



Australian Government

MARA007 Contribute to safe cargo operations on offshore support vessels

Release: 1

MARAO07 Contribute to safe cargo operations on offshore support vessels

Modification History

Release 1. New unit of competency.

Application

This unit involves the skills and knowledge required to undertake a range of offshore activities on board an offshore support vessel (OSV). It includes deck preparation, transfer of deck cargoes, bulk cargo operations and operations with deck equipment within the limits of responsibility of an integrated rating and under the direction of the officer in charge or Master.

This unit applies to Integrated Ratings working in the offshore maritime industry assigned to specific activities and responsibilities.

No licencing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

A – Handling Cargo and Vessel Stability

Unit Sector

Not applicable.

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 Recognise characteristics of OSV cargo and OSVs to ensure the safe transfer and transport of cargo	1.1	Features of various offshore installation types, vessels rig types and operations are outlined
	1.2	Cargo operations of offshore support vessels are identified
	1.3	Properties of cargo being transported are identified and their impact on safety, the environment and vessel operations is recognised

- | | | |
|----------|-----|--|
| | 1.4 | Hazards associated with the transport of cargo are clarified according to emergency response documentation |
| | 1.5 | Hazard controls associated with OSV cargo are employed according to organisational procedures |
| 2 | | Comply with legislative and organisational requirements for safe transfer and transport of OSV cargo |
| | 2.1 | Safety data sheets (SDS)/material safety data sheets (MSDS)/IMDG Code relevant to cargo are accessed and safety management procedures are identified |
| | 2.2 | SDS/MSDS/IMDG Code are interpreted to identify relevant cargo-related hazards to the vessel and to personnel |
| | 2.3 | Legislative, organisational and company specific requirements are interpreted to identify appropriate actions for safe transfer and transport of cargo |
| | 2.4 | Transfer of cargo is undertaken under direction and within the limits of responsibility of an integrated rating |
| 3 | | Take precautions to prevent hazards |
| | 3.1 | Organisational policies and procedures to minimise hazards are identified |
| | 3.2 | Type and severity of hazards posed by OSV cargo is recognised |
| | 3.3 | Transfer and transport of cargo is monitored to prevent hazards |
| | 3.4 | Monitoring equipment, where installed, is regularly inspected and used according to organisational procedures |
| 4 | | Respond to hazardous situation |
| | 4.1 | Source of hazard is identified according to organisational procedures |
| | 4.2 | Risk is assessed considering severity and likelihood of consequences |
| | 4.3 | Control measures to minimise risk are implemented to level of responsibility or referred to appropriate person for permission or further action |
| | 4.4 | Containment procedures are applied where appropriate |
| | 4.5 | Appropriate safety procedures are followed and personal protective equipment is used according to organisational procedures |
| | 4.6 | Risk is eliminated where possible |

- | | | |
|--|-----|---|
| 5 Take precautions to prevent pollution of the environment from the release of liquid or dry bulk cargoes | 5.1 | Procedures to prevent pollution are identified and observed at all times |
| | 5.2 | Measures to prevent pollution during normal and emergency situations are applied according to regulatory requirements and organisational procedures |
| | 5.3 | All relevant information is immediately reported to appropriate persons when a spill is detected or a malfunction has occurred that poses a risk of a spill |
| | 5.4 | All required spill containment procedures are correctly implemented according to regulatory requirements and organisational procedures |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

- | | |
|---|--|
| Features of various types of offshore support vessels must include: | <ul style="list-style-type: none">• general arrangement and construction• types of offshore support vessels• types of offshore installations, rigs and platforms |
| Cargo operations must include: | <ul style="list-style-type: none">• loading, unloading and care in transit of deck cargo• loading and unloading of liquid cargo• loading and unloading dry bulk cargo• piping systems and deck valve arrangements• tubular cargo securing arrangements |
| Properties must include: | <ul style="list-style-type: none">• deck cargo types and characteristics• hazards of oil cargoes• hazards of noxious liquid substances (NLS) cargo• hazards of offshore cargo operations• tubular cargo stability and securing |
| Cargo must include: | <ul style="list-style-type: none">• containerised deck cargo• drilling muds |

	• drilling brines • dry bulk cargo • heavy lifts and unusual lifts • NLS • oil • tubular deck cargo
Hazards must include:	• electrostatic hazards • environmental hazards • explosion and flammability hazards • health hazards • pressure hazards • sources of ignition • toxicity hazards
Hazard controls must include:	• atmospheric control • cargo securing arrangements including ensuring safe stowage or lashing of deck cargo • cargo segregation • equipment colour coding • personal protective equipment
Cargo securing equipment must include:	• capstan winches and wires • cargo securing manual • cargo securing pins • chocks • tugger winches and wires • dollies
Measures must include:	• assisting in implementing shipboard cargo securing arrangements • reporting relevant information to the responsible person

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>

Assessment Requirements for MARA007 Contribute to safe cargo operations on offshore support vessels

Modification History

Release 1. New unit of competency.

Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least one occasion and include:

- carrying out cargo operations safely and according to accepted policies and procedures
- correctly identifying safety data sheets (SDS), material safety data sheets (MSDS and/or IMDG Code, relevant cargo-related hazards to vessel and to personnel, and taking appropriate action for safe transfer and stowage of cargo
- ensuring safe stowage or lashing of deck cargo
- identifying and developing awareness of hazardous situations
- interpreting and applying knowledge of OSV layouts, OSV cargo features, characteristics and hazards, and related hazard prevention strategies to duties on various types of offshore support vessels
- reading and interpreting SDS and/or MSDS and/or IMDG Code
- recognising hazards and other problems that can arise when managing safety on an OSV, taking appropriate remedial action and initiating appropriate solutions.
- using verbal and non-verbal means of communication in a clear and appropriate manner to effectively communicate with other crew members

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- actions and measures to be taken in the event of spillage
- features and characteristics of various types of offshore support vessels
- general arrangement and construction of offshore support vessels
- hazard control procedures on offshore support vessels
- hazard controls
- hazards associated with:
 - OSV deck cargo operations
 - OSV bulk and liquid
 - below deck cargo operations

- hazards to the environment including the effects of oil and chemical pollution on human and marine life
- information on SDS and/or MSDS and/or IMDG Code
- loading and unloading cargo
- offshore support vessel safety culture and safety management systems
- piping systems, hoses and valves
- procedures for the safe use of personal protective equipment
- shipboard procedures to reflect current MARPOL regulations to prevent pollution
- terminology relating to the structure and operations of various types of offshore support vessels
- work health and safety/occupational health and safety (WHS/OHS) requirements and work practices

Assessment Conditions

Assessors must satisfy National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) assessor requirements.

Assessment must satisfy the National Vocational Education and Training Regulator (NVR)/Australian Quality Training Framework (AQTF) standards.

Assessment must occur in workplace operational situations on board an offshore support vessel (OSV) or where this is not available, in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- applicable documentation such as legislation, regulations, codes of practice, workplace procedures and operational manuals
- range of relevant practical and written exercises, case studies and simulations that reflect typical ambient conditions found in the workplace
- tools, equipment, machinery, materials and personal protective equipment currently used in industry.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>