



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **SFIFISH215B Apply deckhand skills aboard a fishing vessel**

**Release: 1**

## **SFIFISH215B Apply deckhand skills aboard a fishing vessel**

### **Modification History**

Not Applicable

## Unit Descriptor

<p><b>Unit descriptor</b></p>	<p>This unit of competency involves basic deckhand duties aboard a fishing vessel, including rope work, assisting in anchoring, mooring, operating winches and windlasses, and preparing a fishing vessel for sea.</p> <p>Licensing, legislative, regulatory or certification requirements may apply to this unit. Therefore it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this unit.</p>
-------------------------------	--

## Application of the Unit

<p><b>Application of the unit</b></p>	<p>This unit has application to a deckhand role aboard a fishing vessel. Someone undertaking deckhand duties may also undertake other work roles, such as cooking, and onboard processing.</p> <p>All enterprise or workplace procedures and activities are carried out according to <i>relevant government regulations, licensing and other compliance requirements</i>, including <i>occupational health and safety (OHS) guidelines</i>, maritime and occupational diver codes of practice and procedures, and <i>ecologically sustainable development (ESD) principles</i>.</p> <p>Equipment operation, maintenance, repairs and calibrations are undertaken in a safe manner that conforms to manufacturer instructions. Appropriate <i>personal protective equipment (PPE)</i> is selected, checked, used and maintained.</p>
---------------------------------------	---

## Licensing/Regulatory Information

Refer to Unit Descriptor

## Pre-Requisites

<b>Prerequisite units</b>		

## Employability Skills Information

<b>Employability skills</b>	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 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.
---	--

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<p>1. Use and maintain ropes and perform basic knots, bends, hitches, splices and common whipping</p>	<p>1.1. <b>Operations</b> are carried out safely.</p> <p>1.2. Rope materials, methods of construction, measurement methods, physical characteristics and common areas of use are correctly identified.</p> <p>1.3. Ropes are checked for wear, maintained, coiled and stowed correctly.</p> <p>1.4. Knots, bends and hitches are tied neatly and securely and used according to their correct application.</p> <p>1.5. Ropes are spliced neatly and securely according to their correct application and rope ends are whipped, where appropriate, to maintain good condition.</p>
<p>2. Operate winches, capstans and windlasses</p>	<p>2.1. Winches, capstans and windlasses are selected, as appropriate, checked and prepared for operation prior to use.</p> <p>2.2. Winches, capstans and windlasses are safely operated to carry out fishing vessel deck operations.</p>
<p>3. Secure the vessel at anchor</p>	<p>3.1. Securing of the vessel is carried out.</p> <p>3.2. Preparation of the anchor and equipment prior to letting go is appropriate to the depth of water, weather and sea conditions, and tidal range in area of operation.</p> <p>3.3. Quantity of anchor cable run out or recovered complies with orders provided.</p> <p>3.4. Control of the cable is maintained within safe operating limits during normal operation.</p> <p>3.5. Degree to which the anchor and equipment is secured on completion of anchoring operations is appropriate to forecast conditions and complies with orders provided.</p> <p>3.6. Manufacturer recommendations and anchoring requirements are followed during anchor winch operations.</p> <p>3.7. Anchoring area is kept free of loose ropes, wires and debris throughout all operations.</p>
<p>4. Secure and adjust the vessel's position during mooring operations</p>	<p>4.1. <b>Mooring</b> of the vessel is carried out correctly.</p> <p>4.2. Mooring lines and associated equipment are handled safely and efficiently at all times.</p> <p>4.3. Mooring area is kept free of loose ropes, wires and debris throughout all operations.</p> <p>4.4. Tension on mooring lines is maintained at a level</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>appropriate to the stage and nature of the operation when warping the vessel or maintaining position.</p> <p>4.5. Reports of incidents made to supervisory personnel are complete, clear and concise, and at a time designed to maximise the mooring security of the vessel.</p> <p>4.6. Mooring lines are secured according to orders provided, forecast tidal conditions and planned vessel operations.</p> <p>4.7. Equipment malfunction or problems during operations are promptly recognised and appropriate <b>corrective action</b> taken.</p>
5. Monitor the situation of the vessel when moored or anchored	<p>5.1. Monitoring operations are planned and <b>carried out</b> for safe operations.</p> <p>5.2. Frequency, timing and coverage of scheduled checks and inspections comply with watch-keeping instructions.</p> <p>5.3. Action taken in the event of <b>irregularities or abnormal conditions</b> is appropriate to their significance and within own responsibility to implement.</p> <p>5.4. Reports of incidents made to supervisory personnel are complete, clear and concise, and at a time designed to maximise the safety and integrity of the vessel.</p> <p>5.5. Restrictions on access to the vessel by visitors are in accordance with watch-keeping instructions.</p>
6. Secure the vessel	<p>6.1. Checks on vessel security are planned and carried out safely.</p> <p>6.2. <b>Coverage</b> and frequency of checks and inspections on the vessel's seaworthiness comply with orders received.</p> <p>6.3. Watertight integrity is checked and appropriate action taken to prepare for prevailing and forecast weather and sea conditions.</p> <p>6.4. Degree to which the vessel is <b>secured</b> is appropriate to prevailing and forecast conditions and complies with orders received.</p> <p>6.5. Action taken in the event of irregularities is appropriate to their significance and within own responsibility to implement.</p> <p>6.6. Reports of conditions made to supervisory personnel</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>are completed accurately and correctly.</p> <p>6.7. Reports to supervisory personnel on irregularities beyond own ability to rectify are clear and concise, and made in time to enable remedial action to be taken.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

