



Australian Government

AVIB3005 Inspect and report on aerodrome serviceability

Release: 1

AVIB3005 Inspect and report on aerodrome serviceability

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 inspect and report on aerodrome serviceability, in compliance with relevant regulatory requirements of the Civil Aviation Safety Authority (CASA) and national operating standards.

It includes performing an aerodrome inspection, reporting hazardous situations, facilitating repairs and reporting the restoration of aerodrome serviceability.

This unit addresses aviation technical skill requirements (physical, mental and task-management abilities) related to aerodrome operations duties of ground operations personnel non-technical skills, 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 as a single operator or within a team 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

Not applicable.

Competency Field

B – Equipment Checking and Maintenance

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 Inspect aerodrome serviceability

- 1.1 Access to aerodrome is arranged with appropriate authorities
- 1.2 Aerodrome is inspected for hazards and serviceability
- 1.3 Situations resulting in unserviceability of aerodrome are identified in accordance with workplace procedures
- 1.4 Hazardous situation or unserviceability is rectified or made safe as required, in accordance with workplace procedures and regulatory requirements

2 Report hazardous situations and unserviceabilities

- 2.1 Requirements for official notification of hazardous situations or unserviceabilities, are assessed
- 2.2 Relevant authorities or organisations are notified of hazardous situations or unserviceabilities, in accordance with workplace procedures and regulatory requirements
- 2.3 Hazard reports and documentation is completed, filed and disseminated in accordance with workplace procedures

3 Facilitate repairs

- 3.1 Hazardous situations and unserviceabilities are rectified in accordance with workplace procedures and regulatory requirements, with minimal disruption to aircraft operations
- 3.2 Relevant authorities or organisations are notified of works that may disrupt aircraft operations, in accordance with workplace procedures and regulatory requirements
- 3.3 Temporary markers, markings and/or temporary aerodrome lighting are deployed as required to facilitate repairs

4 Report restoration of aerodrome serviceability

- 4.1 Restoration of aerodrome serviceability is confirmed in accordance with workplace procedures and regulatory requirements
- 4.2 Temporary markers, markings and/or temporary aerodrome lighting used to facilitate repairs are removed
- 4.3 Relevant authorities are notified of restoration of aerodrome serviceability in accordance with workplace procedures and regulatory requirements

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.

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| Aerodromes must include one or more of the following types: | <ul style="list-style-type: none">• aerodrome environs:<ul style="list-style-type: none">• areas surrounding navigational aids• buildings• drainage systems• fences and gates• obstacle limitation surfaces (OLS)• permanent or temporary structures in the aerodrome environment• certified aerodromes• Defence aerodromes• joint-user aerodromes• registered aerodromes• other (unclassified) aerodromes |
| Aerodrome hazard and serviceability inspections must include: | <ul style="list-style-type: none">• animal and bird hazards, and objects becoming hazards within obstacle limitation areas• movement areas:<ul style="list-style-type: none">• apron• clearway• runway and runway strip• runway end safety area (RESA)• taxiway and taxiway strip |
| Procedures for initiating repairs or dealing with hazards and/or unserviceabilities must include one or more of the following: | <ul style="list-style-type: none">• accessing current weather information and public/aviation forecasts for the worksite• closing aerodrome to all air traffic• contacting aerodrome users• dealing with the hazard• ensuring lighting required to carry out works does not represent a hazard to aircraft operations• extinguishing lighting to hazardous section of the movement area• notifying appropriate aerodrome maintenance personnel or |

	contractors
	• marking unserviceable area • notifying relevant aerodrome personnel • partial closure of the movement area • reporting by a Notice to Airmen (NOTAM) • serviceability inspection following repairs/rectification • undertaking repairs
Hazardous situations requiring reporting must include one or more of the following:	• aerodrome works • changes to temporary or permanent published aerodrome information • circuit failure • failure of: • aerodrome beacon • lighting to the wind indicator • obstacle lights • pilot activated lighting (PAL) • hazardous situations resulting in some or all of aerodrome becoming unserviceable • partial lighting failures (such as described in the Manual of Standards (MOS) Part 139 – Aerodromes) • power supply failure • restoration of aerodrome serviceability
Hazardous situations leading to aerodrome unserviceability must include one or more of the following:	• bird or animal activity • aerodrome works (such as Time Limited Work, major works requiring Method of Working Plan (MOWP)) • changes or loss of runway surface frictional characteristics • damaged fences or open gates • damaged wind indicator • disabled aircraft, vehicles, and equipment • excessive loose materials • faulty drains • flooding • fuel and oil spills • incorrect or unclear markers and unclear runway markings • long grass, surface cracks, stones and debris • loss of runway shape • loss of visibility of markings • potholes, cracks, scouring, ruts • runway edge fretting, and drop off • stripping • situations restricting effective operation of navigational aids such as:

Temporary aerodrome lighting must include one or more of the following:

- obstructions (trees, vehicles, structures)
- vehicle movements within restricted areas
- unsatisfactory bearing capacity
- vehicles, plant and equipment on movement area
- battery powered lights
- hard-wired portable lights
- kerosene flares
- solar powered lights
- vehicle lights

Unit Mapping Information

This unit replaces and is equivalent to AVIB3005A Inspect and report on aerodrome serviceability.

