



Australian Government

Department of Education, Employment and Workplace Relations

TDMMF3507B CONTRIBUTE TO MAINTAINING A SAFE WATCH

Revision Number: 1

TDMMF3507B CONTRIBUTE TO MAINTAINING A SAFE WATCH

Modification History

Not applicable.

Unit Descriptor

UNIT DESCRIPTOR:

This unit involves the skills and knowledge required by an Integrated Rating to contribute to a safe navigational watch on a commercial vessel under the direction of the officer of the watch and in compliance with Australian and international regulations and guidelines to ensure the safety of navigation, protection of the marine environment and the safety of the vessel and the persons on board.

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 Contribute to watchkeeping procedures	<ul style="list-style-type: none"> a Effective communication with the officer of the watch is correctly maintained at all times on matters relevant to the role of an integrated rating during watchkeeping duties b Bridge communications are clear and concise and advice or clarification is sought from the officer on watch when watch information or instructions are not clearly understood c A proper look-out is maintained at all times and in such a way as to conform to accepted principles and procedures and regulatory requirements d Lights, shapes and sound signals conform with the requirements contained in the International Regulations for Preventing Collisions at Sea and are correctly recognised e The frequency and extent of monitoring of traffic, the vessel and the environment conform with established principles and procedures f Internal and external communication systems are used in accordance with bridge procedures and manufacturer's instructions g Precautions and procedures are followed to implement environmental protection measures h Fatigue management strategies are correctly applied within the bridge management team

ELEMENT	PERFORMANCE CRITERIA
2 Respond to potential emergency situations	<ul style="list-style-type: none">a Observations and emergency situations are promptly reported to the officer on watch in accordance with bridge proceduresb Distress signals are recognised and reported in accordance with bridge procedures

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 legislation, codes of practice, policies and procedures
- 3 Bridge procedures on board a vessel
- 4 Functions and responsibilities of the members of a bridge team on board a vessel
- 5 Procedures for the relief, maintenance and handover of a watch
- 6 Procedures for the use of internal communications and alarm systems
- 7 Factors that can affect watchkeeping functions
- 8 Causes of groundings, collisions and casualties when on board a vessel
- 9 Navigational hazards and implications for watchkeeping
- 10 Typical watchkeeping problems and emergency situations and appropriate action and solutions
- 11 Bridge instrumentation, controls and alarms relevant to the functions of an integrated rating
- 12 Functions of unmanned machinery space (UMS) controls, alarms and indicators
- 13 Rudder and propeller control and vessel manoeuvring characteristics
- 14 Fatigue management principles and techniques, including signs and symptoms of fatigue
- 15 Basic environmental protection measures
- 16 Maritime communication techniques used within a bridge team on board a vessel

REQUIRED SKILLS

This describes the basic skills required for this unit.

- 1 Communicate effectively with others on watchkeeping issues, arrangements and

requirements

- 2 Read, interpret and apply instructions, procedures and information relevant to the role and responsibilities of an integrated rating when contributing to a watchkeeping operations
- 3 Select and use appropriate internal and external communications equipment during watchkeeping duties
- 4 Contribute collaboratively as a member of the bridge team during watchkeeping duties
- 5 Take appropriate initiatives related to the protection of the environment during watchkeeping duties
- 6 Interpret and apply required practices during watchkeeping duties
- 7 Modify activities dependent on differing vessel contingencies, risk situations and environments
- 8 Identify problems and emergency situations that may arise during watchkeeping duties and report problems and issues and take appropriate action based on available information
- 9 Monitor and anticipate hazards that may arise during watchkeeping duties and take appropriate action
- 10 Adapt to differences in vessels, bridge equipment and watchkeeping procedures
- 11 Select and operate bridge equipment as required within the limits of responsibility of an integrated rating

Evidence Guide

Evidence Guide

TDMMF3507B CONTRIBUTE TO MAINTAINING A SAFE WATCH

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.

Evidence Guide**TDMMF3507B CONTRIBUTE TO MAINTAINING A
SAFE WATCH**

1 Critical aspects of evidence required to demonstrate competency in this unit	<p>Assessment must confirm appropriate knowledge and skills to:</p> <ul style="list-style-type: none"> a Contribute to watchkeeping arrangements and procedures b Fulfil responsibilities of an integrated rating during a watch c Report observations and other emergency situations arising during a watch d Communicate effectively with others in the course of watchkeeping duties
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 contexts b Consistently applies underpinning knowledge and skills when: <ul style="list-style-type: none"> 1 carrying out look-out duties 2 identifying watchkeeping problems and reporting them to the officer in charge of the watch 3 applying safety precautions relevant to the role of an integrated rating during watchkeeping operations 4 reporting observations and other potentially dangerous situations to officer in charge of the watch 5 communicating effectively with the officer in charge of the watch in matters relevant to watchkeeping duties c Shows evidence of application of relevant workplace procedures, including: <ul 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

