Assessment Requirements for AVIY3077
Manage remote pilot aircraft systems in abnormal flight situations

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, performance criteria and range of conditions on at least one occasion and include:

- adapting to differences in equipment and operating environment in accordance with standard operating procedures
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- communicating effectively with others when managing abnormal remote pilot aircraft system (RPAS) flight situations including using a radio
- compensating for the secondary effects of controls
- completing relevant documentation
- ensuring compliance with relevant emergency procedures and regulatory requirements
- identifying and correctly using relevant equipment
- identifying symptoms of incipient and developed stalls
- implementing contingency plans
- implementing work health and safety (WHS)/occupational health and safety (OHS) procedures and relevant regulations
- interpreting and following operational instructions and prioritising workload
- 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
- operating the RPAS within its limitations
- performing various functions simultaneously as required
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- recognising situations that may require a precautionary recovery
- reporting and/or rectifying identified problems promptly, in accordance with regulatory requirements and workplace procedures
- selecting and using relevant equipment
- selecting and using required personal protective equipment conforming to industry and WHS/OHS standards
• using instruments and displays to monitor RPAS performance
• working collaboratively with others when managing abnormal RPAS flight situations including using a radio
• 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 range of conditions and include knowledge of:

• action plan to be used in an engine failure in flight, other than after launch
• action planning processes
• action required to recover from a stall during a turn
• actions required to recover from an incipient spin (wing drop at point of stall)
• actions to be conducted following a forced recovery
• aeronautical decision-making processes
• all applicable checklist items
• causes of stalling
• controllability checks and external inspection procedures
• difference between a spin and spiral dive
• ditching procedures as specified in the AFM/POH or company operations manual
• effective communication
• effects of a partial engine failure on RPA performance with respect to straight and level flight and turning while maintaining level flight
• emergency radio procedures
• engine failure emergency procedures
• error management, including error types, causes and consequences
• factors affecting a stall
• factors to be considered when deciding whether to recover immediately or proceed to a more suitable recovery area after a partial engine failure
• fatigue risk management
• functions and effects of all RPAS flight controls
• hazards associated with flying operations at low level
• hazards associated with turning an RPA at slow speed using large angles of bank while maintaining level flight following a partial engine failure after launch
• height loss while gliding including minimum height to achieve safe turns towards selected recovery area
• human performance and its limitations, including the senses, memory and situational
awareness
- in a Defence context, relevant Defence Orders and Instructions
- potential dangers of unbalanced flight at slow speed
- practical action plans for engine failure after launch
- principles of aerodynamics
- recovery techniques
- relevant sections of Civil Aviation Regulations and Orders pertaining to abnormal flight situations
- spin entry and recovery techniques
- stress, workload and time pressure management
- symptoms of the approach to the stall and the stall
- WHS/OHS and environmental procedures and regulations.

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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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
- acceptable means of simulation assessment
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals
- relevant materials, tools, equipment and personal protective equipment currently used in industry.
Links

Companion Volume implementation guides are found in VETNet -
https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816