



**Technician Training**

# **BO 105 Series Field Maintenance Refresher Training Course**

**7 Days**

**Classroom 42 Hours**

**Practical As Requested**

Approved By: Ross McMichael \_\_\_\_\_ Date 05/06/2020

Instructor \_\_\_\_\_ Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Rev. 1.0

**AIRBUS**



This course is comprised of a theoretical presentation and practical exercises necessary to adequately review the basic aircraft systems and perform specific maintenance tasks described in Airbus maintenance documentation. Also, review of recent ASB/EASBs and modifications to the aircraft will be presented. Following the successful completion of this course, technicians should be familiar with the systems described in regards to field level maintenance activities necessary to maintain the helicopter up to, but not including, "Depot" level maintenance tasks.

#### **ORGANIZATIONAL LEVEL:**

Daily servicing of, maintenance checks, inspections for condition, exchange of line replaceable units (LRU) in accordance with the aircraft maintenance manual.

#### **INTERMEDIATE LEVEL:**

Repair on or off of the helicopter, extended periodical inspections according to aircraft maintenance manual by qualified personnel with test equipment and special tools as required.

#### **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
- Previous BO105 series Field Maintenance course

#### **NOTICES:**

Airbus 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 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 BO105 Series maintenance refresher 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, course policies, and history of Airbus and the BO105.

## **PUBLICATIONS**

Classroom 2.0 Hours

SCOPE: This block of instruction shall include new O.R.I.O.N. publications, to include ASB's/SB's as they apply to the BO105 series helicopter, construction, content, use, effectivity and revisions of the Airbus World publications.

## **CONTROL PANELS & INSTRUMENTS**

Classroom 6.0 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 2.0 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 2.0 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.





## **MAIN ROTOR SYSTEM (ROTORS)**

Classroom 2.0 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.

## **FUSELAGE (AIRFRAME STRUCTURE)**

Classroom 1.0 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 1.0 Hours

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

## **TAIL UNIT (DRIVE SYSTEM)**

Classroom 2.0 Hours

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

## **TAIL UNIT (ROTORS)**

Classroom 2.0 Hours

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

## **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

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.

## **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.

## **POWERPLANT**

Classroom 2.0 Hours

SCOPE: This block of instruction shall include a description of the Allison 250 Series shaft engines, airframe interface and operation, maintenance, inspection, system monitoring, engine mounting, starting system, fire detection, and fire extinguishing systems.

## **FUEL AND LUBRICATION SYSTEMS**

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 3.0 Hours

SCOPE: This block of instruction shall include description, maintenance, and inspection of installed Optional Equipment.



## **ELECTRICAL SYSTEMS**

Classroom 2.0 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**

SCOPE: There are no exams required for this Refresher Course. The student is requested to provide a course critique.