

INTERTEK AIRPORT LIGHTING EQUIPMENT CERTIFICATION PROGRAM

IESALC Government Contacts Subcommittee Meeting

Virtual Meeting October 7, 2021

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INTRODUCTION



- **Purpose / Outline**

- Applicability of ALECP
- Update of Current Program Status
- Update on Current Initiatives



AIRPORT LIGHTING EQUIPMENT CERTIFICATION

Certification Program covers all equipment specified in the FAA AC 150/5345 series:

- Rotating Beacons
- Obstruction Lights
- Wind Cones
- Isolation Transformers
- Taxiway/ Runway Inpavement and Elevated Lights
- Retroreflective Markers
- Cable Connectors
- Underground Cable
- Runway & Taxiway Signs
- Portable Runway Lights
- Light Bases
- Constant Current Regulators
- Precision Approach Path Indicators (PAPI)
- Runway End Identification Lights (REIL)

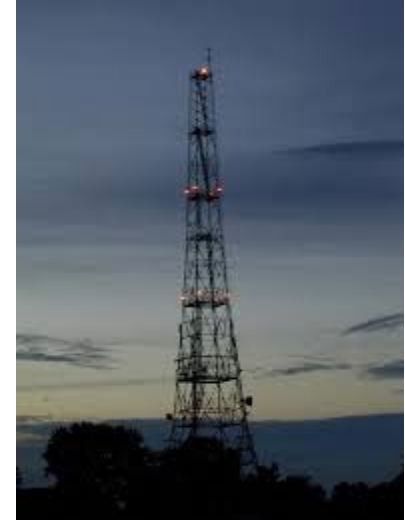


ALECP PURPOSE AND APPLICABILITY



- **Purpose is to assist in enhancing aviation safety by:**
 - Insuring good quality, reliable, airfield lighting products
 - Verifying equipment performance so that all pilots receive reliable, standardized visual queues.
- **Applicability of ALECP Certification**
 - **Airfield Lighting Products:**
 - Only FAA acceptable means to satisfy Title 14 CFR Part 139 Section 139.311 Certification of Airports
 - Mandatory for all projects funded by Federal AIP for PFC monies
 - Widely used around the world to insure a standard level of performance

ALECP PURPOSE AND APPLICABILITY



- **Applicability of ALECP Certification**

- **Obstruction Lighting Products:**

- **FAA Regulations - 14 CFR Part 77**
 - 77.7 – Specifies the requirements for notifying the FAA of construction or alteration of an obstruction.
 - FAA Form 7460-1, Notice of Proposed Construction or Alteration
 - 77.9 - Specifies what types of construction requires notification to the FAA.
 - 77.17 – Provides the definitions of obstructions.
 - 77.29 – Describes the aeronautical study that the FAA does to evaluate the impact of the proposed obstruction.
 - 77.31 – Describes the determination that FAA makes for each obstruction.
 - Determination of No Hazard to Air Navigation is issued with conditions including the lighting and marking.
 - 77.33 – Determination of No Hazard to Air Navigation is good for 18 months.

ALECP PURPOSE AND APPLICABILITY



- **Applicability of ALECP Certification**

- **Obstruction Lighting Products:**

- **FAA AC 70/7460-1M**

- Describes how obstructions must be marked and lighted

- Section 15.4 states that lighting equipment should conform to the latest version of FAA AC 150/5345-43.

FAA AC 150/5345-53 lists the manufacturers that have demonstrated compliance

Other manufacturers' equipment may be used if it meets the requirements of -43

CURRENT ALECP PROGRAM STATISTICS



- 57 program participants
 - (6 pending)
- 62 licensed manufacturing facilities
 - (7 pending)
- Certifications since the Spring Government Contacts Meeting in April 2021
 - 23 new or full re-qualification certificates
 - 14 revised certificates
 - 14 de-listings



ALECP PROGRAM STATUS

COVID – 19

Testing activity remains operational with necessary precautions

Client visits are possible with necessary precautions

Intertek visits at client facilities are possible with necessary precautions

Remote test witness are still available up to 12/2021 (if necessary)

All audits / inspections are back to live as of May 2021

ALECP PROGRAM STATUS – COMMON QUESTION



Shipping Covers (FAA AC 150/5345-42J)

- 3.1.3.5.4 - Required for all bases and extensions
 - Exterior Grade Bb/Cc plywood
 - “or other material of equal strength and weather resistance.”
 - L-867 shipping cover must be ½” thick (Figure 5-4)
 - L-868 shipping cover must be equal to light fixture thickness (Figure 5-9)

NEW SPECIFICATIONS



Cancelation dates:

Each new AC states that it cancels the previous version

Effective dates:

FAA AC 150/5345-53D section 12.a.v

The previous equipment certificates automatically expire on the given effective date.

Effective dates are usually six months from the issue date.

