


Irish Aviation Authority The Times Building 11–12 D’Olier Street Dublin 2, D02 T449, Ireland www.iaa.ie	Údarás Eitlíochta na hÉireann Foirgneamh na hAmanna 11–12 Sráid D’Olier Baile Átha Cliath 2, D02 T449, Éire	AERONAUTICAL NOTICE No. T.16 ISSUE 01 DATE 17.05.24	 <small>ÚDARÁS EITLÍOCHTA NA HÉIREANN IRISH AVIATION AUTHORITY</small>
Aerodromes Division			

Requirements for the use of an Aerodrome at night in the Shannon FIR

The Irish Aviation Authority in pursuance of Article 23 of the Irish Aviation Authority (Aerodromes and Visual Ground Aids) Order, (S.I. No. 355 of 2008), hereby directs as follows:

1. Other than an aerodrome that is certified or licenced under Regulation (EU) 139/2014 or S.I. 355/2008 as applicable, for nighttime operations, an aircraft shall not take-off from, or land at an aerodrome in the State at night except where:
 - a. The aerodrome owner, occupier, or manager has made a declaration to the Authority in accordance with Appendix II to this Notice, that such place is in compliance with the requirements set out in Appendix I to this Notice; and
 - b. The Authority acknowledges acceptance of the declaration in writing.

The Authority may verify, by inspection, that the aerodrome complies with the requirements of Appendix I to this Direction. This inspection may occur in advance of, or subsequent to the acknowledgement of the declaration.

The Authority may, if it deems necessary, impose conditions on, or prohibit the operation of aircraft at any place, at night, to ensure the safety of such aircraft operations and/or persons.

2. Nothing in this Notice shall prohibit an emergency landing where necessary to ensure the safety of an aircraft.

Definitions:

“aerodrome” means a defined area on land or water, including any buildings, installations, and equipment, intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft and also includes an area, whether on land or water or on a building or other structure or elsewhere, intended for use for landing or taking off by aircraft capable of descending or climbing vertically.

“Night” Regulation (EU) 923/2012, (SERA) Art 2.97 defines night as:

“...the hours between the end of evening civil twilight and the beginning of morning civil twilight. Civil twilight ends in the evening when the centre of the sun’s disc is 6 degrees below the horizon and begins in the morning when the centre of the sun’s disc is 6 degrees below the horizon...”

The times for evening civil twilight and morning civil twilight can be found in AIP Ireland Gen 2.7.

**Chief Executive
Irish Aviation Authority**

APPENDIX I

Minimum Requirements for the use of an aerodrome at night in the Shannon FIR.

1. Infrastructure Requirements:

An aerodrome, when used at night, shall have as a minimum the following fully serviceable visual aids provided in accordance with ICAO Annex 14, Vol. 1 and Vol. 2, as applicable:

1.1 Visual aids for a runway:

a) Runway threshold lights:

- (i) Lights should consist of at least six lights evenly spaced at intervals of not more than 9m across the threshold.
- (ii) Lights shall be fixed unidirectional lights showing green in the direction of approach to the runway.
- (iii) When the threshold is at the runway extremity, light fittings serving as threshold lights may be used as runway end lights.

b) Runway end lights:

- (i) Lights should consist of at least six lights evenly spaced at intervals of not more than 9m across the end of the runway.
- (ii) Lights shall be fixed unidirectional lights showing red in the direction of the runway.

c) Runway edge lights:

- (i) Lights (fixed lights) showing variable white shall be placed along, or within 3m of, the outside edge of the runway with the lights spaced at intervals of not more than 100m.
- (ii) Lights shall show at all angles in azimuth necessary to provide guidance to a pilot landing or taking off in either direction.
- (iii) When the runway edge lights are intended to provide circling guidance, they shall show at all angles in azimuth.

d) Wind direction indicator:

- (i) An illuminated wind direction indicator that is clearly visible from the air and at ground level from the ends of the runway or Final Approach and Take-off (FATO) or Touch-down and Lift-Off (TLOF) areas, as applicable.

1.2 Where an aerodrome is being used by rotary wing aircraft only, the following visual aids shall be provided:

a) Final Approach and Take-off Lights (FATO) lights shall be placed along the edges of the FATO and spaced as follows:

- (i) For an area in the form of a square or rectangle, at intervals of not more than 50m with a minimum of four lights on each side including a light at each corner; and
- (ii) For any other shaped area, including a circular area, at intervals of not more than 5m, with a minimum of ten lights.

b) TLOF perimeter lights.

- (i) Lights shall be placed along the edge of the area designated for use as the TLOF or within a distance of 1.5m from the edge.
- (ii) Where the TLOF is a circle, the lights shall be:

- a. Located on straight lines in a pattern which will provide information to pilots on drift displacement; and
 - b. Where (a.) is not practicable, evenly spaced around the perimeter of the TLOF at the appropriate interval, except that over a sector of 45 degrees, the lights shall be spaced at half spacing;
- (iii) Lights shall be uniformly spaced at intervals of not more than 5m. There shall be a minimum number of four lights on each side including a light at each corner or where the TLOF is a circle, there shall be a minimum of fourteen lights.
 - (iv) The lights shall be fixed omnidirectional lights showing green. It is recommended that perimeter lights should not exceed a height of 25cm and should be inset when a light extending above the surface could endanger helicopter operations.

