



Australian Government

Department of Education, Employment and Workplace Relations

TDMMR5207B CARRY OUT DOGGING AND CARGO HANDLING OPERATIONS AT A RIG

Revision Number: 1

TDMMR5207B CARRY OUT DOGGING AND CARGO HANDLING OPERATIONS AT A RIG

Modification History

Not applicable.

Unit Descriptor

UNIT DESCRIPTOR:

This unit involves the skills and knowledge required to carry out the duties of an Integrated Rating during dogging and cargo handling operations on board a commercial support vessel at an off-shore oil or gas rig, including carrying out hatch cover operations, cleaning and preparing cargo spaces, assisting in cargo handling operations, lashing cargo, and carrying out dogging functions.

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 Establish communications for dogging operations	- a Methods of communication are agreed with relevant personnel - b Agreed signals/communications for load moving conform to Australian standards and codes of practice - c Communications are trialled and adjusted and/or confirmed as required to ensure a safe and effective lift - d Communications equipment is checked for correct operation and configured in line with legislative and company requirements - e Defective communications equipment is tagged, rejected and reported to authorised personnel for corrective action - f Signals/communications are given both within sight and out of sight of crane operator
2 Carry out dogging operations	- a Lifting gear is checked and defective gear is isolated and reported in accordance with established procedures - b Common whipping, bends, hitches and splices in fibre rope are made as required as part of dogging operations carried out by integrated ratings on a supply vessel at a rig - c The weight of the load is assessed in accordance with established procedures

ELEMENT	PERFORMANCE CRITERIA
2 Carry out dogging operations (continued)	- d Safe working loads of slings in various configurations are correctly calculated in accordance with established procedures - e Appropriate ropes, slings, chains and accessories are selected and used for load shifting in accordance with established procedures - f Loads of various weights and sizes are slung during cargo handling operations in accordance with established procedures - g Appropriate directions are given to a crane operator to move a load when the load is not in the operator's view - h All hand signals and whistle signals for directing load movement are given in accordance with established communication protocols
3 Assist in cargo handling operations at a rig	- a Assistance is provided in the handling of cargo during loading and unloading operations at a rig as per established procedures and under the supervision of the responsible officer - b Appropriate precautions are taken during cargo handling to avoid accidents and cargo damage - c Damaged cargo or faulty or defective cargo handling gear and equipment is identified, marked and reported to the responsible officer
4 Carry out hatch cover operations	- a Assistance is provided in hatch opening and closing operations in accordance with established procedures and under the supervision of the responsible officer - b Checks and routine maintenance on hatch securing and opening devices and machinery are carried out in accordance with established procedures and under the supervision of the

ELEMENT	PERFORMANCE CRITERIA
	responsible officer c Assistance is provided in securing hatch covers for sea in accordance with established procedures and under the supervision of the responsible officer
5 Clean and prepare cargo spaces	a Assistance is provided in cleaning and preparation of a cargo as per established procedures and under the supervision of the responsible officer b Assistance is provided in the opening, checking, cleaning and sealing of a bilge and the dismantling of a strum box
6 Lash cargo	a Assistance is provided in the lashing of cargo in accordance with established procedures and under the supervision of the responsible officer b Appropriate precautions are taken during cargo lashing procedures to avoid cargo damage c Faulty and defective lashing and securing gear and equipment is identified, marked and reported to the responsible officer
ELEMENT	PERFORMANCE CRITERIA
7 Clean and prepare cargo spaces	a Assistance is provided in cleaning and preparation of a cargo space as per established procedures and under the supervision of the responsible officer b Assistance is provided in the opening, checking, cleaning and sealing of a bilge and the dismantling of a strum box

ELEMENT	PERFORMANCE CRITERIA
8 Follow safety and hazard control procedures	- a All required safety precautions and regulations are followed when carrying out cargo handling and dogging operations - b Operational hazards are identified and action is taken in conjunction with the officers, engineers and other members of the crew to minimise or eliminate risk to personnel, vessel and the environment - c Agreed signals/communications for load moving as per Australian standards and codes of practice are used during dogging operations - d Where relevant, procedures and precautions necessary for entry into confined spaces on a vessel are correctly followed, including obtaining the authority and approval of the relevant officer - e Shipboard emergency and contingency plans are followed in the event of a failure or emergency during cargo handling and dogging operations

Required Skills and Knowledge

REQUIRED KNOWLEDGE

This describes the knowledge required for this unit.

