



**Australian Government**

# **AVIW0002 Manage multi-crew operation in beyond visual line of sight (BVLOS) operations**

**Release: 1**

# **AVIW0002 Manage multi-crew operation in beyond visual line of sight (BVLOS) operations**

## **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 aircraft systems (RPAS) in a multi-crew operation in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes operating and managing RPAS during normal flight and managing RPAS 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 RPAS 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 outcomes.

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

- |                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1 Establish remote pilot aircraft command</b>                      | <b>1.1</b> Command responsibilities are exercised in accordance with organisational authority and guidelines<br><br><b>1.2</b> Command structure is established appropriate to aircraft<br><br><b>1.3</b> Command structure is communicated to flight team and external authorities<br><br><b>1.4</b> Communication mechanisms and procedures are implemented between levels of command in accordance with organisational procedures<br><br><b>1.5</b> Liaison is established and maintained between remote pilot in command (RPIC), flight team and other relevant stakeholders to meet control and command requirements                                                                                                                                                     |
| <b>2 Manage tasks and workload</b>                                    | <b>2.1</b> Workload of flight team members is planned taking into account time and resource constraints<br><br><b>2.2</b> Flight team is assigned workload priorities and performance expectations are communicated clearly<br><br><b>2.3</b> Workload of flight team is coordinated in accordance with agreed operational objectives and task timelines<br><br><b>2.4</b> Performance of flight team and individuals is systematically monitored against defined measurable performance criteria to ensure satisfactory completion of assigned tasks and workloads<br><br><b>2.5</b> Potential and current issues and problems arising in relation to task and workload management are identified and acted on in accordance with regulatory and organisational requirements |
| <b>3 Communicate organisational objectives and required standards</b> | <b>3.1</b> Flight team members are provided with up-to-date information concerning organisational objectives and standards<br><br><b>3.2</b> Flight team member understanding of objectives and standards is confirmed<br><br><b>3.3</b> Organisational standards and values are modelled and promoted to flight team members                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>4 Make effective decisions</b>                                     | <b>4.1</b> Relevant, current and sufficient information is gathered                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

- to assess and analyse situation for decision making
- 4.2** Problem-solving strategies and techniques are used to identify and generate options
- 4.3** Decisions are made, communicated to flight team and implemented in a timely manner in accordance with regulatory requirements and workplace procedures
- 4.4** Decisions and actions are evaluated for their effectiveness and outcomes
- 4.5** Decisions, their rationale and associated actions are documented and reported in accordance with regulatory requirements and workplace procedures
- 5 Lead flight teams and individuals**
  - 5.1** Link between function of flight team and organisational goals is clarified as required and is communicated to flight team
  - 5.2** Participative decision making is used to develop, implement and review work of flight team and to allocate responsibilities
  - 5.3** Opportunities are given to flight team members and individuals to provide feedback about efficient work practices and processes
  - 5.4** Flight team members and individuals are encouraged to provide feedback about efficient work practices
  - 5.5** Appropriate delegation is made to flight team and individuals in accordance with relevant flight team objectives and goals, and organisational policy and 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 AVIW0002 Manage multi-crew operation in beyond visual line of sight (BVLOS) operations**

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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:

- allocating sufficient resources and time to complete workload
- applying relevant aeronautical knowledge
- breaking down tasks and establishing courses of action to accomplish specified goals
- collecting information and identifying key issues and relationships relative to achieving determined roles
- conducting briefings to share common plan and to set priorities
- correcting flight team member deviations from standards
- encouraging monitoring of performance by other flight team members
- ensuring flight team members are aware of their role and responsibilities throughout a flight
- ensuring responsibility for flight path management is always assigned
- establishing an atmosphere to encourage open communications
- identifying and managing threats and errors
- identifying and managing undesired aircraft states
- identifying when flight team members become ineffective or incapacitated
- implementing work health and safety (WHS) procedures and relevant regulations
- maintaining flight team member motivation and commitment to task
- maintaining patience and focus when processing large amounts of data or multiple tasks
- managing flight deck gradient relative to task
- managing time and resources to ensure work is completed safely and effectively
- monitoring outcomes and evaluating own performance
- monitoring effectiveness of flight team performance
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- setting realistic performance standards
- taking action to resolve flight team member confusion.

## **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:

- aircraft instrument requirements
- aircraft load limitations
- aircraft performance and landing calculations
- aircraft speed limitations
- aircraft systems
- applicability of drug and alcohol regulations
- classification of operations
- RPAS flight team management, including:
  - flight team coordination:
    - distribution of responsibilities
    - working with a flight team concept
  - flight team cooperation:
    - small group dynamics (norms, atmosphere, pressure, communication and structure)
    - conflict management
  - leadership style of management:
    - concern for performance
    - concern for people
    - democratic versus autocratic style
    - encouraging inputs and feedback
    - optimising flight team performance in flight
    - correcting flight team coordination deficiencies
  - communication, including:
    - verbal and non-verbal communication
    - one and two-way communication
    - effects of different communication styles
    - miscommunication (including cultural misunderstandings)
- effective decision-making processes, including:
  - identifying problems and causal factors
  - assessing component parts systematically and logically
  - employing analytical techniques to identify solutions and to consider the value and implications of each
  - generating solutions and/or alternative courses of action
  - assessing alternative solutions and risks with other flight team members
  - determining course of action
  - communicating decision and delegate tasks to flight team
  - monitoring progress against agreed plan
  - evaluating decisions in line with changing circumstances
  - ensuring decision making is improvement-focused and directed towards achieving optimum outcomes

- emergency equipment requirements
- flight and duty time limits
- flight rules (specific to aircraft), including:
  - documentation
  - aircraft nationality and registration
  - airworthiness of aircraft
  - personnel licensing
  - rules of the air
  - procedures for air navigation
  - air traffic services
  - aeronautical information service
  - aerodromes
  - facilitation
  - search and rescue (SAR)
  - security
  - aircraft accidents and incidents – pilot in command (PIC) responsibilities
  - air service operations
- fuel/power planning requirements for the flight
- judgement and decision making, including:
  - pilot judgement concepts:
    - types of judgement
    - motor skills and human factors
  - aeronautical decision making:
    - decision-making concepts
    - pilot responsibilities
    - behavioural aspects
  - identification of hazardous attitudes:
    - physical factors
    - psychological factors
    - social influences and interface between people
  - pilot judgement awareness:
    - risk assessment
    - cockpit stress management
  - applying decision-making concepts:
    - practical application
    - managing resources
    - safety awareness
- maintenance authorisations
- privileges and limitations of the multi-crew
- requirements for an Air Operator Certificate (AOC)

- requirements for aerodromes, including:
  - type of information contained in an operation manual.

## 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 personal protective equipment (PPE) currently used in industry.

## Links

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