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Assessment Requirements for AVIY0043 Monitor flight performance

Release: 1

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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 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 action 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 fuel consumption variations
  - aircraft performance calculations and variations
  - effects of air traffic reroutes
  - effects of flight diversion over different terrain
  - unanticipated meteorological conditions, including icing conditions
- implementing and managing contingency plans for unanticipated and emergency airborne situations, including:
  - overdue position report
  - overdue at destination
  - fuel exhaustion
  - inability to communicate with aircraft
  - continuing to operate in unsafe conditions
  - in-flight fire
  - loss of engine/s
  - loss of cabin pressure
  - security threat
  - incapacitation of flight crew member
  - ditching/emergency landing
  - rescue coordination

- 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:
  - fuel consumption
  - en route weather, including winds
  - aircraft performance, including the limitations imposed by minimum equipment list (MEL) restrictions
  - in-flight equipment failures
  - security problems
  - effects of and on hazardous materials
  - restricted articles
  - 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
- responding appropriately to cultural differences in the workplace
- 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 fixed service, including:
  - message format
  - national practical fixed network:
    - Aeronautical Fixed Telecommunication Network (AFTN)
    - Société Internationale de Télécommunications Aéronautiques (SITA)
- 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 fuel consumption variations
  - aircraft performance calculations and variations
  - effects of air traffic reroutes
  - 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

- fuel exhaustion
- inability to communicate with aircraft
- continuing to operate in unsafe conditions
- in-flight fire
- loss of engine/s
- loss of cabin pressure
- security threat
- incapacitation of flight crew member
- ditching/emergency landing
- rescue coordination
- government/ ATC coordination and notification
- elementary radio theory, including:
  - amplitude
  - frequency
  - period
  - wavelength
  - electromagnetic (EM) wave
  - sound wave
  - EM spectrum
  - radio spectrum:
    - very low frequency (VLF)
    - low frequency (LF)
    - medium frequency (MF)
    - HF
    - VHF
    - ultra-high frequency (UHF)
  - propagation of radio waves
  - skip distance and hops
  - D, E and F layers
  - aerials:
    - polar diagrams
    - Figure 8
    - cardioid
  - modulation:
    - AM
    - FM
    - sidebands: single side band (SSB) and double side band (DSB)
  - elementary radio transmit/receive (TX/RX)
- en route weather changes, including:

- winds
- en route alternate terminal weather, including extended operations (ETOPS)
- turbulence
- icing
- weather reroutes initiated by flight dispatch
- fatigue risk management processes
- flight equipment failures, including:
  - effect on performance:
    - potential for diversion
    - effect on subsequent flights
  - availability of maintenance at diversion aerodrome:
    - effect on other systems
    - ETOPS considerations
    - emergency potential
- flight monitoring resources — position reports, including:
  - company radio:
    - Aeronautical Radio Incorporated (ARINC) reports
    - commercial radio net reports
    - aircraft situation display (ASD)
    - departure station reports
    - destination station reports
    - 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 performance calculations for routine and emergency airborne situations
- identification of methods and procedures for managing unlawful interference with aviation as a flight dispatcher, including:
  - taking control of an aircraft by force, or threat of force, or any other form of intimidation or by any trick or false pretence
  - destroying an aircraft that is in service
  - causing damage to an aircraft that is in service that puts the safety of the aircraft, or any person on board or outside the aircraft, at risk
  - doing anything on board an aircraft that is in service that puts the safety of the aircraft, or any person on board or outside the aircraft, at risk
  - placing, or causing to be placed, on board an aircraft that is in service, anything that puts the safety of the aircraft, or any person on board or outside the aircraft, at risk
  - putting the safety of aircraft at risk by interfering with, damaging or destroying air navigation facilities

- putting the safety of an aircraft at risk by communicating false or misleading information
- committing an act at an airport, or causing any interference or damage, that puts the safe operation of the airport, or the safety of any person at the airport, at risk
- international aeronautical telecommunications service, including:
  - fixed
  - mobile radio navigation service
  - broadcasting telecommunications service
- radio navigation service, including:
  - standard navigation aids
  - operational objectives:
    - CAT I
    - CAT II
    - CAT III
    - instrument landing system (ILS)
    - ground-controlled approach (GCA)
    - VHF omni-directional range (VOR)/distance measuring equipment (DME)
    - non-directional beacon (NDB) and directional finding (D/F)
- 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