- 1 Safe Working Code of Practice for the Australian Offshore Support Vessel Industry and other relevant maritime codes and regulatory requirements
- 2 Relevant OH&S and pollution control legislation and policies
- 3 Functions and responsibilities of an integrated rating during cargo handling operations on a support vessel at a rig
- 4 Cargo handling and dogging procedures within the limits of responsibility of an integrated rating, including:
 - a carrying out hatch cover operations
 - b cleaning and preparing cargo spaces
 - c lashing and securing of various types of cargo

REQUIRED KNOWLEDGE

- d dogging operations
- 5 Agreed signals/communications for load moving as per Australian standards and codes of practice
- 6 Calculations required during dogging and load shifting operations may include: addition, subtraction, multiplication and division, fractions, decimals, percentages and mixed numbers
- 7 Ways of estimating the weight of a load and methods of calculating the safe working load of cranes and load lifting equipment
- 8 Slings and lifting gear used during cargo handling and dogging operations at a rig and their applications
- 9 Techniques and precautions required when lashing various types of cargo carried on support vessels servicing off-shore oil/gas rigs
- 10 Hazards and related safety precautions when carrying out cargo handling and dogging operations at a rig
- 11 Faults and damage that may occur with lifting gear and action to be taken when they are identified
- 12 Basic environmental protection measures during cargo handling and dogging operations
- 13 Personal protection clothing and equipment and its purpose
- 14 Communication techniques and equipment used during cargo and dogging operations on board a support vessel at a rig

REQUIRED SKILLS

This describes the basic skills required for this unit.

- 1 Use verbal, hand and other communication techniques and signals required when carrying out dogging and cargo handling operations at an oil or gas rig
- 2 Read, interpret and apply standard operating procedures for dogging and cargo handling operations at an oil or gas rig, including all required OH&S procedures and precautions
- 3 Read and interpret material safety data sheets

REQUIRED SKILLS

- 4 Observe and interpret indications of equipment performance
- 5 Complete any required operational and maintenance records
- 6 Carry out calculations required during dogging and load shifting operations
- 7 Work safely and collaboratively with others when carrying out dogging and cargo handling operations at an oil or gas rig
- 8 Select and use relevant tools and equipment as per instructions
- 9 Recognise faulty equipment and cargo and take appropriate action as per operating instructions
- 10 Recognise routine problems when carrying out dogging and cargo handling operations at an oil or gas rig and take appropriate action
- 11 Adapt to differences in vessels, equipment and standard operating procedures
- 12 Open and close hatches as per standard operating procedures
- 13 Clean cargo spaces as per standard operating procedures
- 14 Lash various types of cargo carried on support vessels servicing off-shore oil/gas rigs in accordance with standard operating procedures
- 15 Operate cargo handling equipment as per standard operating procedures

Evidence Guide

Evidence Guide

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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.

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| 1 Critical aspects of evidence required to | Assessment must confirm appropriate knowledge and skills to:

a Carry out cargo handling operations within the limits of |
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Evidence Guide

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demonstrate competency in this unit	responsibility of an integrated rating b Carry out dogging operations on a support vessel at a rig c Carry out hatch cover operations d Clean and prepare cargo spaces e Lash cargo f Apply all required safety, environmental and hazard control precautions and procedures during cargo handling and dogging operations at a rig g Communicate effectively with others during cargo handling and dogging operations
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 carrying out cargo handling operations within the limits of responsibility of an integrated rating 2 carrying out dogging operations 3 carrying out hatch cover operations 4 cleaning and prepare cargo spaces 5 lashing cargo 6 applying all required safety, environmental and hazard control precautions and procedures during cargo handling and dogging operations 7 communicating effectively with others during cargo handling and dogging operations c Shows evidence of application of relevant workplace procedures, including:

