



Australian Government

Department of Education, Employment and Workplace Relations

SISOYSB302A Sail a small boat in light to moderate conditions

Release: 2

SISOYSB302A Sail a small boat in light to moderate conditions

Modification History

Not Applicable

Unit Descriptor

This unit describes the performance outcomes, skills and knowledge required to rig and sail a small boat using a variety of techniques in light to moderate conditions and under minimal guidance. This unit also focuses on using a trapeze and spinnaker, and participating in crew recovery and towing drills.

Application of the Unit

This unit applies to those working as small boat sailing guides in a range of light to moderate conditions.

This unit may also apply to leaders working for outdoor education or adventure providers; volunteer groups; not-for-profit organisations or government agencies.

Licensing/Regulatory Information

No licensing, regulatory or certification requirements apply to this unit at the time of endorsement.

Pre-Requisites

Nil

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements and Performance Criteria

ELEMENT

PERFORMANCE CRITERIA

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the Evidence Guide.

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|-----------------------------------|--|
| 1. Plan for the sailing activity. | <ul style="list-style-type: none"> 1.1. Select an activity site or location with <i>light to moderate conditions</i> according to <i>relevant legislation</i> and <i>organisational policies and procedures</i>. 1.2. Access <i>relevant sources</i> to interpret <i>weather and environmental information</i>, and determine potential sailing conditions. 1.3. Identify and minimise potential <i>hazards and risks</i> within the <i>small boat</i> sailing environment. 1.4. Identify <i>food and water requirements</i> to maintain physiological well being during activity. |
| 2. Select equipment. | <ul style="list-style-type: none"> 2.1. Select small boat and <i>equipment</i> according to design and construction features and check working condition. 2.2. Identify and select suitable <i>sails</i> for boat. 2.3. Select clothing suitable for the prevailing and expected conditions. 2.4. Fit and adjust equipment to ensure comfort, safety and suitability. |
| 3. Rig and de-rig small boat | <ul style="list-style-type: none"> 3.1. Identify appropriate running and standing rigging. 3.2. Determine the appropriate type of <i>cleat</i>. 3.3. Determine Cunningham eye system and outhaul. 3.4. Identify features of <i>sails and mast and boom fittings</i>. 3.5. Rig <i>sails</i> using <i>appropriate knots</i>. |
| 4. Sail a marked course. | <ul style="list-style-type: none"> 4.1. Identify the points of sailing given the direction of the wind relative to the small boat. 4.2. Use <i>primary boat controls</i> to sail the boat through tacks and gybes and demonstrate the techniques of roll tacking and roll gybing. 4.3. <i>Determine wind direction and use wind, wind</i> |

ELEMENT	PERFORMANCE CRITERIA
	<p><i>indicators and directional change to follow the marked course.</i></p>
	<p>4.4. Use the tiller extension where necessary to sail a course which includes windward and downwind legs.</p>
	<p>4.5. Manoeuvre <i>small boat</i> alongside a wharf or anchored vessel or object without damage or injury to boat or persons.</p>
	<p>4.6. Maintain communication with other craft and crew members, where required.</p>
<p>5. Handle a spinnaker.</p>	<p>5.1. Identify component <i>parts of a spinnaker and situations in which a spinnaker could be used.</i></p>
	<p>5.2. Rig a spinnaker, set, gybe and drop in <i>light to moderate conditions.</i></p>
	<p>5.3. Steer a <i>small boat</i> under spinnaker in <i>light to moderate conditions.</i></p>
<p>6. Use a trapeze.</p>	<p>6.1. Identify situations in which <i>trapeze systems</i> are used.</p>
	<p>6.2. Identify component parts of a <i>trapeze</i> system and adjust and fit the trapeze harness according to manufacturer's recommendations and organisational policies and procedures.</p>
	<p>6.3. Sail on <i>trapeze</i> in favourable conditions according to organisational policies and procedures.</p>
	<p>6.4. Steer boat with a crew on <i>trapeze</i>, demonstrating the ability to get in, get out, tack and gybe.</p>
<p>7. Perform crew recovery and towing drills.</p>	<p>7.1. Recover a crew member lost overboard according to organisational policies and procedures.</p>
	<p>7.2. Apply appropriate recovery side, approach speed and stopping technique to minimise risk of injury to crew in water and ensure efficient recovery.</p>
	<p>7.3. Prepare <i>small boat</i> for <i>towing according to organisational policies and procedures.</i></p>
	<p>7.4. Tow boat in single and or multiple tow situations according to organisational policies and procedures.</p>
	<p>7.5. Release boat from multiple tow situations safely according to organisational policies and procedures.</p>
<p>8. Complete post activity responsibilities.</p>	<p>8.1. Maintain and stow <i>sail</i> and rig according to manufacturer's recommendations and organisational policies and procedures.</p>
	<p>8.2. Maintain trailers and trolleys to minimise rust on frames and bearings.</p>

ELEMENT

PERFORMANCE CRITERIA

- 8.3. Evaluate *relevant aspects* of the activity.
- 8.4. Identify improvements for future small boat sailing experiences in light to moderate conditions.

