



NIGHT OPERATIONS

Syllabus

Course provided by Vertical Master and in compliance with:

COMMISSION IMPLEMENTING REGULATION (EU) 2019/947 / EASA

Open and specific category operations



Certified Institut

Duration: 1 day (7 hours)

Schedule: **Evening**

Prerequisites: A1/A3 & STS

Course Objective:

- Check local sunset and sunrise times before planning night operations.
- Ensure the operational area is illuminated, especially during take-off and landing.
- Night flights make it harder to judge distances and obstacles, as UA lights provide limited visibility.
- If visual contact is lost at night, immediately activate the return-to-home (RTH) function.
- Infrared (IR) cameras can support visibility at night but are less effective in rain or humidity.
- Turning off the front green flashing light can reduce reflection in the onboard camera.
- Use navigation, position, and anti-collision lights for UA controllability and to signal presence.
- Manned aircraft lighting standards: red (left wingtip), green (right wingtip), white (tail), strobes, and red beacon for orientation and collision avoidance.

Syllabus:

Chapter	Topic	Description
1.	Degradation of visual acuity	<ul style="list-style-type: none">• Recognize that night flying degrades visual perception.• Recognize night myopia, caused by the enlargement of the pupil.• In low-light conditions, without distant objects to focus on, the eye's focusing mechanism may adopt a resting myopic position.• If night-vision goggles are used, know how they function.
2.	Night illusions	<ul style="list-style-type: none">• Define the term "night illusion."• Recognize and overcome visual illusions caused by darkness and understand the physiological conditions that may impair night vision.• State the limitations of night vision techniques, both at night and during the day.
3.	Altered visual-scanning techniques	<ul style="list-style-type: none">• Indicate the limitations of different visual scanning techniques at night and during the day.

4.	Altered identification of obstacles	<ul style="list-style-type: none"> • Explain the effect of obstacles on the takeoff distance required at night.
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