

Use of aircraft external lights to aid runway incursion prevention



Using external lighting can be an important tool to mitigate the effect of runway incursions. IFALPA recommends the use of the guidelines set out in this document and developed in association with EUROCONTROL and the US FAA.

It is a widely held belief that the use of aircraft external lights could be an effective tool as part of a runway incursion prevention programme. However, at present there are no globally accepted procedure for the use of aircraft external lights while on the ground. However, the following guidelines have been developed by the IFALPA Aerodrome & Ground Environment Committee in association with EUROCONTROL and the US FAA.

While the suggestions made in these guidelines should help to improve the visibility of aircraft operating in the manouvering area of an airport they should not be seen as replacing proper monitoring of radio and other communications.

The captain is responsible for ensuring operating limitations and established operating procedures are observed. The captain always has the final authority to use the aircraft lights as deemed necessary for the safe execution of flight (including ground movement operations).

Clearly, there are issues associated with the use of external lights which must be addressed for example the impact of dazzle effect from strobes, landing lights and some high power taxi and runway turn off lights especially in certain weather conditions (snow, fog etc.) and the impact of external light use on others must always be considered.

Guidelines for the use of aircraft lights during ground operations:

To the extent possible and consistent with aircraft equipment, operating limitations, and flight crew procedures, the illumination of aircraft exterior lights day or night should be as follows:

FLIGHT CREW PROCEDURES

BEFORE STARTING

Anti Collision lights / rotating beacon	ON
Logo lights	ON (Note 1)

TAXI-OUT (Moving on own power) (Note 2)

Taxi light	ON (Note 3)
Navigation / Position lights	ON (night); Operators Policy (day)
Turnoff lights	ON (Note 3)
Wing Inspection Lights	ON

CROSSING ANY RUNWAY (Note 4)

Strobe lights	ON
Turnoff lights	ON
Landing lights	ON

ENTERING RUNWAY FOR TAKE OFF

Strobe lights	ON
<i>Take off clearance received:</i>	
Landing lights	ON

TAXI-IN (runway vacated) (Note 2)

Landing lights	OFF
Strobe lights	OFF
Runway Turn off lights	ON (Note 3)

Note 1: During the hours of darkness anytime the aircraft is in motion on the ground or in the air below 10,000ft/FL100.

Note 2: To signal intent to other pilots, consider turning taxi and runway turn off lights off when stopped, yielding, or as a consideration to other pilots or ground personnel.

Note 3: Runway turn-off and taxi lights should always be ON during taxi. Outside the runway they may be temporarily switched off to avoid the blinding or dazzling effect, they should always be used when crossing a runway.

Note 4: When crossing a runway, the factual status of the runway, active or not, does not have any affect on the use of lights. Operators or Captains should consider turning ALL exterior lights on when crossing any runway



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