



Australian Government

Department of Education, Employment and Workplace Relations

TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES

Revision Number: 1

TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES

Modification History

Not applicable.

Unit Descriptor

UNIT DESCRIPTOR:

This unit involves the skills and knowledge required of an Integrated Rating to assist the responsible officer in a range of mooring and anchor handling activities as required of an Integrated Rating, including preparing for arrival or departure from an anchorage or mooring, handling mooring lines, carrying out stoppering and heaving line tasks, anchor operations, securing a vessel to a sea buoy, and securing a tug using either tug's or vessel's lines.

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 Carry out mooring and anchor handling tasks	<ul style="list-style-type: none"> a Tasks required of an integrated rating in preparation for arrival and departure from an anchorage or mooring are completed in accordance with shipboard procedures b Mooring line handling, stoppering and heaving line tasks are performed in accordance with shipboard procedures c Mooring and unmooring operations are carried out as per established procedures d Anchor operations are carried out in accordance with shipboard procedures e Vessel is secured to a sea buoy in accordance with shipboard procedures f A tug is secured using tug's or vessel's lines as per shipboard procedures g Communications during mooring and anchor handling operations are clear and timely and involve the correct use of communications equipment where required
2 Follow safety and hazard control procedures	<ul style="list-style-type: none"> a All required safety precautions and regulations are followed when carrying out routine mooring and anchor handling tasks b Operational hazards are identified and action is taken in conjunction with the officers, engineers and other team members to minimise or eliminate risk to personnel, vessel and

ELEMENT

PERFORMANCE CRITERIA

the environment

ELEMENT	PERFORMANCE CRITERIA
2 Follow safety and hazard control procedures (continued)	c Shipboard emergency and contingency plans are followed in the event of a failure or emergency associated with mooring and anchor handling equipment and machinery and associated systems

Required Skills and Knowledge

REQUIRED KNOWLEDGE

This describes the knowledge required for this unit.

- 1 Applicable sections of relevant maritime regulations
- 2 Relevant OH&S and pollution control legislation and policies
- 3 Mooring and anchor handling procedures on board a vessel
- 4 Functions and responsibilities of the members of the bridge and engine room teams on board a vessel
- 5 Procedures for carrying out the routine tasks required of an integrated rating when a vessel is arriving at or departing from a berth or anchorage
- 6 Types, features and characteristics of fibre and wire ropes
- 7 Hazards and related safety precautions when carrying out mooring and anchor handling activities
- 8 Signs of fatigue
- 9 Fatigue management principles and techniques
- 10 Communication techniques and equipment used during mooring and anchor handling operations

REQUIRED SKILLS

REQUIRED KNOWLEDGE

This describes the basic skills required for this unit.

- 1 Use basic verbal and other communication skills required when assisting in mooring and anchor handling activities
- 2 Read, interpret and apply basic instructions and standard operating procedures relevant to mooring and anchor handling activities
- 3 Work safely and collaboratively with others when assisting in mooring and anchor handling activities
- 4 Select and safely use tools and equipment as per operating instructions
- 5 Recognise problems that may occur during mooring and anchor handling activities and take appropriate action
- 6 Store lines, tools and equipment after use as per standard operating procedures
- 7 Adapt to differences in vessels, port facilities, equipment and standard operating procedures
- 8 Follow required work schedule as per company requirements

Evidence Guide

Evidence Guide

TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES

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 Carry out mooring and anchor handling tasks b Ensure the exercise of all required safety, environmental and hazard control precautions and procedures during mooring and anchor handling activities c Communicate effectively with others during mooring and
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Evidence Guide**TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES**

	anchor handling activities
2 Evidence required for demonstration of consistent performance	<p>a Performance is demonstrated consistently over a period of time and in a suitable range of contexts</p> <p>b Consistently applies underpinning knowledge and skills when:</p> <ol style="list-style-type: none"> 1 carrying out mooring and anchor handling tasks 2 exercising all required safety, environmental and hazard control precautions and procedures during mooring and anchor handling tasks 3 communicating effectively with others during routine shipboard tasks <p>c Shows evidence of application of relevant workplace procedures, including:</p> <ol style="list-style-type: none"> 1 ISM Code and associated vessel's safety management system and procedures 2 OH&S regulations and hazard prevention policies and procedures 3 job procedures and work instructions related to mooring and anchor handling activities 4 following housekeeping processes <p>d Action is taken promptly to report operational incidents and problems in accordance with regulations and shipboard procedures</p> <p>e Work is completed systematically with required attention to detail</p> <p>f Recognises and adapts appropriately to cultural differences in the workplace, including modes of behaviour and interactions between crew and others</p>

Evidence Guide

TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES

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:

Evidence Guide (continued)

TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES

3 Context of assessment (continued)

- 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

- Access is required to opportunities to:
- a demonstrate the ability to carry out mooring and anchor handling procedures through appropriate case studies, practical exercises and simulated situations; and/or
 - b carry out mooring and anchor handling procedures on an operational commercial or training vessel

Range Statement

Range Statement

TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES

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 relevant maritime regulatory requirements
b. Work is performed:	1 as a member of an anchoring or mooring party under defined operational requirements, with some accountability and responsibility for self and others in achieving the prescribed outcomes
c. Work involves:	1 the application of basic mooring and anchor handling procedures across a variety of operational contexts
d. Work requires:	1 the following of orders and instructions of the officer on watch

2. WORKSITE ENVIRONMENT

a Vessel may include:	1 any Australian or international commercial vessel
b Mooring operations include:	1 throwing heaving lines 2 running out mooring lines 3 reporting distance off

Range Statement**TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES**

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|----|---|
| 4 | securing mooring lines |
| 5 | letting go mooring lines |
| 6 | recovering mooring lines |
| 7 | making fast fore and aft to a fixed terminal or jetty |
| 8 | making fast to a single point mooring |
| 9 | making fast to a conventional buoy mooring |
| 10 | preparing mooring area for operations |
| 11 | making fast and letting go tugs |

Range Statement (continued)**TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES**

VARIABLE	SCOPE								
b Mooring operations include: (continued)	<table border="1"> <tr> <td style="width: 5%; text-align: center;">12</td> <td>adjusting moorings during a port stay</td> </tr> <tr> <td style="text-align: center;">13</td> <td>securing mooring area on departure</td> </tr> <tr> <td style="text-align: center;">14</td> <td>rigging gangways, accommodation ladders and pilot ladders</td> </tr> <tr> <td style="text-align: center;">15</td> <td>stowing mooring lines after use</td> </tr> </table>	12	adjusting moorings during a port stay	13	securing mooring area on departure	14	rigging gangways, accommodation ladders and pilot ladders	15	stowing mooring lines after use
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13	securing mooring area on departure								
14	rigging gangways, accommodation ladders and pilot ladders								
15	stowing mooring lines after use								
c Mooring equipment includes:	<table border="1"> <tr> <td style="width: 5%; text-align: center;">1</td> <td>man-made fibre and wire-rope moorings</td> </tr> <tr> <td style="text-align: center;">2</td> <td>heaving lines and stoppers (rope and chain)</td> </tr> <tr> <td style="text-align: center;">3</td> <td>tension winches</td> </tr> <tr> <td style="text-align: center;">4</td> <td>stand clone winches</td> </tr> </table>	1	man-made fibre and wire-rope moorings	2	heaving lines and stoppers (rope and chain)	3	tension winches	4	stand clone winches
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Range Statement (continued)**TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES**

	5	electric, hydraulic and hand driven capstans/drum ends
	6	dead men and fairheads
d Equipment malfunctions or problems may include:	1	failure of moorings or equipment
	2	damage to moorings
	3	insufficiency of moorings
	4	poor leads
	5	inability to maintain vessel in position
e Routine and emergency anchor operations may include:	1	dropping, paying out and holding an anchor
	2	reporting amount and lie of cable
	3	letting go and weighing anchor
	4	securing to a single anchor
	5	securing to twin anchors
	6	recovering anchor
	7	clearing anchor and cable
	8	recovering a foul hawse
	9	hanging off an anchor

Range Statement (continued)**TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES**

VARIABLE	SCOPE
f Anchor equipment may include:	1 cable 2 securing arrangements 3 anchor balls 4 cable locker
g Operational hazards during mooring or anchor handling operations may include:	1 failure of moorings, anchor or equipment 2 damage to moorings 3 insufficiency of moorings 4 faulty or damaged machinery and equipment 5 moving and rotating machinery 6 using equipment beyond safe working limits 7 cables and ropes 8 poor leads 9 inability to maintain vessel in position 10 moving heavy loads using unsafe lifting procedures 11 slippery deck 12 poor housekeeping procedures 13 non-compliance with safe working procedures

Range Statement (continued)**TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES**

h Documentation and records may include:	1	ISM Code safety management system plans, procedures, checklists and instructions
	2	IMO STCW 95 Convention and Code
	3	AMSA Marine Orders
	4	orders and instructions of the officer on watch
	5	vessel and company procedures
	6	instructions of relevant maritime authorities
	7	relevant Australian and international standards

Range Statement (continued)**TDMMR4307B ASSIST IN MOORING AND ANCHOR HANDLING ACTIVITIES**

VARIABLE	SCOPE
i Applicable legislation, regulations and codes may include:	1 relevant sections of IMO STCW 95 Convention and Code
	2 relevant sections of AMSA Marine Orders
	3 ISM Code
	4 relevant international, Commonwealth, State and Territory OH&S legislation

Unit Sector(s)

Not applicable.

Field

Field MF Carry Out Operations on Equipment and Systems

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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