



Australian Government

PUAFIR004 Manage complex aerial operations for an incident

Release: 1

PUAFIR004 Manage complex aerial operations for an incident

Modification History

Release 1.0 This is the first release of this unit of competency in the PUA Public Safety Training Package.

Application

This unit of competency involves the skills and knowledge to manage complex aerial operations during the response to an incident. It includes working within organisational and regulatory frameworks, establishing and managing an air operations unit for an incident, confirming safety and effectiveness of aerial operations, developing aerial operations strategies, developing and maintaining an air operations plan within an incident action plan, managing the implementation of an air operations plan, responding to changed circumstances and establishing systems for the safety and security of aerial operations.

The unit is applicable to personnel that may fill the role of the air operations manager at an incident. The air operations manager is the most senior aviation related official, during an incident response, responsible for coordinating a range of tactical aerial operations missions within a complex operational environment. They are also responsible for managing personnel undertaking missions and for providing aviation related support services. Authorisation to perform this role is subject to organisational policies and procedures.

The fire sector is those sections of government departments, statutory authorities or agencies that have responsibility under jurisdictional arrangements for the delivery of firefighting and fire management services.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable

Competency Field

Fire

Unit Sector

Fire

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes

1 Work within an organisational and regulatory framework

2 Establish and manage air operations unit

PERFORMANCE

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

- 1.1** Briefing on the incident is obtained from the operations officer
- 1.2** Responsibility for coordinating aerial operations for the incident and managing work of the air operations unit is accepted
- 1.3** Legislation, regulations and organisational policies and procedures for incident aerial operations are identified and implemented
- 1.4** Communication is established and maintained with state or territory aircraft coordinator
- 1.5** Air space requirements and issues are referred to state or territory aircraft coordinator
- 1.6** Incident reporting requirements for air operations are met
- 1.7** Advice is provided on aircraft availability and capability, support requirements and operational priorities in accordance with organisational regulatory framework
- 2.1** Air operations unit, appropriate to incident scale and needs, is established
- 2.2** Personnel are allocated responsibilities and are briefed and debriefed at the conclusion of their deployment
- 2.3** Communication is maintained with operations officer, aircraft officer and air attack supervisor and their specialist expertise is sought, as required
- 2.4** Communication is maintained with aircraft contractors including pilots, engineers and refuellers and their specialist advice is sought, as required

- 2.5 Team Resource Management (TRM) principles are applied to incident air operations and roles and responsibilities for air operations missions are confirmed
 - 2.6 Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements are implemented
 - 2.7 Job hazards are identified and action is taken to eliminate, minimise or control them
 - 2.8 Personnel are managed and monitored for safe and effective work practices and those who are impaired or working in an unsafe way are stood down from duty
- 3 **Confirm safety and effectiveness of current aerial operations**
 - 3.1 Air operations plan and details of specific aviation support aspects are confirmed
 - 3.2 Aircraft at incident, en route or in the vicinity are identified
 - 3.3 Aerial operations missions are identified
 - 3.4 Temporary restricted air space need is determined with incident controller and operations officer, with requests then forwarded through to the state air desk
 - 3.5 Air communications plan is established and maintained
 - 3.6 Flight following procedures are established and maintained
 - 3.7 Support services and related personnel are confirmed
 - 3.8 Accident response plan is established and maintained
- 4 **Develop aerial operations strategies**
 - 4.1 Incident controller's intent and incident management objectives are identified

- 4.2 Current and projected incident situation is obtained
 - 4.3 Capabilities and constraints of available aircraft are reviewed
 - 4.4 Options for use of aircraft resources to support operational needs are developed and analysed
 - 4.5 Aerial strategies and tactics that contribute towards achievement of incident management objectives are developed
 - 4.6 Availability of resources to implement strategies are confirmed with aircraft officer
 - 4.7 Priorities and strategies for use of aircraft resources are proposed and confirmed with operations officer
- 5 **Develop and maintain air operations plan within the IAP**
 - 5.1 Air operations plan is developed in accordance with organisational procedures and in collaboration with operations officer and planning officer
 - 5.2 Aerial operations mission resources, support facilities and services are identified in the air operations plan
 - 5.3 Accident response and air communication plans are developed and are included in the air operations plan
 - 5.4 Air operations plan is developed in consultation with operations officer and submitted to incident controller for approval
 - 5.5 Air operations plan is regularly reviewed in response to changed situations or at predetermined timeframes
- 6 **Manage implementation of air operations plan**
 - 6.1 Roles and responsibilities for implementing air operations plan are confirmed
 - 6.2 Arrangements are made for aerial operations mission personnel to be briefed

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| | 6.3 | Tasking of flights is authorised in accordance with organisational procedures |
| 7 Respond to changed circumstances | 7.1 | Effectiveness of aerial operations missions is monitored and priorities for aircraft use are regularly confirmed with operations officer |
| | 7.2 | Procedures are established for reassignment of aircraft |
| | 7.3 | Operations officer is notified of changes to aircraft capability or status and situations that are or may be hazardous |
| 8 Provide oversight of systems for safety and security of air operations | 8.1 | Flight following procedures are established and implemented in accordance with organisational regulations and requirements |
| | 8.2 | Search and rescue procedures are established and implemented in accordance with organisational regulations and requirements |
| | 8.3 | Incident and near miss reporting system is established and monitored |
| | 8.4 | Notifiable incidents are reported in accordance with organisational procedures and regulatory requirements |
| | 8.5 | Secure areas are designated for aircraft and are monitored to ensure only authorised personnel can access them |
| | 8.6 | Security for aircraft and equipment and arrangements for controlling access to the air base are established |

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.

