



**Australian Government**

**MEA233 Inspect, test and troubleshoot  
aircraft inertial navigation and reference  
systems and components**

**Release: 1**

# **MEA233 Inspect, test and troubleshoot aircraft inertial navigation and reference systems and components**

## **Modification History**

Release 1 - New unit of competency

## **Application**

This unit of competency requires application of hand skills and the use of system/component knowledge and applicable maintenance publications and test equipment to inspect, test and troubleshoot inertial navigation and reference 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 pathway.

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**

MEA207            Remove and install aircraft electronic system components

MEA246            Fabricate and/or repair aircraft electrical components or parts

## **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.

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|---|--|
| 1. Inspect inertial navigation and reference systems and components     | 1.1 Isolation tags are checked and aircraft configured for safe system inspection and operation in accordance with the applicable maintenance manual   |
|   | 1.2 Inertial navigation and reference 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 reported  |
| 2. Test/adjust inertial navigation and reference systems and components | 2.1 Aircraft and system are prepared in accordance with applicable maintenance manual for the application of power/system operation  |
|   | 2.2 Inertial navigation and reference system is functionally tested in accordance with maintenance manual for evidence of serviceability or malfunction  |
|   | 2.3 System calibration or adjustments are performed in accordance with maintenance manual, as appropriate  |
| 3. Prepare for troubleshooting  | 3.1 Relevant maintenance documentation and modification status, including system defect reports, where relevant, are used to identify an unserviceability  |
| 4. Troubleshoot inertial navigation and reference systems               | 4.1 Available information from maintenance documentation, inspection and test results is used, where necessary, to assist in fault determination   |
|   | 4.2 Maintenance manual fault diagnosis guides and logic processes are used to ensure efficient and accurate troubleshooting to line replaceable level  |
|   | 4.3 Specialist advice is obtained, where required, to assist with the troubleshooting process  |
|   | 4.4 Inertial navigation and reference system faults are located and the causes of the faults are clearly   |

identified and correctly recorded in maintenance documentation, where required

#### 4.5 Rectification requirements are determined

## 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.

### Procedures and requirements include:

- Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

## Unit Mapping Information

Release 1 – equivalent to MEA233C Inspect, test and troubleshoot aircraft inertial navigation and reference systems and components

## Links

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