



Australian Government

AVIF0018 Manage risks with unmanned aerial systems (UAS) beyond visual line of sight (BVLOS)

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 aviation risk with unmanned aerial systems (UAS) beyond visual line of sight (BVLOS) in compliance with relevant regulatory requirements and national operating standards.

It includes establishing the risk management context, planning for risk management, managing risk and evaluating the risk management plan. Work involves managing the effects of uncertainty on objectives using a safety management system (SMS) within a variety of BVLOS remote piloted aircraft systems operational contexts within the Australian aviation industry.

This unit addresses aviation non-technical skill requirements (mental, social and personal-management abilities) related to safety management duties that complement the technical skills of aviation 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 as a single operator or within a team environment.

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

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 Establish risk management context in BVLOS operation

- 1.1** Nature and extent of aviation operational activity, its objectives and outcomes are established within the organisational context
- 1.2** Strategic and risk management context are identified in accordance with organisational requirements
- 1.3** Stakeholders are identified and consulted to ensure their views, concerns and needs are taken into account in the risk management process
- 1.4** Criteria for assessing aviation risk are determined in accordance with workplace standards
- 1.5** Risk management criteria is determined to provide guidance on balancing risk, costs, benefits and opportunities
- 1.6** Risk management criteria are monitored, reviewed and adjusted to ensure opportunities, and current and emerging trends are reflected

2 Plan for risk management in BVLOS

- 2.1** Sources of risks are identified and consulted to ensure full coverage
- 2.2** Risks are assessed and documented in consultation with stakeholders, and risk level thresholds are established
- 2.3** Risk controls are considered/modified and selected for acceptability
- 2.4** Risk management plan and evaluation methodology are developed and communicated to stakeholders

3 Monitor and evaluate aviation risk in BVLOS

- 3.1** Aviation risk management plan is implemented and monitored in accordance with workplace standards
- 3.2** Internal and external risks to outcomes are monitored and remedial actions are identified, as required, and initiated
- 3.3** Risk management plans are reviewed routinely, on occurrence of events of significant importance to the

organisation and when required by regulatory practice

- 3.4** Stakeholder feedback is obtained and considered in evaluation activity
- 3.5** Recommendations for enhancing risk management plan are formulated and implemented
- 3.6** Outcomes of evaluation are effectively communicated to stakeholders

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 AVIF0018 Manage risks with unmanned aerial systems (UAS) beyond visual line of sight (BVLOS)

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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:

- applying effective verbal/non-verbal communication techniques when engaging with internal/external stakeholders
- applying procedures relating to work health and safety (WHS) and environment in the context of aviation risk management
- developing an aviation risk assessment, including:
 - likelihood criteria:
 - rare
 - unlikely
 - possible
 - likely
 - almost certain
 - consequence criteria:
 - negligible
 - minor
 - major
 - moderate
 - severe
- conducting aviation risk control, including hierarchy of control
- applying relevant legislation, regulations and policies, including:
 - relevant sections of Civil Aviation Safety Regulations (CASRs) and Civil Aviation Orders relating to safety management systems (SMS) and Manual of Standards (MOS)
 - national and state/territory WHS legislation
- delegating task responsibilities related to risk management processes
- engaging in discussion by exchanging complex oral information
- listening effectively when engaging with internal/external stakeholders
- researching and analysing the wider context affecting the aviation industry and/or organisation

- solving problems through analysis and reasoning
- explaining complex, formal documents and assisting others to apply these documents in the workplace
- using appropriate formal language and style for written plans.

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:

- Australian and international risk management standards
- aviation risk management processes, which are:
 - logical and systematic
 - applied to any strategy plan, process, program or procedure that will enable the organisation to minimise losses and to maximise opportunities
 - applied within existing aviation SMS
 - implemented to address operational and safety factors related to:
 - regulatory
 - hardware
 - environmental
 - personnel
- diversity of risks in the aviation industry
- importance of consultation and communication at every stage of the risk management cycle
- legal requirements, legislation, regulations, policies, procedures and guidelines relating to aviation risk management
- range of evaluation methodologies
- relationship of risk to context, i.e. how the context may define the risks
- strategic and risk management context, including:
 - organisational functions
 - political
 - operational
 - financial
 - social
 - legal
 - commercial
 - various stakeholders and clients
 - relationship between the organisation and the environment in which it operates
- sources of risk, including:
 - perceived
 - potential
 - actual

- determining criteria for evaluating risk, including:
 - compliance with established legal requirements
 - consideration of cost-benefit analysis outcomes
 - establishment of risk rankings to determine levels of acceptability
- risk management plan for relevant BVLOS operation, including:
 - analysis of risks
 - likelihood
 - consequences and risk levels
 - control options selected
 - person/s responsible for implementing control options
 - performance measures
 - periodic review timetable
 - prioritised list of unacceptable risks
 - resources required
 - sources of risk and risk events
 - timeframe for implementation.

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
- physical areas and assets.

Links

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