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- problem-solving skills to:
 - identify and assess features, fittings and purposes of small boat equipment
 - differentiate between knots used for rigging
 - determine wind direction to maintain direction, speed and balance
- planning and organising skills to:
 - select appropriate location with light to moderate conditions
 - source small boat, equipment, and food and water
 - prepare for trapeze, spinnaker, recovery and towing drills
- numeracy skills to:
 - select correct sized sail and spinnaker for boat
 - determine points of sail in relation to course, wind direction and angles
 - identify when to use the spinnaker according to specific points of sail
- literacy skills to interpret and apply weather and environmental information and manufacturer's recommendations for equipment use
- communication skills to implement towing and recovery procedures as part of a team
- emergency response and crew recovery skills to enable initial response to emergencies.

Required knowledge

- legislation and organisational policies and procedures to enable safe conduct of all activities including rules of the road to safely sail alongside other water craft
- types of small boats and equipment, characteristics and technology used for sailing
- maintenance and care of boat and equipment to ensure optimal condition is maintained
- knots and their application to a sailing setting, such as types used to rig sails
- sailing manoeuvres and techniques including use of a spinnaker and trapeze
- sailing terminology, such as port or starboard, windward, leeward, to enable a common understanding between crew members
- the main points of sailing and sail positions to manoeuvre small boat efficiently
- information on tide and wind to enable safe launching, landing and manoeuvring
- towing and recovery procedures to enable safe and effective operations
- hazards and risks associated with small boat sailing and the effects of wind direction and speed
- food and water requirements to maintain health and energy during activities
- emergency, towing and recovery procedures to ensure risk minimisation.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

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

Evidence of the following is essential:

- selects small boat and equipment suitable for light to moderate conditions and identifies features and fittings to rig and de rig small boat
- performs manoeuvres around a marked course, including all major points of sailing, in light to moderate conditions
- uses primary boat controls, a spinnaker and a trapeze to enhance sailing performance and undertakes single and multiple tows and crew recoveries while maintaining adequate communication with crew
- maintains and stows equipment according to manufacturer's recommendations
- evaluates and reflects on own small boat sailing performance to identify strengths, weaknesses and areas that need improvement.

Context of and specific resources for assessment

Assessment must ensure participation in multiple small boat sailing activities in light to moderate conditions that are of sufficient duration to demonstrate competency and consistency of performance.

Assessment must also ensure access to:

- resources and information to plan and select equipment for the sailing activity
- a suitable location with *light to moderate conditions*, winds of 8 - 18 knots and wave heights up to 0.5m
- a small sailing boat, suitable sails, spinnaker, and safety equipment.

Method of assessment

A range of assessment methods should be used to assess practical skills and knowledge. The following examples are appropriate for this unit:

- oral or written questioning to assess knowledge of small boat sailing environments, including wind direction and speed, and possible hazards
- observation of safe participation and demonstration of enhanced small boat sailing techniques and manoeuvres

- third-party reports from a supervisor detailing performance.

Holistic assessment with other units relevant to the industry sector, workplace and job role is recommended.

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, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Light to moderate conditions may include:

- winds of 8 - 18 knots
- wave height to 0.5m.

Relevant legislation may include:

- occupational health and safety
- permits or permission for access
- environmental regulations
- ***marine regulations.***

Organisational policies and procedures may include:

- occupational health and safety
- use, maintenance and storage of equipment
- communication protocols
- crew recovery
- towing procedures
- minimal impact environmental codes
- code of ethics.

Relevant sources may include:

- Bureau of Meteorology
- media
- land managers or agencies
- coastal patrol or coastguard
- volunteer marine rescue
- local knowledge.

Weather and environmental information may include:

- satellite images
- daily and weekly forecasts
- maximum and minimum temperatures
- weather warnings
- event warnings
- river levels
- synoptic charts
- high and low tide predictions.

Hazards may include:

- temperature extremes
- slippery or unstable terrain
- dangerous animals and insects
- stinging trees and nettles
- dense vegetation
- group management hazards
- slippery or unstable shore

- poor posture, poor technique
 - poor carrying techniques
 - loose or insecure craft when being transported.
 - other craft.
- Risks** may include:
- hypothermia
 - heat exhaustion
 - injuries
 - exhaustion
 - lost party or party member
 - equipment failure
- Small boat** may include:
- 18ft and under
 - single masted unballasted mono or multi hulled vessel
 - stayed or unstayed mast
 - one, two or three sails.
- Food and water requirements** may include:
- range of foods
 - energy content
 - hydration.
- Equipment** may include:
- personal protective equipment
 - safety and rescue equipment
 - small boat
 - trapeze harness.
- Sails** may include:
- mainsail
 - jib
 - spinnaker.
- Cleat** may include:
- cam
 - clam
 - horn
 - V cleats.
- Knots** may include:
- figure of eight
 - bowline
 - half hitch
 - reef knot
 - rolling hitch.
- Primary boat controls** may include:
- mainsail
 - jib
 - balance
 - trim
 - centreboard.
- Trapeze system** may include:
- full harness
 - half harness.

Relevant aspects may include:

- objectives
- planning process
- activity site
- weather
- equipment selection
- clothing selection
- food selection
- instructional content
- instructional technique
- directing techniques
- rescue techniques employed.

Unit Sector(s)

Outdoor Recreation

Competency Field

Yachting - Small Boat