



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **AVIB3001B Inspect and report on an aerodrome**

**Revision Number: 1**

## AVIB3001B Inspect and report on an aerodrome

### Modification History

Not applicable.

### Unit Descriptor

#### Unit Descriptor

This unit involves the skills and knowledge required to inspect and report on an aerodrome, including performing an aerodrome inspection, reporting hazardous situations, facilitating repairs, and reporting the restoration of aerodrome serviceability. Required performance includes compliance with all relevant regulatory requirements and protocols. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

### Application of the Unit

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

Use for ADF Aviation is to be in accordance with relevant Defence Orders and Instructions and applicable CASA compliance.

Work is performed under limited supervision.

Work involves the application of relevant principles, regulations, protocols and procedures when inspecting and reporting on an aerodrome as part of commercial airport activities across a variety of operational contexts within the Australian aviation industry.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

Not applicable.

## **Employability Skills Information**

**Employability Skills**                      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

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
<b>1 Perform an aerodrome inspection</b>	<p>1.1 Access to the aerodrome is arranged with appropriate authorities</p> <p>1.2 Aerodrome is inspected for serviceability, identifying situations resulting in the unserviceability of the aerodrome</p> <p>1.3 Where appropriate, the hazardous situation is rectified or made safe using suitable procedures</p> <p>1.4 Aircraft parking control is completed in accordance with workplace communication procedures and regulatory requirements</p>
<b>2 Report hazardous situations</b>	<p>2.1 Any requirements for official notification of the hazardous situation on the movement area and Obstacle Restriction Areas are assessed</p> <p>2.2 Relevant authorities or organisations are notified of the hazardous situation in accordance with workplace communication procedures and regulatory requirements</p>
<b>3 Facilitate repairs</b>	<p>3.1 Any requirement for official notification of the hazardous situation on the movement area and Obstacle Restriction Areas are assessed</p> <p>3.2 Relevant authorities or organisations are notified of the hazardous situation in accordance with workplace communication procedures and regulatory requirements</p>
<b>4 Report the restoration of aerodrome serviceability</b>	<p>4.1 Restoration of aerodrome serviceability is inspected and confirmed in accordance with workplace communication procedures and regulatory requirements</p> <p>4.2 Unserviceability markings are removed</p> <p>4.3 Relevant authorities are notified of the restoration of aerodrome serviceability in accordance with workplace communication procedures and regulatory requirements</p>

## Required Skills and Knowledge

### REQUIRED KNOWLEDGE AND SKILLS

This describes the essential knowledge and skills and their level required for this unit.

#### Required knowledge:

- Sections of Civil Aviation Safety Regulations and Civil Aviation Orders pertaining to inspecting and reporting on aerodromes (i.e. CAR 89)
- Relevant OH&S and environmental procedures and regulations
- Aerodrome inspection procedures
- Aerodrome operating procedures
- Functions of a works safety officer (as defined in Civil Aviation Safety Regulations)
- Reporting procedures
- Relevant equipment used in aerodrome inspection and reporting
- Aircraft schedules and their use in aerodrome inspection and reporting
- Purpose and application of unserviceability markers
- Purpose and application of Method of Working Plans (MOWPs)
- Aerodrome emergency response procedures
- Safety hazards and risks that exist when inspecting an aerodrome and related risk control procedures and precautions
- Problems that may occur when inspecting and reporting on an aerodrome and appropriate action that should be taken in each case

#### Required skills:

- Communicate effectively with others when inspecting and reporting on an aerodrome
- Read and interpret instructions, regulations, procedures and other information relevant to inspecting and reporting on an aerodrome
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to inspecting and reporting on an aerodrome
- Report hazardous situations that may arise on an aerodrome
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when inspecting and reporting on an aerodrome
- Adapt appropriately to cultural differences in the workplace, including modes of behaviour and interactions with others
- Promptly report and/or rectify any identified problems that may occur when inspecting and reporting on an aerodrome in accordance with regulatory requirements and workplace procedures
- Implement contingency plans for unexpected events that may arise when inspecting and reporting on an aerodrome

