



**Australian Government**

# **Assessment Requirements for MEA424 Evaluate aircraft non-destructive tests**

**Release: 2**

# Assessment Requirements for MEA424 Evaluate aircraft non-destructive tests

## Modification History

Release 2. Equivalent to MEA424 Evaluate aircraft non-destructive tests with amended prerequisite codes.

## 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:

- conducting metallurgical assessment of inspection areas and identifying potential failure sites and modes
- designating most appropriate method, technique or procedure
- referencing aircraft maintenance information and regulatory requirements for inspection
- developing and validating test procedures
- applying safety procedures, standard operating procedures and legislative requirements to all work
- reading/interpreting/applying relative testing standards
- reading/interpreting/applying relative conformance standards
- documenting procedure and results
- submitting reports in accordance with standard enterprise procedures.
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## 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:

- definition of structural terms, i.e. safe life, damage tolerant, failsafe, stress, strain, shear and cycles
- inspection requirements for metal and composite structure, including:
  - ageing aircraft inspection requirements
  - safe life structure
  - damage tolerant structure
  - fail safe structure
- potential causes of structural failure
- metallurgical analysis to assess inspection areas and potential failure sites and modes
- NDT methods, techniques and procedures
- meaning and validity of relevant codes, standards, specifications and procedures

- regulatory requirements of the ADF and CASA relating to the use of NDT for inspection of aircraft structure and components
- test procedures for testing techniques and specimens
- validation processes
- process for approval of procedures
- process for documentation/distribution of procedures
- evaluation procedures
- process for documentation of evaluation results
- process for amending tests and distributing amendments
- national/Australian Standards, NOHSC guides, state/territory regulatory codes of practice/standards
- use and application of personal protective equipment (PPE)
- safe work practices and procedures
- relevant hazards and control measures related to the competency.

## Assessment Conditions

- This unit may be assessed on the job, off the job or a combination of both on and off the job. Where assessment occurs off the job, that is the candidate is not in productive work, then an appropriate simulation must be used where the range of conditions reflects realistic workplace situations. The competencies covered by this unit would be demonstrated by an individual working alone or as part of a team. The assessment environment should not disadvantage the candidate.
- Assessors should gather a range of evidence that is valid, sufficient, current and authentic. Evidence can be gathered through a variety of ways including direct observation, supervisor's reports, project work, samples and questioning. Questioning techniques should not require language, literacy and numeracy skills beyond those required in this unit of competency.
- The candidate must have access to all tools, equipment, materials and documentation required. The candidate must be permitted to refer to any relevant workplace procedures, product and manufacturing specifications, codes, standards, manuals and reference materials.
- Assessors must be satisfied that the candidate can competently and consistently perform all elements and performance criteria of the unit of competency, including required knowledge, and be capable of applying the competency in new and different situations and contexts.
- This unit could be assessed in conjunction with any other units addressing the safety, quality, communication, materials handling, recording and reporting associated with the research, analysis, development, approval and evaluation of non-destructive tests, or other units requiring the exercise of the skills and knowledge covered by this unit.
- Assessors must be qualified at *AS 3669-2006 Non-destructive testing – Qualification and approval of personnel – Aerospace Level 3*.

## Links

Companion Volume implementation guides are found in VETNet -

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