



Technician Training

H135 / EC135 CPDS Classic Field Maintenance Training Course

15 Days / 3 Weeks

Classroom 68 Hours

Practical 22 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

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 following items shall serve as the training points for a typical H135 / EC135 CPDS maintenance 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.

Introduction

Classroom 2.0 hours

SCOPE: This block of instruction shall include student registration, orientation to the training facility and training center, course policies, and history of Airbus Helicopters Inc. and the EC135.

Publications

Classroom 2.0 hours

SCOPE: This block of instruction shall include the construction, content, use, effectivity, and revision procedure for the publications of EC135 helicopter. It shall include introduction to ATA format type maintenance documentation, introduction to manufacturer's forms, helicopter documentation, and component log cards.

Control Panels & Publications

Classroom 8.0 hours, Practical 2.0 hours

SCOPE: This block of instruction shall include identification, location, concepts of operation the instrument panel, warning unit, main switch panel, miscellaneous electrical panels and overhead console. Additionally, the analog flight instrument systems along with the various monitoring systems shall be explained.

General Maintenance Instructions

Classroom 4.0 hours

SCOPE: This block of instruction shall include a description of general maintenance practices for towing, moving, mooring, covering, hoisting and jacking helicopter.

Main Rotor System (Drive System)

Classroom 4.0 hours, Practical 8.0 hours

SCOPE: This block of instruction shall include description, operation, maintenance, and inspection of the main gearbox, rotor brake, free-wheel clutches and attachment of the main gearbox to the aircraft.

Practical instruction shall include the removal of the main rotor mast and spacer tube, free-wheel clutches and the associated seals for the input drives, accessory drive units, oil cooler blower assemblies, and oil coolers using specific to task special tools. Procedures for the practical exercise are outlined in the aircraft maintenance manual.



Main Rotor System (Rotors)

Classroom 3.0 hours, Practical 3.0 hours

SCOPE: This block of instruction shall include description, operation, maintenance, and inspection of the main rotor system, main rotor blades, and track and balance.

Practical instruction shall include removal and installation of the main rotor blades, main rotor lead-lag dampers and bearing support using specific to task special tools. Procedures for the practical exercise are outlined in the aircraft maintenance manual.

Fuselage (Airframe Structure)

Classroom 3.0 hours

SCOPE: This block of instruction shall include description, materials, and construction of the airframe structure to include cabin dimensions, fuel compartment locations, drain valves and vent holes.

Tail Unit (Tail Boom)

Classroom 2.0 hours

SCOPE: Block of instruction shall include identification, description, construction and materials used on the tail boom and Fenestron assembly, horizontal stabilizer and vertical stabilizers.

Tail Unit (Drive System)

Classroom 3.0 hours, Practical 3.0 hours

SCOPE: This block of instruction shall include identification, description of maintenance of the tail rotor drive shafts, hangar bearings, and tail rotor gearbox.

Practical instruction shall include the removal and installation of the tail rotor gearbox, input and output drive seals of the tail rotor gearbox, and tail rotor control unit using specific to task special tools. Procedures for the practical exercise are outlined in the aircraft maintenance manual.

Tail Unit (Rotors)

Classroom 3.0 hours, Practical 3.0 hours

SCOPE: This block of instruction shall include description, operation and maintenance of the tail rotor and balance of the Fenestron assembly.

Practical instruction shall include removal and installation of the tail rotor aft shaft and tail rotor hub assembly using specific to task special tools. Procedures for the practical exercise are outlined in the aircraft maintenance manual.



Exam

Classroom 3.0 hours

SCOPE: This block of instruction shall include administering the first airframe exam. The exam will be a comprehensive closed book multiple choice questions, and will include questions on information presented in each of the blocks of instruction presented during the first week of instruction. A review will be conducted to discuss the exam and to answer any student questions.

Flight Controls

Classroom 3.0 hours

SCOPE: This block of instruction shall include description, operation, inspection and maintenance of the flight control systems to include collective, cyclic and tail rotor flight control rigging procedures.

Flight Controls (Hydraulic System)

Classroom 2.0 hours, Practical 3.0 hours

SCOPE: This block of instruction shall include the description, operation, inspection, maintenance, and servicing of the aircraft hydraulic systems to include servo controls and monitoring of the systems.

Practical instruction shall include removal and installation of the main rotor servo and tail rotor hydraulic servos, hydraulic pump and reservoir, and servicing of the hydraulic system using specific to task special tools. Procedures for the practical exercise are outlined in the aircraft maintenance manual.

Landing Gear

Classroom 1.0 hours

SCOPE: This block of instruction shall include a description of the main landing gear and the maintenance and inspection requirements.

Power Plant (Turbomeca Arrius 2B & P&W 206B)

Classroom 6.0 hours

SCOPE: This block of instruction shall include a description of the Arrius 2B1, Arrius 2B2, Pratt & Whitney 206B, and Pratt & Whitney 206B2 turbo shaft engines, airframe interface and operation, maintenance, inspection, system monitoring, engine mounting, starting system, fire detection, and fire extinguishing systems.

Fuel and Lubrication System

Classroom 4.0 hours

SCOPE: This block of instruction shall include a description of the operation, inspection, and maintenance of the airframe fuel and lubrication system.



Standard Equipment

Classroom 2.0 Hours

SCOPE: This block of instruction shall include the description of operation, maintenance, and inspection of the windshield wipers, lighting systems, cockpit controls, heating and ventilating systems.

Optional Equipment

Classroom 2.0 Hours

SCOPE: This block of instruction shall include description, maintenance, and inspection of the Auto Pilot (AFCS) and Flight Control Display System (FCDS) systems and interface with the aircraft display systems.

Electrical Systems

Classroom 5.0 Hours

SCOPE: This block of instruction shall include description, operation, maintenance, and inspection of the D.C. and A.C. electrical systems to include automatic systems, functions, circuit protection, and voltage regulation.

Maintenance Inspections

Classroom 2.0 Hours

SCOPE: This block of instruction shall include a description of the required inspections intervals for inspections. Also current To Be Overhauled (TBO) and Time Change Items (TCI) will be discussed.

Exam and Critique

Classroom 3.0 Hours

SCOPE: This block of instruction shall include administering the second airframe exam and critique of the exam. The exam will be a comprehensive closed book multiple choice questions, and will include questions on information presented in each of the blocks of instruction presented during the second week of instruction. A review will be conducted to discuss the exam and to answer any student questions.