Lighting visual aids to improve safety and accuracy of operating on the runway/FATO/TLOF (e.g. a visual approach slope indicator system – PAPI, APAPI) should be considered when one or more of the conditions in the notes below exist. The safety objective of such system is to provide information on approach angle necessary to maintain safe height over obstacles and runway threshold. It is essential that where approach slope guidance is provided, it is installed correctly and properly maintained to ensure the accuracy of guidance provided to the pilot.

Taxiways, if provided, should be identified on both edges by reflective markers or lights. If the lighting system does not adequately illuminate apron edges they should be marked in the same manner as taxiways.

Vegetation (i.e. trees and hedgerow) should be monitored, removed and lopped if necessary, to ensure that the approach / departure paths are maintained as free and clear of obstacles as possible. Where such trees / hedgerows are located on neighbouring lands, it is the responsibility of the owner, occupier or manager to engage with the landowner concerned.

Fixed obstacles in close proximity to, or in the approach / departure paths should be lit with omnidirectional low intensity steady red Type B obstacle lights (minimum 32 candela). Where it not possible to install such lights, alternative means of identifying obstacles should be presented to the Authority for consideration.

Notes:

- a) The presence of objects in the approach area may involve serious hazard if an aircraft descends below the normal approach path, particularly if there are non-visual or other visual aids to give warning of such objects;
- b) Physical conditions at either end of a runway present a serious hazard in the event of an aeroplane undershooting or overrunning a runway; and
- c) Terrain or prevalent meteorological conditions are such that an aeroplane may be subjected to unusual turbulence during approach.

2. Owner, Occupier or Manager Requirements:

2.1 Prior to the commencement of operations at night at an aerodrome, the owner, occupier, or manager shall declare, through completion and submission of the Declaration Form in Appendix II, to the Aerodromes Division of the Irish Aviation Authority or to aerodromes@iaa.ie that the following requirements are in place:

- a) The site has been assessed by means of a daytime and nighttime flight assessment conducted by an appropriately qualified pilot in the category / type of aircraft proposed to operate, in order to assess the suitability of the aerodrome for such purposes:
 - (i) The IAA Flight Operations (Unscheduled) Division shall be provided with the name and qualification of the pilot intending to conduct the flight assessments and shall provide confirmation of their suitability.
- b) A safety policy and a risk assessment appropriate to the level of operation;
- c) A layout chart of the aerodrome indicating the runway(s) and or FATO/ TLOF as applicable, orientation, dimensions, slopes and any obstacles in the surrounding environment;
- d) An aerodrome manual which should contain the following information:
 - (i) general information;
 - (ii) particulars of the site;
 - (iii) particulars of the aerodrome operating procedures and safety measures;
 - (iv) an aerodrome emergency plan (see Section 3 of this Appendix); and
 - (v) procedures to appropriately limit the aerodrome or other location operation if any unsafe conditions arise; and
- f) Evidence of aerodrome insurance conforming to the schedule contained in S.I. No. 138/1988 - Aerodrome Insurance (Form of Certificate of Insurance) Regulations, 1988.

3. Emergency Services

3.1 When developing the emergency plan for the aerodrome, the following should be considered:

- a) A competent person should conduct an assessment of the hazards and risks;
- b) Arrangements for contacting the local Fire Service, An Garda Síochána, and Ambulance Service;
- c) Liaison with local Emergency Services to visit the site so that they can brief their personnel on suitable access and egress routes for their vehicles and the nature of any hazards, such as fuel in aircraft or storage tanks and the types of aircraft likely to use the site;
- d) Ensuring that any first aid and fire-fighting equipment/extinguishing media as identified within the risk assessment is available and can be transported to an accident or incident which occurs within the aerodrome boundary; and
- e) Providing written instructions on the action to be taken should an emergency occur.

Notes:

- a) Declarations shall be submitted to: Aerodromes Division, Irish Aviation Authority, The Times Building, 11-12 D'Olier St., Dublin 2 or by email to: aerodromes@iaa.ie
- b) The acceptance of a declaration shall be valid for a period not exceeding two years from the date of said acceptance, at which point a new declaration shall be submitted to the Authority if operations at night at the aerodrome are proposed to continue. The renewal declaration must be submitted before the expiry of validity of the previous declaration.
- c) During the period of validity of the declaration the aerodrome must always be maintained in a condition suitable for use by aircraft, when available for use at night. Any material changes in the surface of the landing area or any changes in the obstruction characteristics of the approaches, take-off paths or circuit area or any circumstances which render the place hazardous shall be notified immediately to the Authority and operations suspended.

APPENDIX II

Declaration of the suitability of an Aerodrome for Operations at Night in the Shannon FIR			
1. Owner, Occupier, or Manager			
Aerodrome / Location Name:			
Owner, Occupier, or Manager Name:			
Contact Number:			
Email Address:			
Postal Address:			
Aerodrome Address (If different to above):			
2. Aerodrome / Location Details (To include a Diagram)			
Latitude / Longitude (WGS-84)			
Runway / FATO Orientation		Surface Type	Useable Length/area (m)
1.			
2.			
3. Details of Activity			
1.	Planned number of monthly movements.		
2.	Airspace classification.		
3.	Category/Type of aircraft proposed to operate.		
4. Aerodrome Declaration			
<p>The Aerodrome at Section 1 of this form is compliant with the requirements of Appendix I to Aeronautical Notice, T.16, Issue 01 and is declared as suitable for operations at night in the Shannon FIR as detailed in the Aerodrome Manual and any promulgated aeronautical information. The Aerodrome is available for inspection by the IAA.</p>			
<p>Signature of Aerodrome Owner, Occupier or Manager: _____</p>			
<p>Date: _____</p>			