

Title	Demonstrate knowledge of maritime rules and navigation, and steer and keep watch on a vessel		
Level	3	Credits	10

Purpose	<p>This unit standard is intended for persons studying towards a qualification in vessel operation or crewing with the intention of applying for a Maritime New Zealand license.</p> <p>People credited with this unit standard are able to demonstrate knowledge of maritime rules, navigational marks, and the magnetic compass; steer a commercial vessel; and assist the master in keeping a lookout on a vessel.</p>
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Classification	Maritime > Navigation and Seamanship
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Available grade	Achieved
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Guidance Information

- 1 Legislation relevant to this unit standard includes:
Health and Safety at Work Act 2015.
Maritime Transport Act 1994 and subsequent amendments.
- 2 References
International Maritime Organisation, *International Code of Signals*. IMO 994E, 2005.
International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) systems. Available at <http://www.iala-aism.org>.
Maritime Rules and Advisory Circulars. Available at <http://www.maritimenz.govt.nz>.
Maritime Rule Part 22 and 91, and Advisory Circulars. Available at <http://www.maritimenz.govt.nz>.
New Zealand's System of Buoys and Beacons, Maritime New Zealand, 2008, ISBN 0-478-18815-3. Available at <http://www.maritimenz.govt.nz>.
- 3 Definition
Operating procedures refers to the safe operating procedures documented in the vessel's Marine Transport Operator Plan (MTO) as well as any undocumented standard operating procedures for that vessel.
MTO stands for Maritime Transport Operator Plan which refers to the documented operational plan required for all commercial vessels as a part of the Maritime Operator Safety System (MOSS), the operator certification system established under Part 19 of the maritime rules and administered by Maritime New Zealand.
Vessel refers to any form of commercial or military watercraft; sometimes used in maritime circles interchangeably with the word *ship*.

- 4 Assessment information
- a Binoculars may be used to assist the lookout in monitoring traffic, navigation marks, hazards, and other situations as directed by the master.
 - b All operations are carried out under the authority of the vessel's master.
 - c Competency may be demonstrated using simulated scenarios.
 - d All activities and evidence must be in accordance with operating procedures.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of Maritime Rules.

Performance criteria

- 1.1 Collision Prevention Rules are explained in accordance with Part 22 of the Maritime Rules; *Collision Prevention*.
- 1.2 Navigation Safety Rules are explained in accordance with Part 91 of the Maritime Rules; *Navigation Safety Rules*.

Outcome 2

Demonstrate knowledge of navigational marks.

Performance criteria

- 2.1 The international system of buoyage is described in accordance with the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) System 'A' Maritime Buoyage System.

Range	IALA region A – (in-depth knowledge) IALA region B – (lateral marks only)
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- 2.2 The conventional direction of buoyage in New Zealand is described in accordance with New Zealand's System of Buoys and Beacons.
- 2.3 The navigational meaning and purpose of marks are identified and described in terms of colour, shape, marking, and lighting in accordance with New Zealand's System of Buoys and Beacons.

Range	marks – lateral, cardinal, isolated danger, safer water, special, new dangers.
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Outcome 3

Demonstrate knowledge of the magnetic compass.

Performance criteria

- 3.1 The Earth's magnetic field is described in terms of magnetic variation and magnetic anomalies.
- 3.2 The construction, care, and maintenance of a magnetic compass are described in accordance with manufacturers' specifications.
- 3.3 Compass bearings are converted in accordance with the stated variation and vessel deviation.
- Range true to magnetic, magnetic to true.
- 3.4 Deviation and its effect on a magnetic compass, and methods of eliminating and minimising deviations, are described.

Outcome 4

Steer a commercial vessel.

Performance criteria

- 4.1 Vessel is steered in accordance with the master's helm orders and within acceptable limits, having regard to the area of navigation and prevailing sea state.
- 4.2 Vessel is steered by reference to compass and visual marks.
- 4.3 Steering modes are changed over.
- Range steering modes – primary, backup and emergency systems, hand steering, auto pilot.
- 4.4 Instructions for variations to vessel's speed are acknowledged and actioned.
- 4.5 Relieving helmsman is provided full handover.

Outcome 5

Assist the master in keeping a lookout on a vessel.

Performance criteria

- 5.1 Bearings of sound signals, lights or other vessels observed by the lookout are conveyed to the master.
- 5.2 The lookout is maintained in accordance with the master's instructions.
- 5.3 Immediate clarification is sought where lookout instructions received are unclear.

- 5.4 Relieving lookout is provided with an accurate and complete account of the current situation in accordance with the master's instructions.
- 5.5 Any signs of a dragging anchor are identified, and the master is alerted in accordance with the master's instructions.
- 5.6 The master is provided with an accurate and complete account of the situation around the vessel in accordance with the master's instructions.
- 5.7 Advice or clarification is sought when orders received are unclear or when the lookout is in doubt.

Planned review date	31 December 2025
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	15 October 2015	31 December 2022
Review	2	26 November 2020	N/A

Consent and Moderation Requirements (CMR) reference	0054
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.