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- 1 Relevant sections of the Safe Working Code of Practice for the Australian Offshore Support Vessel Industry
- 2 ISM Code and associated vessel's safety management system and procedures
- 3 agreed signals/communications for load moving as per Australian standards and codes of practice

Evidence Guide (continued)

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2 Evidence required for demonstration of consistent performance (continued)

- 4 OH&S regulations and hazard prevention policies and procedures
- 5 standard operating procedures and work instructions
- 6 instructions and orders of officers on the vessel/rig
- d Action is taken promptly to report operational incidents and problems 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

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

Evidence Guide (continued)

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	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 routine cargo handling and dogging tasks on board a support vessel at a rig through appropriate case studies, practical exercises and simulated situations; and/or - b assist in routine cargo handling and dogging tasks on board an operational commercial support vessel at a rig

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 Safe Working Code of Practice for the Australian Offshore Support Vessel Industry and other relevant maritime codes and regulatory requirements

Range Statement

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b. Work is performed:	1 as an integrated rating under the supervision of the responsible officers
c. Work involves:	1 the application of established procedures and techniques to the cargo handling and dogging tasks falling within the limits of responsibility of an integrated rating on a support vessel during cargo handling operations at a rig
d. Work requires:	1 the following of orders and instructions of the officer in charge of the watch

2. WORKSITE ENVIRONMENT

a Vessel may include:	1 any commercial vessel supporting off-shore oil and gas rig operations
b Cargo handling and dogging operations may be carried:	1 by day or night in both normal and emergency situations 2 under any possible conditions of weather and loading 3 while moored or at anchor
c Cargo may include:	1 <i>general cargo stored in a cargo space or on a hatch</i> 2 <i>deck cargo</i> 3 <i>cargo containers</i> 4 <i>equipment and stores</i> 5 bulk cargo

Range Statement (continued)

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VARIABLE	SCOPE
d Agreed signals/communications for load moving Australian standards and codes of practice and include:	1 stop 2 raise 3 lower 4 slew - left or right 5 luff - boom up and down
e Communications may occur through:	1 <i>hand signals</i> 2 <i>whistles</i> 3 hand-held radio
f Calculations required during dogging and load shifting operations may include:	1 addition 2 subtraction 3 multiplication 4 division 5 fractions 6 decimals 7 percentages 8 mixed numbers

Range Statement (continued)

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g Personal protective equipment may include:	1	ear muffs/plugs and goggles
	2	gloves
	3	life-jacket
	4	overalls
	5	steel capped boots
	6	sun glasses and sun hat
	7	vests
	8	wet weather gear

Range Statement (continued)

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VARIABLE	SCOPE
h Operational hazards for cargo handling and dogging operations may include:	- moving heavy loads using unsafe lifting procedures - cargo handling operations in rough seas or bad weather - unsecured cargo, deck machinery, components or equipment - slippery deck - moving and rotating machinery - faulty lifting/lashing gear and equipment - using equipment and lifting gear beyond safe working limits - poor housekeeping procedures <i>working in confined spaces</i>

Range Statement (continued)

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	10 non-compliance with safe working procedures
i Documentation and records may include:	1 Safe Working Code of Practice for the Australian Offshore Support Vessel Industry 2 ISM Code safety management system plans, procedures, checklists and instructions 3 Safe working Code of Practice for the Australian Offshore Support Vessel Industry 4 orders and instructions of the officer in charge of the watch 5 vessel, rig and company procedures
j Applicable legislation, regulations and codes may include:	1 Safe Working Code of Practice for the Australian Offshore Support Vessel Industry 2 relevant sections of IMO Conventions and Codes 3 relevant sections of AMSA Marine Orders 4 Safe working Code of Practice for the Australian Offshore Support Vessel Industry 5 ISM Code 6 relevant international, Commonwealth, State and Territory OH&S and pollution control 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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