Technician Training

H145 Helionix® / BK117 D2 Differences Training Course

10 Days / 2 Weeks
Classroom 37 Hours
Practicals 23 Hours

Approved By: Ross McMichael_____Dated 01/06/2020

Instructor_____Dated ___/___/____

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 H145/BK117C2 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.

The following items shall serve as the training points for a typical H145 / BK 117D2 conversion 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 1.0 hours

SCOPE: Block of instruction shall include student orientation to the training facility, training materials, safety, policies, procedures, and any additional information relevant for the course.

General information Classroom 2.0 hours

SCOPE: Block of instruction shall include the general description and development of the BK117D2, review of the maintenance concept, documentation layout, Illustrated Parts Manual, Time Change item (TCI) Time Between Overhaul (TBO), Types of Inspections, descriptions of Inspections, Checks, Description of Scheduled Measures, and Abbreviations.

Fuselage Classroom 1.0 hours

SCOPE: Block of instruction shall include review and differences of the Fuselage, Reference Planes, Structure Definition, Airframe Structure, Cabin Structure, Drain System, Windshields, Windows, Doors, Access Panels, Interior Fairings, Cowlings, and Handling.

Landing Gear Classroom 1.0 hours

SCOPE: Block of instruction shall include the differences of the, operation, inspection, and maintenance of the Main Landing Gear Assembly.

Integrated Modular Avionics (IMA, HELONIX) Classroom 10.0 hours Practical 1.0 hour

SCOPE: Block of instruction shall include the general description of the HELONIX system architecture, Alerting System, IMA Tests, First Limit Indicator, UMS / VMS Textual Pages, Clock / Chronometer, FDCR, Usage Monitoring System, and Maintenance Software.

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

Flight Control System Classroom 2.0 hours Practical 9.0 hours

SCOPE: Block of instruction shall include the review and differences of the Main and Tail Rotor Systems, Main Rotor Controls, Non-Boosted main Rotor Control Section, Parallel Actuators - Cyclic Controls, Hydraulic System, Hydraulic Monitoring and Testing System, Boosted Main Rotor Control Section, Rigging of the Main Rotor Controls, Tail Rotor Control, Tail Rotor Actuator, Rotating Section of Tail Rotor Control, and Rigging of the Tail Rotor Control.

Practical Exercises will include rigging of the boosted and non-boosted flight controls (main and tail Rotor), review of hydraulic fluid replenishment, bleeding and fluid change, and hydraulic system pressure relief valve checks using special tools and procedures in the AMM.

Lifting System Classroom 2.0 hours Practical 5.0 hours

SCOPE: Block of instruction shall include general review and differences of the Main Transmission Monitoring and Indication, Main Rotor System, Track and Dynamical Balancing of Main Rotor System, and Rotor Brake System.

Practical instruction shall include the removal and installation procedures for the main rotor shaft, disassembly/assembly of the main rotor head using special tools and procedures according to the AMM.

Tail Unit Classroom 1.0 hours Practical 8.0 hours

SCOPE: Block of instruction shall include the general description, Tail Structure, Tail Rotor Drive, Tail Rotor Monitoring and Indication, Transmission Fairing, Tail Rotor Assembly, and Balancing of the Tail Rotor System.

Practical instruction shall include the removal, disassembly, assembly, and installation of the tail rotor assembly, removal and installation of the tail rotor transmission input and output seals using special tools and procedures in the AMM.

Power Plant Classroom 5.0 hours

SCOPE: Block of instruction shall include the review and differences of the engine, engine Integration, Fire Warning and Extinguishing System, Inlet Barrier Filter (Optional Equipment), Airframe Fuel System, Airframe Oil System, Oil System Monitoring and Indication, Engine Control System (FADEC), Engine Monitoring and Indication System, and Ignition System.

Standard Equipment Classroom 2.0 hours

SCOPE: Block of instruction shall include the review and differences of the Windshield Wiper, Heating and Ventilation system, Instrument Cooling System, Lighting Systems, and LAVCS Vibration Control System.

Avionics for Mechanic Classroom 1.0 hours

SCOPE: Block of instruction shall include the review and differences of the Avionics Systems, Avionics Power Supply, Avionics Deck Cooling, Intercom System (DVCS 6100), VHF AM Communication, ELT, ADF, VHF NAV System (VOR), ILS, Marker Beacon, DME, Transponder, GPS, Radar Altimeter System, Integrated Electronic Standby Instrument (IESI), CVDFR System, and the Vision 1000 Cockpit Camera.

Electrical System Classroom 5.0 hours

SCOPE: B Block of instruction shall include the review and differences of the Symbols and Codes of the electrical system, Locations of Main Components, Electrical Supply, Starter/Generator Control and Monitoring, Battery System, Emergency Power Supply System, External Power Supply System, AC Power System (Optional), Electrical Power Distribution System, Bus Tie Control System, Consumer Bus Bars, Operation Modes of the DC Power System, Start and Ignition System, and Lighting System.

Auto Pilot System (AFCS) Classroom 2.0 hours

SCOPE: Block of instruction shall include the general description, Electrical Power Supply Distribution, AFCS Overview, Crew Controls, Actuators, VMD SYST Page, and Maintainability / Testability.

Exam Classroom 2.0 hours

SCOPE: This block of instruction shall include administering an exam consisting of questions pertaining to the topics discussed during the course. The exam consists of fifty (50) multiple choice questions. A review will be conducted after every student has completed the exam to discuss the content and answer any questions from the students.