



Australian Government

Department of Education, Employment and Workplace Relations

PUADEFEO815A Operate small watercraft

Revision Number: 1

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Modification History

Not applicable.

Unit Descriptor

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This unit covers the competency required to operate *small watercraft*.

It includes the requirement to prepare the watercraft for operations, to conduct buoyancy calculations, to carry out appropriate tasks, and to clean and maintain the watercraft.

Application of the Unit

Application of the Unit

This unit applies to the individual who is required to operate small watercraft to conduct a range of tasks including:

- transporting personnel and/or equipment across water
- assisting mounting and maintaining wet crossing activities
- patrolling range boundaries
- recovering proof ordnance.

While the technical aspects of this competency are concerned with 'operating a boat', the specialisation of the skill, and safety issues associated with waterborne operations confer additional responsibilities upon the operator. For all *watercraft operations* the individual may need to provide directions to personnel within the boat concerning specific safety matters such as seating, movement and actions on incidents such as man overboard and capsize. The individual must demonstrate sound judgement in the use of authority, and where possible, work within the existing lines of authority. The individual will usually operate the boat with minimum supervision.

The watercraft will normally be operated:

- in protected or calm waters
- day or night
- in training, on exercise and on operations.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Employability Skills	This unit contains employability skills.
Pre-requisite Unit/s	Nil

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. Prepare for watercraft operations

- 1.1 ***Operating instructions*** are interpreted to determine the task, cargo, destination and route, and navigation data is compiled in accordance with ***standard procedures***
- 1.2 ***Buoyancy/floatation calculations*** are completed to ensure passengers and cargo are safe to move
- 1.3 ***Equipment*** is selected, checked for serviceability and unserviceable items are replaced or rejected and reported to the supervisor in accordance with standard procedures
- 1.4 ***Shore preparation*** is conducted in accordance with standard procedures and watercraft is prepared and readied for launch
- 1.5 Appropriate personal protective equipment is selected and worn by all personnel
- 1.6 Passengers and crew are given a safety brief by the operator prior to embarking

ELEMENT**PERFORMANCE CRITERIA****2. Operate small watercraft**

- 2.1 Watercraft is launched safely in accordance with standard procedures and local conditions
- 2.2 Watercraft is loaded and trimmed to ensure safety of crew and load
- 2.3 Watercraft is *operated* consistent with *hazards and environmental conditions*, and in accordance with standard procedures
- 2.4 Directions are provided, as necessary, to passengers in order to maintain safety and efficient boat operation
- 2.5 *Contingency and emergency drills* are carried out, as necessary, to minimise threat to personnel and equipment
- 2.6 Personnel and/or loads are disembarked and/or unloaded safely in accordance with standard procedures

3. Recover and maintain vessel

- 3.1 Watercraft is recovered from a ramp or improvised landing site
- 3.2 Watercraft and associated equipment are checked for serviceability, cleaned and maintained
- 3.3 Defects are reported and documentation is completed in accordance with standard procedures
- 3.4 Debriefing requirements are completed, as required, in accordance with standard procedures

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required Skills

- calculate and record number and weight of passengers, stores and equipment
- constantly monitor hazards and apply safety principles to operations
- encourage other team members
- follow instructions/directives and report information
- participate in team
- read and interpret operating instructions
- use a variety of verbal and non-verbal communication techniques including language style, active listening
- use clear interpersonal communication as operator of the vessel
- use knots and lashings to secure watercraft

Required Knowledge

- applicable statutory waterways rules for watercraft operation
- buoyancy/floatation calculations
- composition of teams, and roles and responsibilities of team members
- effects of water moving over objects and obstacles
- local water hazards and environmental conditions
- team work
- techniques for supporting others
- verbal and non-verbal communication techniques including language style, active listening

Evidence Guide

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 safely operate selected small watercraft on various waterways under a range of environmental conditions. The operator must demonstrate competency at carrying both equipment and personnel, and demonstrate the ability to manage the full range of contingency and emergency actions.

Consistency in performance

Competency should be demonstrated over a timeframe that allows for the preparation, operation and maintenance of small watercraft under a range of water operating conditions carrying personnel and cargo.

