Australian Government

Department of Education, Employment and Workplace Relations

MEA206C Remove and install aircraft basic radio communication and navigation system components

Release: 2

MEA206C Remove and install aircraft basic radio communication and navigation system components

Modification History

Minor formatting and editorial changes made. Additional assessment advice provided in the Evidence Guide.

Unit Descriptor

This unit of competency is part of the Avionic Certificate IV AME training pathway. It covers the competencies required for the removal and installation of basic communication and navigation system components of both fixed and rotary wing aircraft. The unit is used in workplaces that operate under the airworthiness regulatory systems of the ADF and CASA.

Where a CASA licensing outcome is sought this unit forms part of the CASA requirement for the granting of the chosen Aircraft Maintenance Engineer Licence under CASR Part 66, in accordance with the licensing provisions in Section 3, Assessment Guidelines.

Application of the Unit

This unit requires application of hand skills and the use of maintenance documentation/publications in the removal and installation of basic radio communication and navigation system components.

Applications include fixed and rotary wing aircraft that are fitted with basic radio communication and navigation system components.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

MEA201B   Remove and install miscellaneous aircraft electrical hardware/components

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1.	Remove basic radio communication and navigation system components	1.1. System is rendered safe and prepared in accordance with the applicable ma and isolation tags are fitted where necessary to ensure personnel safety
		1.2. ***Communication and navigation system component*** removal is carried out the applicable maintenance manual
		1.3. Required maintenance documentation is completed and processed in accord enterprise procedures
		1.4. Removed components are tagged and packaged in accordance with specifie
2.	Install basic radio communication and navigation system components	2.1. Communication and navigation system components to be installed are chec correct part numbers, modification status, serviceability and shelf life
		2.2. Physical installation of components is performed in accordance with the ap maintenance manual and regulatory requirements, ensuring appropriate adju carried out
		2.3. System is reinstated to correct operational condition in preparation for testi
		2.4. Required maintenance documentation is completed and processed in accord enterprise procedures

Required Skills and Knowledge

Required skills

Look for evidence that confirms skills in:

- locating and identifying radio communication and navigation system components comprising:
  - HF and VHF communications
  - VOR and ADF navigation systems
  - ELT systems
- locating and identifying applicable radio system antennas
- removing and installing communication and navigation system components, including antennas
- applying relevant OHS practices

Required knowledge

Look for evidence that confirms knowledge of:

- component attachment methods
- connection of hardware, and plugs
- handling precautions for electrostatic sensitive devices
- relevant OHS practices
- the use of approved maintenance documentation and aircraft publications relating to radio communication and navigation systems and components
- basic layout and working principles to block diagram level of:
  - HF communication systems
  - VHF communication systems
  - ADF navigation systems
  - VOR navigation systems
  - ELT systems
- relevant regulatory requirements and standard procedures

Evidence Guide

The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	

Overview of assessment	A person who demonstrates competency in this unit must be able to remove and install the components of aircraft basic communication and navigation systems while observing all relevant safety and component handling precautions.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	It is essential that cleanliness requirements and safety precautions applicable to the system being maintained are fully observed, understood and complied with, as well as work practices associated with electrostatic sensitive devices. Evidence of transferability of skills and knowledge related to removal and installation is essential. This is to be demonstrated by application across a range of radio communication and navigation system components as listed in the Range Statement. An understanding of the attachment methods, connection of hardware, and the need for adjustment or calibration and system operation as they relate to the work must be demonstrated before undertaking any action. The work plan should take account of applicable safety and quality requirements in accordance with the industry and regulatory standards. A person cannot be assessed as competent until it can be demonstrated to the satisfaction of the workplace assessor that the relevant elements of the Unit of Competency are being achieved under routine supervision on at least one item from each of Groups 1 to 3 listed in the Range Statement. This shall be established via the records in the Log of Industrial Experience and Achievement or, where appropriate, an equivalent Industry Evidence Guide.
Context of and specific resources for assessment	Competency should be assessed in the work environment, using tools and equipment specified in maintenance manuals. It is also expected that general-purpose tools, test and ground support equipment found in most routine situations would be used where appropriate.
Method of assessment	

Guidance information for assessment	Individuals being assessed who have already attained MEA207C Remove and install aircraft electronic system components, will have covered a significant amount of the skill and knowledge requirements for this unit plus part of the Performance Criteria for Elements 1 and 2 and associated Range Statement items. Those who have attained MEA276A Maintain basic light aircraft communication and radio navigation systems and components, or MEA289A Maintain basic light aircraft avionic systems and components, will have fully covered the requirements for this unit in common Range Statement variables. Log of Industrial Experience and Achievement records relating to MEA207C Remove and install aircraft electronic system components, MEA276A Maintain basic light aircraft communication and radio navigation systems and components and MEA289A Maintain basic light aircraft avionic systems and components, may be accepted as also meeting the evidence requirements for this unit in the applicable areas.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Note	Range statements listed below are numbered to facilitate specification of the assessment requirements included in the Evidence Guide
Communication and navigation system components	Communication and navigation system components may include: 1.　HF and VHF communication and applicable antennas 2.　ADF and VOR navigation and applicable antennas 3.　ELT
Application	Application of this unit may relate to: • scheduled or unscheduled maintenance activities • individual or team-related activities
Procedures and requirements	Refer to industry standard procedures specified by manufacturers, regulatory authorities or the enterprise

Unit Sector(s)

Aviation maintenance

Competency field

Co-requisite units

Not applicable

Manufacturing Skills Australia