



Australian Government

Department of Education, Employment and Workplace Relations

**TDMMC1007C STEER A VESSEL
UNDER THE DIRECTION OF THE
MASTER OR OFFICER IN CHARGE OF
THE WATCH**

Release: 1

TDMMC1007C STEER A VESSEL UNDER THE DIRECTION OF THE MASTER OR OFFICER IN CHARGE OF THE WATCH

Modification History

Not applicable.

Unit Descriptor

UNIT DESCRIPTOR:

This unit involves the skills and knowledge required of an Integrated Rating to steer a commercial vessel under the direction of the master or officer in charge of the watch on a steady course within acceptable limits having regard to the area of navigation and prevailing sea state. This also includes making smooth and controlled alterations of course when required, maintaining clear and concise communications at all times and acknowledging orders in a seamanlike manner.

Application of the Unit

Application of the unit	The unit has application in the qualification for an Integrated Rating, i.e. Certificate III in Transport&Distribution(Maritime Operations - Integrated Rating).
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Licensing/Regulatory Information

Licensing/legislative requirements	The unit is consistent with the relevant sections of STCW 95 and Marine Orders under the Australian Navigation Act 1912, describing the specific requirements for Integrated Ratings.
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Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

<i>Elements describe the essential outcomes of a unit of competency.</i>	<i>Performance Criteria describe the required performance needed to demonstrate achievement of the element. Assessment of performance is to be consistent with the Evidence Guide.</i>
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Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Steer the vessel	<ul style="list-style-type: none"> a Vessel is steered under the direction of the officer in charge of the watch in response to helm orders and set course b Vessel's heading is maintained within acceptable limits with respect to the directions of the officer in charge of the watch, given helm orders, the area of navigation, weather and sea condition and tide c Vessel's steady course is maintained for 10 minutes within two degrees d Alterations of heading are smooth and controlled e Communication is clear, concise and acknowledged according to good seamanship practice f Steering is changed from automatic pilot to manual steering and vice versa in accordance with the directions of the officer in charge of the watch, helm orders, vessel's procedures and manufacturer's instructions g Safe operating limits of vessel's steering systems are not exceeded h Steering techniques are consistent with the prevailing weather and sea conditions or possible states of emergency

TDMMC1007C STEER A VESSEL UNDER THE DIRECTION OF THE MASTER OR OFFICER IN CHARGE OF THE WATCH
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ELEMENT	PERFORMANCE CRITERIA
2 Respond to orders (continued)	<ul style="list-style-type: none">a The directions of the officer in charge of the watch and helm orders are correctly understood, acknowledged and promptly acted uponb Confirmation or clarification of directions and helm orders is sought where they are not clearly understood

TDMMC1007C STEER A VESSEL UNDER THE DIRECTION OF THE MASTER OR OFFICER IN CHARGE OF THE WATCH
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Required Skills and Knowledge

REQUIRED KNOWLEDGE

This describes the knowledge required for this unit.

- 1 Relevant sections of IMO STCW Convention and Codes, AMSA Marine Orders and the NSCV/USL Code applicable to the steering of vessels
- 2 Relevant State & Territory marine and OH&S legislation, standards, codes of practice, guidelines policies and procedures
- 3 Limits of responsibility of an integrated rating on a vessel carrying out steering duties
- 4 Principles and procedures for steering a vessel
- 5 Typical helm orders and steering action required
- 6 Procedures for changing over from automatic pilot to hand steering and vice versa
- 7 Effects on steering of wind, currents and bottom topography
- 8 Steering problems for various sizes of vessels and appropriate action and solutions
- 9 Steering techniques in and near traffic separation schemes and vessel traffic service areas
- 10 Maritime communication techniques, including responding to helm orders

REQUIRED SKILLS

This describes the basic skills required for this unit.

- 1 Communicate effectively in the English language with the officer in charge of the watch and others on the bridge team
- 2 Read, interpret and apply instructions, procedures and information relevant to the role and responsibilities of an integrated rating as they relate to the steering

REQUIRED KNOWLEDGE

of a vessel under the direction of the master or officer in charge of the watch

- 3 Interpret and follow standard steering practices
- 4 Work collaboratively with others when steering a vessel under the direction of the master or officer in charge of the watch
- 5 Modify activities dependent on differing vessel contingencies, risk situations and environments
- 6 Identify problems that may arise when steering a vessel, report the problems and take appropriate action based on available information
- 7 Monitor and anticipate hazards when steering a vessel under the direction of the master or officer in charge of the watch and take appropriate action to report them, and take appropriate corrective action
- 8 Adapt to differences in vessels, bridge equipment and standard operating procedures
- 9 Steer the vessel as directed in accordance with standard operating procedures

Evidence Guide

Evidence Guide

TDMMC1007C STEER A VESSEL UNDER THE DIRECTION OF THE MASTER OR OFFICER IN CHARGE OF THE WATCH
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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.

