Technician Training

H145 Helionix® / BK117 D2 Avionics Training Course

15 Days / 3 Weeks
Classroom 90 Hours
Practical 0 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 H145 / BK 117D2 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.

Welcome Classroom 1.0 hour

SCOPE: Students will attend a session of introduction from our training staff. Familiarization to the training manual media and an orientation to the course learning management system will be provided during this session..

General Information Classroom 2.0 hours

SCOPE: This block of instruction will expose the development and general description of the H145. Subject matter of the maintenance concept and helicopter documentation will be discussed.

Integrated Modular Avionics Classroom 12.0 hours

SCOPE: Topics discussed during this block of instruction include the integrated modular avionics (IMA, HELIONIX), the alerting system, IMA tests, first limitation indicator (FLI), UMS / VMS textual pages and maintenance software.

Electrical System Classroom 12.0 hours

SCOPE: This block of instruction will provide identification, location and general maintenance for the airframe electrical components to include symbols and codes, starter/generator system, battery system, emergency power supply system, external power supply system, electrical power distribution, bus tie control system, operation modes of the DC power system, start and ignition system, and lighting system.

Avionics Classroom 18.0 hours

SCOPE: This block of instruction will include explanatory interaction and operation pertaining to the H145 airframe relating to antenna arrangement, instrument panel, avionic deck, avionic bay, pitot-static system, intercom system, VHF AM communication system, emergency locator transmitter, ADF system, VHF navigation system, instrument landing system, marker beacon, distance measuring equipment, transponder, global positioning system, radar altimeter system, integrated electronic standby instrument, CVFDR system, Vision 1000 cockpit camera and an overview of maintenance software..

Mechanical Systems Classroom 12.0 hours

SCOPE: This block of instruction will cover the main transmission and rotor monitoring systems, hydraulic monitoring and testing system, fuselage components, fuel monitoring and indication system, hydraulic monitoring and indication system, engine monitoring and indication system and the ventilation-heating system

AutoPilot System Classroom 21.0 hours

SCOPE: This block of instruction will include detailed description of system components to include parameters of the processing units, sensors, crew controls, actuators and displays. The operation of the autopilot will be explored with regards to engagement/ disengagement, basic stabilization, standard upper modes, navigation and approach upper Modes, GPS-based operation, AFCS-monitoring and maintainability/testability.

Optional Helionix Equipment Classroom 6.0 hours

SCOPE: This block of instruction provides additional information concerning optional systems. Systems reflected upon include synthetic vision system (SVS), helionix digital map (DMAP), airborne collision avoidance system (ACAS) and health monitoring system (HMS).

Exam and Critique Classroom 6.0 hours

SCOPE: Two blocks of time are reserved for administering the course curriculum examinations. Both examination part ‘A’ and part ‘B’ will be a comprehensive closed book multiple choice type exam and include questions on information presented in each of the blocks of instruction presented during the course of instruction. The averaged percentile of both tests will be the final examination score. Any final test score of 70% or higher will result in the student being issued a certificate of completion. A critique will be administered after the completion of exam part ‘B’.