Technician Training

EC130 / H130 series
Field Maintenance
Training Course

10 Days / 2 Weeks
Classroom  40 Hours
Practical  20 Hours

Approved By: Ross McMichael __________________________ Date: 01/06/2020

Instructor __________________________ Date: ___/___/_____
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 EC130 / H130 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

SCOPE: History of Airbus helicopters, Introduction to the EC130 / H130 series helicopter.

Classroom 1.0 hours

Publications

SCOPE: New O.R.I.O.N. publications, ATA 100 specifications as it applies to the EC130/H130 series helicopters, construction, content, use, effectivity and revisions of the Keycopter publications. Quiz covering the material.

Classroom 4.0 hours

Overview / Structure

SCOPE: Description, construction, maintenance, and inspection of the primary and secondary structure, fenestron and landing gear. Quiz covering the material.

Classroom 4.0 hours

Main Rotor Drive System

SCOPE: Description, construction, maintenance, troubleshooting and inspection of the gearbox, gearbox lubrication system, engine drive and rotor brake. Practical work includes removal and installation of the gearbox modules, input seal, rotor brake and drive shaft. Quiz covering the material.

Classroom 2.0 hours Practical 4.0 hours

Main Rotor

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.

Classroom 1.0 hours Practical 5.0 hours

Main Rotor Head

SCOPE: Description, construction, maintenance, inspection removal and installation starflex,spring vibration absorber and blades including their new individual technology. Quiz covering the material.

Classroom 2.0 hours Practical 3.0 hours
General Exam Number 1

Tail Rotor Gearbox System

Classroom 1.0 hours  Practical 1.5 hours

SCOPE: Description, construction, maintenance, inspection and troubleshooting of the tail rotor gear box and drive shafts. Practical work consists of bearing removal, and replacement tail rotor gearbox input and output seals replacement. Quiz covering the material.

Tail Rotor Hub (Fenestron)

Classroom 1.5 hours  Practical 2.5 hours

SCOPE: Description, construction, maintenance of the fenestron. Practical work includes removal and reinstallation. the inspection criteria of the tail rotor blades, hub assembly, including pitch-change spider, inner and outer bearings, laminated tension torsion bars and blade bushing replacement dynamic balancing is covered. Quiz covering the material.

Electrical Power System

Classroom 3.0 Hours

SCOPE: Description, operation, maintenance and troubleshooting of the electrical system including the post-mod multibloc electrical system. Quiz covering the material.

Tandem Servo and Hydraulic System

Classroom 2.5 hours  Practical 0.5 hours

SCOPE: Description, operation, maintenance, inspection and troubleshooting of the tandem servos and the dual hydraulic systems. Practical work includes removal and reinstallation of hydraulic pumps, and the replacement of the gear box driven pump seals. Quiz covering the material.

Rotor Controls (Flight)

Classroom 1.5 hours  Practical 2.0. hours

SCOPE: Description, construction, operation, maintenance and rigging of the flight controls. Practical work includes rigging the aircraft flight controls and tail rotor controls. Quiz covering the material.

Fuel System

Classroom 1.5 hours

SCOPE: description, operation, maintenance, inspection and troubleshooting of fuel system including the post-mod rupture resistant fuel tank. Quiz covering the material.
Lighting, Equipment and Furnishings  
Classroom 1.0 hours  
SCOPE: Description, operation and troubleshooting of the lighting and fire detection systems. Description of available furnishings for the EC130 / H130 series helicopters. Quiz covering the material.

VEMD / Instruments  
Classroom 2.0 hours Practical 1.5 hours  
SCOPE: Description of the operating modes of the VEMD. Configuration, maintenance, flight reports, failures, over limits and power checks maintenance, inspection of all instruments and their respective systems. Quiz covering the material.

Engine Installation 2B1 / 2D  
Classroom 4.5 hours Practical 1.5 hours  
SCOPE: Description, engine operating controls, starting system, twist grip, fuel metering, engine back-up control ancillary unit, collective pitch and yaw anticipator operation and rigging. Troubleshooting techniques of engine failures codes. Engine removal and VEMD system operation. Quiz covering the material.

Active Vibration Control System  
Classroom 1.5 hours  
SCOPE: Description, AVCS system operation and troubleshooting techniques. Quiz covering the material.

Air Conditioning and Heating  
Classroom 2.0 hours  
SCOPE: Description, cooling and heating system operation and troubleshooting techniques. Quiz covering the material.

Radio and Navigation  
Classroom 1.5 Hours  
SCOPE: Description, operation and function of the Radio and Navigation systems. available for the EC130/H130 series helicopters. Quiz covering the material.

Review, Final Exam & Critique  
Classroom 1.0 hours  
SCOPE: General review of material covered. Final examination, review of examination.