



Australian Government

AVIF0013 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.

Application

This unit involves the skills and knowledge required to manage human factors in remote pilot aircraft systems (RPAS) operations, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes managing personal performance, communicating effectively within an aviation environment, and recognising threats and errors.

This unit addresses aviation non-technical skill requirements (mental, social and personal-management abilities) related to safety management duties of flight operations personnel, and contributes to safe and effective performance in complex aviation operational environments.

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

Work is performed independently or under limited supervision as a single operator or within a team environment.

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

Use for Defence Aviation is to be in accordance with relevant Defence Orders, Instructions, Publications and Regulations.

Pre-requisite Unit

Not applicable.

Competency Field

F – Safety Management

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

PERFORMANCE CRITERIA

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Manage personal performance

- 1.1 Pre- and post-operational personal condition is managed to ensure safe and effective performance
- 1.2 Individual performance when conducting remote pilot operations is monitored against workplace standards, procedures and requirements
- 1.3 Degradation of physiological condition is recognised and appropriate strategies are implemented to ensure safe outcome of RPAS operations
- 1.4 Degradation of psychological condition is recognised and appropriate strategies are implemented to ensure the safe outcome of RPAS operations
- 1.5 Sources of stress are identified and managed to maintain a safe aviation operating environment
- 1.6 Limitations to personal performance are communicated to crew/team to maintain a safe RPAS operating environment

2 Communicate effectively within an aviation environment

- 2.1 Effective listening skills are applied
- 2.2 Questions are used to gain additional information and to clarify understanding
- 2.3 Information received is clarified as required, interpreted, and accurately communicated or reported with due observation of ethics and protocols required of the operational environment
- 2.4 Communication is undertaken in varying situations with culturally diverse, familiar and unfamiliar individuals, teams and crews
- 2.5 Appropriate protocols and procedures are followed when using communications systems during routine and contingency aviation operations
- 2.6 Responses are sought from and provided to others in a timely manner

3 Recognise and respond to actual

- 3.1 Potential environmental or operational threats and errors that are likely to affect the safety of RPAS flight are recognised

**and potential threats
and errors**

- 3.2 Hazards are identified, risks are assessed and hazard management is implemented
- 3.3 Actual environmental or operational threats that affect the safety of RPAS flight are recognised
- 3.4 Competing operational priorities and task demands that may represent a threat to the safety of RPAS flight are identified
- 3.5 Threat countermeasures are identified and implemented
- 3.6 RPAS flight progress and effect of countermeasures are monitored and assessed to ensure a safe outcome
- 3.7 Alternative countermeasures are identified and implemented, and effectiveness of countermeasures are re-evaluated
- 3.8 Checklists and standard operating procedures are implemented to prevent RPAS handling, procedural or communication errors
- 3.9 Committed errors are identified and responded to before aircraft enters an undesired state
- 3.10 RPAS are monitored using a systematic scan technique to collect and analyse flight information for potential or actual error recognition purposes
- 3.11 RPAS operating environment is monitored to collect and analyse flight information for potential or actual error recognition purposes
- 3.12 Own performance is self-monitored to recognise potential or actual error occurrence
- 3.13 Countermeasure implementation is undertaken to prevent or correct errors before RPAS enters an undesired state
- 3.14 Countermeasure implementation is undertaken to prevent or correct errors after RPAS enters an undesired state

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

This unit replaces but is not equivalent to AVIF3021B Manage human factors in remote pilot aircraft systems (RPAS) operations.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=4725260a-0af3-4daf-912b-ef1c2f3e5816>