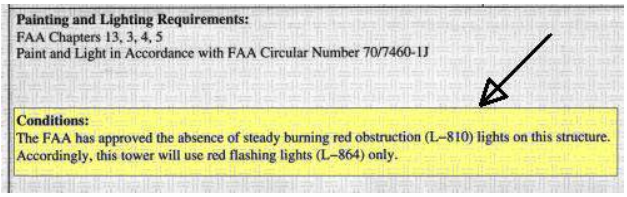
After I filled out the web forms, the FCC took about 45 days to approve my request.

NOW YOU CAN TURN THEM OFF!

In due course, I received an email from the FCC advising me that my application had been approved – and reminded me to file again after I made the lighting changes.

The procedure is the same, except now you are going to do *NT (Required Construction/Alteration Notification)* instead of *MD*. Just go back to the same login link, select *NT* and follow screen instructions. This will confirm you have completed your modification of tower lighting.

The FCC will then mail you a new ASR form within a week or two. You should make sure to update the authorizations posted at the control point to show the FCC has eliminated the sidemarkers from your station.



The new ASR contains the changed conditions

Note: When constructing a tower, you normally are required to go back to the FAA and do the 7460-2 Part 1 notice of commencement and later Part 2 (completion).

This is *not* the case here; you do not go back to the FAA.

KEEP YOUR SYSTEM LEGAL

It also goes without saying that your beacons must be in full compliance as they specify a rate of 27 to 33 flashes per minute. A check that they turn on at the proper light level is also a good idea.

As I was one of the very first to do this, and clear documentation did not exist, I had some help from Karl.Trautmann@faa.gov and from Diane.Dupert@fcc.gov. You may feel free to contact them should you run into any problems or questions as you proceed. The process now seems to be pretty straightforward but the first time through it was, well, just a bit confusing.

Although I have never found any bird carcasses around my towers, I am happy to not have to replace the side lamps nor pay for the electricity to power them. All in all, I found this to be a very worthwhile effort.

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