



Australian Government

Assessment Requirements for UEEEC0046 Operate and maintain amateur radio communication stations

Release: 1

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Modification History

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria on at least two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (WHS/OHS) requirements, including risk control measures
- assembling apparatus in an appropriate sequence with all modules/sub-assemblies and parts correctly placed
- carrying out set-up efficiently without waste of materials or damage to apparatus, the surrounding environment or services using sustainable energy principles
- completing work and maintaining reports
- connecting and disconnecting components to radio equipment manufacturer requirements and appropriate engineering requirements
- correctly using an amateur radio in accordance with relevant industry standards and workplace procedures
- dealing with unplanned events in accordance with WHS/OHS and workplace procedures
- dismantling and assembling apparatus in accordance with manufacture guidelines
- following manufacturer service instructions for radio station assembly and dismantling, including transmitter, power, measurement and adjustment
- identifying and assembling amateur radio communication equipment
- maintaining an amateur radio communication station
- operating an amateur radio communication station
- preparing to operate an amateur radio communication station
- testing and measuring equipment
- testing and operating parameters of the station in accordance with workplace procedures and relevant industry standards
- using testing devices.

Knowledge Evidence

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

- amateur radio communication principles, operation and maintenance including:
 - amateur radio technical basics
 - interference and electromagnetic compatibility (EMC) overview
 - licence conditions
 - mathematics used for amateur radio operation
 - measurements
 - nature of amateur radio
 - operating practices and procedures overview
 - propagation overview
 - safety overview
 - transmission lines and antennas overview
 - transmitters and receivers
- problem-solving techniques
- relevant industry standards, including:
 - Standard Licence Operator's level as prescribed by the Australian Communication Media Authority (ACMA)
- relevant manufacturer specifications and operating instructions
- relevant radio spectrum regulations
- relevant resources, tools, apparatus and testing devices
- relevant job safety assessments or risk mitigation processes
- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- sustainable energy principles.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in suitable workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated suitable workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, tools, facilities and equipment currently used in industry
- relevant Australian and international standards for the assembly and operation of an amateur

radio station

- resources that reflect current industry practices in relation to assembling, dismantling and operating an amateur radio station, including the assembly of an antenna, power supply unit or an equivalent circuit
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>