



Australian Government

Department of Education, Employment and Workplace Relations

TDMMH1907A PLAN A PASSAGE

Revision Number: 1

TDMMH1907A PLAN A PASSAGE

Modification History

Not applicable.

Unit Descriptor

UNIT DESCRIPTOR:

This unit involves the skills and knowledge required to plan and conduct a passage and determine the position of a commercial vessel, including planning and conducting a passage for all conditions by acceptable methods of plotting ocean tracks, routeing in accordance with the General Principles on Ships' Routeing and reporting as required by the Guidelines and Criteria for Ship Reporting Systems'.

This is a new unit that incorporates the passage planning functions covered by the previous unit *TDMMH401A Plan and conduct a passage and determine position*. The 'position fixing' functions covered by the previous unit have been incorporated in a new unit *TDMMH1606A Determine position of the vessel* and the 'conduct of a passage' components have been included in *TDMMF3001B Maintain a safe navigational watch*.

Application of the Unit

Application of the unit	The unit has applications in qualifications for a Watchkeeper (Deck), Master (Less than 500 GT):and Master 3, i.e. Diploma of Transport&Distribution(Maritime Operations - Deck Watchkeeper) and Diploma of Transport&Distribution(Coastal Maritime Operations - Master Class 3).
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Licensing/Regulatory Information

Licensing/legislative requirements	The unit is consistent with the relevant maritime regulations describing requirements for both a Watchkeeper, Master (Unlimited) and Master 3/Skipper 1. This includes applicable sections of AMSA Marine Orders and State/Territory maritime licensing and regulatory requirements and the National Standard for Commercial Vessels (NSCV) and the USL Code.
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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 Use and care for navigational charts, nautical publications and related documentation	<ul style="list-style-type: none"> a Navigational charts, nautical publications and related documentation are handled and used in ways that ensure continued availability, utility and length of life b Navigational charts, nautical publications and related documentation are stored and maintained (corrected) in accordance with company procedures and notices to mariners c Navigational charts, nautical publications and related documentation are filed in accordance with company procedures d Navigational charts, nautical publications and related documentation are used for voyage planning and identification

ELEMENT	PERFORMANCE CRITERIA
	of navigational hazards in accordance with company procedures and accepted maritime practice
ELEMENT	PERFORMANCE CRITERIA
2 Plan route for voyage	<ul style="list-style-type: none"> a The proposed voyage is appraised with respect to relevant navigational hazards using navigational charts, nautical publications and related documentation b The route for the voyage is determined and documented in accordance with operational instructions and navigational principles and taking due account of identified navigational hazards c Critical points along the proposed route of the voyage are identified and recorded d Actions to deal with the identified critical points are developed in accordance with navigational principles and practice and company procedures e Potential navigational contingencies and problems that may occur along the planned route are identified and strategies for dealing with them developed and recorded
3 Determine the state of the tide at a specified location and apply findings to the passage plan	<ul style="list-style-type: none"> a Calculate the times and heights of high and low tide at any tabulated port b Determine the height of tide at any tabulated location for a specific time c Determine the time that the tide rises or falls to a required height at any tabulated location

ELEMENT	PERFORMANCE CRITERIA
4 Document and report planned route and passage	<ul style="list-style-type: none">a Planned route for a vessel's voyage is recorded and reported in accordance with company procedures and regulatory requirementsb Plans and strategies for dealing with critical situations and contingencies along the route of a voyage are recordedc Variations to a planned route are documented prior to archiving on completion of a voyage

Required Skills and Knowledge

REQUIRED KNOWLEDGE

This describes the knowledge required for this unit.

- 1 Relevant maritime regulations related to the planning of a passage of a vessel
- 2 Principles of passage planning
- 3 Procedures for effective passage planning, including contingency planning
- 4 Information required to develop an effective passage plan
- 5 Procedures for filing and handling navigational charts, nautical publications and related documentation in serviceable condition
- 6 Principles and procedures for navigation
- 7 Procedures for the use of the automatic pilot for the steering of the vessel
- 8 Manoeuvring procedures in and near traffic separation schemes and vessel traffic service areas
- 9 Vessel reporting systems and their use in planning and conducting a voyage
- 10 Maritime communication techniques, including the use of standard marine terminology and the requirements for the issuing of helm and engine orders and tug communications

REQUIRED SKILLS

This describes the basic skills required for this unit.

