



Australian Government

AVIY0024 Operate remote pilot airship

Release: 1

AVIY0024 Operate remote pilot airship

Modification History

Release 1. This is the first release of this unit of competency in the AVI Aviation Training Package.

Application

This unit involves the skills and knowledge required to operate and manage remote pilot airships in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes operating and managing the airship during normal flight and during abnormal and emergency procedures.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to equipment and system operations of flight or ground operations personnel and contributes to safe and effective performance in complex aviation operational environments.

Operations are conducted as part of commercial and military aircraft activities across a variety of operational contexts within the Australian aviation industry.

Work is performed independently or under limited supervision within a single- pilot or multi-crew remote pilot airship environment.

Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Pre-requisite Unit

Not applicable.

Competency Field

W – Equipment and Systems Operations

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential Performance criteria describe the performance needed to

outcomes.

demonstrate achievement of the element.

1 Operate and manage remote pilot airship during normal flight

- 1.1** Airship is prepared for flight according to organisation and manufacturer procedures
- 1.2** Airship is released from mooring under the control of the remote pilot in preparation for flight
- 1.3** Airship weight and balanced is assessed and adjusted as required for flight
- 1.4** Remote pilot airship sub-systems and devices are operated to achieve operational requirements
- 1.5** Remote pilot airship, sub-systems and devices are monitored using a systematic scan technique
- 1.6** Remote pilot airship and flight environment information is analysed to identify actual and potential threats or errors
- 1.7** Airship hull is managed for pressure and the effects of temperature and environment
- 1.8** Remote pilot airship automation is utilised to manage control station workload
- 1.9** Checklist procedures are implemented during normal Remote pilot airship operations

2 Manage remote pilot airship during abnormal and emergency procedures

- 2.1** Abnormal or emergency situations are identified, diagnosed and communicated
- 2.2** Remote pilot airship control is maintained at all times
- 2.3** Remote pilot airship abnormal or emergency checklist procedures are implemented to maintain safety of flight
- 2.4** Course of action is decided, implemented, evaluated and revised to achieve safest outcomes
- 2.5** Location and operation of emergency systems applicable to remote pilot airship are explained
- 2.6** Airship is tethered at the end of flight according to organisational procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit Mapping Information

No equivalent unit

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>

Assessment Requirements for AVIY0024 Operate remote pilot airship

Modification History

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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 (SOPs)
- applying precautions and required action to minimise, control or eliminate identified hazards
- applying relevant legislation and workplace procedures
- communicating effectively with others
- completing relevant documentation
- 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 airship system 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 technique for monitoring remote pilot airship, 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
- selecting and using required personal protective equipment (PPE) conforming to industry and WHS standards
- undertaking fault finding in remote pilot airship
- using automated systems to manage workload
- 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, performance criteria and range of conditions and include knowledge of:

- aeronautical decision-making processes relevant to remote pilot airship operations
- effective communication
- error management, including error types, causes and consequences
- airship release and tethering procedures
- risk identification, analysis and control in relation to remote pilot airship operations
- weather conditions and impact on operation of remote pilot airship
- flight environment information, including:
 - head-up display (HUD) suitable for flight
 - remote pilot airship control systems suitable for flight indications, including height, speed, direction and location
- remote pilot airship as applicable to rating/endorsement requirements in relation to remote pilot airship type if relevant
- battery/fuel/power system, including:
 - likely faults that may affect battery/fuel/power system
 - emergency operating procedures for battery/fuel/power system
 - operation of /battery/fuel/power selector panel or display
 - full battery/fuel capacity
- hull envelope:
 - likely faults that may affect the airship hull
 - emergency operating procedures for airship hull failure
- electrical system, including:
 - likely faults that may affect electrical system
- detection and avoidance systems, including:
 - surveillance and collision avoidance functions of detection and avoidance systems
 - system limitations
- automated systems, including:
 - limitations of automated systems
- remote pilot airship checklists, including:
 - explanation of the normal system operating procedures of remote pilot airship, sub-systems and devices used to operate specific remote pilot airship, including use of published scans and checklists, immediate action items, warnings and limitations.

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

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