



Australian Government

AVIY0016 Lead formation flight

Release: 1

AVIY0016 Lead formation flight

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 lead formation flights, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes planning a formation flight, briefing and debriefing formation flight crews, leading a formation, and managing abnormal and emergency situations while leading a formation flight.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to aircraft operational duties of flight crew, 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 within a single-pilot or multi-crew 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

AVIY4063 Perform close formation flight

Competency Field

Y – Aircraft Operation and Traffic 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 Plan a formation flight

- 1.1 Formation flight tasking requirements are identified
- 1.2 Crews, briefing venue, timing and aircraft availability are coordinated
- 1.3 Task is analysed to determine manoeuvres and formations that ensure safe outcome
- 1.4 Flight route is planned to achieve formation outcomes in the time available and within performance capabilities of the flight
- 1.5 All air traffic, area limitations and navigation requirements are complied with
- 1.6 Actions in abnormal or emergency situations involving the formation are planned

2 Brief and debrief formation flight crew

- 2.1 Ground and flight manoeuvres are briefed and confirmed with formation flight crews
- 2.2 Timings, route/s, speeds and altitudes to be flown are specified
- 2.3 Deputy formation leader responsibilities are briefed and confirmed
- 2.4 Communication procedures, minimum fuel, abnormal and emergency procedures and method of return for landing are briefed and confirmed
- 2.5 Achievements and any faults or errors that occurred during the formation flight are identified
- 2.6 Guidance and feedback is provided to other formation members during post-flight debrief

3 Lead a formation

- 3.1 Lead aircraft is manoeuvred using controlled corrective action to ensure a stable platform for pilots flying in formation stations
- 3.2 Formation is safely manoeuvred anticipating and allowing for formation size, proximity to obstructions, terrain, airspace limitations, weather conditions and air traffic, while ensuring compliance with regulatory requirements

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| | 3.3 | Formation is directed and controlled using precise standard radio phraseology, hand and other signal procedures |
| | 3.4 | Formation lost contact procedures are implemented and managed as required |
| | 3.5 | Formation member flight performances and appropriate reactions to problems are monitored |
| 4 Manage abnormal and emergency situations | 4.1 | Control of aircraft and formation when leading is maintained |
| | 4.2 | Abnormal or emergency situations affecting formation performance are identified and analysed |
| | 4.3 | Course/s of action to resolve abnormal or emergency situations are implemented and monitored |
| | 4.4 | Task workload and flight safety priorities are organised to ensure optimum outcome of the situation |

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 AVIY4064A Lead an aircraft formation flight.

Links

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

Assessment Requirements for AVIY0016 Lead formation flight

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 and performance criteria 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 aeroplane or helicopter aeronautical knowledge
- communicating effectively with others
- completing relevant documentation
- determining that formation members possess appropriate qualifications and currency
- following relevant legislation and workplace procedures
- identifying and correctly using relevant equipment
- implementing contingency plans
- implementing work health and safety (WHS)/occupational health and safety (OHS) procedures and relevant regulations
- maintaining control and formation while leading aircraft
- managing abnormal and/or emergency situations as formation flight leader:
 - lost aircraft and formation rejoin procedures
 - individual aircraft incident or accident
- manoeuvring formation safely by anticipating and allowing for all aspects of formation flying including compliance with regulatory requirements
- modifying activities depending on workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action
- monitoring formation aircraft performance
- monitoring formation member flight performances and appropriate reactions to problems
- monitoring work activities in terms of planned schedule
- operating electronic communications equipment to required protocol
- reading, interpreting and following relevant regulations, instructions, procedures, information and signs
- recognising environmental conditions that impact on formation performance
- reporting and/or rectifying identified problems promptly, in accordance with regulatory requirements and workplace procedures
- selecting and using required personal protective clothing and equipment conforming to industry and WHS/OHS standards

- setting local or area barometric pressure adjusted for sea level (QNH) at appropriate stages of flight
- working collaboratively with others
- working systematically with required attention to detail without injury to self, 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 include knowledge of:

- air traffic, area limitations and navigation requirements for formation flight
- CASR Part 61 Manual of Standards Schedule 3 Aeronautical Knowledge relevant to aeroplane or helicopter operations
- deputy formation flight lead responsibilities
- formation briefing and debriefing procedures
- formation flight lead responsibilities
- formation manoeuvre safety limits considering formation size, proximity to obstructions, terrain, airspace limitations, weather conditions, air traffic and regulatory requirements
- in a Defence context, relevant Defence Orders and Instructions
- planning and briefing requirements for formation flight
- post-flight debriefing techniques
- relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders
- relevant WHS/OHS and environmental protection procedures and regulations
- standard operating procedures for abnormal or emergency situations for formation flight
- verbal and non-verbal formation communication procedures:
 - commence take off roll
 - position changes
 - radio receiver failure
 - radio transmitter failure.

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

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