- 1 Use verbal communication skills required when planning a passage within limits of responsibility of a Watchkeeper or Master 3/Skipper 1
- 2 Read and interpret charts and other published information relevant to planning a passage within limits of responsibility of a Watchkeeper or Master 3/Skipper
- 3 Identify and select appropriate charts and publications for a voyage
- 4 Correct nautical charts and publications from data in notices to mariners
- 5 Appraise the available data to determine an appropriate route
- 6 Calculate tidal windows and restrictions

REQUIRED SKILLS

- 7 Generate the chartwork for a passage plan, including courses, distances, waypoints critical points clearing lines danger lines and appropriate monitoring systems
- 8 Tabulate courses, distances, waypoints and critical aspects of a plan
- 9 Enter a passage plan into a ECS or ECDIS system
- 10 Enter a passage plan into an electronic navigation system
- 11 Recognise problems that may be experienced when planning and navigating a passage and take appropriate action
- 12 Adapt to differences in vessels, equipment and related standard operating procedures

Evidence Guide

<p>Evidence Guide TDMMH1907A PLAN A PASSAGE</p>
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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.

<p>1 Critical aspects of evidence required to demonstrate competency in this unit</p>	<p>Assessment must confirm appropriate knowledge and skills to:</p> <ol style="list-style-type: none"> a Plan the passage of a commercial vessel of 500 gross tonnage or more taking into account all relevant navigational hazards b Access, use and maintain navigational charts, nautical publications and related documentation c Communicate effectively with others when planning a voyage d Plan for reporting procedures in accordance with the Guidelines and Criteria for Ship Reporting Systems
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Evidence Guide**TDMMH1907A PLAN A
PASSAGE****2 Evidence
required for
demonstration
of consistent
performance**

- 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:
 - 1 planning a passage
 - 2 identifying and evaluating navigation problems and determining appropriate solutions
 - 3 identifying and implementing improvements to voyage planning procedures
 - 4 applying required precautions relevant to voyage planning
- c Shows evidence of application of relevant workplace and regulatory procedures, including:
 - 1 relevant sections of applicable maritime regulations
 - 2 vessel's safety management system and procedures
 - 3 navigational regulations and hazard prevention policies and procedures
 - 4 reporting of vessel's position, route and navigational contingencies
 - 5 job procedures and navigational instructions
 - 6 use of relevant nautical publications and charts
 - 7 procedures for the storage of nautical publications and charts
- d Action is taken promptly to report and/or rectify any vessel planning problems in accordance with established procedures
- e Work is completed systematically with required attention to detail

Evidence Guide**TDMMH1907A PLAN A
PASSAGE**

- f Recognises and adapts appropriately to cultural differences in the workplace, including modes of behaviour and interactions and communication with others

Evidence Guide (continued)**TDMMH1907A PLAN A
PASSAGE****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**

- Access is required to opportunities to:
- a plan a simulated passage using an approved marine simulator over an appropriate range of latitudes and navigational hazards; and/or
 - b assist in the planning of an actual voyage for a commercial vessel of 500 gross tonnage or more involving an appropriate range of latitudes and navigational hazards

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 relevant maritime regulations
b. Work is performed:	1 as the person responsible for preparing passage plans, with the draft plan being evaluated by the vessel's master
c. Work involves:	1 the application of a significant range of fundamental navigational principles and procedures across a wide variety of navigational contexts, including navigation at high latitudes. Contribution to the development of a plan for a voyage is required as a member of a bridge team with appropriate allowance for possible contingencies
d. Work requires:	1 judgement and teamwork in planning, technical and operational functions related to planning the passage of a commercial vessel of more than 500 GT

2. WORKSITE ENVIRONMENT

a Vessel may include:	1 any Australian or international commercial vessel within the limits of responsibility of a Watchkeeper on a vessel of more than 500 GT or Master (less than 500 GT)