#### Required skills

- assisting in different types of mooring operations:
  - adjusting mooring during a port stay
  - making fast and letting go fore and aft to a wharf
  - making fast and letting go to a single-point mooring
  - preparing area for operation
  - rigging safe access to a vessel
  - using springs that manoeuvre a vessel to and from a wharf
- checking cargo condition, such as catch temperature
- handling ropes and wires:
  - coiling and stowing ropes
  - identifying different rope material and construction
  - performing an eye splice, back splice and a short splice
  - performing common whipping on ropes and line
  - preparing and throwing a heaving line
  - tying a half hitch, clove hitch, round turn and two half hitches, rolling hitch and timber hitch
  - tying a sheet bend and a double-sheet bend
  - tying an overhand knot, figure-eight knot, reef knot, bowline and cod-end knot
  - using knots, bends and hitches and securing arrangements
  - using stoppers
- letting go and weighing anchor:
  - communicating with controller
  - displaying signals
  - handling anchor-securing arrangements

**REQUIRED SKILLS AND KNOWLEDGE**

- preparing an anchor buoy
- recovering a foul hawse
- removing debris from an anchor
- single and twin anchor (such as running moor) operations
- reporting incidents and events to supervisory personnel
- securing equipment and objects for sea passage, transit in port or ready for use, including:
  - cargo
  - containers
  - drawers and cupboard doors in accommodation and storage spaces
  - galley utensils and stores
  - large pieces of vessel equipment, such as gangways, spare fishing gear and anchors
  - machinery spares
  - personal items
- taking contingency actions when encountering a malfunction or problem caused by:
  - adverse weather
  - cargo or cargo-securing arrangements
  - damage to moorings
  - failure of moorings and equipment
  - inability to maintain vessel in position
  - insufficient mooring length or strength
  - poor leads
- using and identifying synthetic rope and wire mooring lines:
  - back springs
  - bow and stern ropes
  - breast lines
  - fore and aft springs
- using different anchoring and mooring winches:
  - stand-alone winches
  - tension winches operated in manual or self-tensioning modes
  - windlasses and capstans with drum ends
- using power operated equipment:
  - capstans
  - cranes and derricks
  - winches associated with fishing
- using securing arrangements, such as:



## REQUIRED SKILLS AND KNOWLEDGE

- impounding
- lashing
- patent securing arrangements.

