



Australian Government

**Assessment Requirements for
MEAAVI0017 Inspect, test and
troubleshoot aircraft primary radar
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 MEA220 Inspect, test and troubleshoot aircraft primary radar 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 aircraft primary radar systems during scheduled or unscheduled maintenance on a primary radar system and at least one major system component or line replacement unit (LRU)
- recognise system and component defects, external damage, correct/incorrect installation, connection of plugs, terminations, attachment hardware (including cabling/harnesses/transmission lines/wave guides) and security in radar (navigation/weather) system components and interface
- perform functional testing by applying logic processes and taking and interpreting system measurements to accurately and effectively isolate malfunctions within the system and system components and assess the system's post-maintenance serviceability.
- 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 primary radar systems
- basic principles/functions relating to the system components and associated with:
 - basic alternating current (AC) and direct current (DC) circuit theory
 - digital fundamentals
 - analogue fundamentals
 - radar fundamentals
 - transmission lines, waveguide and antenna characteristics
- primary radar system maintenance requirements and troubleshooting procedures
- work health and safety (WHS) practices for aircraft primary radar systems including those relating to ground functional testing of radar systems
- maintenance manuals for aircraft primary radar 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 aircraft primary radar 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 aircraft primary radar systems and components
 - tool 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.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371>