



Transport Accident
Investigation
Commission

Final report

Tuhinga whakamutunga

Maritime inquiry MO-2023-202
Collision between passenger ferry Waitere and
recreational vessel Onepoto
Off Paihia, Bay of Islands
13 April 2023

September 2024



The Transport Accident Investigation Commission

Te Kōmihana Tiro tiro Aituā Waka

No repeat accidents – ever!

“The principal purpose of the Commission shall be to determine the circumstances and causes of accidents and incidents with a view to avoiding similar occurrences in the future, rather than to ascribe blame to any person.”

Transport Accident Investigation Commission Act 1990, s4 Purpose

The Transport Accident Investigation Commission is an independent Crown entity and standing commission of inquiry. We investigate selected maritime, aviation and rail accidents and incidents that occur in New Zealand or involve New Zealand-registered aircraft or vessels.

Our investigations are for the purpose of avoiding similar accidents and incidents in the future. We determine and analyse contributing factors, explain circumstances and causes, identify safety issues, and make recommendations to improve safety. Our findings cannot be used to pursue criminal, civil, or regulatory action.

At the end of every inquiry, we share all relevant knowledge in a final report. We use our information and insight to influence others in the transport sector to improve safety, nationally and internationally.

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Notes about Commission reports

Kōrero tāpiri ki ngā pūrongo o te Kōmihana

Citations and referencing

The citations section of this report lists public documents. Documents unavailable to the public (that is, not discoverable under the Official Information Act 1982) are referenced in footnotes. Information derived from interviews during the Commission's inquiry into the occurrence is used without attribution.

Photographs, diagrams, pictures

The Commission owns the photographs, diagrams and pictures in this report unless otherwise specified.

Verbal probability expressions

For clarity, the Commission uses standardised terminology where possible.

One example of this standardisation is the terminology used to describe the degree of probability (or likelihood) that an event happened, or a condition existed in support of a hypothesis. The Commission has adopted this terminology from the Intergovernmental Panel on Climate Change and Australian Transport Safety Bureau models. The Commission chose these models because of their simplicity, usability, and international use. The Commission considers these models reflect its functions. These functions include making findings and issuing recommendations based on a wide range of evidence, whether or not that evidence would be admissible in a court of law.

Terminology	Likelihood	Equivalent terms
Virtually certain	> 99% probability of occurrence	Almost certain
Very likely	> 90% probability	Highly likely, very probable
Likely	> 66% probability	Probable
About as likely as not	33% to 66% probability	More or less likely
Unlikely	< 33% probability	Improbable
Very unlikely	< 10% probability	Highly unlikely
Exceptionally unlikely	< 1% probability	



Figure 1: Passenger ferry *Waitere*
(Credit: Waitere Cruises Limited)



Figure 2: A Boston Whaler similar to the recreational boat *Onepoto*
(Credit: Photographer unknown)