### Literacy skills used for:

- reading safety rules and regulations.

### Numeracy skills used for:

- estimating safe working loads of ropes and wires
- reading levels of tanks and void spaces
- reading temperature-monitoring devices.

### Required knowledge

- anchor cable markings
- anchor, cable and equipment on a specific vessel
- appropriate health and hygiene practices
- characteristics of different types of mooring ropes
- codes of safe work practice and safety rules and regulations
- construction of the vessel sufficient to understand which areas need to be made watertight
- curing the vessel for sea
- different configurations of mooring lines for various parts of a vessel
- different types of anchor
- hazards that could occur if the operation is not controlled properly
- how to make the vessel watertight
- indications of, and hazards associated with, breaking mooring lines
- knots, bends and hitches and their applications
- means of access
- requirements for access equipment
- status of safety equipment
- the method of operation of cargo-lifting and securing equipment
- principles relating to:
  - effects of unequal tension on mooring lines and the use of fixed mooring lines
  - how a vessel is made fast to the wharf
  - how a vessel normally lies to an anchor and cable
  - how vessel displacement or profile and prevailing wind or current affect anchoring operations
  - mooring systems, including the specific functions of the mooring leads

**REQUIRED SKILLS AND KNOWLEDGE**

- the correct application of common knots, bends and hitches
- procedures relating to:
  - checking and inspecting the seaworthiness of the vessel
  - displaying signals, flags, lights and shapes
  - effect of the rise and fall of tide when berthed
  - maintaining a deck watch in port
  - maintenance of different types of rope
  - operating powered equipment in all modes, including emergency operation
  - preparing deck machinery for use in ambient conditions
  - routine and emergency operation of anchors
  - securing all areas and equipment for sea prior to departure
  - splicing rope and tying common knots, bends and hitches
  - use of winches, capstans and windlasses
  - warping a vessel to various configurations at a wharf.

## Evidence Guide

<b>EVIDENCE GUIDE</b>	
<p>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..</p>	
<b>Overview of assessment</b>	
<p><b>Critical aspects for assessment evidence required to demonstrate competence in this unit</b></p>	<p>Assessment must confirm the ability to:</p> <ul style="list-style-type: none"> <li>• deal with security contingencies</li> <li>• identify malfunctions or possible problems and implement contingency plans</li> <li>• monitor and control access</li> <li>• perform knots, bends, hitches, splicing and whipping</li> <li>• perform routine checks and inspections of vessel:               <ul style="list-style-type: none"> <li>• security</li> <li>• seaworthiness</li> <li>• watch-keeping duties</li> </ul> </li> <li>• prepare anchor equipment for use and control during operation</li> <li>• prepare winches and capstans associated with fishing for use and control during operation</li> <li>• progress mooring operations to completion</li> <li>• report on conditions</li> <li>• secure anchoring equipment, winches and capstans on completion of operations</li> <li>• secure mooring area on completion of operations</li> <li>• use, maintain and repair ropes and lines</li> <li>• secure the vessel.</li> </ul> <p>Assessment must confirm knowledge of:</p> <ul style="list-style-type: none"> <li>• procedures for entering dangerous and enclosed spaces</li> <li>• safety rules and regulations during operation.</li> </ul>
<p><b>Context of and specific resources for assessment</b></p>	<p>Assessment is to be conducted at the workplace or in a simulated work environment.</p> <p>Resources may include:</p> <ul style="list-style-type: none"> <li>• facilities for negotiating buoyage systems and traffic</li> <li>• operational vessel with a range of equipment.</li> </ul>

<b>EVIDENCE GUIDE</b>	
<b>Method of assessment</b>	The following assessment methods are suggested: <ul style="list-style-type: none"> <li>• observation of practical demonstration</li> <li>• practical exercises</li> <li>• project work</li> <li>• written or oral short-answer testing.</li> </ul>
<b>Guidance information for assessment</b>	This unit may be assessed holistically with other units within a qualification.

