



Australian Government

Assessment Requirements for AVIF0021 Manage human factors in remote pilot aircraft systems operations

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 and operating environment in accordance with standard operating procedures
- applying effective listening techniques when managing human factors in remote pilot aircraft systems (RPAS) operations
- applying effective questioning techniques to obtain information and clarify information while communicating with others
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant air safety practices and regulations
- communicating effectively with others
- identifying symptoms of deterioration in own physiological condition that might endanger the safety of RPAS operations and taking appropriate corrective action
- identifying symptoms of deterioration in own psychological condition that might endanger safety of RPAS operations and taking appropriate corrective action
- identifying and rectifying undesired RPAS states:
 - incorrect RPAS configuration associated with a reduced margin of safety
 - inappropriate RPAS flight mode awareness and selection
 - misapplication of flight controls
 - pilot induced aircraft position
 - pilot induced speed deviation
- implementing contingency plans
- interpreting and following operational instructions and prioritising work
- maintaining compliance with relevant regulatory requirements including avoiding alcohol and drugs before and when conducting RPAS operations
- managing and controlling stress before and when conducting RPAS operations
- managing aspects of lifestyle that may impact on personal performance
- managing and monitoring own physical performance
- managing and monitoring own psychological performance
- 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
- reading, interpreting and following relevant instructions, regulations, procedures, information and signs
- recognising and responding to actual and potential RPAS threats and errors
- recognising signs of fatigue and applying appropriate fatigue management techniques
- reporting or rectifying problems, faults or malfunctions promptly, in accordance with workplace procedures
- responding appropriately to cultural differences in the workplace
- setting priorities and managing workload to ensure safe task completion in available time
- 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:

- aeronautical decision-making processes relevant to RPAS operations
- aspects of lifestyle that may adversely influence personal physiological condition
- aspects of lifestyle that may adversely influence personal psychological condition
- crew coordination:
 - basic principles of crew coordination
 - verbal and non-verbal communication factors
 - barriers to communication
 - listening skills
 - assertion skills
 - factors affecting decision-making processes
 - communication:
 - attitude
 - personality
 - judgement
 - leadership style
 - leadership qualities
 - poor crew coordination factors
- effective communication techniques
- effects of stress on personal performance and ways of managing and controlling stressors that may impact on RPAS operations:
 - concepts of fatigue
 - environmental stress symptoms, causes and effects
 - ergonomics of control systems and instruments

- principles of stress management
- short- and long-term stressor effects on performance
- stress and arousal interaction
- error management, including error types, causes and consequences
- human factors that may influence personal performance during RPAS operations
- human performance and its limitations, including the senses, memory and situational awareness
- in a Defence context, relevant Defence Orders and Instructions
- relevant work health and safety (WHS) procedures and regulations
- relevant sections of Civil Aviation Safety Regulations (CASRs) and Civil Aviation Orders:
 - human factors limitations
 - physical examination requirements
 - medical clearances
- requirements for reporting and documenting safety incidents and safety critical errors that may have occurred during an RPAS mission
- RPAS flight instruments visual scanning techniques
- undesired RPAS states:
 - incorrect RPAS configuration associated with a reduced margin of safety
 - inappropriate RPAS flight mode awareness and selection
 - misapplication of flight controls
 - RPAS pilot induced aircraft position
 - RPAS pilot induced speed deviation.

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>