



Australian Government

Assessment Requirements for MEAAVI0012 Inspect, test and troubleshoot advanced aircraft communications systems and components

Assessment Requirements for MEAAVI0012 Inspect, test and troubleshoot advanced aircraft communications systems and components

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 MEA215 Inspect, test and troubleshoot advanced aircraft communications systems and components.

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 advanced aircraft communications systems and components during scheduled or unscheduled maintenance on a system for at least one major system component or line replaceable unit (LRU) from each of the following:
 - ultra-high frequency (UHF) and satellite communications (SATCOM)
 - intercommunication and cockpit voice recorder (CVR) systems.
- recognise system and component defects, external damage, correct/incorrect installation, attachment hardware (including cabling/harnesses/transmission lines) and security in each of the following:
 - external communications systems (UHF and SATCOM)
 - internal communications systems (intercommunication and CVR)
- perform functional testing by applying logic processes, taking and interpreting system measurements to accurately and effectively isolate malfunctions and faults within the listed systems and assess post-maintenance serviceability
- apply testing procedures, cleanliness requirements and safety precautions at all times, and as relevant to the systems 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:
 - external communications systems (UHF and SATCOM)
 - internal communications systems (intercommunication and cockpit voice recorders)
- maintenance requirements for the above systems and troubleshooting procedures
- work health and safety (WHS) practices for advanced aircraft communications systems and components

- basic principles/functions, relating to the above-listed systems and associated with:
 - electromagnetic radiation and propagation
 - basic alternating current (AC) and direct current (DC) circuit theory
 - printed circuit boards
 - digital fundamentals
 - analogue fundamentals
 - transmitter and receiver principles
 - antenna characteristics
 - transmission line characteristics
- maintenance manuals for the inspection, testing and troubleshooting of advanced aircraft communications 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 advanced aircraft communications 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 advanced aircraft communications systems and components
 - tools and equipment specified in the maintenance manuals
 - general and special-purpose tools and items of ground support and test equipment.

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