Non-essential conditions may be found in the PUA Public Safety Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This is a newly created unit, there is no equivalent unit.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>

Assessment Requirements for PUAFIR004 Manage complex aerial operations for an incident

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and includes

- allocating roles and responsibilities and managing personnel performance and welfare
- applying Team Resource Management (TRM) principles
- authorising tasking of flights
- briefing and debriefing personnel and pilots
- complying with relevant legislation and regulations
- coordinating complex aerial operations during an incident response
- designating secure areas for aircraft and monitoring access
- determining restricted air space and forwarding requests to state air desk
- developing air operation plan for complex aerial operation
- confirming
 - accident response plan and air communications plan
 - aerial strategies and tactics
 - availability and options for use of aircraft resources to support operational needs
 - priorities and strategies for aircraft resources
 - support services and personnel
- establishing and maintaining flight following procedures and incident and near miss reporting system
- following organisational policies and procedures including reassignment of aircraft and search and rescue procedures
- identifying
 - aerial operations mission, resources, support facilities and services in air operations plan
 - aircraft at incident, en route or in the vicinity
 - incident controller's intent and incident management objectives
 - job hazards and action to eliminate, minimise or control them
- implementing Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements and safe work practices
- managing work of air operations unit for complex aerial operations
- maintaining communication with state or territory aircraft coordinators, operations officer, aircraft officer, air attack supervisor and aircraft contractors including pilots, engineers and

refuellers

- monitoring aerial operations missions and confirming priorities for aircraft
- controlling aircraft and equipment security and access to the air base
- notifying authorised personnel of changes to aircraft capability or status and of hazardous situations
- obtaining briefings from relevant personnel to coordinate aerial operations
- planning air attack strategies for complex aerial operations
- providing aviation and general information advice to personnel
- referring air space requirements and issues to state or territory aircraft coordinators
- reporting notifiable incidents
- reviewing air operations plan and capabilities and constraints of available aircraft.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and includes knowledge of

- air accident, incident and near miss response procedures and reporting systems
- air attack strategies including offensive, defensive and firebombing
- air attack tactics including direct, indirect, head, flank, parallel, line building and asset and crew protection and aerial ignition
- air base establishment requirements
- air operations unit structure including roles and responsibilities
- aircraft capability relative to fire and incident management activities
- aircraft operator, flight crew and air crew roles and responsibilities
- aircraft refuelling and marshalling requirements
- aircraft operating environment including
 - airspace classifications and process
 - aviation communications systems
 - flight rules
 - temporary restricted airspace
 - visual meteorological conditions
- air radio communication requirements
- aviation resources including
 - aerial attack platforms including light helicopter, light or medium fixed wing aircraft
 - aerial products including water, foam, retardant and gel and their characteristics, application and effectiveness
 - factors affecting performance of aviation resources including fuel, weather and topographic factors
 - firebombing aircraft including fixed and rotary wing firebombers, single engine air tankers (seats) and multi engine aircraft
 - firebombing systems including buckets, belly tank and scoopers
- consumables planning

- coordination of aircraft
- crew marshalling
- fire behaviour
- firebombing systems
- flight following
- flight notification
- flight planning
- flight safety including
 - aviation briefings
 - aviation communications
 - duty time limitations
 - Notice to Airmen (NOTAM)
 - restricted airspace
- hazards that may adversely affect aircraft operations
- incident action plan content including
 - accident response plan
 - air operations plan
 - aircraft communications plan
- logistics planning
- management of briefings and debriefings including passenger safety briefings
- night operations, if required
- operational support requirements for aerial operations missions
- organisational policies and procedures for conducting hazardous aircraft support operations including aircraft marshalling, refuelling, firebombing product mixing and loading, passenger transport and incendiary operations
- relevant legislation and regulations including civil aviation regulations
- report and record keeping requirements
- risk management principles
- safety and security requirements at an airbase
- search and rescue requirements
- strategies and tactics relating to fire activity, behaviour and suppression
- tactical aircraft
- Team Resource Management (TRM) principles
- Work Health and Safety (WHS)/Occupational Health and Safety (OHS) requirements.

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 operational situations or in simulated operational training 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 exercises, case studies and/or simulations
- an incident or exercise involving complex aerial operations that requires coordination
- appropriate materials, equipment, tools and personal protective clothing and equipment currently used in industry including
 - an air operations unit with personnel performing both tactical and support functions for complex aerial operations
- applicable documentation including organisational procedures, standards, equipment specifications, regulations, codes of practice and operational manuals.

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