Evidence Guide**TDMMF3507B CONTRIBUTE TO MAINTAINING A SAFE WATCH**

- 4 relevant guidelines relating to the role of an integrated rating on board a vessel
- 5 following bridge housekeeping processes
- d Action taken promptly to report watchkeeping incidents in accordance with established 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 between crew and others

Evidence Guide(continued)**TDMMF3507B CONTRIBUTE TO MAINTAINING A SAFE WATCH****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

- Access is required to opportunities to either:
- a demonstrate the ability to contribute to a safe watch in range of suitably simulated watchkeeping situations relevant to the

Evidence Guide(continued)**TDMMF3507B CONTRIBUTE TO MAINTAINING A SAFE WATCH****assessment**

role of an integrated rating; and/or

- b contribute to maintaining a safe watch as an integrated rating on a commercial vessel in an appropriate range of situations and weather and sea conditions

Range Statement**Range Statement****TDMMF3507B CONTRIBUTE TO MAINTAINING A SAFE WATCH**

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 95 Convention and Code
b. Work is performed:	1 under the direction of the officer of the watch as a member of a bridge team in accordance with defined operational requirements, with some accountability and responsibility for self and others in achieving the prescribed outcomes
c. Work involves:	1 It involves the application of look-out and observational techniques across a variety of operational contexts

Range Statement**TDMMF3507B CONTRIBUTE TO MAINTAINING A SAFE WATCH**

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| d Work requires: | 1 the following of orders and instructions of the officer on watch |
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2. WORKSITE ENVIRONMENT

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| a Vessel may include: | 1 any Australian or international commercial vessel |
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| b Watchkeeping arrangements and procedures may be implemented: | 1 by day or night in both normal and emergency situations
2 under any possible conditions of weather and loading
3 while underway
4 during berthing and unberthing operations
5 while anchoring or mooring
6 while in port
7 while moored or at anchor |
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| c Watchkeeping principles for a rating (as laid out in the AMSA Marine Orders) include: | 1 proper lookout must be maintained at all times
2 duties of look-out and helmsman must be kept separate
3 look-out must give full attention to keeping a proper look-out and must not carry out other duties which could interfere with the task
4 all necessary precautions must be taken to avoid pollution of the marine environment |
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Range Statement (continued)**TDMMF3507B CONTRIBUTE TO MAINTAINING A SAFE WATCH**

VARIABLE	SCOPE
c Watchkeeping principles for a rating (as laid out in the AMSA Marine Orders) include: (continued)	5 appropriate assistance must be available to be summoned to the bridge if required by a change in the vessel's situation
d Fatigue management strategies may include:	1 recognition of symptoms of fatigue 2 arranging to take a break when symptoms of fatigue are identified 3 maintenance of personal fitness and health 4 appropriate dietary habits 5 avoidance of excessive consumption of alcohol prior to watchkeeping duties
e Emergencies may include:	1 fire 2 stranding 3 possible collision 4 heavy weather 5 synchronous rolling 6 distress signal 7 failure of bridge equipment, steering equipment, navigational lights

Range Statement (continued)**TDMMF3507B CONTRIBUTE TO MAINTAINING A
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| 8 | loss of main engines |
| 9 | person overboard |
| 10 | fog and restricted visibility |
| 11 | cargo shift |
| 12 | ice formation on hull and superstructure |
| 13 | floating ice |
| 14 | retrieval of survivors from the water |
| 15 | loss of watertight integrity |
| 16 | intoxicated persons on board a vessel |
| 17 | dragging anchor |
| 18 | fouled hawse |
| 19 | loss of mooring lines or winches when berthing |
| 20 | entry into confined spaces |

Range Statement (continued)**TDMMF3507B CONTRIBUTE TO MAINTAINING A
SAFE WATCH**

VARIABLE	SCOPE
e Emergencies may include: (continued)	21 personnel working aloft or overside 22 sudden list or loll

Range Statement (continued)**TDMMF3507B CONTRIBUTE TO MAINTAINING A SAFE WATCH**

f Documentation and records may include:	<ol style="list-style-type: none"> 1 ISM Code safety management system plans, procedures, checklists and instructions 2 orders and instructions of the officer on watch 3 procedures for reporting emergencies and observations to the officer in charge of the watch 4 instructions of relevant maritime authorities 5 relevant Australian and international standards
g Applicable legislation, regulations and codes may include:	<ol style="list-style-type: none"> 1 relevant sections of IMO STCW 95 Convention and Code 2 relevant sections of AMSA Marine Orders 3 ISM Code 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 MF Operational Quality and Safety

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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