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— SET THE REFERENCE. FLY THE STANDARD. —

SET STANDARD TRAINING

FLIGHT CREW TRAINING DOCUMENT
EASA · PART-FCL · SERA · PART-NCO

TRAINING MANUAL · NIGHT RATING (AEROPLANE)

Night VFR

Training manual for the night rating, with syllabus and self-assessment
From the regulations to night flying in the aeroplane



INTENDED FOR
LAPL(A) · PPL(A) · CPL(A)

REGULATORY FRAMEWORK
EASA · SERA · Part-NCO · AIP

REFERENCE
FCL.810 · AMC1 FCL.810(a)

EDITION
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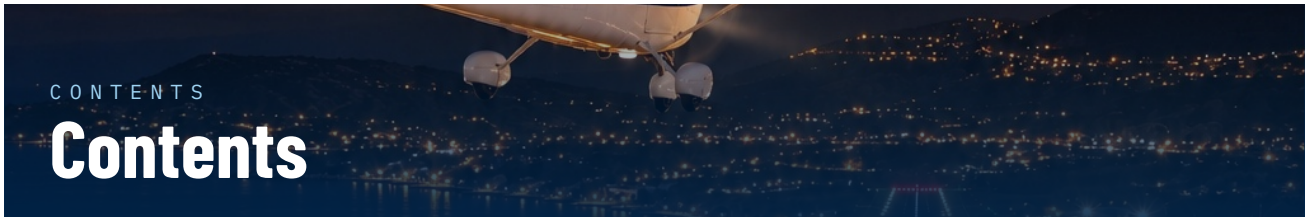
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perception **shall be limited to exercising the privileges of their licence in daytime only** (MED.B.075). Before starting the course, check that your medical certificate does not carry that limitation; if in doubt, consult your aero-medical examiner (AME).

Basic instrument flight training (LAPL)

The LAPL(A) holder must have completed, **before completing** the night flying training (FCL.810(a)(2)), the basic instrument flight training of the PPL(A) course: straight and level flight, turns, climbs and descents by reference to instruments, and recovery from unusual attitudes. The ATO/DTO must certify this.

3.3 The course: content and time limits

5 h	3 h	5 + 5	6 months
MINIMUM NIGHT FLIGHT TIME	DUAL INSTRUCTION	SOLO TAKE-OFFS AND LANDINGS	MAXIMUM COURSE DURATION

RULE · FCL.810(A)(1)

The applicant shall complete a **training course within a period of up to 6 months**, at a **DTO or an ATO**, comprising:

- (i) **theoretical knowledge instruction**;
- (ii) **at least 5 hours of flight time at night** in the appropriate aircraft category, including:
  - at least **3 hours of dual instruction**, including at least **1 hour of cross-country navigation**, with at least one dual cross-country flight of at least **50 km (27 NM)**, and
  - **5 solo take-offs and 5 solo full-stop landings**.



FIG 3.1 *Minimum structure of the flight instruction (FCL.810(a)(1)(ii)).*

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ILLUSION	WHAT HAPPENS	COUNTERMEASURE
Black-hole approach	Approach over water or unlit terrain towards a lit runway, often with a town behind it. With no intermediate references, the pilot believes they are higher than they are and descends too far: the flight path curves towards the ground short of the runway. It is a classic cause of CFIT.	Use PAPI/VASI or a calculated glide path (≈ 300 ft per NM on 3°); monitor the altimeter and VSI; do not descend below circuit altitude until established on a stabilised final.
Upsloping / downsloping runway	An upsloping runway (or rising terrain before it) makes you believe you are high → low approach. A downsloping runway causes the opposite.	Know the runway slope (AIP AD 2); trust the PAPI.
Narrow / wide runway	A runway narrower than usual gives the impression of being higher than you are → you fly low. A wider one gives the impression of being lower → you fly high and tend to flare too high.	As above; compare with the runways you know.
False horizon	Sloping cloud layers, coastal lights, lit roads or stars mistaken for ground lights create a tilted horizon; the pilot aligns the wings with it.	Control attitude with the artificial horizon.
Ground lights mistaken for stars	Where ground lighting is sparse, an isolated light (a farm, a boat) is taken for a star, or a low star for a ground light. The pilot may bank or pitch to "put the ground below" and enter an unusual attitude. Under an overcast sky, dark areas of terrain merge with the sky.	Attitude on the artificial horizon; distrust any "horizon" formed by scattered lights.
Cockpit reflections	Charts or tablets on the glareshield, bright displays or the dome light reflect in the windscreen and create lights or lines that do not exist.	Nothing bright on the glareshield; lighting at the minimum readable level.
Judging distance	When only points of light are visible, with no size reference, depth is misjudged: a bright light looks close and a dim one far away, whatever their real distance.	Altimeter, DME/GNSS and timing, not the visual impression.
Autokinesis	A fixed light observed for several seconds against a dark background appears to move. The pilot may "follow" it and become disoriented.	Do not fix your gaze; scan and cross-check with the instruments.
Featureless terrain	Over calm water, desert or unlit snow all height reference is lost.	Fly by instruments and altimeter.

