



**Australian Government**

# **DEFCA327 Coordinate area and route search, and clearance of explosive ordnance**

**Release 1**

## DEFCA327 Coordinate area and route search, and clearance of explosive ordnance

### Modification History

Release	TP Version	Comments
1	DEF12 V2	First release. Replaces and is equivalent to DEFCA317B. Coordinate area and route search, and clearance of explosive ordnance. Pre-requisites removed. Unit Descriptor updated. Application added. Minor Range Statement change. Evidence Guide updated.

### Unit Descriptor

This unit covers the competency required to plan and direct high-risk search tasks as part of an obstacle reduction to provide an unhindered and safe path. Obstacle reduction Is the creation of a safe path through an obstacle which may be widened to the boundaries/extremities for the complete removal of the obstacle, and can be accomplished by the use of explosive or non-explosive methods, including the tasking of purpose designed clearance vehicles and plant equipment.

No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication. In a Defence context, this means that there is no civilian need to hold this unit in order to meet licensing, legislative, regulatory or certification requirements.

### Application of the Unit

This competency was developed for combat engineer personnel required to plan and direct high risk search tasks as part of an obstacle reduction to provide an unhindered and safe path in a deployed operational environment but is applicable to any individual in this field of work. The individual will always lead a team and work autonomously. All activities are carried out in accordance with relevant organisational policies and procedures

### Licensing/Regulatory Information

Not applicable.

## Pre-Requisites

Not applicable.

## Employability Skills Information

This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

### ELEMENT

Elements describe the essential outcomes of a Unit of Competency.

### PERFORMANCE CRITERIA

Performance Criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

## Elements and Performance Criteria

<b>1. Plan area and route clearance</b>	<p>1.1 Requirement is received, understood and confirmed with higher authority as necessary.</p> <p>1.2 <b>Resource</b> availability and serviceability is identified and constraints are determined.</p> <p>1.3 <b>Reconnaissance</b> is conducted in accordance with <i>standard procedures</i>.</p> <p>1.4 Clearance plan is developed in accordance with design, resources, risks and <b>environmental considerations</b>.</p> <p>1.5 Problems that cannot be resolved locally are referred to higher authority for resolution.</p> <p>1.6 Competence of team members is confirmed and monitored.</p> <p>1.7 Clearance team is briefed in accordance with standard procedures.</p> <p>1.8 Liaison is undertaken with outside agencies as required.</p> <p>1.9 Work health and safety (WHS) requirements and recognised safety precautions are applied throughout the operation in accordance with standard procedures.</p>
<b>2. Supervise area and route clearance</b>	<p>2.1 Clearance team is directed and supervised in accordance with the clearance plan.</p> <p>2.2 All <b>unexpected situations</b> that require a quick and decisive response are recognised and responded to in accordance with operational requirements and standard procedures.</p> <p>2.3 Checks are completed for safety signage, lane marking and fencing in accordance with standard procedures.</p> <p>2.4 <b>Information</b> is recorded throughout operation and reported to outside agencies as necessary.</p> <p>2.5 Support from outside agencies is organised and directed.</p> <p>2.6 Technical advice is provided to the chain of command or support agencies.</p>
<b>3. Finalise the task</b>	<p>3.1 Higher authority is notified that clearance is complete in accordance with standard procedures.</p> <p>3.2 Post activity analysis is conducted and subsequent recommendations are made in accordance with</p>

	<p>standard procedures.</p> <p>3.3 <b><i>Equipment and stores</i></b> are reconditioned, replaced or returned as applicable.</p> <p>3.4 <b><i>Documentation</i></b> is completed in accordance with standard procedures.</p>
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## Required Skills and Knowledge

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

### Required Skills

- accurately compile minefield records
- analyse the threat – tactics, techniques and procedures
- collect and report information for intelligence
- destruct malfunctioned explosive ordnance
- employ chemical detectors
- employ clearance methods
- employ hazard marking
- employ RRAMNS
- employ Rules of Evidence
- employ Rules of Engagement
- enforce explosive safety distances
- lay, arm, neutralise and disarm mines and booby traps
- Navigate with compass and GPS
- plan road and route repair
- rapid calculation of blast effects
- use and employ electronic metal detector

