



**Pilot Training**

# **EC145 / BK117 C2 Instructor Orientation Training Course**

**4 Days**

<b>Ground School</b>	<b>15 Hours (2.5 Days)</b>
<b>Sim</b>	<b>0 Hours</b>
<b>Flight</b>	<b>Up to 4 Hours per Student</b>



## **SCOPE:**

This course will provide a comprehensive Instructor Pilot Course on the EC145C2 helicopter. Classroom instruction, combined with handouts, will provide complete information for a thorough review and overall understanding of the aircraft in order to serve as an Instructor in the EC145C2 helicopter. This review will cover normal procedures, aircraft limitations, and emergency procedures.

## **OBJECTIVE:**

Upon completion of this course the applicant is qualified to act as an Instructor Pilot on the EC145C2 helicopter.

## **COURSE PREREQUISITES:**

Acceptance into this course is based upon these requirements:

- A current FAA issued Helicopter Pilot Certificate
- Valid Medical Certificate
- Current Helicopter Experience
- Minimum of 50 hours in a EC145C2 Helicopter
- Qualified Helicopter Flight Instructor

In special circumstances any of the above requirements may be waived with the approval of Airbus Helicopters, Inc.'s Chief Flight Instructor.

## **NOTICES:**

Airbus Helicopters, Inc. 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 Helicopters, Inc. 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.

The stated duration of the course is based on two student pilots per course. Additional student pilots may change the duration of the flight portion of the course. Airbus Helicopters Inc. instructor pilots fly a maximum of 4.5 hours per day.



## **Ground School**

15 hours

### **Day 1**

#### **Introduction and General Overview**

3.0 hours

SCOPE: This block of instruction will cover registration and orientation to the course, an explanation of the course outline, Airbus Training School Operations and a general overview of the helicopter. The general overview will include the main characteristics, description, main dimensions, airframe reference points, the engine, the main components and systems, the cockpit layout of the helicopter, including CPDS and associated VEMD, malfunctions, and the helicopter operating publications.

#### **Lifting Systems**

0.5 hours

SCOPE: This block of instruction will cover the functions of the main rotor drive system, the main gearbox and its components and lubrication system to include the indicating system, air circulation, main gear box caution / warning lights, the rotor brake components and operation. The main rotor, the main rotor blades, the main rotor control assembly, the rotor speed monitoring and indicating system, the aural warnings and the main rotor and main transmission limitations.

#### **Fuselage**

0.5 hours

SCOPE: This block of instruction will cover the basic structure of the helicopter including the main cabin, the floor structure, aft structure, doors, windows, cowlings, and firewalls.

#### **Tail Unit**

0.5 hours

SCOPE: This block of instruction will cover the tail boom, tail rotor drive system, the tail rotor drive shaft, the tail gearbox, the tail rotor, and tail rotor control failure.

#### **Flight Control**

1.0 hours

SCOPE: This block of instruction will cover the cyclic and collective controls and the tail rotor flight controls, to include the hydraulic system and SAS systems and associated normal and emergencies procedures.





## Day 2

### Landing Gear

0.5 hours

SCOPE: This block of instruction will cover the landing gear components and their functions, the mounting and characteristics the cross tubes and skids, to include discussion on low medium and high gear installations.

### Power Plant

3.0 hours

SCOPE: This block of instruction will cover the aircraft fuel system components and operation, the Turbomeca Arriel 1E2 power plant, engine mounting, engine operation, fuel filters, and the fuel injection system, the engine power levers, the emergency fuel shut-off, the engine monitoring system, the engine lubrication system and oil cooling, the lubrication indicating system, and the engine compartment fire detection system.

### Electrical System

1.0 hours

SCOPE: This block of instruction will cover the direct current power sources, power system components and their functions, layout of the power system components, power distribution, external power units, and the systems associated malfunctions and failures as well as caution / warning lights.

### FCDS

1.0 hours

SCOPE: This block of instruction will cover introduction and overview of the Flight Control Display System, to include description of all components, normal pilot operations, emergencies, and pilot trouble shooting.

### AFCS

1.0 hours

SCOPE: This block of instruction will consist of an Automatic Flight Control System overview, to include description of all components, normal pilot operations, emergencies, and pilot troubleshooting.



## Day 3 & 4

### Instructor Pilot Maneuvers

3.0 hours

SCOPE: This block of instruction will cover the maneuvers required to be completed by the Student IP. Each maneuver will be discussed in detail concerning techniques, helpful hints, and common situations to avoid. This section of the course focuses on single engine failure (OEI) training, governor failures, tail rotor malfunctions, and autorotations.

### Flight Training

4.0 hours

#### Flight 1 (Right Seat)

Up to 2.0 Hours

- Review emergency procedures
- Limitations review
- OEI
- T/R Malfunctions
- GOV Failures
- Autorotation

#### Flight 2 (Left Seat)

Up to 2.0 Hours

- OEI
- T/R Malfunctions
- GOV Failures
- Autorotation