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8.2 Taxiways and apron

SYSTEM	COLOUR	NOTES
Taxiway edge	**Blue**	Blue unmistakably distinguishes a taxiway from a runway.
Taxiway centreline	Green	On runway exits and in ILS sensitive areas they may alternate green and yellow.
Stop bar	Red	Never cross an illuminated stop bar, even if you hold a clearance.
Runway guard lights	Flashing yellow	They indicate the proximity of a runway-holding position.
Apron	Floodlights	They light the apron: beware of glare when moving off onto the dark taxiway.

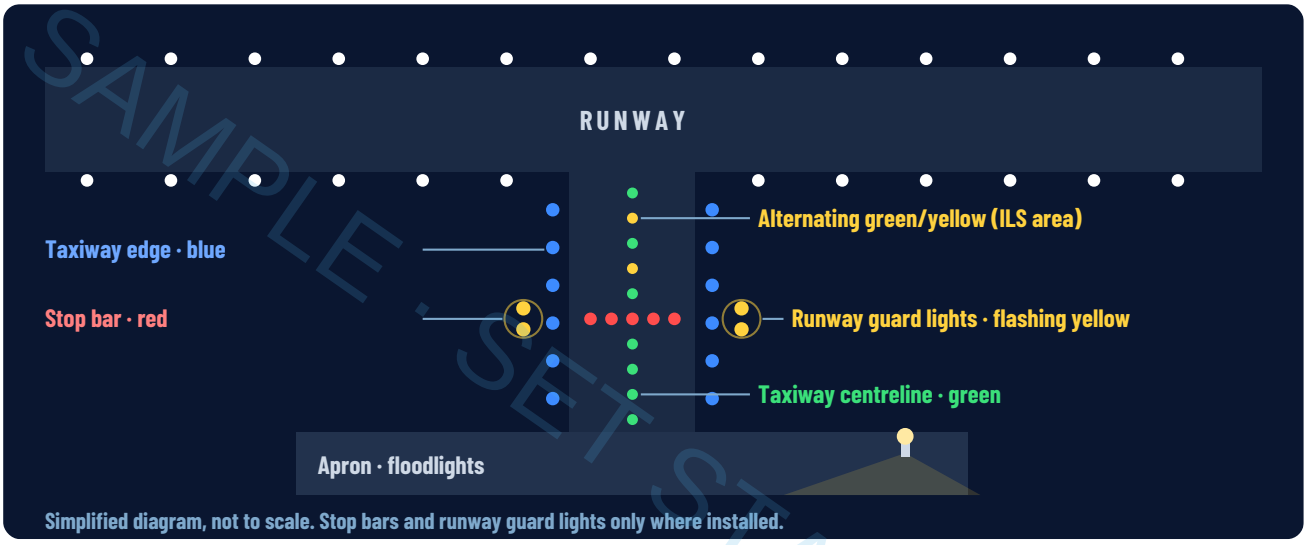


FIG 8.2 *Lighting of a taxiway and its holding point, seen in plan view.*

> **COMMON ERROR**
>
> Mistaking a parallel taxiway for the runway at night. Before take-off check: **white** edge lights (not blue), runway designator, magnetic heading matching the runway and, if fitted, white centreline lights.

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