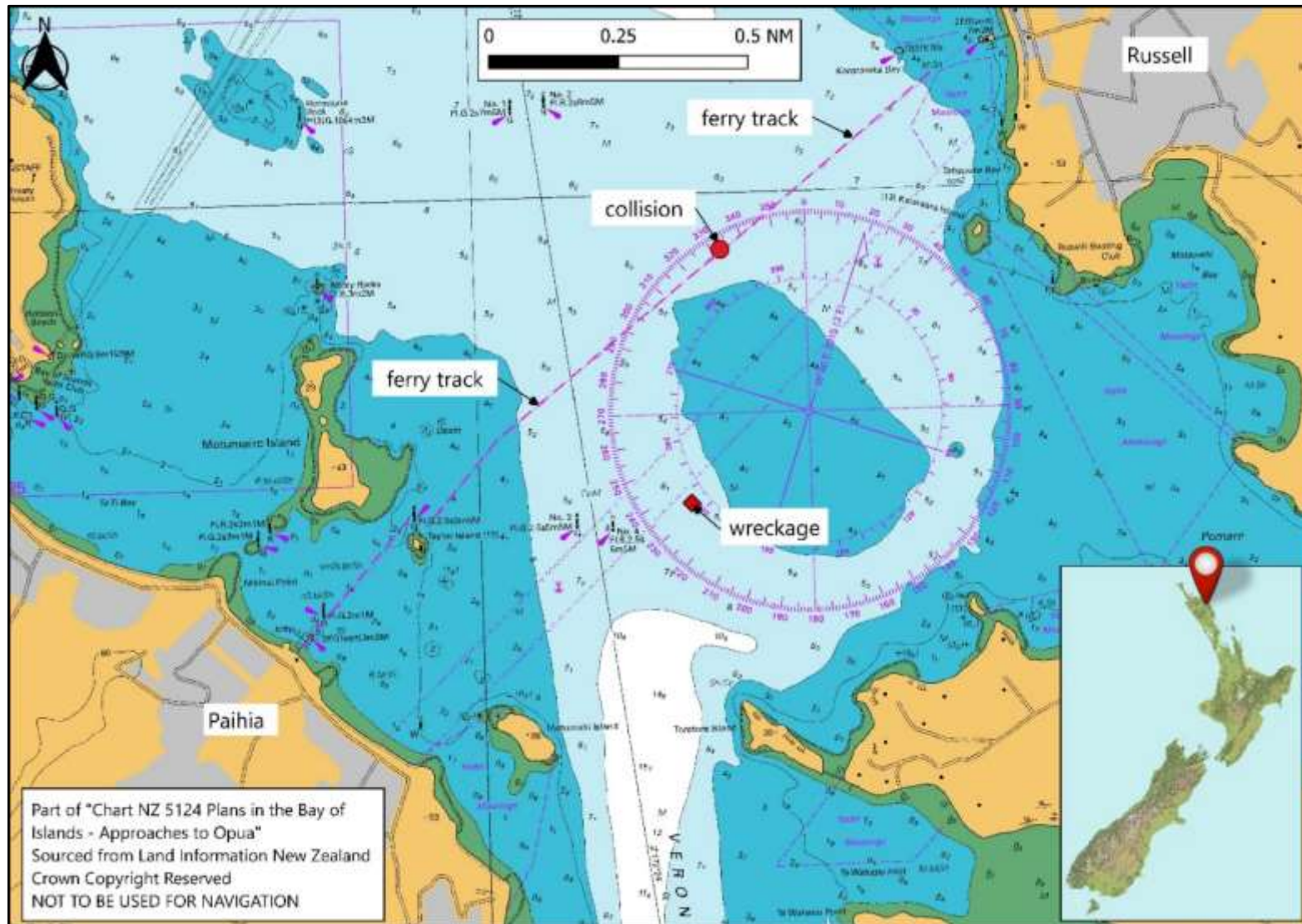


Figure 3: Location of the accident
 (Credit: Land Information New Zealand)

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1 Executive summary

Tuhinga whakarāpopoto

What happened

- 1.1. At about 1147 on 13 April 2023, the recreational vessel *Onepoto* and the passenger ferry *Waitere* collided in the Bay of Islands, New Zealand. The *Onepoto* was on passage from Opua to Onepoto Bay. The *Waitere* was on a scheduled trip from Russell to Paihia.
- 1.2. The master of the *Waitere* suffered serious injuries and was airlifted to hospital.
- 1.3. The *Waitere* suffered catastrophic damage and eventually sank. The *Onepoto* also sustained some damage but was able to proceed under its own power to a repair berth.

Why it happened

- 1.4. Watchkeeping standards on both vessels did not provide safe navigation and it is **virtually certain** that they contributed to the accident.
- 1.5. The skipper of the *Onepoto* was distracted by a non-critical engine alarm. As a result, they did not keep a proper lookout and did not see the *Waitere* crossing in front of them. Once the skipper of the *Onepoto* noticed the *Waitere*, they were too close to take action to avoid the collision.
- 1.6. The skipper of the *Onepoto* was navigating the vessel at 20.5 knots (kt). Had it been travelling at a safer speed for the conditions, it is **very likely** that either the collision would have been avoided or the consequences of the collision would have been reduced.
- 1.7. The master of the *Waitere* did not see the *Onepoto* until it was about five metres (m) away, and they did not have enough time to take action to avoid the collision.

What we can learn

- 1.8. Collisions at sea can be avoided by implementing watchkeeping standards and adhering to the collision prevention rules.
- 1.9. Every vessel must maintain a proper lookout by sight and hearing and use all means available to determine whether a risk of collision exists. In a crossing situation, regardless of which vessel is the designated give-way vessel, both vessels must be vigilant and monitor the effectiveness of any avoidance action taken, such as a change of course and/or a change of speed, until the other vessel has passed and is clear.
- 1.10. All vessels must proceed at a speed that allows time to determine whether a risk of collision exists and enables the vessel to stop in a safe distance if required.

Who may benefit

- 1.11. All seafarers, vessel owners, vessel operators, boat insurers, boat clubs, local councils and harbourmasters may benefit from the findings of this inquiry.

