



**Australian Government**

# **Assessment Requirements for AVIF0016**

## **Manage network data links**

**Release: 1**

# Assessment Requirements for AVIF0016 Manage network data links

## 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 and performance criteria on at least one occasion and include:

- adapting to differences in equipment in accordance with standard operating procedures (SOPs)
- applying precautions and required actions to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- communicating and negotiating effectively with others
- completing documentation related to work activities
- identifying and correctly using flight support equipment, processes and procedures
- implementing and managing contingency plans for unanticipated and routine airborne situations, including:
  - aircraft power variations
  - aircraft performance
  - effects of flight diversion over different terrain
  - unanticipated meteorological conditions
- implementing and managing contingency plans for unanticipated and emergency airborne situations, including:
  - overdue position report
  - overdue at destination
  - fuel/power exhaustion
  - inability to communicate with aircraft
  - continuing to operate in unsafe conditions
  - loss of power
  - ditching/emergency landing
  - government/air traffic control (ATC) coordination and notification
  - unlawful interference with aviation
- interpreting and following operational instructions and prioritising work
- maintaining aviation communications and data links, including:
  - data communications:
    - transmission control protocol (TCP)/internet protocol (IP)

- high frequency (HF)
- satellite
- voice communications:
  - mobile telephony
  - very high frequency (VHF)
  - ultra-high frequency (UHF)
  - HF
  - radio over IP (ROIP)
  - satellite
- modifying activities depending on differing operational dispatch contingencies, risk situations and environments
- monitoring flight performance, including:
  - power availability
  - en route weather, including winds
  - aircraft performance, including the limitations imposed by minimum equipment list (MEL) restrictions
  - perishable cargo
- operating electronic communications equipment to required protocol
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- reporting and documenting unlawful interference with aviation
- reporting and/or rectifying identified problems promptly in accordance with regulatory requirements and workplace procedures
- selecting and using required personal protective equipment (PPE) conforming to industry and work health and safety (WHS) standards
- taking action to manage unlawful interference with aviation
- working collaboratively with others when managing disruptive and unlawful behaviour within aviation operating environments
- 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 and performance criteria and include knowledge of:

- aeronautical mobile service, including:
  - VHF band frequency utilisation
  - phonetic alphabet
  - standard words
  - call signs
  - abbreviations

- communications
- priorities:
  - distress
  - urgency
  - traffic
- practical operations
- automated aeronautical service, including:
  - telecommunications service
  - flight weather (VOLMET)
  - VHF
  - HF
  - automatic terminal information service (ATIS)
- applying relevant aeronautical knowledge to flight monitoring services
- aviation risk management processes
- contingency planning considerations for unanticipated and routine airborne situations, including:
  - aircraft power consumption variations
  - aircraft performance calculations and variations
  - effects of flight diversion over different terrain
  - unanticipated meteorological conditions, including icing conditions
- contingency planning considerations for unanticipated and emergency airborne situations, including:
  - overdue position report
  - overdue at destination
  - power exhaustion
  - inability to communicate with aircraft
  - continuing to operate in unsafe conditions
  - ditching/emergency landing
- elementary radio theory, including:
  - amplitude
  - frequency
  - period
  - wavelength
  - electromagnetic wave
  - sound wave
  - electromagnetic spectrum
  - radio spectrum:
    - very low frequency (VLF)
    - low frequency (LF)
    - medium frequency (MF)

- HF
- VHF
- UHF
- propagation of radio waves
- skip distance and hops
- D, E, and F layers
- aeriels:
  - polar diagrams
  - Figure 8
  - cardioid
- modulation:
  - AM
  - FM
  - sidebands: SSB and DSB
- elementary radio transmit/receive (TX/RX)
- en route weather changes, including:
  - winds
  - weather re-routes
- fatigue risk management processes
- flight equipment failures, including:
  - effect on performance:
    - potential for diversion
    - effect on subsequent flights
  - availability of maintenance at diversion location:
    - effect on other systems
    - emergency potential
- flight monitoring resources - position reports:
  - company radio:
    - Aeronautical Radio Incorporated (ARINC) reports
    - commercial radio net reports
    - aircraft situation display (ASD)
    - departure station reports
    - destination station reports
    - air traffic control (ATC) reports
    - satellite communications (SATCOM)
- flight watch requirements, including:
  - aircraft position fixes and reporting requirements
  - en route weather and wind monitoring
  - estimated time of arrival (ETA) calculations
  - fuel/battery power performance calculations for routine and emergency airborne

situations

- identification of methods and procedures for managing unlawful interference with aviation as a flight dispatcher
- relevant state/territory regulations and requirements
- relevant WHS and environmental protection procedures and guidelines
- risks and hazards when monitoring flight performance and related actions to control the risk.

## 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 workplace operational situations. Where this is not appropriate, assessment must occur in simulated workplace operational situations that reflect 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
- acceptable means of simulation assessment
- applicable documentation, including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and PPE currently used in industry.

## 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>