



**Australian Government**

**MEA252 Test, align and troubleshoot  
aircraft synchro and servo system  
components**

**Release: 2**

# MEA252 Test, align and troubleshoot aircraft synchro and servo system components

## Modification History

Release 2. Equivalent to MEA252 Test, align and troubleshoot aircraft synchro and servo system components with amended prerequisite codes.

## Application

This unit of competency requires application of hand skills, test equipment and knowledge of analogue theory to test, align and troubleshoot synchro and servo components, from fixed and rotary wing aircraft, that are repaired or overhauled in aviation maintenance workshops 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 (Component Maintenance Workshop 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).

## Pre-requisite Unit

MEA201	Remove and install miscellaneous aircraft electrical hardware/components
MEA261	Use electronic test equipment
MEA296	Use electrical test equipment in aviation maintenance activities

## 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. Test synchro and servo system | 1.1 Synchro and servo system components are correctly prepared and connected to the appropriate test |
|----------------------------------|--|

components		equipment/rig in accordance with approved procedures
	1.2	Components are functionally tested or cycled through the prescribed test procedures in accordance with maintenance manual for evidence of serviceability or malfunction while observing all relevant work health and safety (WHS) requirements
	1.3	Faults or unserviceabilities are correctly identified and recorded on appropriate maintenance documentation
2. Align synchro and servo system components	2.1	Synchro and servo system components are adjusted in accordance with approved procedures and maintenance manuals until operating within prescribed limits/tolerances
3. Troubleshoot synchro and servo system components	3.1	Available information from maintenance records and inspection and test results is used, where necessary, to assist in fault determination
	3.2	Maintenance manual fault diagnosis guides and logic processes are used to ensure efficient and accurate troubleshooting
	3.3	Synchro and servo system component faults are located and the causes of the faults are clearly identified and correctly recorded in maintenance documentation, where required
	3.4	Fault 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.

**Component testing, alignment and troubleshooting is performed on:**

- Synchro system components
- Servo system components

- Synchro and servo system components can come from any of:**
- Air data computers, auto pilot servos, remote position indicators and other similar applications
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- Procedures and requirements include:**
- Industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

## Unit Mapping Information

Release 2. Equivalent to MEA252 Test, align and troubleshoot aircraft synchro and servo system components

## Links

Companion Volume implementation guides are found in VETNet -

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