



**Australian Government**

# **DEFAD002A Assist in establishing and clearing a cargo drop zone**

**Release: 2**

## DEFAD002A Assist in establishing and clearing a cargo drop zone

### Modification History

Release	TP Version	Comments
2	DEF12V2	Layout adjusted. No changes to content.
1	DEF12V1	Primary release.

### Unit Descriptor

This unit covers the competency required to assist with setting up and closing a cargo drop zone capable of receiving container and/or platform air-drop loads from fixed wing aircraft, and clearing items from a cargo drop zone.

### Application of the Unit

The number and size of loads to be air-dropped will vary depending on the operation and capabilities of the aircraft used, which will determine the size of the drop zone required. Removal of air-dropped loads from the drop zone requires the use of material handling equipment and vehicles. The operation of this equipment is not covered within this unit. Work is normally performed as part of a small team under supervision with limited decision making.

### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

Not applicable.

### 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. 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

ELEMENT	PERFORMANCE CRITERIA
1. Assist with establishing a cargo drop zone	<p>1.1 Tasks are received and confirmed with supervisor</p> <p>1.2 <b><i>Markers or signal devices</i></b> are set up in accordance with <b><i>workplace procedures</i></b></p> <p>1.3 <b><i>Appropriate personnel</i></b> are notified of the readiness of the drop zone, using <b><i>appropriate communication methods</i></b></p>
2. Participate in operating a cargo drop zone	<p>2.1 <b><i>Deployment sequence</i></b> and impact of load onto drop zone is observed in accordance with workplace procedures</p> <p>2.2 Loads and associated equipment are inspected and <b><i>abnormalities</i></b> are reported to appropriate personnel in accordance with workplace procedures</p> <p>2.3 <b><i>Aerial delivery equipment</i></b> is <b><i>recovered</i></b> in accordance with workplace procedures</p> <p>2.4 <b><i>Air-dropped loads</i></b> are <b><i>recovered</i></b> in accordance with workplace procedures</p>
3. Assist with closing a cargo drop zone	<p>3.1 Appropriate <b><i>methods</i></b> are used to close drop zone in accordance with workplace procedures</p> <p>3.2 Appropriate personnel are notified once drop zone has been closed</p>

## **Required Skills and Knowledge**

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

### **Required Skills**

- communicate within the workplace
- load vehicles and restraining loads
- manual lifting techniques
- operate navigation equipment
- operate organisational vehicles
- teamwork
- use enterprise communications systems and procedures
- use material handling equipment
- use pyrotechnics and marking devices

### **Required Knowledge**

- aircraft communications procedures
- air-drop load deployment sequence
- drop zone communication devices
- drop zone procedures
- map reading and navigation
- safety precautions for using pyrotechnics
- workplace work health and safety (WHS) requirements specific to drop zones

## Evidence Guide

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

Assessment must confirm the ability to:

- set up flares, lights and marker panels at a drop zone
- communicate with the aircrew via radio
- safely recover an air-drop load in excess of 22 kg (50 lbs).

### Consistency in performance

Competency should be demonstrated over time using a range of actual or simulated air-drop operations covering a range of air-drop types and contexts.

### Context of and specific resources for assessment

#### Context of assessment

Competency should be assessed in a field environment.

#### Specific resources for assessment

Access is required to:

- equipment including:
- air-drop loads
- aerial delivery equipment
- material handling equipment
- communication equipment and devices
- suitable cargo drop zone to receive air-drop loads.

### Guidance information for assessment

The use of simulated air-drop loads may be utilised for assessment when suitable aircraft are not available.

## 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>Markers or signal devices</i></b> may include:	<ul style="list-style-type: none"> <li>• Heliograph mirrors</li> <li>• Lights</li> <li>• Marker panels</li> <li>• Pyrotechnics or flares</li> <li>• Raised angle markers</li> <li>• Smoke</li> <li>• Tethered balloons</li> </ul>
<b><i>Workplace procedures</i></b> may include:	<ul style="list-style-type: none"> <li>• Australian Standards</li> <li>• Briefs</li> <li>• Doctrinal pamphlet</li> <li>• Duty statements</li> <li>• Legislative requirements</li> <li>• Manufacturers' handbooks, industry specifications and technical instructions</li> <li>• WHS regulations</li> <li>• Organisational policies and procedures</li> <li>• Procedure manuals</li> <li>• Relevant state/territory or federal legislation</li> <li>• Standard Operating Procedures</li> <li>• Technical and tactical procedures</li> <li>• Written or verbal orders</li> </ul>
<b><i>Appropriate personnel</i></b> may include:	<ul style="list-style-type: none"> <li>• Aircrew</li> <li>• Supervisor</li> </ul>
<b><i>Appropriate communication methods</i></b> may include:	<ul style="list-style-type: none"> <li>• Additional panels to code identifier</li> <li>• Extinguishing lights</li> <li>• Radio communications</li> <li>• Removing code identifier</li> <li>• Smoke</li> </ul>
<b><i>Deployment sequence</i></b> may include:	<ul style="list-style-type: none"> <li>• Deployment of load from aircraft</li> <li>• Deployment of extraction parachute</li> <li>• Deployment of main parachute</li> </ul>
<b><i>Abnormalities</i></b> may include:	<ul style="list-style-type: none"> <li>• Abnormal function of aerial delivery equipment</li> <li>• Air-dropped load not landing on intended point of impact</li> <li>• Failure of aerial delivery equipment</li> <li>• Other unforeseen faults/problems</li> </ul>

<b><i>Aerial delivery equipment</i></b> may include:	<ul style="list-style-type: none"><li>• Containers</li><li>• Load rigging equipment</li><li>• Parachute releases</li><li>• Parachutes</li><li>• Platforms</li></ul>
<b><i>Recovery of aerial delivery equipment and air-dropped loads</i></b> may involve the use of:	<ul style="list-style-type: none"><li>• Manual handling procedures</li><li>• Material handling equipment</li><li>• Vehicles</li></ul>
<b><i>Air-drop loads</i></b> may include:	<ul style="list-style-type: none"><li>• Free drop loads between 1.4 kg (5 lbs) - 35 kg (77 lbs)</li><li>• Container loads between 22 kg (50 lbs) - 1 000 kg (2 200 lbs)</li><li>• Platform loads between 1 140 kg (2 520 lbs) - 19 040 kg (42 000 lbs)</li></ul>
<b><i>Methods to close drop zone</i></b> may include:	<ul style="list-style-type: none"><li>• Radio communications</li><li>• Removal of code identifier</li><li>• Smoke</li></ul>

## Unit Sector(s)

Not applicable.