

United Kingdom Overseas Territories Aviation Circular

OTAC 139-25

Light Emitting Diode Aerodrome Ground Lighting

Issue 1
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Effective: On issue

GENERAL

Overseas Territories Aviation Circulars are issued to provide advice, guidance and information on standards, practices and procedures necessary to support Overseas Territory Aviation requirements. They are not in themselves law but may amplify a provision of the Air Navigation (Overseas Territories) Order or provide practical guidance on meeting a requirement contained in the Overseas Territories Aviation Requirements.

PURPOSE

New information regarding the policy for accepting LED AGL and solar-powered LED AGL.

RELATED REQUIREMENTS

OTAR Part 139.

CHANGE INFORMATION

First issue.

ENQUIRIES

Enquiries regarding the content of this Circular should be addressed to Air Safety Support International at the address on the ASSI website www.airsafety.aero or to the appropriate Overseas Territory Aviation Authority.

1. Introduction

This OTAC sets out the policy for accepting the installation of Light Emitting Diode Aerodrome Ground Lighting (LED AGL).

2. Objectives

There are two elements to be considered:

- a. the general process to enable acceptance of a proposed LED installation and;
- b. application of similar considerations to solar powered systems.

3. Application and oversight processes

- 3.1 Research shows that no major civil aviation regulator, worldwide, has a formal approval process for LED AGL fittings.
- 3.2 Over the past decade a lot of work has been done by manufacturers, in conjunction with regulators, to develop aviation lighting systems compliant with ICAO requirements.
- 3.3 Reputable manufacturers will also comply with a number of other standards covering such issues as tolerability of humidity, salt fog, immersion, vibration and shock etc.
- 3.4 General performance having been proven, all major authorities appear to rely on manufacturers' statements of compliance with one or more of ICAO, FAA (using Intertek Testing Services), UK-CAA, and STANAG (NATO Standardization Agreement).
- 3.5 Aerodrome operators should satisfy themselves that a proposed installation complies with performance and colour standards in Annex 14 appendices 1, 2 and 4. Evidence of compliance should be obtained and held by the aerodrome operator.

4. Solar Powered AGL Systems

If an aerodrome operator proposes to procure solar powered LED AGL, there is no formal regulatory requirement. However, the aerodrome operator needs to satisfy himself that the system will provide sufficient power to meet the operational service and performance need.