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... edited by Barry Mishkind – the Eclectic Engineer

Broadcast Operations

Did You Know? New Rules For Short Towers



By Chuck Hastings

[September 2017] Trying to stay current with FCC rule changes can make one feel that it is getting harder and harder to keep up with all the various rules and laws that govern businesses these days.

Here is one of those "Did you know?" questions: Did you know that broadcast towers between 50 feet and 200 feet above ground level now have to be painted according to the FAA color directive?

Probably you are thinking "Fake News." But that is only because it is a new law that has not been communicated very well to broadcasters and tower owners.

THE NEW LAW

Check it out: short towers will need to comply with new Public Law and FAA rules.

The new Public Law 114-190 Section 2110 "*Tower Marking,"* contained in the 114th Congress, Public Law 190, Title II - *Aviation Safety Critical Reforms*, Subtitle 'A' *Safety*

This law was passed as part of House Bill 636 on July 15, 2016 and applies to towers 50 feet to 200 feet above ground level. The law is buried between the *"FAA Travel Certification"* 114-190 Section 2109 and the *"Aviation Cybersecurity"* 114-190 Section 2111.

To a certain extent, it seems the impetus for all of this comes from farming areas, perhaps to protect crop dusters, etc. A few people did notice this and started discussion on the BROADCAST email list (start here). But most folks missed it.

IS THE LAW IN EFFECT?

It would be nice if the FAA or FCC were to clearly notify the broadcast industry of this new law and consequent ruling.

As a contract radio broadcast engineer I now have to inform clients of their obligation to paint their shorter towers. I do not have a problem with the new law, but I think everyone should know what it is in the works, and compliance may soon be required.

The caveat on the short tower marking rules is that the FAA has not followed up with "...issuing regulations to require the marking of 'covered' towers. ("Covered" meaning 50 feet to 200

feet above ground level). Unless it too is buried between some FAA safety regulations, I have not seen it, and cannot find it on a cyber search.

WHAT THIS LAW SAYS

Basically, most shorter towers now have to be painted in accordance to FAA colors.

There was a one year 'grace period' for towers in place before the new law was enacted. But towers erected after the law was in place have to be painted upon completion of tower build. One year has passed since the Congress passed the law.

According to information obtained via Stuart Goettsch of Wallen Communications in Tucson, this bill basically requires all towers over 50 feet that are currently unmarked to be marked in some fashion. However, it exempts towers within incorporated city limits, towers within farm building complexes (the center type complex with the buildings around), and certain other towers with tall structures directly adjacent to them. In other words, potentially a lot of exemptions.

Nevertheless, the Bill put the responsibility on the FAA to determine when those situations apply and for all of these towers to direct what the individual marking requirements would be.

This is where the standstill continues to reside.

BUREAUCRATIC HOLDUP

So you do not worry unnecessarily about this, the Bill did say that the new program was to be implemented within one year, however, it has not been implemented yet.

According to Goettsch's source, there is a lot of politicking going on behind the scenes, as this HB is quite onerous for some of the bigger tower site owners. He spoke with an FAA obstruction specialist a couple months back, and as of then he still had not heard "more" from up above and therefore was not starting to do anything yet.

Essentially, the issue is all of these towers would have to have an ASR in order to direct and document what the FAA feels is the pertinent marking level.

Immediate related questions would be: 1) If it has to be painted then does it need to have a light for nighttime conspicuity? 2) Can dual lighting be used to avoid painting? And there is probably more questions and requests for waivers of which the FAA cannot really vary much from the Bill since it is a Congressional Law.

THE FAA IS THE KEY

The Bill did direct more funds to the FAA to hire more people to help manage and implement this, and that also could be a hiccup, as it takes a long time to recruit, hire, and train someone before the implementation could occur.

Assuming this does not get reversed politically, once it gets sorted out and going, there will be lots of towers needing some level of work done.

The bottom line is nobody can do anything yet until they get direction from the FAA.



WE NEED INFORMATION

Overall, I do not have a problem with the new law, but I do think everyone should know that it is in the works, and compliance may soon be required.

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UPDATE MAY 2018

In reviewing some difficult to find reports and information, it becomes clear that the 'shorter tower paint' requirement is complex, convoluted and confusing.

The record clearly shows it cleared the Senate and was signed by the President 07/15/2016

The FAA then revised the Rules 10/08/16, with AC 70/7450-1L. CJG1. but the 'rule' for shorter towers is placed in a unique position. 200 feet is still the basic standard, but has the caveat.

2.1 Structures to be Marked and Lighted.
Any temporary or permanent structure, including all appurtenances, that exceeds an overall height of 200 feet (61 m) above ground level (AGL) or exceeds any obstruction standard contained in 14 CFR Part 77 should be marked and/or lighted. However, an FAA aeronautical study may reveal that the absence of marking and/or lighting will not impair aviation safety. Conversely, the object may present such an extraordinary hazard potential that higher standards may be recommended for increased conspicuity to ensure aviation safety. In general, commercial outside lighting should not be used in lieu of FAA-recommended marking and/or lighting. Recommendations on marking and/or lighting structures can vary, depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, the number of structures and overall design layout. *The FAA may also recommend marking and/or lighting a structure that does not exceed 200 (61 m) feet AGL or 14 CFR Part 77 standards because of its particular location* (Italics added for emphasis).The marking and lighting configurations are illustrated in Appendix A, Figures A-1 through A-27.

After reviewing the latest information I conclude, nothing has changed as of yet with regard to 50 ft to 200 foot towers with the exception *the FAA may recommend marking,* unless it is a meteorological evaluation tower, (MET).

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