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 AVIB3005 Inspect and report on aerodrome serviceability

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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:

- adapting to differences in equipment and operating environment in accordance with workplace procedures
- applying relevant legislation and workplace procedures
- applying relevant systems (such as aerodrome safety management system [SMS]) and procedures to assess and/or mitigate risk that might arise during inspecting and reporting on aerodrome serviceability
- communicating effectively with others
- completing relevant documentation
- identifying and correctly using equipment required to conduct an inspection and reporting on aerodrome serviceability
- implementing work health and safety (WHS)/occupational health and safety (OHS) procedures and relevant regulations
- interpreting and following operational instructions and prioritising work
- modifying activities according to workplace contingencies, situations and environments
- monitoring and anticipating operational problems and hazards and taking appropriate action
- 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
- selecting and using required personal protective equipment (PPE) conforming to industry and WHS/OHS standards
- working collaboratively with others
- working systematically with required attention to detail without injury to self or 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 range of conditions and include knowledge of:

- aerodrome layout, including access routes
- aircraft schedules and their use in inspecting and reporting on aerodrome serviceability
- different operating conditions:
 - all weather conditions
 - day and night
 - various forms of transport such as vehicle, other motorised/towed equipment
 - variety of terrain conditions
- equipment used when inspecting and reporting on aerodrome serviceability:
 - computer
 - hand tools
 - lights
 - maintenance equipment
 - markers
 - radio/s (airband/VHF radio, non-ops/UHF radio)
 - spills response kit
 - telephone
 - vehicle with flashing light
- functions of an aerodrome reporting officer (ARO) and a works safety officer (WSO) as defined in the Manual of Standards (MOS) Part 139 – Aerodromes
- navigational aids:
 - Distance measuring equipment (DME)
 - instrument landing system (ILS)
 - non-directional beacons (NDBs)
 - VHF omni-directional radio range (VOR)
- operation of airband radio equipment as used to communicate with air traffic control (ATC) and/or pilots
- problems, safety hazards and risks that exist when inspecting an aerodrome and related assessment/management measures that may need to be taken
- procedures for servicing and minor maintenance of equipment used when inspecting and reporting on aerodrome serviceability
- purpose and application of:
 - aerodrome markers, markings and temporary lighting
 - Method of Working Plan (MOWP)
- radio frequencies applicable to the aerodrome:
 - automatic terminal information services (ATIS)
 - common traffic advisory frequency (CTAF)

- other air traffic agencies (such as ATC or flight information region [FIR])
- aerodrome weather information broadcast (AWIB)
- relevant information and documents:
 - Aerodrome Emergency Plan (AEP) and procedures to be followed for each aerodrome emergency
 - aerodrome safety management system (SMS) and safety/security policies and principles of risk assessment and risk management
 - aerodrome Drug and Alcohol Management Plan (DAMP)
 - aerodrome manual
 - aeronautical information publication (AIP)
 - AIP – En Route Supplement Australia (ERSA)
 - airline timetables
 - airside driver's handbook and/or airside driving requirements for the aerodrome
 - Civil Aviation Safety Regulations (CASRs)
 - conditions of service, legislation and industrial agreements including workplace agreements and awards
 - induction and training materials
 - logbooks
 - MOS Part 139 – Aerodromes
 - manufacturer specifications for equipment used when inspecting and reporting on aerodromes
 - Notice to Airmen (NOTAM)
 - operational checklists
 - plans and maps
 - relevant forms and databases
 - Wildlife Hazard Management Plan
 - workplace procedures
- relevant legislative and regulatory requirements relating to inspecting and reporting on the serviceability of an aerodrome as identified in:
 - CASRs and MOS Part 139 – Aerodromes
 - Defence Orders and Instructions
 - environmental sustainability
 - standards and recommended practices (SARPs) of the International Civil Aviation Organization (ICAO)
 - workplace relations
 - WHS/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:
 - unserviceability markers/markings:

- displaced threshold markers
- dumbbell markers
- signal circle markers
- unserviceability lighting
- unserviceability cross markers
- unserviceability cones
- vehicle or other mobile obstacle markings and equipment:
 - company logo/identification
 - orange or yellow painting or distinctive marking (of vehicles regularly used on movement area)
 - warning lights (orange/amber/yellow) mounted to be visible through 360 degrees
- weather information and its implications for workplace operations
- workplace procedures for inspecting and reporting on aerodrome serviceability.

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 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 currently used in industry.

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