## Range Statement

<b>RANGE STATEMENT</b>	
<p>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.</p>	
<p><b><i>Relevant government regulations, licensing and other compliance requirements</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• business or workplace operations, policies and practices</li> <li>• correct marketing names and labelling</li> <li>• ESD principles, environmental hazard identification, risk assessment and control</li> <li>• maritime and occupational diving operations, safety at sea and pollution control</li> <li>• OHS hazard identification, risk assessment and control.</li> </ul>
<p><b><i>OHS guidelines</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• appropriate workplace provision of first aid kits and fire extinguishers</li> <li>• clean, uncluttered, hygienic workplace</li> <li>• codes of practice, regulations and/or guidance notes which may apply in a jurisdiction or industry sector</li> <li>• enterprise-specific OHS procedures, policies or standards</li> <li>• hazard and risk assessment of workplace, maintenance activities and control measures</li> <li>• induction or training of staff, contractors and visitors in relevant OHS procedures and/or</li> </ul>

<b>RANGE STATEMENT</b>	
	<p>requirements to allow them to carry out their duties in a safe manner</p> <ul style="list-style-type: none"> <li>• OHS training register</li> <li>• safe lifting, carrying and handling techniques, including manual handling, and the handling and storage of hazardous substances</li> <li>• safe systems and procedures for outdoor work, including protection from solar radiation, fall protection, confined space entry and the protection of people in the workplace</li> <li>• systems and procedures for the safe maintenance of property, machinery and equipment, including hydraulics and exposed moving parts</li> <li>• the appropriate use, maintenance and storage of PPE.</li> </ul>
<p><i>Food safety and hygiene regulations and procedures</i> may include:</p>	<ul style="list-style-type: none"> <li>• Australian Shellfish Sanitation program</li> <li>• equipment design, use, cleaning and maintenance</li> <li>• exporting requirements, including Australian Quarantine Inspection Service (AQIS) Export Control (Fish) orders</li> <li>• Hazard Analysis Critical Control Point (HACCP) and other risk minimisation systems</li> <li>• people, product and place hygiene and sanitation requirements</li> <li>• Primary Products Standard and the Australian Seafood Standard (voluntary)</li> <li>• requirements set out in Australian and New Zealand Food Authority (ANZFA) Food Standards Code</li> <li>• temperature and contamination control along chain of custody.</li> </ul>
<p><i>ESD principles</i> may include:</p>	<ul style="list-style-type: none"> <li>• applying animal welfare ethics and procedures</li> <li>• controlling effluents, chemical residues, contaminants, wastes and pollution</li> <li>• controlling weeds, pests, predators and diseases, stock health maintenance</li> <li>• improving energy efficiency</li> <li>• increasing use of renewable, recyclable and recoverable resources</li> <li>• minimising noise, dust, light or odour emissions</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• reducing emissions of greenhouse gases</li> <li>• reducing use of non-renewable resources</li> <li>• reducing energy use</li> <li>• reducing interactions with native and protected flora and fauna, marine or land parks or areas</li> <li>• reducing live cultured or held organisms from escaping into environment</li> <li>• undertaking environmental hazard identification, risk assessment and control</li> <li>• undertaking facility quarantine, biosecurity and translocation of livestock and genetic material</li> <li>• using and recycling of water, and maintaining water quality.</li> </ul>
<b>PPE</b> may include:	<ul style="list-style-type: none"> <li>• buoyancy vest or personal floatation device (PFD)</li> <li>• gloves, mitts or gauntlets, and protective hand and arm covering</li> <li>• hard hat or protective head covering</li> <li>• hearing protection (e.g. ear plugs and ear muffs)</li> <li>• insulated protective clothing for freezers or chillers and refrigeration units</li> <li>• non-slip and waterproof boots (gumboots) or other safety footwear</li> <li>• personal locator beacon or Emergency Position Indicating Radio Beacon (EPIRB)</li> <li>• protective eyewear, glasses and face mask</li> <li>• protective hair, beard and boot covers</li> <li>• protective outdoor clothing for tropical conditions</li> <li>• respirator or face mask</li> <li>• safety harness</li> <li>• sun protection (e.g. sun hat, sunscreen and sunglasses)</li> <li>• uniforms, overalls or protective clothing (e.g. mesh and waterproof aprons)</li> <li>• waterproof clothing (e.g. wet weather gear and waders).</li> </ul>
<b>Operations</b> may include:	<ul style="list-style-type: none"> <li>• anchoring: <ul style="list-style-type: none"> <li>• emergency</li> <li>• letting go and recovery</li> <li>• routine</li> </ul> </li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>• anchor winches</li> <li>• at sea and ashore</li> <li>• cable and rope winches</li> <li>• communications and signalling</li> <li>• hydraulic, electric and mechanical</li> <li>• manual handling of equipment</li> <li>• monitoring: <ul style="list-style-type: none"> <li>• departure</li> <li>• display of signals, flags, lights and shapes</li> <li>• environmental impact</li> <li>• mooring integrity during tidal movements</li> <li>• routine fire and security rounds and inspections</li> <li>• safe access to and about the vessel</li> <li>• visitors to the vessel</li> </ul> </li> <li>• mooring: <ul style="list-style-type: none"> <li>• adjustment from both fore and aft mooring positions</li> <li>• berthing and unberthing to a wharf</li> <li>• mooring and unmooring to a single point</li> <li>• rigging and recovering means of access to the vessel</li> </ul> </li> <li>• net haulers</li> <li>• pot or trap haulers</li> <li>• powered winch, capstan and windlass</li> <li>• rope work</li> <li>• securing: <ul style="list-style-type: none"> <li>• completion of operations and maintenance</li> <li>• heavy weather</li> <li>• long or short voyages</li> <li>• prior to departure</li> <li>• routine situations</li> </ul> </li> <li>• three, four or eight-strand rope</li> <li>• varying weather conditions</li> <li>• wire rope.</li> </ul>
<b>Mooring</b> may mean :	<ul style="list-style-type: none"> <li>• at a single point</li> <li>• berthed alongside a wharf.</li> </ul>
<b>Corrective action</b> may include:	<ul style="list-style-type: none"> <li>• adjustment</li> <li>• reporting incident to supervisory personnel</li> </ul>

