



Technician Training

BK117 (A1, A3, A4, B1, B2, C1) Field Maintenance Training Course

60 Hours / 2 Weeks

Classroom 52.5 Hours

Practical 7.5 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 BK 117 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 1.0 hours

SCOPE: This block of instruction shall include student registration, orientation to the training facility, training center and course policies, history of Airbus and the BK 117.

Publications

Classroom 4.0 hours

SCOPE: This block of instruction will include construction, content, use, effectivity and revision procedures of publications for all models of helicopters utilizing the new manual format, to include Airbus forms, helicopter records, and component logs.

Control Panels & Publications

Practical 1.5 hours

SCOPE: This block of instruction will include identification, location and general maintenance for the instrument panel, annunciator panel, D.C. power control panel, main switch panel, miscellaneous switch panel and overhead console. In addition, the flight instruments, engine and transmission monitoring instruments and miscellaneous systems monitoring instruments will be explained.

General Maintenance Instructions

Classroom 2.5 hours

SCOPE: This block of instruction will include a description of general maintenance practices for towing, moving, mooring, covering, hoisting and jacking. Leveling and dimension check, weight and balance, and location of required decals and signs.

Main Rotor System (Drive System)

Classroom 2.5 hours, Practical 6.0 hours

SCOPE: This block of instruction will include description, operation, maintenance, and inspection of the main gearbox, rotor brake and attachment of the main gearbox to the aircraft.

Practical instruction shall include the removal of the main rotor mast & spacer tube, free-wheel clutches, and the associated seals for the input drives and tail rotor out-put drive using specific to task special tools. Procedures for PE are outlined in the AMM.



Main Rotor System (Rotors)

Classroom 2.5 hours

SCOPE: This block of instruction will include description, operation, maintenance, and inspection of the main rotor head and main rotor blades, track and balance, and auto-rotation RPM adjustment.

Airframe

Classroom 2.0 hours

SCOPE: This block of instruction will include the identification, description, and construction of the airframe structure and include cabin and baggage compartment dimensions. Locations of drain valves and 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 2.5 hours, Practical 2.0 hours

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

Practical instruction shall include the removal and installation of input and output drive seals of the tail rotor gearbox using specific to task special tools. Procedures for PE are outlined in the AMM.

Tail Unit (Rotors)

Classroom 2.5 hours, Practical 2.0 hours

SCOPE: This block of instruction will include identification, description, maintenance, and inspection of the tail rotor system.

Practical instruction shall include removal and installation of the tail rotor forked shaft. Removal, installation, and shimming of the tail rotor head to shaft fork using specific to task special tools. Procedures for PE are outlined in the AMM.

**Exam**

Classroom 2.0 hours

SCOPE: This block of instruction will include administering the first airframe exam. The exam 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 first week of instruction. A critique will be conducted to discuss the exam and to answer any student questions.

Flight Controls

Classroom 2.0 hours

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

Flight Controls (Hydraulic System)

Classroom 4.0 hours

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

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 (LTS 101 & Arriel 1E2)

Classroom 6.0 hours

SCOPE: This block of instruction will include description, operation, maintenance, and inspection of the powerplant to include control rigging, systems monitoring, engine mounting, starting system and fire detection and extinguishing systems.

Fuel and Lubrication System

Classroom 2.0 hours

SCOPE: This block of instruction will include description, operation, maintenance, and inspection of the airframe fuel and lubrication systems.



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.

Electrical Systems (Single & Dual Bus Systems)

Classroom 6.0 Hours

SCOPE: This block of instruction will include description, operation, maintenance, and inspection of the Single Bus and Dual Bus D.C. and A.C. electrical systems to include automatic system functions and voltage regulation adjustment.

Maintenance Inspections

Classroom 1.0 Hours

SCOPE: This block of instruction will include a description of the required inspections, the need for inspections and types of inspections. Component TBO's and TCI's will also be discussed.

Exam and Critique

Classroom 2.0 Hours

SCOPE: This block of instruction will include administering the final airframe exam and course critique. The exam 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 second week of instruction. A critique will be conducted to discuss the exam and answer any student questions.