



Pilot Training

EC225LP (ATP / Initial Type Rating)

20 Days

Ground School 58 Hours (10 Days)

Sim 28 Hours for a crew of two including check ride, 20 Hours for crew of one

AIRBUS



SCOPE:

This course will provide a pilot Ground School and Simulation Training for the EC225LP helicopter. Classroom instruction, combined with flight simulation, will provide information for a thorough review of the aircraft and the knowledge needed to conduct normal flight activities and response to an aircraft emergency or system failure.

OBJECTIVE:

To teach the pilot the fundamental knowledge of the aircraft necessary to conduct safe and efficient ground, pre-flight and flight procedures in the EC225LP. The pilot will be able to list the aircraft limitations, describe the functions and operations of the aircraft's systems, use the Flight Manual to obtain necessary information for safe and efficient operation of the aircraft, including knowledge of the aircraft charts necessary for safe and efficient operations. An emphasis on conducting normal flight activities and responding appropriately during an aircraft emergency or system failure.

COURSE PREREQUISITES:

Acceptance into this course is based upon these requirements:

RATINGS AND CERTIFICATES

Each candidate who does not already possess an FAA ATP rating must meet the following:

- License must be valid thru the end of the course
 - Commercial pilot with an instrument rating issued under 14 CFR 61
- or**
- Foreign Airline Transport Pilot license with instrument privileges **or** commercial pilot license with an instrument rating issued by a contracting state to the Convention on International Civil Aviation and contains no geographic limitations. *Foreign candidates applying under this provision must meet **all** of the requirements for an ATP rating as defined in 14 CFR Parts 61.153, 61.155, 61.157 and 61.161.*

AERONAUTICAL EXPERIENCE

At least 1200 hours total time

500 hours cross country flight time

100 hours night time (15 hours in helicopter)

200 hours of flight time in an aircraft (75 hrs. PIC or SIC performing PIC duties under supervision of PIC or any combination)

75 hours of instrument flight time in actual or simulated IMC (50 hrs. in flight, at least 25 hrs. in helicopter as PIC or SIC performing PIC duties under supervision of PIC or any combination)



AIRLINE TRANSPORT PILOT RATING

Each candidate seeking an initial ATP Helicopter rating, must have taken and passed the appropriate airline transport pilot knowledge test on the areas defined by 14 CFR 61.155(c) within 24 months with a passing score of 70% or higher prior to enrolment in this course.

LIMITED TYPE RATING WITH 25 HOUR SOE RESTRICTION

To complete all of the training and testing for an Unlimited EC225LP Type Rating the applicant must meet at least one of the following prerequisites:

1. Hold a type rating in a helicopter and that type rating may not contain the supervised operating experience limitation;
2. Have been appointed by the U.S. Armed Forces as pilot in command of a helicopter;
3. Have 500 hours of flight time in a EC225LP; or
4. Have 1000 hours of flight time in two different types of helicopters.

If the applicant does not meet any of the requirements listed under paragraph E, upon successfully completing the curriculum may be issued an EC225LP type rating with a 25 Hour SOE (Supervised Operating Experience) limitation. The applicant may not act as PIC in the EC225LP until the SOE limitation has been removed in accordance with 14 CFR 61.64(c)(iii).

TRANSPORTATION SECURITY ADMINISTRATION VALIDATION

Each candidate must meet the requirements of 49 CFR 1552 which must be validated **PRIOR** to being accepted as a student in this curriculum.



Ground School	58 hours
WELCOME AND IN-PROCESSING	0.8 hour
SCOPE: This block of instruction will cover registration and orientation to the course, and an explanation of the course outline.	
AIRCRAFT OVERVIEW	1.0 hour
SCOPE: 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 and the helicopter operating publications.	
DOCUMENTATION / FLIGHT MANUAL	0.6 hour
SCOPE: This block of instruction will cover the flight manual in depth, with emphasis on updating procedures, flight manual layout, and practical of the flight manual as it relates to normal and emergency procedures, performance planning, weight and balance, and optional equipment.	
LIMITATIONS	1.0 hour
SCOPE: This block of instruction will cover the flight manual in depth, with special emphasis on the aircraft limitations identified in FLM section 2 and pertinent supplements.	
INDICATING AND RECORDING SYSTEMS	1.6 hours
SCOPE: This block of instruction will cover the indicating system locations and principles including normal and abnormal indications, aural tones, warning lights, cautions, VMS indications and their interpretations.	
STRUCTURE/FUSELAGE	1.1 hours
SCOPE: This block of instruction will cover the general design and layout of the fuselage.	
MAIN ROTOR DRIVE SYSTEM	2.4 hour
SCOPE: This block of instruction will cover the main gearbox design and installation, drive, lubrication, monitoring and emergency procedures associated with the main gearbox.	



MAIN ROTOR

1.2 hour

SCOPE: This block of instruction will cover the main rotor system, including the spheriflex design and components, blade design, NR laws and monitoring of the main rotor speed.

TAIL ROTOR DRIVE SYSTEM

0.7 hour

SCOPE: This block of instruction will cover the components of the tail rotor drive shaft, the tail rotor gearbox, lubrication and monitoring.

TAIL ROTOR

0.4 hour

SCOPE: This block of instruction will cover the components and operation of the tail rotor including emergency procedures associated with the tail rotor system.

ACTIVE VIBRATION SYSTEM

0.4 hour

SCOPE: This block of instruction will cover the Active Vibration Control System, its systems, controls and associated normal and emergency procedures.

FLIGHT CONTROLS

0.6 hour

SCOPE: This block of instruction will cover the basic flight control installation for the EC225, including the relationship with the hydraulic systems, servos, and emergency procedures related to loss of tail rotor control.

