



Australian Government

Assessment Requirements for MEA266 Terminate and repair aircraft optical fibre cable

Release: 1

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Modification History

Release 1 - New unit of competency

Performance Evidence

Evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria under the specified conditions of assessment, and must include:

- observing WHS procedures and selecting and correctly using PPE, including observance of laser safety procedures
- fitting optical connectors
- cleaning and polishing of optical connectors
- repairing optical fibre cable by splicing
- thorough clean-up of work area and correct packaging and disposal of waste
- testing of terminated and repaired optical fibre cables
- connecting optical fibre cable to the light transmitter and optical receiver.

Knowledge Evidence

Evidence required to demonstrate competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria and include knowledge of:

- types of optical connector
- materials and procedures for cleaning and polishing optical connectors
- tools and materials used for fitting optical connectors
- optical fibre cable construction and characteristics, including:
 - strain relief and bend radius
 - cable installation precautions
- methods of splicing optical fibre cable
- light transmission methods and applications
- types of optical receiver
- test equipment:
 - calibrated light source and light receiver
 - power meter
 - optical time domain reflectometers
- cable inspection and testing
- AS/NZS 2211:2006 Safety of laser products (Parts 1 and 2)
- WHS procedures associated with optical fibre cable termination and repair, including laser safety procedures

- PPE required for optical fibre termination and repair
- relevant maintenance manuals
- relevant regulatory requirements and standard procedures.

Assessment Conditions

- Competency should be assessed in the work environment or simulated work environment using tools and equipment specified in the applicable aircraft maintenance manuals. It is also expected that applicable general-purpose tools and test equipment found in most routine situations would be used where appropriate.
- Evidence of knowledge about optical fibre data transmission systems will be necessary to supplement evidence of ability to interpret requirements and terminate and repair optical fibre cable before undertaking any action. The work plan should take account of applicable safety and quality requirements in accordance with the industry and regulatory standards.
- The following conditions of assessment represent the requirements of the Regulators (ADF and CASA) and maintenance stakeholders and must be rigorously observed.
- A person cannot be assessed as competent until it can be demonstrated to the satisfaction of the workplace assessor that the relevant elements and performance criteria of the unit of competency are being achieved under routine supervision on a representative range of tasks, including:
 - termination of optical fibre cable using a range of connector types
 - repair of optical fibre cable.
- This shall be established via the records in the Log of Industrial Experience and Achievement or, where appropriate, an equivalent Industry Evidence Guide (for details refer to the Companion Volume Assessment Guidelines).
- Assessors must satisfy the requirements of the National Vocational Education and Training Regulator (Australian Skills Quality Authority, or its successors).
- Where the unit is to be used for CASA licensing purposes the Assessor must also meet the criteria specified in the CASR Part 147 Manual of Standards.

Links

Companion Volume implementation guides are found in VETNet -

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