Title	**Operate a restricted limits vessel**		
Level	**4**	**Credits**	**10**

Purpose	This unit standard is intended for persons studying towards a qualification in vessel operation with the intention of applying for a Skipper Restricted Limits license from Maritime New Zealand. People credited with this unit standard are able to: maintain a navigational watch on a vessel; manoeuvre a vessel; and interpret meteorological and tidal information.

Classification	Maritime > Navigation and Seamanship

Available grade	Achieved

Guidance Information

1 Legislation relevant to this unit standard includes:
Health and Safety at Work Act 2015.
Maritime Transport Act 1994 and subsequent amendments.
Local bylaws as applicable.

2 References
International Maritime Organisation, *International Code of Signals.* IMO 994E, 2005. Available at https://imo.org/en;
Maritime Rule Part 19 *Maritime Transport Operator - Certification and Responsibilities;*
Maritime Rule Part 31, *Crewing and Watchkeeping*. Available at http://www.maritimenz.govt.nz;
Coastguard Boating Education, Scanlan, Mike. Safety in Small Craft, 3rd edition 2020. ISBM 978-0-473-51208-8.

3 Definitions
Accepted industry practice refers to standardised practices and procedures accepted by the wider maritime industry as examples of best practice.
Operating procedures refers to the safe operating procedures documented in the vessel's MTOP as well as any undocumented standard operating procedures for that vessel.
MOSS stands for Maritime Operator Safety System which refers to the operator certification system established under Part 19 of the maritime rules and administered by Maritime New Zealand.
MTOP 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 Competency may be demonstrated using simulated scenarios.
  b All activities and evidence must be in accordance with accepted industry practice, and operating procedures.

Outcomes and performance criteria

Outcome 1

Maintain a navigational watch on a vessel.

Performance criteria

1.1 Vessel is operated within the limitations of the vessel, its crew, weather, and environment.

Range limitations of vessel – stability, power and propulsion, design characteristics;
weather – sea state, wind, visibility, swell;
environment – effect of: darkness, tide, proximity to land, currents, swell.

1.2 Human factors affecting safe watchkeeping are explained and ways to minimise these are described.

Range fitness for duty, fatigue, distraction, complacency.

1.3 Safe watchkeeping practices are maintained in accordance with Maritime Rule Part 31 *Crewing and Watchkeeping*.

Range single operator practice, single point error, risk management principles, situational awareness and communication.

1.4 Passengers and crew are informed, and their welfare and safety are maintained, during potentially hazardous manoeuvres and emergency situations.

Outcome 2

Manoeuvre a vessel.

Performance criteria

2.1 The effects of wind, tide, and vessel characteristics on vessel handling are explained.

Range vessel characteristics – rudder, propeller and pivot point.

2.2 Vessel handling techniques are described, and the vessel is manoeuvred safely in a confined area, minimising risk of damage to the vessel, fixed structures, and other vessels.

Range transverse thrust/prop-walk, use of back-up engine controls.

2.3 The vessel is manoeuvred to berth and un-berth positions correctly with respect to approach, speed, and prevailing wind and tide conditions and secured alongside.

Range coming alongside and springing off, use of mooring lines including bow line, stern line, bow spring and stern spring.

2.4 Anchoring techniques are described, and the vessel is manoeuvred to a safe anchorage.

Range vessel preparation, anchor selection, shelter, depth, holding conditions, tide, weather, clearance from hazards, anchoring techniques.

2.5 Manoeuvring actions are appropriate to prevailing conditions and the manoeuvring characteristics of the vessel.

2.6 Appropriate preparations and techniques for encountering heavy weather and crossing a bar are described in accordance with the Safety in Small Craft reference and Maritime New Zealand bar crossing guidance.

Range use of speed, engines, drogues, sea anchors, following seas, head-seas, beam seas.

2.7 Safe use of small boats including dinghies and tenders is described.

Outcome 3

Interpret meteorological and tidal information.

Performance criteria

3.1 Three sources of marine weather forecasts are identified, and the usefulness of the differing forecasts are explained for passage planning.

3.2 The meaning of terminology used in weather forecasting is explained.

Range backing, veering, gusts, knots, sea, swell, anticyclone, high pressure, depression, low pressure, cyclone, tropical depression, cold front, warm front, occluded front.

3.3 Weather systems are identified from a mean sea level analysis chart and their likely effect on local weather conditions is explained.

Range systems – anticyclone, high pressure, depression, low pressure, cyclone, tropical depression, cold front, warm front, occluded front. effects – wind, fog, rain, snow.

3.4 Wind speed and direction is estimated from a mean sea level analysis chart, and geographic influences on wind strength are explained.

Range geographic effects – funnelling, katabatic winds, land breeze, sea breeze.

3.5 The effects of tidal flow, wind speed, direction and fetch on local sea state is predicted and explained for a given scenario.

3.6 Responses to changes in weather and sea conditions are described.

Range approach of depression and frontal weather, increasing wind strength, deterioration of visibility, tidal effects, rising sea states.

Replacement information	This unit standard and unit standard 29223 replaced unit standard 8126.

Planned review date	31 December 2025

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

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.