# FEDERAL COMMUNICATIONS COMMISSION

WASHINGTON DC 20554

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**Opportunities to Reduce Bird Collisions with Communications Towers While Reducing Tower Lighting Costs**

On December 4, 2015, the Federal Aviation Administration (FAA) revised its advisory circular that prescribes tower lighting to eliminate the use of L-810 steady-burning side lights on towers taller than 350 ft. Above Ground Level (AGL). *See* http://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_70_7460-1L.pdf. On September 28, 2016, the FAA released specifications for and made mandatory flashing L-810 lights on new towers 150-350 ft. AGL. *See* http://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5345-43GH.pdf. While the FAA made these changes to reduce the number of migratory bird collisions (by as much as 70%), extinguishing steady-burning side lights also reduces maintenance costs to tower owners. Implementing flashing lighting on towers that received an FAA Study prior to the release of the new advisory circular can be achieved through a simple application process with the FAA and the Federal Communications Commission (FCC).

The FAA and FCC recognize that:

- Birds are attracted to non-flashing red lights, such as L-810 steady-burning side lights; and
- Birds are much less attracted to flashing lights on towers, such as L-864 and L-865 lights.

A "lighting deviation" can be used to extinguish or eliminate L-810 steady-burning side lights from an existing registered tower taller than 350 ft. AGL and to reprogram L-810 steady-burning side lights to flash on registered towers 150-350 ft. AGL.[1] The following steps are necessary:[2]

1. File a Marking and Lighting study electronically with the FAA (https://oeaaa.faa.gov/oeaaa/external/portal.jsp) requesting the elimination or omission of steady-burning lights (L-810) or requesting that steady-burning lights flash with Form 7460-1, Notice of Proposed Construction or Alteration. Designate structure type: "Deviation from Red Obstruction Light Standards."

2. Once the FAA has approved the request and assigned a FAA Study Number, file Form 854 with the FCC via the Antenna Registration System (ASR). Please select "MD – Modification" and choose the appropriate FAA Lighting Style.[3] The FCC typically will approve the application and modify the registration within 24 hours.

3. Once the lighting change for a tower has been granted by the FCC via ASR, the L-810 steady-burning side lights can be extinguished on towers taller than 350 ft. AGL and reprogramed to flash in concert with L-864 lights on towers 150-350 ft. AGL. Extinguishing L-810 lights and reprogramming lights are typically accomplished in the tower transmission building and do not ordinarily require climbing the tower. Per the FAA requirements, flashing red lights should flash at 30 FPM (+/- 3 FPM).

The elimination of continuously burning security lights under towers also minimizes bird attraction to the site and reduces energy costs. Many tower operators use down-shielded, motion sensor-triggered security lighting, which promotes tower safety and reduces the possibility of attracting migratory birds.

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[1] Although incandescent lights may not support reprogramming and require replacement with LED lights, the process described below would be the same otherwise.

[2] For towers 150-350 ft. AGL, if the existing No Hazard Determination was issued under advisory circular 70/7460-1L prior to September 28, 2016, no filings are needed with either the FAA or FCC to change from steady-burning to flashing L-810 lights.

[3] If the FAA grants a lighting deviation referencing an advisory circular other than 70/7460-1L, select "3. Other" and describe the lighting in the field provided. If the FAA issues a new Study referencing 70/7460-1L, select the lighting style that corresponds to the lighting in the FAA Study.

For more information about this and other migratory bird or endangered species issues, please contact: Joelle Gehring, Biologist, Federal Communications Commission, (202)270-4435, Joelle.Gehring@FCC.gov