AVIB3003B Inspect and report on the Obstacle Limitation Surfaces

Revision Number: 1
AVIB3003B Inspect and report on the Obstacle Limitation Surfaces

Modification History
Not applicable.

Unit Descriptor
This unit involves the skills and knowledge required to inspect and report on the Obstacle Limitation Surfaces (OLS), including performing a visual inspection of the OLS, reporting obstacles in the OLS, and reporting the return of the aerodrome to the previous status. Licensing, legislative, regulatory or certification requirements are applicable to this unit.

Application of the Unit
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 the Obstacle Limitation Surfaces 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

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
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<tbody>
<tr>
<td>1</td>
<td><strong>Perform a visual inspection of the Obstacle Limitation Surfaces</strong></td>
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<tr>
<td></td>
<td>1.1 The Obstacle Limitation Surfaces are inspected visually, and objects or structures which have or may become obstacles are identified</td>
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<td>1.2 Where appropriate, obstacles in the Obstacle Limitation Surfaces are removed without notification in accordance with workplace procedures</td>
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<td>1.3 Where an obstacle cannot be removed, a determination for the reporting, marking or lighting of the obstacle is made in accordance with workplace procedures</td>
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<tr>
<td>2</td>
<td><strong>Report obstacles in the Obstacle Limitation Surfaces</strong></td>
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<tr>
<td></td>
<td>2.1 Where an obstacle cannot be removed, declared distances and supplementary take off distances are calculated and are appropriately reported to relevant authorities and organisations in accordance with workplace procedures</td>
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<td>2.2 All relevant authorities or organisations are notified of the (1) status of the obstacle (i.e. permanent or temporary), (2) declared distances for the obstacle, (3) location of the obstacle, where there is no requirement for reporting declared distances, and (4) appropriate marking and lighting requirements using suitable means of communication</td>
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<tr>
<td>3</td>
<td><strong>Report the return of the aerodrome to the previous status</strong></td>
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<td></td>
<td>3.1 The Obstacle Limitation Surfaces are inspected visually to confirm removal of temporary obstacles</td>
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<tr>
<td></td>
<td>3.2 Relevant authorities or organisations are notified of the removal of the temporary obstacle, using suitable means of communication</td>
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Required Skills and Knowledge

REQUIRED KNOWLEDGE AND SKILLS

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

Required knowledge:

- Relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders, including CAR 89W to 89Z inclusive
- Relevant OH&S and environmental procedures and regulations
- Procedures for inspecting and reporting on OLS
- Aerodrome operating procedures
- Functions of a works safety officer (as defined in Civil Aviation Safety Regulations CAR 89)
- Reporting procedures
- Relevant equipment used in aerodrome inspection and reporting on OLS
- Aircraft schedules and their use in inspection and reporting on OLS
- Purpose and application of unserviceability markers
- Purpose and application of Method of Working Plans (MOWPs)
- Basic mathematics underlying the survey of OLS and the calculation of the declared distances
- Principles of shielding of objects and the impact of multiple critical obstructions on Supplementary Take-off Distances
- Safety hazards and risks that exist when inspecting and reporting on OLS and related risk control procedures and precautions
- Problems that may occur when inspecting and reporting on OLS and appropriate action that should be taken in each case, including when objects protrude on OLS

Required skills:

- Communicate effectively with others when inspecting and reporting on the OLS
- Read and interpret instructions, regulations, procedures and other information relevant to inspecting and reporting on the OLS
- Interpret and follow operational instructions and prioritise work
- Complete documentation related to inspecting and reporting on the OLS
- Report any obstacles in the OLS of an aerodrome and when the aerodrome has been returned to its previous status
- Operate electronic communication equipment to required protocol
- Work collaboratively with others when inspecting and reporting on the OLS
- 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 the OLS in accordance with regulatory requirements and workplace procedures
REQUIRED KNOWLEDGE AND SKILLS

- Implement contingency plans for unexpected events that may arise when inspecting and reporting on the OLS
- Apply precautions and required action to minimise, control or eliminate hazards that may exist during inspecting and reporting on the OLS
- 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 inspect and report on the OLS
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

Obstacle Limitation Surfaces inspections will occur:
- at least one hour prior to the first commercial transport operation of the day, or
- immediately after any significant phenomenon which could reasonably be expected to affect the serviceability of the aerodrome, or
- otherwise as determined by the aerodrome operator

Relevant authorities for accessing and reporting purposes 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)

Obstacles may be:
- existing objects or structures
- proposed objects or structures

Obstacles may occur within the:
- movement area
- Obstacle Restriction Area (ORA)
- Obstacle Limitation Surfaces (OLS)

Obstacle Limitations Surfaces which are related to the aerodrome reference point include:
- inner horizontal surface
- conical surface
- outer horizontal surface

Other Obstacle Limitations Surfaces include:
- transitional surface
- inner transitional surface
- approach and take-off surfaces
- inner approach surface
- baulked landing surfaces

Declared distances include:
- take-off run available (TORA)
- take-off distance available (TODA)
- accelerate stop distance (ASDA)
- landing distance available (LDA)
- TODA gradient
- Supplementary Take-off Distances (STODA) and
RANGE STATEMENT

Procedures for making the aerodrome surrounds safe may involve:

- marking the unserviceable area or obstacle by day or night
- partial closure of the aerodrome
- aerodrome closure
- contacting the aerodrome user
- marking and lighting of obstacles

Serviceability markers and cones include:

- signal circle markers
- unserviceability cross markers
- unserviceability cones
- displaced threshold markers
- work limit markers
- glider markers
- dumb bell markers

Suitable means of reporting include:

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

Initiating repairs or hazard removal procedures includes:

- notifying relevant aerodrome personnel
- undertaking the repairs
- negotiating with the owner of the obstacle to remove the hazard
- notifying appropriate contractors
- post-works serviceability inspection

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
- standard operating procedures

Information/documents may include:

- relevant sections of Civil Aviation Safety Regulations and Civil Aviation Orders pertaining to inspecting and reporting on the Obstacle Limitation Surfaces
- aerodrome manuals
RANGE STATEMENT

- workplace operating procedures manuals
- En Route Supplement Australia (ERSA)
- Departure and Approach Procedures (DAP)
- manufacturers specifications for equipment used when inspecting and reporting on the Obstacle Limitation Surfaces
- Civil Aviation Advisory Publications (CAAPs)
- airline timetables
- induction and training materials

Applicable regulations and legislation may include:

- relevant Civil Aviation Act (1988) and Civil Aviation Regulations and Orders, including CAR 89w to 89Z inclusive
- relevant requirements, standards and recommended practices of the International Civil Aviation Organization (ICAO) pertaining to airport reporting
- Airports Act
- 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