Australian Government

MEA224 Inspect aircraft instrument systems and components

Release: 2

MEA224 Inspect aircraft instrument systems and components

Modification History

Release 2. Equivalent to MEA224 Inspect aircraft instrument systems and components with amended prerequisite codes.

Application

This unit of competency requires application of hand skills and the use of system/component knowledge and applicable maintenance publications to inspect aircraft instrument systems and components of fixed and rotary wing aircraft during scheduled or unscheduled maintenance. Work may be performed individually or as part of a team.

The unit is part of the Avionic Certificate IV (Aircraft Maintenance Stream) training pathways.

The unit is used in workplaces that operate under the airworthiness regulatory systems of the Australian Defence Force (ADF) and the Civil Aviation safety Authority (CASA).

Where a CASA licensing outcome is sought this unit forms part of the CASA requirement for the granting of the chosen maintenance certification licence under Civil Aviation Safety Regulation (CASR) Part 66, in accordance with the licensing provisions in the Companion Volume Implementation Guide.

Pre-requisite Unit

MEA246	Fabricate and/or repair aircraft electrical hardware or parts
MEA292	Remove and install advanced aircraft instrument system components

Competency Field

Aviation maintenance

Unit Sector

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Inspect instrument systems and	1.1 Isolation tags are checked and aircraft configured for safe system inspection and operation in accordance with

components	the applicable maintenance manual
	1.2 Instrument system components are visually or physically checked for external signs of defects in accordance with applicable maintenance manual while observing all relevant work health and safety (WHS) requirements
	1.3 Defects are correctly identified and recorded in accordance with standard enterprise procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Instrument systems and components include:	• Flight instruments, including pitot/static systems, airspeed indicators (ASIs), vertical speed indicators (VSIs), altimeters, altitude alerting and reporting, turn and bank and slip/turn coordinators, directional gyros (DGs) and artificial horizons (AHs) (air and electrically driven) • Machmeters, air data systems, angle of attack, stall warning and avoidance systems • Flight data recorders (FDRs) • Engine indication systems • Magnetic compasses and attitude and heading reference system (AHRS) • Miscellaneous instrument systems, including pressure measurement, fuel quantity, fuel flow, position indication, voltage and frequency, current and power • Ground proximity warning system (GPWS)
Procedures and requirements include:	• Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Unit Mapping Information

Release 2. Equivalent to MEA224 Inspect aircraft instrument systems and components

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=ce216c9c-04d5-4b3b-9bcf-4e81d0950371