



Australian Government

AVIF3025A Facilitate the safety of aerodrome works and works site access

Release 1

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Modification History

Release 1. This is the first release of this unit.

Unit Descriptor

This unit involves the skills and knowledge required to facilitate the safety of aerodrome works and works site access and includes preparing for aerodrome works, facilitating aerodrome access by vehicles and personnel, and facilitating and completing aerodrome works. Required performance includes compliance with all relevant regulatory requirements.

Application of the Unit

Work must be carried out in compliance with the relevant regulatory requirements of the Civil Aviation Safety Authority. (CASA).

Use for Australian Defence Force (Defence) Aviation is to be in accordance with relevant Defence Orders and Instructions.

Work is performed under limited supervision.

Work involves the application of relevant regulations, principles, protocols and procedures when facilitating the safety of aerodrome works and works site access as part of aerodrome operations. All activities are carried out in accordance with relevant organisational policy and workplace procedures.

Licensing/Regulatory Information

Legislative/regulatory and/or personnel licensing/certification requirements are applicable to this unit.

Pre-Requisites

Nil.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

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| 1 Prepare for aerodrome works | <p>1.1 Official notification of impending start to aerodrome works is confirmed with appropriate aerodrome personnel</p> <p>1.2 Processes for safe conduct of aerodrome works are developed or adapted from relevant plans, drawings, procedures documents and Method of Working Plans (MOWPs) in accordance with workplace procedures</p> <p>1.3 Factors that may adversely affect the safety and/or security of an aviation workplace are determined</p> <p>1.4 Workplace hazards are identified, risks are assessed and risk controls are developed and implemented</p> |
| 2 Facilitate aerodrome access by vehicles and personnel | <p>2.1 Access requirements and relevant authorisation for vehicles and personnel are determined in accordance with workplace procedures</p> <p>2.2 Personnel, vehicles and equipment entering airside are inspected to ensure compliance with aerodrome requirements</p> <p>2.3 Appropriate facilitation of works personnel and vehicles is maintained throughout period on airside</p> <p>2.4 Vehicles are inspected to ensure they are marked in an appropriate manner</p> |
| 3 Facilitate aerodrome works | <p>3.1 Unserviceability markers and barriers are positioned in accordance with workplace procedures and regulations</p> <p>3.2 Aerodrome works are facilitated in accordance with MOWPs or other workplace procedures</p> <p>3.3 Activities of personnel, vehicles and plant on the movement area are managed to ensure aircraft safety</p> <p>3.4 Works are completed in accordance with relevant MOWP or Notice to Airmen (NOTAM)</p> <p>3.5 Updated notification information is issued to ensure continued safe</p> |

conduct of aerodrome works and aircraft operations

- 4 Complete aerodrome works**
- 3.6 Aerodrome is temporarily restored to operational status in accordance with workplace procedures and regulatory requirements as required by aircraft
 - 4.1 Works area is cleared of personnel, vehicles and plant in a safe and timely manner, ensuring aerodrome has been restored to full operational status
 - 4.2 Works-affected area is inspected for serviceability in accordance with workplace procedures
 - 4.3 Aerodrome overall is inspected for serviceability in accordance with workplace procedures
 - 4.4 Relevant authorities or organisations are notified of aerodrome serviceability restoration in accordance with workplace procedures, using suitable means of communication
 - 4.5 Relevant reports are completed, filed and disseminated according to workplace procedures

Required Skills and Knowledge

This section describes the knowledge and skills required for this unit.

Required knowledge:

- Aerodrome layout, including access routes
- Aerodrome works classifications:
 - time limited works not affecting normal aircraft operations (movement area operational in less than 10 minutes)
 - time limited works requiring a NOTAM, where normal aircraft operations are not affected (movement area not operational within 10-30 minutes)
 - works requiring MOWP with proposed NOTAM for each stage of works
 - unscheduled/emergency works
 - unrestricted works (aerodrome closed)
- Aircraft schedules and their use in facilitating the safety of aerodrome works and works site access
- Different operating conditions:
 - all weather conditions
 - day or night
 - variety of terrain conditions
 - various forms of transport such as vehicles, other motorised/towed equipment
- Functions of a works safety officer (WSO) such as defined in Manual of Standards (MOS) Part 139
- Operation of airband radio equipment as used to communicate with Air Traffic control (ATC) and/or pilots
- Physical characteristics of aircraft
- Problems, safety hazards and risks that may occur when facilitating the safety of aerodrome works and works site access and related assessment/management measures that may need to be taken
- Procedures for making the movement area safe for aerodrome works include:
 - accessing current weather information and public/aviation forecasts applicable to the worksite as required
 - closing aerodrome to all air traffic
 - contacting aerodrome users
 - ensuring lighting required to carry out works does not represent a hazard to aircraft operations
 - extinguishing lighting to hazardous section of movement area
 - marking unserviceable area/s

