



**Australian Government**

# **DEFCM314A Operate an in-service remote positioning vehicle**

**Release 2**

## DEFM314A Operate an in-service remote positioning vehicle

### 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 operate an in-service remote positioning vehicle (RPV). While the remote positioning vehicle is operated as part of a task, the task itself is not covered by this unit of competency.

The unit also covers the operation of tools that are a fixed component of the RPV, but does not cover the attachment and operation of other tools.

### Application of the Unit

This unit normally applies to the individual who is required to operate a remote positioning vehicle as part of a task.

The individual is required to prepare the remote positioning vehicle as part of a task, to apply the appropriate occupational health and safety work health and safety (OH&SWHS) requirements and safety precautions, to identify requirements and resources, to operate the RPV, and to complete all housekeeping related to the operation of the RPV.

### 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 Required Skills and Knowledge and/or the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. <b>Plan and prepare for RPV operations</b>	<p>1.1 Requirement to operate an <i>in-service RPV</i> are identified and confirmed in accordance with <i>standard procedures</i>.</p> <p>1.2 <i>Potential risks and hazards</i> related to the operation of the RPV are identified and considered in the planning.</p> <p>1.3 Requirements for an RPV control area location are determined.</p> <p>1.4 Safe routes to and from control area to the task location are identified.</p> <p>1.5 RPV start up procedures are applied in accordance with standard procedures .</p> <p>1.6 <i>Emergency procedures, WHS requirements and recognised safety precautions</i> are applied throughout the operation in accordance with standard procedures.</p>
2. <b>Operate remote positioning vehicle</b>	<p>2.1 Legislative requirements are applied throughout the operation in accordance with operational requirements and standard procedures.</p> <p>2.2 RPV is operated in accordance with operational requirements and standard procedures.</p> <p>2.3 <i>Fixed component tools</i> are operated in accordance with task requirements and standard procedures.</p> <p>2.4 Control panel <i>warning indicators</i> are monitored throughout the task in accordance with operational requirements and standard procedures.</p> <p>2.5 Faults are reacted to in accordance with operational requirements and standard procedures.</p> <p>2.6 RPV shut down procedures are applied in accordance with standard procedures.</p>
3. <b>Carry out operator maintenance</b>	<p>3.1 <i>Inspections and checks</i> are conducted to maintain remote positioning vehicle performance in accordance with operational requirements and standard procedures.</p> <p>3.2 <i>Operator maintenance</i> is conducted in accordance with operational requirements and standard procedures.</p> <p>3.3 Fixed component tools are tested, adjusted or replaced in accordance with operational requirements and standard procedures.</p>
4. <b>Complete housekeeping</b>	<p>4.1 RPV is cleaned and stored in accordance with</p>

**activities**

standard procedures .

4.2 All required records and documentation are finalised in accordance with standard procedures.

## **Required Skills and Knowledge**

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

### **Required Skills**

- apply workplace instructions and procedures
- display hand and eye coordination
- identify and solve problems that may arise
- identify potential risks and hazards and ways of controlling the risks and hazards involved
- identify problems that may occur during the task and action that can be taken to report or resolve the problems
- modify activities to cater for variations in workplace contexts and environment
- operate radio controlled transmitter/receiver
- operate fibre optic control
- plan and organise systems and activities
- read and interpret operational and technical data, instructions and manuals
- select and apply appropriate application of technology, information systems and procedures
- test and identify remote control faults

### **Required Knowledge**

- fixed component tools technical capability and limitations
- operational procedures and checks
- operational safety
- operator maintenance procedures
- relevant workplace documentation procedures
- remote operational procedures
- RPV technical capability and limitations
- start up and shut down procedures
- storage procedures

## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

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

Assessment must confirm the ability to:

- apply knowledge of all procedures, requirements and instructions to operate an RPV
- apply appropriate techniques

### **Consistency in performance**

Competency should be demonstrated over time and in a range of actual or simulated contexts.

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

#### **Context of assessment**

Competency should be assessed in the workplace or in a simulated workplace environment, in accordance with all relevant legislation and organisational requirements.

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

Access is required to:

- RPVs and associated 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>In-service RPVs</i></b> may include:	<ul style="list-style-type: none"> <li>• All RPVs approved for in-service use, whether for operational use or training and may include remote positioning vehicles operated by cable or radio signal or autonomously (pre-programmed)</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</li> <li>• Verbal and/or written orders and job instructions</li> </ul>
<b><i>Potential risks and hazards</i></b> may include:	<ul style="list-style-type: none"> <li>• Communication failure</li> <li>• Radio hazard</li> <li>• Remote failure</li> <li>• Safety hazards associated with equipment mounted on RPV</li> <li>• Unsafe ground</li> <li>• Visibility</li> <li>• Uncommanded vehicle response</li> </ul>
<b><i>Emergency procedures, work health and safety requirements and recognised safety precautions</i></b> may:	<ul style="list-style-type: none"> <li>• Be subordinate to the operational requirement of the task being conducted</li> <li>• Involve applying recognised safety precautions</li> </ul>
<b><i>Fixed component tools</i></b> may include:	<ul style="list-style-type: none"> <li>• Manipulator arm</li> <li>• Video cameras</li> </ul>
<b><i>Warning indicators</i></b> may include:	<ul style="list-style-type: none"> <li>• Control monitors and indicators</li> <li>• Equipment indicators</li> <li>• Remote indicators</li> <li>• Visual and/or audio systems</li> </ul>
<b><i>Inspections and checks</i></b> may include:	<ul style="list-style-type: none"> <li>• Battery recharging</li> <li>• Battery replacement</li> <li>• Inspection and tightening of loose fittings</li> </ul>
<b><i>Operator maintenance</i></b> may include:	<ul style="list-style-type: none"> <li>• Charging batteries</li> <li>• Cleaning</li> </ul>

	<ul style="list-style-type: none"><li>• Greasing</li><li>• Inspecting batteries</li><li>• Replacing broken fittings</li><li>• Tightening loose fittings</li></ul>
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**Unit Sector(s)**

Not applicable.