**REQUIRED KNOWLEDGE AND SKILLS**

- Apply precautions and required action to minimise, control or eliminate hazards that may exist during the inspection and reporting on an aerodrome
- Monitor and anticipate operational problems and hazards and take appropriate action
- Monitor work activities in terms of planned schedule
- Modify activities dependent on differing workplace contingencies, situations and environments
- Work systematically with required attention to detail without injury to self or others, or damage to goods or equipment
- Adapt to differences in equipment and operating environment in accordance with standard operating procedures
- Select and use required personal protective equipment conforming to industry and OH&S standards
- Implement OH&S procedures and relevant regulations
- Identify and correctly use equipment required to conduct an inspection and reporting on an aerodrome

# Evidence Guide

## 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 competency in this unit must be relevant to and satisfy all of the requirements of the elements and performance criteria of this unit and include demonstration of applying:
  - the underpinning 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 a period of time and in a suitable range of contexts
- Resources for assessment include:
  - 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:
  - through activities in an appropriately simulated environment at the registered training organisation, and/or
  - in an appropriate range of situations in the workplace

## Range Statement

### 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.

- Inspections may need to occur:
- by day or by night
  - in any weather conditions
  - and will include movement areas, Obstacle Restriction Areas, animal and bird hazards and objects becoming hazards within obstacle limitation areas
- Aerodrome serviceability inspections should occur:
- at least one hour prior to the first commercial transport operation of the day, or as determined by the aerodrome operator, or
  - after any significant phenomenon which could reasonably be expected to affect the serviceability of the aerodrome, or
  - otherwise as determined by the aerodrome operator
- Situations requiring reporting may include:
- changes to temporary or permanent published aerodrome information
  - hazardous situations resulting in some or all of the aerodrome becoming unserviceable
  - aerodrome works
  - restoration of aerodrome serviceability
- Relevant authorities for accessing and reporting purposes may include:
- aerodrome operator or delegated person
  - NOTAM Office (Airservices Australia)
  - Civil Aviation Safety Authority
  - Air Traffic Control (ATC)
  - Australian Defence Forces Command for military bases
  - aerodrome users
- Aerodromes may include:
- licensed aerodromes
  - unlicensed aerodromes
  - Aircraft Landing Areas (ALAs)
- Aerodrome movement area includes:
- apron
  - taxiway
  - runway
  - Obstacle Restriction Area (ORA)
- Aerodrome surrounds may include:
- fences and gates
  - buildings
  - permanent or temporary structures under flight paths (including runway approaches, take-off areas and circuit areas or Obstacle Limitation Surfaces [OLS])
  - drainage systems



## RANGE STATEMENT

- areas surrounding navigational aids
  - obstacle limitation surfaces
- Obstacle Restriction Areas may include:
- runway strips
  - clearways
  - taxiway strips
  - runway end safety areas
- Visual aids may include:
- wind indicator
  - signal circles
  - markers and markings
- Signs and notices may include:
- authorised entry
  - speed restrictions
  - no smoking
  - limited access
  - hazard warnings
  - movement area guidance signs
  - underground electrical reticulation
- Navigational aids may include:
- Non-directional Beacons (NDBs)
  - VHF Omni-directional Radio Range (VOR)
  - Distance Measuring Equipment (DME)
  - Instrument Landing System (ILS)
- Hazardous situations leading to the unserviceability of sealed movement areas may include:
- changes or loss of runway surface frictional characteristics
  - excessive loose materials
  - potholes or cracks
  - unsatisfactory pavement bearing capacity
  - loss of runway shape
  - loss of visibility of markings
  - stripping
  - flooding
  - runway edge fretting
  - bird or animal activity
  - disabled aircraft, vehicles, and equipment
  - fuel and oil spills
- Hazardous situations leading to the unserviceability of unsealed movement areas may include:
- pot holes, scouring, ruts
  - excessive loose materials
  - unsatisfactory surface bearing capacity (e.g. becoming too soft, slippery or rough)
  - long grass, surface cracks, stones and debris
  - loss of runway shape
  - loss of visibility of markers
  - bird or animal activity