- partial closure of movement area
- Purpose and application of aerodrome markers, markings and temporary lighting
- Purpose and application of Method of Works Plan (MOWP)
- Reporting procedures
- Relevant information/documents:
 - Aerodrome Emergency Plan (AEP) and procedures to be followed for each aerodrome emergency
 - aerodrome Drug and Alcohol Management Plan (DAMP)
 - aerodrome manual
 - aerodrome Safety Management System (SMS) and safety/security policies and principles of risk assessment and risk management
 - aerodrome Transport Security Plan (TSP)
 - airline timetables
 - Airside Drivers Handbook and/or airside driving requirements for the aerodrome
 - Australian Standards
 - Civil Aviation Safety Regulations (CASRs)
 - conditions of service, legislation and industrial agreements including workplace agreements and awards
 - induction and training materials
 - logbooks
 - Manual of Standards (MOS) Part 139 - Aerodromes
 - Notices to Airmen (NOTAM)
 - operational checklists
 - plans and maps
 - relevant forms and databases
 - safety data sheets (SDS) for hazardous materials
 - workplace procedures
- Relevant legislative and regulatory requirements relating to facilitating the safety of aerodrome works identified in:
 - Civil Aviation Safety Regulations (CASRs) and Manual of Standards (MOS) Part 139
 - Defence Orders and Instructions
 - environmental sustainability
 - standards and recommended practices (SARPs) of the International Civil Aviation Organization (ICAO)
 - workplace relations
 - work health and safety (WHS)/occupational health and safety (OHS) and environmental,

procedures and regulations including Drug and Alcohol Management Plan (DAMP)

- Reporting procedures
- Requirements for completing relevant documentation and/or incident reporting
- Safety distances required from an aircraft wingtip to objects including other aircraft
- Signs and notices may include:
 - hazard warnings
 - limited access
 - movement area guidance signs
 - no smoking
 - speed restrictions
 - unauthorised entry
 - underground electrical reticulation
- Suitable means of reporting the conduct of works:
 - MOWP
 - NOTAMs
 - other written means of communications as appropriate (such as fax, email)
 - verbal communication
- Weather information and its implications for workplace operations
- When serviceability inspections may need to occur (such as before returning parts of the movement area affected by works to normal service)
- Workplace procedures for facilitating the safety of aerodrome works and works site access

Required skills:

- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Adapt to differences in equipment and operating environment in accordance with standard operating procedures
- Apply relevant systems such as aerodrome safety management system (SMS) and procedures to assess and/or mitigate risk that might arise when inspecting and reporting on aerodrome serviceability
- Communicate effectively with others when facilitating the safety of aerodrome works and works site access
- Complete documentation related to facilitating the safety of aerodrome works and works site access
- Identify and correctly use equipment required to facilitate the safety of aerodrome works and works site access:
 - computer

- hand tools
- lights
- maintenance equipment
- markers
- radio/s (non-ops/HR radio, airband/VHF radio)
- spills response kit
- telephone
- vehicle with flashing light
- vehicle siren/loud speaker
- Implement contingency plans for unexpected events that may arise when facilitating the safety of aerodrome works and works site access
- Implement WHS/OHS procedures and relevant regulations
- Interpret and follow operational instructions and prioritise work
- Monitor and anticipate operational problems and hazards and take appropriate action
- Monitor work activities in terms of planned schedule
- Operate electronic communication equipment to required protocol
- Prepare, process and complete a NOTAM request in accordance with workplace procedures and regulatory requirements, as required
- Read and interpret instructions, regulations, procedures and other information relevant to facilitating the safety of aerodrome works and works site access
- Select and use required personal protective equipment (PPE) conforming to industry and WHS/OHS standards
- Work collaboratively with others when facilitating the safety of aerodrome works and works site access
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge and skills, the range statement and the assessment guidelines for this Training Package.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the Elements, Performance Criteria, Required Skills, Required Knowledge and include demonstration of applying:

- required knowledge and skills
- relevant legislation and workplace procedures
- other relevant aspects of the range statement.

Context of and specific resources for assessment

Performance is demonstrated consistently over time and in a suitable range of contexts.

Resources for assessment include access to:

- a range of relevant exercises, case studies and/or other simulated practical and knowledge assessment, and/or
- access to an appropriate range of relevant operational situations in the workplace.

In both real and simulated environments, access is required to:

- relevant and appropriate materials and equipment, and
- applicable documentation including workplace procedures, regulations, codes of practice and operation manuals.