HYDRAULIC SYSTEM

1.5 hours

SCOPE: This block of instruction will cover the hydraulic systems, both main and emergency and the relationship with the servos and landing gear operations. Included will be instruction on normal operations, monitoring of the systems, malfunction recognition, and emergency procedures relating to potential malfunctions or failures of the hydraulic system.

SERVO CONTROLS

0.6 hour

SCOPE: This block of instruction will cover the main and yaw servos for the EC225. This will include aerodynamic functions of each servo, basic operation of the servo, monitoring, and malfunction recognition. Review of the emergency procedures relating to servo control malfunctions will be covered at the end of this presentation



LANDING GEAR

1.7 hours

SCOPE: This block of instruction will cover the EC225 landing gear system, including basic operations, monitoring, potential malfunctions and failures and emergency procedures relating to landing gear malfunctions.

ELECTRICAL

3.4 hours

SCOPE: This block of instruction will cover the basic EC225 electrical system, installation, component location and function. This section will include the Emergency TRU and Hydro Alternator. Additionally, operations of the electrical system from a pilot's perspective will be covered, including normal operations, system redundancy, and emergency procedures in case of malfunctions or failures.

FUEL SYSTEM

1.5 hours

SCOPE: This block of instruction will cover the fuel supply system for the EC225, including basic installation of the fuel cells, basic operations of all components, monitoring of the fuel system, and potential malfunctions within the systems. Emergency procedures relating to fuel system malfunctions will be covered.

ENGINE AND COMPONENTS

3.2 hours

SCOPE: This block of instruction will cover the EC225 power plant including installation, lubrication system, and monitoring of normal parameters, and power check procedures. Starting, shutdown, and normal procedures will cover in addition to emergency procedures relating to engine and system related malfunctions.

VEHICAL MONITORING SYSTEM

1.9 hours

SCOPE: This block of instruction will cover the EC225 engine and vehicle monitoring system including architecture, data sources, display and interpretation during normal and abnormal situations.

FIRE PROTECTION

1.5 hours

SCOPE: This block of instruction will cover installation and monitoring of the engine and airframe fire detection and suppression system for the EC225. This will include component location, monitoring, system malfunction, and emergency procedures pertaining to the engine or airframe fire and/or excessive heating of the cargo area.



AIR DATA SYSTEM

0.4 hour

SCOPE: This block of instruction covers the air data system, its components, system layout, as well use and interpretation of those systems during normal and emergency situations.

FDS AND AFCS

8.2 hours

SCOPE: This block of instruction will cover, from a pilot's perspective, the EC225 FDS and AFCS systems. This will include basic installation, location and function of the FDS and its relation to the AFCS components. The basic FDS flight and navigation display format will be covered including typical symbols and operations of the autopilot where it helps to explain the overall functionality of the FDS. This module will concentrate on the use of the FDS and AFCS systems, display interpretation and potential malfunction/failures.

ICE AND RAIN PROTECTION

1.4 hours

SCOPE: This block of instruction will cover the ice and rain protection systems installed on the EC225 including ice detection, rotor and engine icing protection as well as windscreen heating. Included will be normal operations, monitoring, and emergency procedures.

HEATING AND VENTILLATION

0.7 hour

SCOPE: This block of instruction will cover the heating, ventilation, and air-conditioning systems installed on the EC225. Included will be normal operations of these systems, monitoring, and emergency procedures associated with the air-conditioning and heating systems.

LIGHTING

1.0 hour

SCOPE: This block of instruction will cover the internal and external lighting systems found on the EC225, including basic and customized lighting. Normal operations, lighting checks and any emergencies related to the lighting systems will be included.

PERFORMANCE PLANNING

3.0 hours

SCOPE: This block of instruction will cover performance charts, power check charts and weight and balance calculations for the EC225.

WEIGHT AND BALANCE

0.8 hour

SCOPE: This block of instruction will cover performance charts, power check charts and weight and balance calculations for the EC225.



NAVIGATION / COMMUNICATION EQUIPMENT 2.0 hours

SCOPE: This block of instruction will cover the navigation and communication equipment installed on the EC225, including normal operations, preflight checks and any emergencies related to the navigation and communication systems will be included.

RADAR 0.4 hours

SCOPE: This block of instruction will cover the installation and use of the weather radar system including normal use and display of data on the MFD.

EMERGENCY EQUIPMENT 1.9 hours

SCOPE: This block of instruction will cover emergency systems and equipment not previously covered earlier in the presentation. This may include, but is not limited to emergency Flotation and Life Rafts, ELT and Jettison-able emergency beacon, emergency lighting, or other equipment installed.

MISCELLANEOUS EQUIPMENT 3.0 hours

SCOPE: This block of instruction will cover systems and equipment not previously covered earlier in the presentation. This will include AVAD, ACAS, and TAWS.

MULTI-PILOT COMMUNICATION AND COORDINATION 1.2 hours

SCOPE: This block of instruction will cover the AHTC Standard Operating Procedures (SOP) for multi-pilot aircraft. The SOP's deal with how crews complete their duties. These SOP's cover aircraft control, crew coordination, communication, briefings, standard phraseology, radio use and dealing with emergencies.

AIRCRAFT PREFLIGHT 1.9 hours

SCOPE: This block of instruction will cover the preflight inspection of the EC155. Utilizing the RFM checklist as well as a classroom multimedia, the PT will be led through an entire preflight to include systems review.

MANEUVERS OVERVIEW 1.2 hours

SCOPE: This block of instruction is intended as a review of the standard CAT-A, CAT-B and IFR maneuvers for the EC225LP.

LIMITATIONS QUIZ AND FINAL EXAM 3.0 hours



Flight Training

28 hours for a crew of two including type rating check ride

AIRBUS