## RANGE STATEMENT

- Hazardous situations leading to the unserviceability of the Obstacle Restriction Areas may include:
- disabled aircraft, vehicles, and equipment
  - fuel and oil spills
  - flooding
  - long grass
  - surface cracks
  - large rocks
  - vehicles plant and equipment on the movement area
  - bird or animal activity
  - unduly rough surface that may cause damage to an aircraft (not including an aircraft becoming bogged)
- Hazardous situations leading to the unserviceability of the aerodrome surrounds may include:
- structures extending beyond the Obstacle Limitation Surfaces (OLS)
  - broken fences or open gates
  - faulty drains
  - erosion or other damage to the shoulder of the movement area
  - incorrect or unclear markers and unclear runway markings
  - damaged wind assembly
  - long grass, surface cracks, stones and debris
  - aerodrome works (e.g. Time Limited Work, major works requiring Method of Working Plan (MOWP))
  - situations restricting the effective operation of navigational aids such as:
    - vehicle movements within restricted areas
    - obstructions (e.g. grass, trees, vehicles, buildings)
    - inappropriate or faulty restriction markers or fences
    - electrical power lines infringing on clearance zones
    - power cables incorrectly laid
- Procedures for making movement and Obstacle Restriction Areas safe may involve:
- marking the unserviceable area by day or night
  - partial closure of the movement area
  - closing the movement area (aerodrome closure)
  - extinguish lighting in the hazardous section of the movement area
  - contacting the aerodrome users
  - reporting of the above by NOTAM
- Serviceability markings/advice may include:
- signal circle markers
  - unserviceability cross markers
  - unserviceability cones
  - displaced threshold markers
  - unserviceability lighting
  - glider markers

## RANGE STATEMENT

Suitable means of reporting will include some or all of the following:

- dumb bell markers
- verbal communications
- other written means of communication as is appropriate (e.g. fax)
- NOTAMs
- Method of Working Plan (MOWP)

Procedures for initiating repairs or hazard removal may include:

- notifying relevant aerodrome personnel
- undertaking the repairs
- removing the hazard
- notifying appropriate contractors

Procedures for appropriate bird and animal management may include:

- maintaining perimeter fencing
- harassment procedures including explosives sounds, sirens etc.
- culling
- environmental controls (e.g. dumping of rubbish)
- habitat management in accordance with the Bird/Wildlife Hazard Management Program

Emergency response procedures may include:

- implementing aerodrome emergency procedures
- reporting to the local police service
- reporting to the Australian Transport Safety Bureau

Hazards in the work areas may include:

- aircraft noise
- aircraft movements
- other vehicles in the vicinity of the aircraft
- personnel in the vicinity of the aircraft
- jet blast
- fumes
- dust

Dependent on the type of organisation concerned and the local terminology used, workplace procedures may include:

- company procedures
- enterprise procedures
- organisational procedures
- established procedures

Information/documents may include:

- sections of Civil Aviation Safety Regulations and Civil Aviation Orders pertaining to inspecting and reporting on aerodromes (i.e. CAR 89)
- aerodrome manuals
- workplace operating procedures manuals
- Manual of Standards - Aerodromes (previously Rules and Practices for Aerodromes [RPA])
- En Route Supplement Australia (ERSA)
- Departure and Approach Procedures (DAP)

## RANGE STATEMENT

Applicable regulations and legislation may include:

- manufacturers specifications for equipment used when inspecting and reporting on aerodromes
- Civil Aviation Advisory Publications (CAAPs)
- airline timetables
- induction and training materials
- sections of Civil Aviation Safety Regulations and Civil Aviation Orders pertaining to inspecting and reporting on aerodromes (i.e. CAR 89)
- relevant requirements, standards and recommended practices of the International Civil Aviation Organization (ICAO) pertaining to airport reporting
- Manual of Standards - Aerodromes (previously Rules and Practices for Aerodromes [RPA])
- Australian Dangerous Goods (ADG) Code and Mines Regulation Act for fuel
- applicable state, territory and commonwealth regulations concerning:
  - occupational health and safety
  - workplace relations
  - workers compensation
  - ADG Code and Mines Regulation Act for fuel
  - environmental protection
  - equal opportunity
  - wildlife management (including culling)

## Unit Sector(s)

Not applicable.

## Competency field

**Competency Field**

B - Equipment Checking and Maintenance