2 Factual information

Pārongo pono

Narrative

- 2.1. At approximately 0707 on 13 April 2023, the *Onepoto* departed Onepoto Bay with the skipper at the helm and a passenger. They planned to go to the Bay of Islands Marina at Opuā for scheduled maintenance work, stopping at Russell for fuel enroute (see Figure 4).
- 2.2. The vessel arrived at the Bay of Islands Marina at about 0842. It was met by a marine radio technician contracted to retrofit a new very high frequency (VHF) marine radio. Because of illness, an engine technician who had been engaged to complete engine diagnostics was unable to attend.
- 2.3. At approximately 1124, the skipper of the *Onepoto* completed a pre-departure radio check with Russell Radio using the new VHF radio. About a minute later, the skipper steered the vessel clear of the Bay of Islands Marina breakwater and headed across the Kawakawa River towards Waikare Inlet.
- 2.4. At approximately 1129, the *Onepoto* passed south of Motutokape Island and entered the Waikare Inlet, at speeds between 5 kt and 10 kt, before altering course to head towards the Veronica Channel.
- 2.5. While entering and exiting the inlet and while transiting the designated yacht mooring area north of Motutokape Island, the skipper of the *Onepoto* operated the vessel at speeds between 10 kt and 15 kt, which were above the 5 kt speed limit for that area.