DRAFT SPECIFICATIONS



FAA AC 150/5390-2D Heliport Design

Comments were due April 5, 2021

Principal Changes

Complete re-organization

Incorporation of FAA EB87 (Heliport Perimeter Lights For Visual Meteorological Conditions (VMC)-January 2012) as Appendix F

DRAFT SPECIFICATIONS



FAA AC 150/5390-2D

Applicable Lighting:

L-853 Retroreflective Markers (FAA AC 150/5345-39D)

L-806 Wind cones (FAA AC 150/5345-27E)

L-852T and L-861T Taxiway edge lights (FAA AC 150/5345-46E)

L-852 Taxiway centerline lights (FAA AC 150/5345-46E)

L-801H/802H Heliport beacon (FAA AC 150/5345-12F)

L-882/883 – VGSI (Visual Glideslope Indicator) (FAA AC 150/5345-52A)

HILS (Heliport Instrument Lighting System) – 200W PAR 56

HALS (Heliport Approach Lighting System, or lead-in lights) - 200W PAR 56

L-860HR - Raised heliport perimeter light

L-860HS - Semi-flush heliport perimeter light

DRAFT SPECIFICATIONS

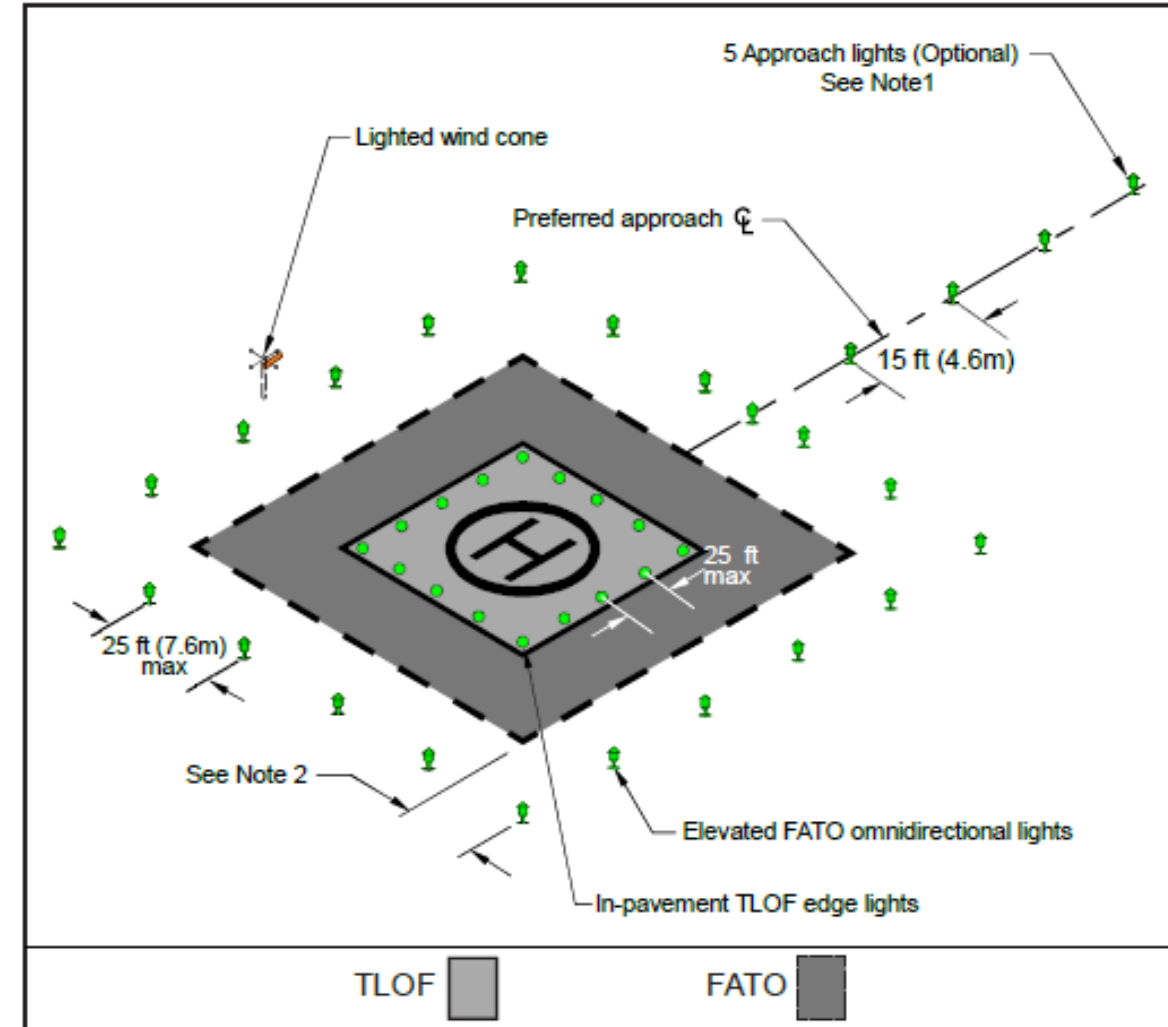


FAA AC 150/5390-2D (continued)

FAA EB 87 / Appendix F

- L-860HR – raised heliport perimeter light
- L-860HS - semi-flush heliport perimeter light

Figure 4-10. TLOF In-pavement and FATO Elevated Perimeter Lighting





DRAFT SPECIFICATIONS

FAA AC 150/5390-2D (continued)

FAA EB 87 / Appendix F

- L-860HR – raised heliport perimeter light
- L-860HS - semi-flush heliport perimeter light

Photometric and configuration requirements are provided.

Field testing is required after laboratory verification.

Design and testing requirements found in FAA AC 150/5345-46E and FAA EB67D apply.

FAA AC 150/5340-30J and FAA AC 150/5345-42J are referenced for installation.