### Required Knowledge

- blast effects
- breaching techniques
- characteristics, technical capabilities, effects, employment and limitations of electronic metal detectors, chemical detectors
- characteristics, technical capabilities, effects, employment and limitations of mines, booby traps and battlefield ordnance
- clearance methods
- destruction of malfunctioned explosive ordnance
- explosive safety distances
- GPS
- intelligence – collection and reporting
- navigation techniques
- obstacle effects and obstacle construction
- recording requirements such as minefield records
- relevant WHS regulations/requirements, equipment, material and personal safety requirements
- road and route repair techniques
- supervision requirements of explosive users/workers

## Evidence Guide

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

Assessment must confirm the ability to coordinate clearance of at least a 50 metre route. The route must contain obstacles of explosive ordnance that as a minimum includes mines and booby traps.

### **Consistency in performance**

Competency should be demonstrated over time in a range of realistic operational scenarios.

### **Context of and specific resources for assessment**

#### **Context of assessment**

Competency should be assessed in simulated work environment that replicates the operational threat environment. The context of assessment is simulated due to the nature of this high risk environment.

#### **Specific resources for assessment**

Access to resources as listed in the Range Statement; suitable site clearance team; and communications equipment.

## 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. ***Bold italicised*** wording in the Performance Criteria is detailed below.

<b><i>Resources</i></b> may include:	<ul style="list-style-type: none"><li>• cranes</li><li>• earth moving equipment</li><li>• electronic metal detectors</li><li>• explosives and ancillary equipment</li><li>• hand held prodger</li><li>• personal protective equipment</li><li>• rapid route and area mine neutralisation system</li><li>• remote positioning devices</li><li>• signage</li></ul>
<b><i>Reconnaissance</i></b> may include:	<ul style="list-style-type: none"><li>• area observation</li><li>• collecting demographic and infrastructure intelligence</li><li>• collecting topographical information</li><li>• forming up point marking</li><li>• locating obstacle positions</li><li>• obstacle boundaries</li><li>• risk and environmental assessment</li><li>• route marking</li></ul>
<b><i>Standard procedures</i></b> may include:	<ul style="list-style-type: none"><li>• Australian Standards</li><li>• job guides, pamphlets and other publications</li><li>• manufacturers' handbooks, industry specifications and technical instructions</li><li>• WHS regulations</li><li>• organisational policies and procedures</li><li>• relevant local government by-laws</li><li>• relevant state/territory or federal legislation or regulations</li><li>• written and verbal orders and job instructions</li></ul>
<b><i>Environmental considerations</i></b> may include:	<ul style="list-style-type: none"><li>• day or night</li><li>• threat</li><li>• tactical</li><li>• flora and fauna</li><li>• geographical features</li><li>• variations in weather conditions</li></ul>
<b><i>Outside agencies</i></b> may include:	<ul style="list-style-type: none"><li>• cordon</li><li>• government agencies</li><li>• non-government organisations (NGOS)</li></ul>



***Unexpected situations*** may include:

- police
- booby traps
- casualties or death
- environmental
- equipment malfunction
- improvised explosive devices
- unauthorised personnel

***Information*** may include:

- activity log
- available time
- clearance rate
- defined perimeter
- maps
- obstacle identification and location
- personnel – witness, etc.
- threat:
- aim/target
- type, quantity and location of mines, booby traps, unexploded ordnance etc.
- tactics, techniques, procedures
- intent, mobility, capability, vulnerability
- threat assessment

***Equipment and stores*** may include:

- binoculars
- chemical detectors (electronic, chemical reaction, etc.)
- communications equipment
- compass
- explosives and accessories
- first aid kit and stretcher
- global positioning system (GPS)
- lighting and power source
- metal detectors
- mine marker
- personal protective equipment (PPE):
  - ballistic helmets
  - ballistic jacket and pants
  - ballistic goggles/visor
- prod
- rapid route and area mine neutralisation system (RRAMNS)
- tools – hand and powered
- vehicles
- weapons

**Documentation** may include:

- activity log
- after action reports
- environmental compliance
- equipment documentation
- maps
- minefield records

## **Unit Sector(s)**

Not applicable.