

**Technician Training** 

# EC155 B/B1 series Field Maintenance Training Course

15 Days / 3 Weeks
Classroom 77 Hours
Practical 25 Hours

Approved By: Ross McMichael	Date:_	_01/06/2020
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Instructor\_\_\_\_\_\_Date\_\_\_/\_\_\_\_

Rev. 2.2





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 EC155 series 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: History of airbus helicopters. Introduction to the EC155 series helicopter.

Publications Classroom 4.0 hours

SCOPE: This block of instruction will include construction, content, use, effectivity and revision procedures for Keycopter (O.R.I.O.N.) publications and the new ATA 100 specification revision 34 code numbering system. A quiz will be conducted on the material presented.

Airframe Classroom 6.0 hours

SCOPE: This block of instruction will include the identification, description, and construction of the five main airframe sections and include cabin and baggage compartment dimensions, jacking and leveling procedures, maintenance and troubleshooting of the doors, windows and stabilizers . A quiz will be conducted on the material presented.

# **Main Rotor Drive**

Classroom 4.0 Hours, Practical 7.0 hours

SCOPE: This block of instruction will include description, operation, maintenance, inspection and troubleshooting of the spheriflex rotor head, and main rotor blades. A quiz will be conducted on the material presented.

#### **Main Rotor System**

Classroom 5.0 Hours, Practical 10.0 hours

SCOPE: Description, construction, maintenance, inspection and troubleshooting of the main rotor shaft, practical work includes removal, disassembly and reinstallation of the components and swashplate assemblies. Quiz covering the material.





# **Tail Rotor Drive System**

Classroom 4.0 Hours, Practical 4.0 hours

SCOPE: This block of instruction will include description, operation, maintenance, inspection and troubleshooting of the tail rotor drive shafting, tail rotor gearbox and tail rotor. A quiz will be conducted on the material presented.

Exam 1 Classroom 2.0 hours

Flight Controls Classroom 2.0 hours

SCOPE: This block of instruction will include description, operation, maintenance, inspection and troubleshooting of the main and tail rotor flight control systems to include rigging procedures. A quiz will be conducted on the material presented.

# **Hydraulic Systems and Servo Controls**

Classroom 4.0 hours

SCOPE: This block of instruction will include description, operation, maintenance, inspection and troubleshooting of each of the aircraft three hydraulic systems to include servo controls and monitoring of the systems. A quiz will be conducted on the material presented.

## **Landing Gear**

Classroom 4.0 hours, Practical 4.0 hours

SCOPE: This block of instruction will include description, operation, maintenance, inspection and troubleshooting of the landing gear system to include mechanical, hydraulic and electrical operations, and monitoring and control of the system. A quiz will be conducted on the material presented.

Fuel System Classroom 5.0 hours

SCOPE: This block of instruction will include description, operation, maintenance, inspection and troubleshooting of the airframe fuel system to include systems monitoring and controls. A quiz will be conducted on the material presented.

Electrical System Classroom 6.0 Hours

SCOPE: This block of instruction will include description, operation, maintenance, inspection and troubleshooting of the D.C. Electrical systems to include automatic system functions and voltage regulation adjustment. A guiz will be conducted on the material presented.





Powerplant Classroom 8.0 Hours

SCOPE: This block of instruction will include description, operation, maintenance, inspection and troubleshooting of the powerplant to include engine controls, systems monitoring, engine mounting, starting system and fire detection and extinguishing systems. A quiz will be conducted on the material presented.

# **Miscellaneous Equipment**

Classroom 3.5 Hours

SCOPE: This block of instruction will include description, operation, maintenance, inspection and troubleshooting of the aircraft's miscellaneous equipment to include windshield wipers, lighting systems, instrument and cockpit controls. A guiz will be conducted on the material presented.

# **Indicating and Recording Systems**

Classroom 3.5 Hours

SCOPE: This block of instruction will include description, operation, maintenance and troubleshooting of the ancillary system units, caution advisory panel to include the VEMD and CAD system. A quiz will be conducted on the material presented.

Navigation System Classroom 4.0 Hours

SCOPE: This block of instruction will include description, operation, maintenance and troubleshooting of the avionique nouvelle avionics systems. A quiz will be conducted on the material presented

Classroom 2.0 hours

#### **Virtual Maintenance Trainer**

Practical 8.0 Hours

SCOPE: This block of instruction will include the use of the VMT. The software allows the student to follow a training path as close to the maintenance procedure described in the work cards. Practical training will be carried out on equipment, engine removal and auto pilot functional tests. Location of H/C component in order to acquire knowledge on systems, maintenance and troubleshooting.

Exam 2 Classroom 2.0 hours

