



Australian Government

Department of Education, Employment and Workplace Relations

SFIFISH401C Locate fishing grounds and stocks of fish

Release: 1

SFIFISH401C Locate fishing grounds and stocks of fish

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit of competency involves locating the fishing environment and concentrations of fish and positioning the fishing operation. 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.
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Application of the Unit

Application of the unit	This unit has application to the fishing and fishing charter sectors. All enterprise or workplace procedures and activities are carried out according to relevant <i>government regulations, licensing and other compliance requirements, including occupational health and safety (OHS) guidelines, food safety and hygiene regulations and procedures</i> and <i>ecologically sustainable development (ESD) principles</i>. 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.
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Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills
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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.
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Position operation to optimise fishing opportunity	1.1. Position of vessel is accurately determined within the limitations of equipment and methods available. 1.2. Vessel is positioned at decided location at correct time for fishing operations. 1.3. Vessel position is maintained within areas of safe operation. 1.4. Vessel is positioned to take account of all relevant environmental factors. 1.5. All sources of relevant information are obtained to aid decision making. 1.6. Area of operation is altered in response to available information to optimise fishing opportunity. 1.7. Vessel position complies with all relevant state, territory and federal regulations.
2. Detect and identify fish concentrations and suitable fishing environments	2.1. Electronic aids are operated to optimise available information. 2.2. Available indications are interpreted to extract all available relevant information. 2.3. Size, density, position and movement of fish concentrations are accurately determined within the limitations of available information. 2.4. Relevant environmental factors are accurately determined within the limitations of available information. 2.5. Fishing environment selected is appropriate to target species and fishing gear.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE
This section describes the skills and knowledge required for this unit.
Required skills
- fixing position on navigational charts or electronic plotters - forecasting weather - using hydro-acoustic equipment - using information from radio direction finder

REQUIRED SKILLS AND KNOWLEDGE

- using other electronic devices to gather information
- using ranges and bearings from RADAR.

Literacy skills used for:

- keeping and reviewing records.

Numeracy skills used for:

- accessing and interpreting information, such as graphs and tables showing abundance
- calculating time, speed and distance.

Required knowledge

- calculation of the times required for movement
- effects of environmental factors
- factors affecting the fishing operation
- fishing gear types and their effect on the environment
- interpretation of information from electronic systems
- operation and adjustment of fish-finding equipment
- operation of position fixing equipment and methods
- relevance of environmental factors
- sources of information and the means of accessing them
- visual indications of fish concentrations

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, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment evidence required to demonstrate competence in this unit

Assessment must confirm the ability to:

- locate fishing grounds and concentrations of target species of fish and to position the fishing operation or vessel
- obtain, correct and plot position lines and positions on navigational and fishing charts
- use accepted methodologies to detect fish concentrations
- match the configuration of fishing gear to the target environment and species.

Assessment must confirm knowledge of:

- requirements, regulations, recommendations and fisheries information for best potential fishing outcome
- all relevant environmental considerations.

Context of and specific resources for assessment

Assessment is to be conducted at the workplace or in a simulated work environment.

Resources may include:

- electronic aids for locating fish
- navigational and fishing charts
- real or realistically simulated fishing operation.

Method of assessment

The following assessment methods are suggested:

- logs of fishing operations
- notated charts explaining where fish stocks were located
- presentation (written or verbal) explaining how fishing grounds and fish stocks were located
- catch records from a number of fishing operations.

EVIDENCE GUIDE	
	Supplementary evidence can be gathered from: • third-party reports • interviews.
Guidance information for assessment	This unit may be assessed holistically with SFIFISH402C Manage and control fishing operations, and other units within a qualification.

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, 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.	
<i>Relevant government regulations, licensing and other compliance requirements</i> may include:	• business or workplace operations, policies and practices: • commercial law, including fair trading and trade practices • consumer law • corporate law, including registration, licensing and financial reporting • disability policies and practices • equal opportunity, anti-discrimination and sexual harassment • industrial relations and awards, individual employment contracts and share of catch agreements • jurisdictional variations • superannuation • taxation • trade practices • warnings and dismissals • worker's compensation • ESD principles, environmental hazard identification, risk assessment and control

RANGE STATEMENT

- fisheries or aquaculture regulations, permits, licences, quotas, catch restrictions, and other compliance requirements, including:
 - Australian Exclusive Economic Zone
 - international treaties and agreements
- food safety, Hazard Analysis Critical Control Point (HACCP), hygiene and temperature control along chain of custody
- Indigenous native title, land claims and cultural activities, including fishing by traditional methods
- imports quarantine and inspection, and importing approved arrangements for Australian Quarantine Inspection Service (AQIS), Australian Customs Service (ACS) and Biosecurity Australia (BA)
- land, buildings and vehicles:
 - buildings and structures design and appearance, constructions and additions
 - poaching, trespass and theft
 - road laws for use of motor vehicles, bikes, trucks and other transport equipment
 - soil and water management
 - use of chemicals and biological agents
 - use of firearms and powerheads
 - use of utilities, including water, natural gas, electricity and sewage
 - water or land lease, tenure or ownership and use
- maritime and occupational diving operations:
 - foreign and Australian legislation applying to quarantine and customs
 - International Convention for the Safety of Life at Sea (SOLAS)
 - International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW 1978)
 - Marine Emergency Response Search and Rescue (MERSAR)
 - National Standards for Commercial Vessels
 - pollution prevention - International Convention for the Prevention of Pollution

