Assessment Requirements for AVIE0006 Maintain aircraft radio communications

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Modification History

Release 1. This is the first release of this unit of competency in the AVI Aviation 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, performance criteria on at least one occasion and include:

- adapting to differences in equipment and operating environment in accordance with standard operating procedures (SOPs)
- applying basic fault-finding techniques related to defective radiotelephone equipment
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- communicating effectively with others
- completing relevant documentation
- complying with regulatory requirements pertaining to aircraft radiotelephone communications
- identifying and correctly using relevant radiotelephone equipment
- implementing contingency plans
- implementing work health and safety (WHS) procedures and relevant regulations
- interpreting and following operational instructions and prioritising work
- interpreting and reacting appropriately to light signals from air traffic control
- interpreting relevant instructions, regulations, procedures and information
- manipulating any switch or device requiring the release of flight controls without changes to height, heading, speed, attitude, exceeding engine speed revs per minute (RPM) or power limits
- modifying activities depending on workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- selecting and using required personal protective equipment (PPE) conforming to industry and WHS standards
- using Aviation English Language to a proficiency standard that enables requests and instructions to be understood by air traffic service and other stations, and ensures compliance with received instructions
- using oral and written English language communication skills sufficient to support situational awareness within flight radio operations
- working collaboratively with others

- working systematically with required attention to detail without injury to self or others, or damage to goods or equipment.

Knowledge Evidence

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

- characteristics of radio waves, wave propagation, transmission and reception, including:
  - radio frequency band ranges:
    - medium frequency (MF)
    - high frequency (HF)
    - very high frequency (VHF)
    - ultra-high frequency (UHF)
  - properties of radio waves
  - propagation of paths of radio waves:
    - ground waves
    - sky waves
  - factors affecting the propagation of radio waves:
    - terrain
    - ionosphere
    - sun spot activity
    - interference from electrical equipment
    - thunderstorms
    - power attenuation
  - radio antennas:
    - characteristics of antennas
    - use of antennas
- components of aeronautical radio systems, including:
  - power source or battery switch, radio master and microphone
  - transmitter
  - receiver
  - antenna
  - location of aerial antennas relevant to radio configuration
  - headphones and speaker
  - procedures for using an aeronautical radio system
  - setting up an aeronautical radio relevant to radio configuration
  - use of radio transmit and receive selector switches (VHF, HF, intercom (I/C) and public address (PA))
  - turning a radio on and off
  - selecting correct frequencies

- - use of squelch control
  - correct use of a microphone
- documented radio procedures relevant to the visual flight rules (VFR)
- emergency transponder codes for distress, radio failure and unlawful interference
- fault-finding procedures and corrective actions for radiotelephone equipment not involving special tools or instruments
- faults that may occur in radiotelephone equipment and appropriate fault detection and remedial action that can be taken
- international radio telephony distress frequencies
- light signals, including interpretation and actions required
- operating procedures for aircraft radiotelephone equipment
- phonetic alphabet
- principles of effective radio telephony communications
- problems that may occur during radio communications and action that can be taken to overcome them
- relevant sections of Civil Aviation Orders and regulations pertaining to aircraft radio communications
- relevant WHS and environmental procedures and regulations
- responsibilities of an aeronautical radio operator, including:
  - secrecy of communications
  - unauthorised transmissions
- standard radiotelephony phraseology as outlined in an aeronautical information publication (AIP).

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

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or simulations
- relevant materials, tools, equipment and currently used in industry
- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- acceptable means of simulation assessment.

Links

AVI Training Package Companion Volume Implementation Guide available on VET Net: - https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816