

# Assessment Requirements for MEAAVI0048 Inspect, test and troubleshoot aircraft instrument display 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 MEA278 Inspect, test and troubleshoot instrument display 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 instrument display systems and components during scheduled or unscheduled maintenance on a system and on at least one major system component of each of the following:
  - electronic flight instrument system (EFIS)
  - engine indicating and crew alerting system (EICAS)
  - electronic central aircraft monitoring (ECAM)
  - head-up display (HUD) (where applicable to the enterprise)
- recognise system and component defects, external damage, correct or incorrect installation, connection of plugs, terminations, and attachment hardware (including cabling or harnesses) for the systems being maintained
- perform functional testing by applying logic processes and using appropriate wiring diagrams and manuals to isolate instrument display system malfunctions and assess 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:

- standard trade practices relating to tool and test equipment usage and installation or securing of system components
- the basic layout (block diagram level) of EFIS, EICAS, ECAM, and HUD (where applicable to the enterprise)
- the operating principles of EFIS, EICAS, ECAM, and HUD (where applicable to the enterprise) and associated with:
  - electrical and instrument fundamentals relating to multi-function display systems
  - interpretation of display information and display screen symbol generation
  - the operation of each listed system and system components
- work health and safety (WHS) procedures for instrument display systems and components

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- relevant Aeronautical Radio Incorporated (ARINC) specifications (avionic data bus)
- · maintenance manuals for instrument display systems and components
- maintenance requirements and troubleshooting procedures
- relevant regulatory requirements and standard procedures, including software management control.

#### **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 instrument display 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 instrument display systems and components
  - tools and equipment specified in maintenance documentation
  - general-purpose tools and test equipment found in most routine situations and required for inspecting, testing and troubleshooting instrument display 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

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