RANGE STATEMENT	
	from Ships (MARPOL 73/78) • Uniform Shipping Laws (USL) Code • use of vessels, right of way and other marine orders, bunkering and refuelling • OHS hazard identification, risk assessment and control • product quality assurance: • correct naming and labelling (country of origin, Australian Fish Names Standard and eco-labelling) • correct quantities, sizes and other customer requirements • third-party certification (e.g. Australian Grown and ISO 14001:2004 Environmental management systems).
OHS guidelines may include:	• appropriate workplace provision of first aid kits and fire extinguishers • clean, uncluttered, hygienic workplace • codes of practice, regulations and/or guidance notes which may apply in a jurisdiction or industry sector • enterprise-specific OHS procedures, policies or standards • hazard and risk assessment of workplace, maintenance activities and control measures • induction or training of staff, contractors and visitors in relevant OHS procedures and/or requirements to allow them to carry out their duties in a safe manner • OHS training register • safe lifting, carrying and handling techniques including manual handling, and the handling and storage of hazardous substances • 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 • systems and procedures for the safe maintenance of property, machinery and equipment including hydraulics and exposed moving parts • the appropriate use, maintenance and storage of PPE.

RANGE STATEMENT	
<i>Food safety and hygiene regulations and procedures</i> may include:	• Australian Shellfish Sanitation program • display, packaging and sale of food, including seafood and aquatic products • equipment design, use, cleaning and maintenance • exporting requirements, including AQIS Export Control (Fish) orders • handling and disposal of condemned or recalled seafood products • HACCP, food safety program, and other risk minimisation and quality assurance systems • location, construction and servicing of seafood premises • people, product and place hygiene and sanitation requirements • Primary Products Standard and the Australian Seafood Standard (voluntary) • processing, further processing and preparation of food, including seafood and aquatic products • product labelling, tracing and recall • receipt, storage and transportation of food, including seafood and aquatic products • requirements set out in Australian and New Zealand Food Authority (ANZFA) Food Standards Code and state and territory food regulations • temperature and contamination control along chain of custody.
<i>ESD principles</i> may include:	• controlling the use and recycling of water, and managing water quality and quantity • managing environmental hazard identification, risk assessment and control • managing imported products quarantine and inspection, facility biosecurity, translocation of livestock and genetic material, and health certification • managing stock health and welfare, especially for handling, holding, transport and slaughter • managing sustainable fisheries or broodstock/seedstock collection requirements, such as size limits, quotas, season restrictions, population dynamics, fishing impacts, reducing by-catch, fisheries management strategies and

RANGE STATEMENT	
	maintaining biodiversity - managing, controlling and treating effluents, chemical residues, contaminants, wastes and pollution - minimising noise, dust, light or odour emissions - planning environmental and resource efficiency improvements - preventing genetically modified organisms and live cultured or held organisms from escaping into environment - protecting native and protected flora and fauna, marine or land parks or areas, adhering to the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES), the Ramsar Convention, World Heritage and other international treaties for which Australia is a signatory - reducing disturbances to soils, erosion and surface water flows from machinery use and other activities - reducing energy use and introducing alternative energy sources.
PPE may include:	- buoyancy vest or personal floatation device (PFD) - gloves, mitts or gauntlets, and protective hand and arm covering - hard hat or protective head covering - hearing protection (e.g. ear plugs and ear muffs) - insulated protective clothing for freezers or chillers and refrigeration units - non-slip and waterproof boots (gumboots) or other safety footwear - personal locator beacon or Emergency Position Indicating Radio Beacon (EPIRB) - protective eyewear, glasses and face mask - protective hair, beard and boot covers - protective outdoor clothing for tropical conditions - respirator or face mask - safety harness - sun protection (e.g. sun hat, sunscreen and

RANGE STATEMENT	
	- sunglasses) - uniforms, overalls or protective clothing (e.g. mesh and waterproof aprons) - waterproof clothing (e.g. wet weather gear and waders).
Position fixing methods may include:	- electronic - visual.
Safe operations may include:	- within the range and level of exposure to prevailing and anticipated weather conditions appropriate to the vessel: - condition - crew - power - size.
Environmental factors may include:	- bottom type - current - light levels - lunar phase - physical obstacles (e.g. other vessels and mooring lines) - tide - time of day, month and year - water depth - water temperature, salinity, colour and clarity - weather - wind speed and direction.
Sources of relevant information may include:	- own vessel's performance records, including crew experience - other vessel's performance records - research data: - industry information - research papers.
Electronic aids may include:	- echo sounder - position determining devices - sonar - temperature sensors and information.
Available indications may include:	- electronic - visual.

Unit Sector(s)

Unit sector	Fishing operations
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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