Range Statement TDMMH1907A PLAN A PASSAGE	
Voyages to be planned may include:	<ol style="list-style-type: none"> 1 any voyage navigable by the size and type of vessel concerned 2 voyages in high latitudes 3 passages through traffic separation schemes, tidal restricted areas and VTS controlled areas 4 pilotage water under conditions of restricted visibility
c Navigation may be planned for conditions of:	<ol style="list-style-type: none"> 1 clear visibility using visual navigational techniques 2 restricted visibility using parallel indexing and/or electronic chart systems 3 clear visibility using a combination of visual and electronic techniques

Range Statement (continued) TDMMH1907A PLAN A PASSAGE	
VARIABLE	SCOPE
d Instrumentation and equipment used for navigation may include:	<ol style="list-style-type: none"> 1 radar 2 automatic radar plotting aid (ARPA) 3 Loran C navigation system 4 GPS and DGPS satellite navigation systems 5 ECS and ECDIS systems (Note: ECDIS systems are considered to be included under the term 'charts' under the IMO STCW Convention and Code) 6 integrated navigation systems

Range Statement (continued)**TDMMH1907A PLAN A
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| 7 | magnetic compasses |
| 8 | gyro compasses and repeaters |
| 9 | chronometers |
| 10 | sextants |
| 11 | azimuth mirrors |
| 12 | pelorus |
| 13 | doppler and electromagnetic logs |
| 14 | echo sounders |
| 15 | continuous position monitoring |

**e Documentation
and records
may include:**

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| 1 | ISM Code safety management system plans, procedures, checklists and instructions |
| 2 | operational orders |
| 3 | navigational charts |
| 4 | nautical publications |
| 5 | Nautical Almanac |
| 6 | General Principles on Ships' Routing |
| 7 | Guidelines and Criteria for Ship Reporting Systems |
| 8 | publications from the Australian Hydrographer or British Admiralty, including radio signals, light lists, sailing directions, tide tables and chart catalogues |
| 9 | navigational warning records |
| 10 | IMO STCW 95 Convention and Code |
| 11 | AMSA Marine Orders |
| 12 | annual and weekly notices to mariners |

Range Statement (continued)**TDMMH1907A PLAN A
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| 13 | vessel's log |
| 14 | company procedures |

Range Statement (continued)**TDMMH1907A PLAN A
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VARIABLE	SCOPE								
e Documentation and records may include: (continued)	<table border="1"> <tr> <td style="width: 20px; vertical-align: top;">15</td> <td>vessel manufacturer's instructions and recommended procedures</td> </tr> <tr> <td style="width: 20px; vertical-align: top;">16</td> <td>instructions of relevant maritime authorities</td> </tr> <tr> <td style="width: 20px; vertical-align: top;">17</td> <td>pilot instructions where relevant</td> </tr> </table>	15	vessel manufacturer's instructions and recommended procedures	16	instructions of relevant maritime authorities	17	pilot instructions where relevant		
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16	instructions of relevant maritime authorities								
17	pilot instructions where relevant								
f Applicable legislation, regulations and codes may include:	<table border="1"> <tr> <td style="width: 20px; vertical-align: top;">1</td> <td>relevant sections of IMO STCW 95 Code, AMSA Marine Orders, State and Territory marine regulations, NSCV/USL Code</td> </tr> <tr> <td style="width: 20px; vertical-align: top;">2</td> <td>International Regulations for Preventing Collisions at Sea</td> </tr> <tr> <td style="width: 20px; vertical-align: top;">3</td> <td>relevant international, Commonwealth, State and Territory OH&S legislation</td> </tr> <tr> <td style="width: 20px; vertical-align: top;">4</td> <td>Guidelines and Criteria for Ship Reporting Systems</td> </tr> </table>	1	relevant sections of IMO STCW 95 Code, AMSA Marine Orders, State and Territory marine regulations, NSCV/USL Code	2	International Regulations for Preventing Collisions at Sea	3	relevant international, Commonwealth, State and Territory OH&S legislation	4	Guidelines and Criteria for Ship Reporting Systems
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2	International Regulations for Preventing Collisions at Sea								
3	relevant international, Commonwealth, State and Territory OH&S legislation								
4	Guidelines and Criteria for Ship Reporting Systems								

Unit Sector(s)

Not applicable.

Field

Field MH Navigation

Relationship to other units

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