Method of assessment

Assessment of this unit must be undertaken by a registered training organisation.

As a minimum, assessment of knowledge must be conducted through appropriate written/oral tests

Practical assessment must occur in an appropriate range of situations in the workplace.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

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| Aerodromes may include: | <ul style="list-style-type: none">• certified aerodromes• Defence aerodromes• joint-user aerodromes• registered aerodromes• other (unclassified) aerodromes |
| Aerodrome works may include: | <ul style="list-style-type: none">• maintenance of markings and lights• major construction or repairs to the movement area• minor repairs to pavements• mowing grass• painting and repainting• rolling surfaces• surveys and inspections• sweeping pavements |
| Workplace may include: | <ul style="list-style-type: none">• aerodrome environs• airside• entire aerodrome• landside• offices |
| Workplace procedures may include: | <ul style="list-style-type: none">• company procedures• enterprise procedures• organisational procedures• standard operating procedures (SOPs) |
| Processes for the safe conduct of works includes: | <ul style="list-style-type: none">• appointment of a person to supervise the safe conduct of works who has been trained to carry out the functions of a works safety officer as set out in the Manual of Standards (MOS) Part 139 – Aerodromes• safety and security induction of works personnel• identifying and controlling work site access• instructing work personnel• establishing communication protocols• ensuring all permits are in place to allow works to proceed |
| Factors that may adversely affect the safety and/or security of an aviation workplace may include: | <ul style="list-style-type: none">• breaches of airside driving rules• breaches of security regulations and procedures• changes in wind and weather conditions• equipment exceeding nominated operating parameters and tolerances• equipment or facility breakdown, malfunction or |

	- failure - moving vehicles and aircraft in the workplace environs - poor works site housekeeping - runway incursions by works vehicles or personnel - workplace emergencies such as fire, flood, chemical/toxic spill, crash, personnel injury - workplace hazards - works plant or equipment becoming an obstacle - declaration of an aircraft emergency
Workplace hazards may include:	- aircraft movements - aircraft noise - aircraft propellers and rotors - dust - exposed electrical leads and connections - foreign object debris (FOD) - fumes - hazardous/toxic materials - high voltage electrical cables - jet blast, propwash - other vehicles in the vicinity of the aircraft - personnel in the vicinity of the aircraft - slippery surfaces
Relevant regulatory requirements may include:	- Defence Orders and Instructions - environmental sustainability - standards and recommended practices (SARPs) of the International Civil Aviation Organization (ICAO) - Manual of Standards (MOS) Part 139 - Aerodromes - work health and safety (WHS)/occupational health and safety (OHS), including Drug and Alcohol Management Plan (DAMP) and environmental, procedures and regulations - workplace relations
Aerodrome movement area facilities include:	- apron - clearway - markers, markings and aerodrome lighting - runway and runway strip - runway end safety area - taxiway and taxiway strip
Temporary aerodrome lighting may include:	- hard-wired portable lights - kerosene flares - battery powered light

Persons that may need to be notified about the safety of aerodrome works and works site access include:	• solar powered lights • contractors • other aerodrome/workplace personnel and managers • security personnel • safety personnel • airline personnel and managers • emergency services personnel • aerodrome tenants/users • relevant technical staff • Air Traffic Control (ATC)
Environmental issues that may need to be managed include:	• dust • hazardous or annoying lights • noise generated by works activity, plant and equipment
Relevant works information include:	• Method of Works Plan (MOWP) • Notice to Airmen (NOTAM) • other written or verbal notification
Inspection of vehicles includes:	• appropriate markings and lights • cleanliness to prevent the spread of weeds • company logo/identification • fuel and oil leakage • radio equipment as required • roadworthiness • secure loads
Inspection of personnel includes:	• confirmation of authorisation to enter the airside • confirmation of appropriate licence to operate vehicles and equipment • checking understanding of: • aerodrome markings and signage • aerodrome speed limits • aerodrome terminology, signs and radio instructions • directions from the Works Safety Officer • required vehicle marking and lighting requirements • vehicle restriction zones around aircraft, navigation beacons, lights
Unserviceability markers/markings may include:	• displaced threshold markers • dumbbell markers • signal circle markers • unserviceability cones

Relevant authorities for reporting purposes include:

- unserviceability cross markers
- unserviceability lighting
- aerodrome operator or delegated person
- aerodrome users
- Air Traffic Control (ATC)
- Australian Defence Forces (Defence) Command for military bases
- Civil Aviation Safety Authority (CASA)
- NOTAM Office (Airservices Australia)

Unit Sector(s)

Not applicable.

Competency Field

F - Safety Management