<b>RANGE STATEMENT</b>	
	<ul style="list-style-type: none"> <li>temporary line repair.</li> </ul>
<i>Carried out</i> may include:	<ul style="list-style-type: none"> <li>by day</li> <li>by night</li> <li>in adverse weather conditions.</li> </ul>
<i>Irregularities or abnormal conditions</i> are those that may affect the safety and integrity of:	<ul style="list-style-type: none"> <li>crew</li> <li>equipment</li> <li>materials, such as cargo</li> <li>vessel.</li> </ul>
<i>Coverage</i> may include:	<ul style="list-style-type: none"> <li>accommodation spaces</li> <li>deck area</li> <li>engine room</li> <li>galley</li> <li>personal facilities</li> <li>processing area</li> <li>storage spaces</li> <li>wheelhouse.</li> </ul>
<i>Secured</i> may include:	<ul style="list-style-type: none"> <li>accommodation and storage spaces</li> <li>anchors</li> <li>galley, stores and equipment</li> <li>large objects likely to move in a sea way</li> <li>lifting appliances and associated equipment</li> <li>material on deck and below, such as cargo</li> <li>openings</li> <li>slack tanks pressed up.</li> </ul>

## Unit Sector(s)

<b>Unit sector</b>	Fishing operations
--------------------	--------------------

## Co-requisite units

<b>Co-requisite units</b>	



<b>Co-requisite units</b>		

## Competency field

<b>Competency field</b>	
-------------------------	--