Assessment Requirements for AVIF0019 Implement complex human factors in remote pilot aircraft systems beyond visual line of sight (BVLOS)

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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 and operating in beyond visual line of sight (BVLOS) environments in accordance with standard operating procedures
- applying precautions and required action to minimise, control or eliminate identified hazards in BVLOS operations
- applying relevant legislation and workplace procedures
- communicating effectively with others
- identifying and correctly using relevant equipment
- implementing contingency plans
- implementing work health and safety (WHS) procedures and relevant regulations
- interpreting and following operational instructions and prioritising work
- interpreting remote pilot aircraft systems displays
- modifying activities depending on workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action
- monitoring work activities in terms of planned schedule
- operating electronic communications equipment to required protocol
- performing systematic scan techniques for monitoring remote pilot aircraft systems, sub-systems (equipment) and devices
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- reporting and/or rectifying problems, faults or malfunctions promptly in accordance with workplace procedures
- undertaking fault finding in remote pilot aircraft systems
- using automated systems to manage workload in BVLOS 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 and performance criteria and include knowledge of:

- definition of human factors
- situational awareness in BVLOS operations, including:
    - adaptation to environment
    - field of view
- human-machine interface principles
- decision making and assertiveness
- instrument-only flying in BVLOS
- loss of human sensing
- complacency and mode awareness in BVLOS operations
- fatigue and fatigue risk management
- control station interface with remote pilot aircraft systems
- stages of flight and human-machine interface
- contingency procedures in event of emergency
- communication in single and multi-crew BVLOS operations, including:
    - flight team members
    - observers
    - other pilots
    - air traffic control (ATC) where required
- data links and maintaining connectivity
- loss of natural sensing in pilot duties
- pilot error in BVLOS
- threat and error management (TEM)
- collision avoidance and separation procedures
- perceptual illusions or distortions related to onboard cameras
- response times to external data from remote pilot aircraft systems
- data link management
- reliance on automation
- BVLOS remote pilot responsibilities
- navigation in remote pilot BVLOS operations
- WHS procedures and relevant regulations
- Civil Aviation Safety Authority (CASA) Manual of Standards (MOS) regulations.

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 and appropriate materials, tools, equipment and personal protective equipment (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