Technician Training

H135 Helionix® (EC135 P3H, EC135 T3H) Differences Training Course

10 Days / 2 Weeks
Classroom 60 Hours

Approved By: Ross McMichael_____Date 01/06/2020

Instructor_____Date ___/___/____

Rev. 2.2

AIRBUS

This course is comprised of a theoretical presentation and practical exercises necessary to adequately review the basic aircraft systems and perform certain maintenance tasks described in Airbus maintenance documentation. Following the successful completion of this course, the technician should be able to perform Organizational and Intermediate level maintenance tasks and procedures necessary to maintain the helicopter. This course does not include Depot level maintenance tasks and procedures as described below.

ORGANIZATIONAL LEVEL:

Complete maintenance checks and servicing, inspection for condition, and exchange of line replaceable units according to applicable documentation.

INTERMEDIATE LEVEL:

Repair on or off of the helicopter and extended periodical inspections according to applicable maintenance documentation. A maintenance facility, qualified personnel, test equipment, and special tools are required to perform these tasks.

DEPOT LEVEL:

Major repair or overhaul at the manufacturer or at an authorized service station according to special documentation. Tools / test equipment and specialized personnel trained in Depot level maintenance tasks.

PREREQUISITES:

- Currently Certified as an Airframe Maintenance Technician
- Two Years Minimum Experience as an Active Helicopter Maintenance Technician
- In special cases these prerequisites can be waived by the Training Manager
- Previously attended the Airbus EC135 / H135 Classic Maintenance Course

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.


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The following items shall serve as the training points for a typical EC135P3H-EC135T3H / H135H differences training course focusing on field maintenance tasks as defined above. The course content shall be revised as necessary to reflect basic production helicopter configuration revision as subsequent aircraft are manufactured.

First Contact With The Helicopter Classroom 1.0 hours

SCOPE: Block of instruction shall include the development and general description of the EC135, dimensions, and documentation of the EC135.

Integrated Modular Avionics (IMA, HELONIX) Classroom 12.0 hours, Practical 4.0 hours

SCOPE: Block of instruction shall include the Integrated Modular Avionics (Helionix), Helionix architecture, IMA electrical power supply, Multifunction Display (MFD), MFD management controls, MFD main formats, flight and navigation display format (FND), navigation display format (NAVD), helicopter terrain awareness and warning (HTAWS), vehicle management system format (VMS), aircraft management computers, data transfer device, data bus system, multifunctional control panel (MCP), memory module, alerting system, IMA tests, first limit indicator, VMS indicating, clock-chronometer, flight data continuous recording, synthetic vision system (SVS), Helionix digital map, helicopter terrain awareness & warning system, and airborne collision avoidance system.

Practical instruction shall include the use of the HELONIX Aircrew Training System (HATS) systems. Instruction will be given in the display switching functions, configuration and maintenance modes.

Lifting System Classroom 2.0 hours

SCOPE: Block of instruction shall include lubrication system, main rotor hub shaft, and main rotor blade.

Fuselage Classroom 1.0 hours

SCOPE: Block of instruction shall include the cabin structure and cowlings.

Tail Unit Classroom 1.0 hour

SCOPE: Block of instruction shall include the tail unit assembly.

Flight Controls Classroom 4.0 hours

SCOPE: Block of instruction shall include the flight controls of the EC135, collective control, cyclic control, trim system, and tail rotor controls.

Hydraulic System Classroom 3.0 hours

SCOPE: Block of instruction shall include the system component location and architecture, operation and function of the main and tail rotor servos, mechanical override system, and system test.

Fuel System Classroom 2.0 hours

SCOPE: Block of instruction shall include the fuel distribution system, fuel pump power supply and monitoring, and the system architecture.

Power Plant Classroom 6.0 hours

SCOPE: Block of instruction shall include engine monitoring PW206B, engine Turbomeca Arrius, engine fuel sub-system Arrius, engine monitoring Arrius, engine control, engine ignition, engine operation, oil cooling system, and inlet barrier filter system.

Fire Protection System Classroom 1.0 hours

SCOPE: Block of instruction shall include the fire warning system, fire extinguishing system, normal functioning, and monitoring and testing.

Ice and Rain Protection Classroom 1.0 hours

SCOPE: Block of instruction shall include the windshield wiper system and the pitot-static heating system.

Heating and Ventilation System Classroom 1.0 hours

SCOPE: Block of instruction shall include the heating and ventilation system architecture.

Lights Classroom 1.0 hours

SCOPE: Block of instruction shall include the position lights, anti-collision light, landing light, instrument lighting, passenger and cargo compartment lighting, and emergency exit light.

Avionics Generalities Classroom 6.0 hours

SCOPE: Block of instruction shall include the avionics, avionics power supply, DVCS intercom system, VHF AM com, emergency location transmitter, automatic direction finding, VHF NAV system, VHF NAV system ILS, marker beacon, distance measuring equipment, transponder, global positioning system, radar altimeter system, integrated electronic standby instrument system, CVFDR system, Vision 1000 cockpit camera, and maintenance software.

Electrical System Classroom 6.0 hours

SCOPE: Block of instruction shall include the electrical system, DC power, battery system, emergency power supply system, bonding system, external power supply system, AC power system, electrical power distribution, operation modes of the DC power system, and engine control for TM and PW.

Auto Pilot System (AFCS) Classroom 5.0 hours

SCOPE: Block of instruction shall include the automatic flight control system presentation, AFCS components, AFCS sensors, crew controls, actuators, crew displays, AFCS monitoring, AFCS modes and functions, navigation and approach upper modes, GPS-based modes, and AFCS maintenance mode.

Heating and Ventilation System Classroom 1.0 hours

SCOPE: Block of instruction shall include the heating and ventilation system architecture.

Lights Classroom 1.0 hours

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Exam Classroom 2.0 hours