Context of and specific resources for assessment

Context of assessment

Competency should be assessed under a variety of water operating conditions. Evidence should be gathered by observing the individual preparing, operating and maintaining small watercraft on a variety of tasks that address all the requirements of the critical aspects of evidence.

Specific resources for assessment

Access is required to:

- watercraft, equipment and accessories
- safety equipment appropriate to the task
- appropriate cargo to be loaded, transported and unloaded
- training areas with access to a suitable body of water.

EVIDENCE GUIDE

Method of assessment

In a public safety environment assessment is usually conducted via direct observation in a training environment or in the workplace via subject matter supervision and/or mentoring, which is typically recorded in a competency workbook.

Assessment is completed using appropriately qualified assessors who select the most appropriate method of assessment.

Assessment may occur in an operational environment or in an industry-approved simulated work environment.

Forms of assessment that are typically used include:

- direct observation
- interviewing the candidate
- journals and workplace documentation
- third party reports from supervisors
- written or oral questions.

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

Small watercraft may include

Hovercraft
 Improvised watercraft such as rafts, pontoons, inflatable, rigid body or improvised watercraft constructed of timber, drums, canvas, inflatable tubes or any combination
 Motorised and non-motorised boats up to five metres in length capable of accommodating a maximum of ten personnel and the operator and crewman
 Motorised and non-motorised bridge and ferry construction craft
 Motorised and non-motorised rigid and non-rigid inflatable craft
 Watercraft powered by outboard motors of up to 40 hp

Watercraft operations may include

Evacuation of personnel, stores and equipment
 Float for people operating near, in or over water
 Providing range safety
 Providing safety
 Resupply operations
 Searches, rescues
 Support to bridge, ferry and raft operations
 Support to divers
 Support to proof firings
 Transport of personnel

Operating instructions may include

Access and egress routes
 Details of enemy threat and own force operations
 Details of ramps or launching points
 Details of resupply or evacuation requirements
 Number and nature of personnel, including casualties to be transported
 Potential hazards

RANGE STATEMENT

	Tidal information
	Types of general cargo and weights
	Weather forecast
Standard procedures may include	Manufacturer's handbooks, industry specifications and technical instructions
	OH&S regulations for water safety
	Procedures manuals, job guides, watermanship pamphlets and other publications
	Statutory waterways rules
	Written and verbal orders and instructions
Buoyancy/floatation calculations may include	Freeboard when loaded within load limits
	Number and weight of passengers within load limits
	Weight of stores and equipment within load units
Equipment to be used may include	Appropriate rescue and recovery equipment
	Items of stores and equipment
	Personal protective equipment such as life jackets
	Safety equipment that may be required under state/territory legislation or standard procedures
	Vehicles and equipment used to transport boats
Shore preparation may include	Assembly for launch
	Equipment checks
	Loading of stores and equipment
	Positioning vessel on ramp or launching site
	Pre-start checks of engine
Operating the watercraft may include	Compliance with waterways rules and regulations
	Engine start-up procedures
	Holding a marine license from a relevant authority
	Moving at a safe speed consistent with the conditions
	Navigating to destination
Hazards and environmental conditions may include	Adverse weather
	Eddies

RANGE STATEMENT

	Fast flowing streams and near still waters
	Floating and submerged debris and snags
	Fog or drizzle
	Heat and cold
	Reduced visibility due to after dark operations
	Tidal flats
	Time pressure
	Undertows
	Underwater hazards
	Wildlife
Environment includes	By day or night and under illumination
	In all weather conditions
	In waters including:
	<ul style="list-style-type: none"> • enclosed waters • lakes and dams • non-tidal rivers • open waters • protected harbours • protected waters • tidal flats • tidal rivers
	Under a range of water conditions
Contingency and emergency drills may include	Abandon ship drills
	Action on capsized
	Diagnosing and rectifying minor engine faults
	Fire drills
	Man overboard drills
	Propeller replacement
	Towing disabled vessels
	Use of improvised rudder
	Use of oars/improvised oars
	Use of sail

Unit Sector(s)

Not applicable.