



Australian Government

MARA024 Manage vessel stability

Release: 2

MARA024 Manage vessel stability

Modification History

Release 2. This is the second release of this unit of competency in the MAR Maritime Training Package.

- Minor statement changes in unit Application
- Minor grammatical change in Performance Criteria 2.1
- Minor statement changes in Performance Evidence
- Minor statement changes in Knowledge Evidence.

Release 1. This is the first release of this unit of competency in the MAR Maritime Training Package.

Application

This unit involves the skills and knowledge required to manage the dynamic factors affecting the stability of a vessel up to 100 metres.

It includes calculating stability, controlling vessel stress and stability, and maintaining records of stability management.

This unit applies to people working in the maritime industry in the capacity of:

- Master on commercial vessels up to 45 metres Near Coastal
- Marine Engine Driver Grade 1 Near Coastal

Licensing/Regulatory Information

Legislative and regulatory requirements are applicable to this unit.

This unit is one of the requirements to obtain Australian Maritime Safety Authority (AMSA) certification as a Master up to 45 metres Near Coastal and Marine Engine Driver Grade 1 Near Coastal as specified in Marine Order 505.

Seafarers seeking certification should check with AMSA.

Pre-requisite Unit

Not applicable.

Competency Field

A - Handling Cargo and Vessel Stability

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1 Calculate stability	1.1 Vessel stability data book is made available and checked for endorsement
	1.2 Data is interpreted to determine safety parameters for vessel
	1.3 Stability is accurately calculated using data extracted from vessel stability data book
	1.4 Stability calculations are checked to ensure they correlate with data set out in vessel stability book
	1.5 Miscalculations or unsafe conditions are recognised and recalculated or checked
	1.6 Calculated stability data is recorded using appropriate units and correct number of significant figures
2 Control vessel stress and stability	2.1 Information from vessel stability data is used to determine loading limits and displacement from draft
	2.2 Vessel weight distribution is managed to maintain stability condition within safe limits at all times and regulatory requirements are complied with under all conditions of loading
	2.3 Relevant stability information is correctly communicated to others, as required
	2.4 Stability conditions of vessel are managed in adverse weather conditions
	2.5 Emergencies that may jeopardise vessel stability are recognised and appropriate actions taken
3 Maintain records of stability management	3.1 Data and information related to stability management is accurately recorded

- 3.2** Data and information related to stability management is filed and stored according to 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.

Unit Mapping Information

This unit replaces and is equivalent to MARA004 Manage vessel stability.

Links

Companion Volume Implementation Guides are found in VETNet -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=772efb7b-4cce-47fe-9bbd-ee3b1d1eb4c2>