



**Pilot Training**

# **Night Vision Goggles NVG Refresher Training Course**

**1 Day**

<b>Ground School</b>	<b>2-4 Hours (1 Day)</b>
<b>Sim</b>	<b>0 Hours</b>
<b>Flight</b>	<b>2 Hours per Student</b>

**SCOPE:**

The student will refresh the knowledge, skills, and proficiency necessary to safely operate a helicopter while utilizing night vision goggles.

**OBJECTIVE:**

To refresh the pilot's knowledge, skills, and proficiency necessary to safely operate a helicopter while utilizing night vision goggles. The intent of this course is to retrain the student who has not flown night vision goggles for more than six months, in the basic flight maneuvers covered in the Rotorcraft/Helicopter Practical Test Standards.

**COURSE PREREQUISITES:**

Acceptance into this course is based upon these requirements:

- A current FAA issued Helicopter Pilot Certificate
- Class 2 Medical Certificate
- Current Helicopter Experience
- Proof of U.S. Citizenship or U.S. Person classification or U.S. State Department License for NVG Training

It is recommended that students have recently attended the Airbus Helicopters, Inc. refresher training in the model for which they seek night vision goggle refresher training. Students should also be night current in accordance with FAR 61.57. Additionally, students who have not attended an NVG Qualification Course from Airbus Helicopters, Inc., must be able to produce documentation that they were previously goggle qualified either in a military program or produce an Initial NVG qualification endorsement.

In special circumstances any of the above requirements may be waived with the approval of Airbus' NVG Flight Instructor.

**GRADUATION REQUIREMENTS:**

Instructor pilots will determine at the end of flight training if students possess the proficiency to receive the end of course graduation certificate. This is accomplished utilizing a progressive evaluation technique by the Instructor Pilot. Students who fail to perform to standard will be given credit for training given, but will not receive an end of course certificate.

**NOTICES:** Airbus reserves the right to notify customer of the occurrence of any force majeure condition that, in its sole discretion, is the cause of excusable delay. In the event of a force majeure condition, the services and/or classes will be extended or, if required, rescheduled for the first available opening. Airbus will not be liable for any costs, claims, or damages to customer or its employees arising from delays or interruptions caused by any force majeure condition. Airbus instructor pilots fly a maximum of 4.0 hours of NVG instruction per day.



## **Ground School**

2- 4 Hours (based on trainee experience)

### **Day 1**

#### **Human Visual System**

SCOPE: In depth study of the human visual system to include:

Anatomy

Types of Vision

Visual Limitations.

#### **Theory of Night Vision Goggles**

SCOPE: Goggle Evolution and Operation

Sources of Night Light

Night Vision Goggle Visual Acuity

Meteorological Conditions and Night Vision Goggles

Crew Resource Management for Night Vision Goggles

Night Vision Goggle Failures

Night Vision Goggle Maneuver Review



## Flight Training

2 Hours

A. Objective: During this lesson the student will receive training on preflight procedures for verifying proper mount and operation of the NVGs while in the cockpit. Cockpit lighting and switches will be operated prior to starting engines.

### Content:

- (1) Classroom Preflight briefing
  - (a) Initial goggle inspection
  - (b) Weather briefing
  - (c) Training preview
- (2) Helicopter Preflight Inspection
- (3) Hot Cockpit Orientation (.3 hours)
  - (a) Lighting operation
    - (i) Instrument panel and center console lights
    - (ii) Annunciator Panel Lights
    - (iii) Landing and Taxi Light
    - (iv) Cockpit lighting
    - (v) Supplemental Lighting (lip lights, flashlights)
  - (b) Switches or Pushbuttons
  - (c) Goggle Emergency Procedures (Failure)
  - (d) Lighting compatibility review and demonstration
  - (e) Cockpit Orientation
    - (i) Proper intensity of the cockpit lights
    - (ii) Under goggle viewing of instruments
    - (iii) Peripheral vision demonstration (limited 40 degree field of view)
    - (iv) Blind spots created by the aircraft structure
    - (v) Demonstration of goggle degradation using taxi and landing lights
    - (vi) Anticollision and Position light usage and problems
- (3) Normal Takeoff
- (4) Enroute to training (goggle up)
- (5) Normal Approach
- (6) Hover Taxi
- (7) Vertical Takeoff and Landing
- (8) Traffic Patterns
- (9) Normal Takeoff
- (10) NVG Failure
- (11) Steep Approach
- (12) Maximum Performance Takeoff
- (13) Air Taxi
- (14) Shallow Approach and Running Landing

Rev. 2.1

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- (15) Confined Area Operations
- (16) Pinnacle Operations (optional)
- (17) Power Failure at Altitude (optional)
- (18) Power Failure at Hover (optional)
- (19) Systems and Equipment Malfunction (optional)
- (20) Unusual Attitude Recovery
- (21) Spatial Disorientation Demonstration
- (20) Normal Takeoff
- (21) Return to GPM - stow Goggles
- (22) Normal Approach
- (23) Hover Taxi
- (24) Aircraft Shutdown and Post flight
- (25) Flight Debrief, student critique and fatigue evaluation

Note: Emergency procedures involving any type of autorotation, hydraulics failure, antitorque failure or single engine operation are optional and at the request of the customer while utilizing their aircraft. These maneuvers will be completed if training is being conducted in AHI aircraft.



#### (4) Flight Maneuvers (1.7 hours)

- (1) Start the Aircraft
- (2) Hover Taxi
- (3) Normal Takeoff
- (4) Enroute to training (goggle up)
- (5) Normal Approach
- (6) Hover Taxi
- (7) Vertical Takeoff and Landing
- (8) Traffic Patterns
- (9) Normal Takeoff
- (10) NVG Failure
- (11) Steep Approach
- (12) Maximum Performance Takeoff
- (13) Air Taxi
- (14) Shallow Approach and Running Landing
- (15) Confined Area Operations
- (16) Pinnacle Operations (optional)
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