1 Critical aspects of evidence required to demonstrate competency in this unit	Assessment must confirm appropriate knowledge and skills to: <ol style="list-style-type: none">a Steer a vessel under the directions of the officer in charge of the watch and in response to helm orders:<ol style="list-style-type: none">1 in normal and emergency situations and adverse weather conditions2 when anchoring or mooring3 during berthing and unberthing operations
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	<ul style="list-style-type: none">4 while anchoring or mooring5 during emergenciesb Exercise all required safety and hazard control procedures when steering a vesselc Identify typical steering problems and take appropriate actiond Communicate effectively with others in the bridge team when steering a vessel
2 Evidence required for demonstration of consistent performance	<ul style="list-style-type: none">a Performance is demonstrated consistently over a period of time and in a suitable range of contextsb Consistently applies underpinning knowledge and skills when:<ul style="list-style-type: none">1 steering the vessel under the direction of the Officer in Charge of the Watch2 identifying and steering problems and determining appropriate courses of action3 applying safety precautions relevant to steering of a vessel4 assessing operational capability of steering system and equipmentc Shows evidence of application of relevant workplace procedures, including:<ul style="list-style-type: none">1 relevant sections of IMO STCW Convention and Code, AMSA Marine Orders and the NSCV/USL Code applicable to the steering of vessels2 vessel's safety management system and procedures3 marine and OH&S regulations and hazard prevention policies and procedures

Evidence Guide (continued)

TDMMC1007C STEER A VESSEL UNDER THE DIRECTION OF THE MASTER OR OFFICER IN CHARGE OF THE WATCH
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2 Evidence required for demonstration of consistent performance (continued)

- 4 job procedures and work instructions
- 5 relevant manufacturer's guidelines relating to the use of steering equipment, including information on capability and limitations
- 6 bridge housekeeping procedures
- d Action is taken promptly to report and/or rectify steering incidents in accordance with statutory requirements and company procedures
- e Work is completed systematically with required attention to detail
- f Recognises and adapts appropriately to cultural differences in the workplace, including modes of behaviour and interactions among crew and others

3 Context of assessment

- a Assessment of competency must comply with the assessment requirements of the relevant maritime regulations
- b Assessment of this unit must be undertaken within relevant marine authority approved and audited arrangements by a registered training organisation:
 - 1 As a minimum, assessment of knowledge must be conducted through appropriate written/oral examinations, and
 - 2 Appropriate practical assessment must occur:
 - i at the registered training organisation; and/or
 - ii on an appropriate working or training vessel

4 Specific resources required for assessment	<p>Access is required to opportunities to:</p> <p>a steer a vessel simulator, meeting the requirements of Section A I/12 of the IMO STCW Code, over an appropriate range of simulated manoeuvring situations, weather and loading conditions; and/or</p> <p>b steer a working or training vessel under the direction of the Officer in Charge of the Watch over an appropriate range of situations, weather and loading conditions</p>
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Range Statement

Range Statement

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The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

VARIABLE

SCOPE

1. GENERAL CONTEXT

a. Work must be carried out:	1 in compliance with the relevant sections of the AMSA Marine Orders and IMO STCW Conventions and Codes and domestic regulations, codes and standards
b. Work is performed:	1 under the directions of the officer in charge of the watch using a prescribed range of procedures/methods either individually or in a team environment with some accountability for the quality of outcomes

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance.

c. Work involves:	1 the use of known and defined steering techniques across a variety of navigational contexts in response to the directions of the officer in charge of the watch
d. Work requires:	1 that in small domestic vessels, the master may provide the supervision in lieu of the officer in charge of the watch and a deckhand may carry out the role of an integrated rating or rating

2. WORKSITE ENVIRONMENT

a Vessel may include:	1 any Australian or international commercial vessel
b Steering may include:	1 hand steering or automatic pilot.
c Steering of the vessel may be carried out:	1 by day or night in both normal and emergency situations 2 under normal and adverse conditions of weather and loading 3 during berthing and unberthing operations

Range Statement (continued)

TDMMC1007C STEER A VESSEL UNDER THE DIRECTION OF THE MASTER OR OFFICER IN CHARGE OF THE WATCH
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VARIABLE	SCOPE
c Steering of the vessel may be carried out: (continued)	4 while anchoring or mooring 5 when navigating in and near traffic separation schemes and vessel traffic service areas

VARIABLE	SCOPE
	<ul style="list-style-type: none"> 6 in shallow water, rivers, estuaries and restricted waters 7 when towing and being towed 8 when dragging an anchor and clearing a foul anchor
<p>d Emergencies may include:</p>	<ul style="list-style-type: none"> 1 person overboard 2 collision 3 grounding 4 when hove to 5 fire or flooding on board vessel
<p>e Helm orders will be given:</p>	<ul style="list-style-type: none"> 1 in the English language and require sufficient proficiency in speaking and understanding in English to communicate effectively with the master or officer in charge of the watch and others on the bridge of the vessel
<p>f Special steering techniques required in adverse weather may include:</p>	<ul style="list-style-type: none"> 1 steering in the face of strong winds, high sea state, heavy swell and surf 2 steering an unmanageable vessel out of the trough of the sea in response to helm orders 3 steering to assist a vessel in distress 4 steering during towing operations 5 steering during the launching of rescue boats and survival craft 6 steering when taking on board survivors from rescue boats and survival craft

VARIABLE	SCOPE
g Documentation and records may include:	<ol style="list-style-type: none"> 1 safety management system plans, procedures, checklists and instructions 2 helm orders 3 company and vessel procedures 4 vessel manufacturer's instructions and recommended procedures 5 instructions of relevant maritime authorities 6 OH&S instructions and regulations

Range Statement (continued)

<p>TDMMC1007C STEER A VESSEL UNDER THE DIRECTION OF THE MASTER OR OFFICER IN CHARGE OF THE WATCH</p>

VARIABLE	SCOPE
h Applicable legislation, regulations and codes may include:	<ol style="list-style-type: none"> 1 IMO STCW 95 Convention and Code related to steering and navigation of vessels 2 relevant sections of AMSA Marine Orders 3 relevant sections of NSCV/USL Code and guidelines 4 International Regulations for Preventing Collisions at Sea 5 relevant international, Commonwealth, State and Territory OH&S legislation

Unit Sector(s)

Not applicable.

Field

Field MC Manoeuvring Vessel

Relationship to other units

Relationship to other units	The unit must be assessed in conjunction with other units that relate to the functions of the occupation(s) concerned.
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