



Australian Government

**Assessment Requirements for
MEAAVI0015 Inspect, test and
troubleshoot rotary wing autopilot systems
and components**

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Modification History

Release 1. Application changed. Elements and Performance Criteria changed. Foundation Skills made explicit. Range of Conditions removed, and relevant information moved to Assessment Requirements. Assessment Requirements clarified. Supersedes and is equivalent to MEA218 Inspect, test and troubleshoot rotary wing autopilot systems.

Performance Evidence

There must be evidence the candidate has completed all the tasks outlined in the elements and performance criteria of this unit, and demonstrated the ability to:

- perform inspection, testing and troubleshooting on a rotary wing aircraft autopilot system (which may include one incorporating a radio-coupled flight director) and its components during scheduled or unscheduled maintenance at least once
- recognise system and component defects, external damage, correct or incorrect installation, connection of plugs, terminations, attachment hardware (including cabling/harnesses) and security in each of the following:
 - flight director components and interface
 - autopilot system components
- perform functional testing by applying logic processes, taking and interpreting system measurements and using test equipment and appropriate wiring diagrams and manuals to accurately and effectively isolate malfunctions and assess post-maintenance serviceability in the listed systems
- apply testing procedures, cleanliness requirements and safety precautions at all times, and as relevant to the system/s being maintained.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- component attachment methods
- the basic layout (block diagram level), function and operation of:
 - flight director components and interface
 - autopilot system components
- integration with other avionic systems, e.g. flight management systems and navigation systems
- flight director and autopilot system maintenance requirements and troubleshooting procedures
- work health and safety (WHS) practices for rotary wing autopilot systems and components
- basic principles/functions, relating to the above-listed systems and associated with:

- basic alternating current (AC) and direct current (DC) circuit theory
- digital fundamentals
- analogue fundamentals
- rotary wing flight theory
- inner and outer loop control
- flight control modes/channels
- maintenance manuals for rotary wing autopilot systems and components
- relevant regulatory requirements and standard procedures.

Assessment Conditions

The following conditions of assessment represent the requirements of the regulators (DASA and CASA) and maintenance stakeholders and must be rigorously observed.

Skills must have been demonstrated under routine supervision in the workplace or in a simulated environment that reflects workplace conditions and contingencies encountered in inspecting, testing and troubleshooting rotary wing autopilot systems and components. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - workplace procedures, manufacturing specifications, codes, standards, manuals, and reference materials relevant to inspecting, testing and troubleshooting rotary wing autopilot systems and components
 - tools and equipment specified in the maintenance manuals
 - general and special-purpose tools and items of ground support and test equipment required for inspecting, testing and troubleshooting rotary wing autopilot systems and components.

Evidence of tasks demonstrating competency must be recorded in a log of industrial experience and achievement.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>