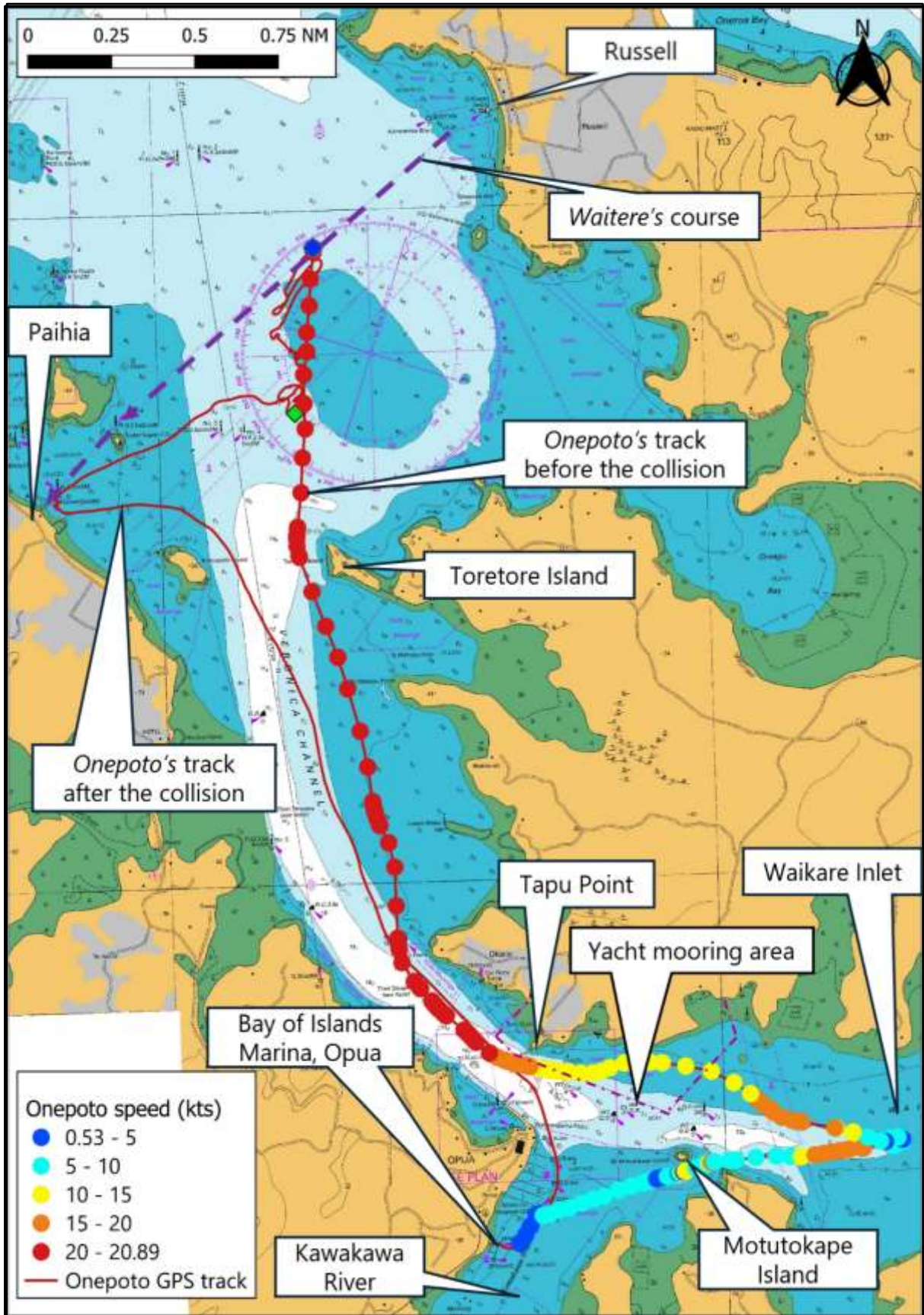


Figure 4: Bay of Islands chart showing *Onepoto* GPS track and *Waitere* course

- 2.6. At approximately 1140, the *Onepoto* passed abeam¹ of Tapu Point and the skipper increased the *Onepoto's* speed to about 20 kt. The vessel was still within the 5 kt speed limit zone.
- 2.7. About a minute later the *Onepoto* was in the main Veronica Channel and more than 200 m from land, where there were no speed restrictions.
- 2.8. At approximately 1140, the ferry *Waitere*, with 20 people on board (15 adult passengers, 4 children and the master²), departed the wharf at Russell on its scheduled service to Paihia at a speed of about 5 kt (see Figure 4). As it passed the 5 kt speed limit zone the master increased the vessel's speed to maximum, which was about 6 kt.
- 2.9. In the logbook, the master of the *Waitere* had recorded 16 passengers for that scheduled service to Paihia.
- 2.10. At approximately 1145, as the *Onepoto* passed west of Toretore Island, an alarm sounded on the vessel's engine-monitoring system.
- 2.11. The *Onepoto* was approaching the Bay of Islands ferry route (see Figure 4). Three ferry services operated on this route, on a Northland Regional Council public transport timetable. There were no speed restrictions for this area.
- 2.12. The *Onepoto* skipper maintained a speed of about 20 kt and investigated the cause of the alarm on the engine-monitoring system display, located on the helm³ station in front of the skipper (see Figure 5). They worked through the system menus on the display, determining that it was a non-critical low voltage alarm.

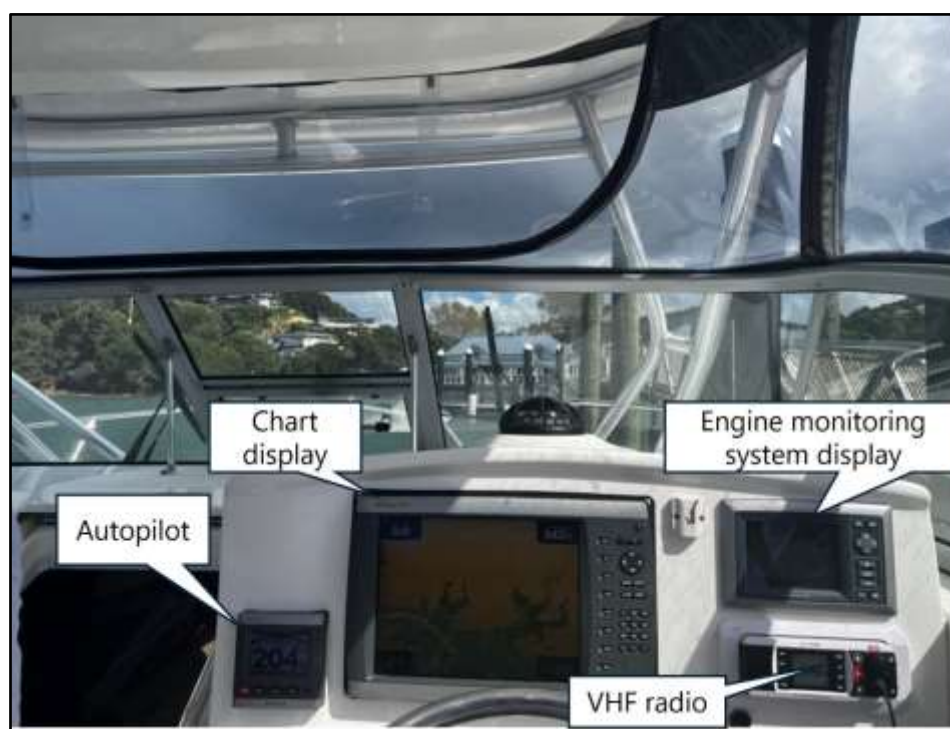


Figure 5: Onepoto helm station

¹ At right angles to the forward and aft line of the vessel

² A licensed mariner who has command of a merchant vessel

³ The means, such as a steering wheel, by which a vessel's steering is controlled

- 2.13. During interview, the skipper of the *Onepoto* stated that when they looked up they saw the *Waitere* crossing. The skipper determined there was not enough time to alter course to avoid collision, so they pulled the *Onepoto's* engine throttles to stop and then to astern⁴.
- 2.14. During interview, the master of the *Waitere* stated that they only saw and heard the *Onepoto* when it was a few metres away and they did not have time to take any action to avoid collision.
- 2.15. At approximately 1147, the two vessels collided. The *Onepoto* struck the port⁵ side of the *Waitere* and the impact caused the *Onepoto* to run on top of the *Waitere*, near the wheelhouse⁶. The master of the *Waitere*, who was positioned at the helm in the wheelhouse, was seriously injured. One of the passengers from the *Waitere* jumped into the water on impact.

After the collision

- 2.16. A few moments later the *Onepoto* stopped moving ahead and slid back into the water with its engines going astern. The skipper manoeuvred the *Onepoto* away from the *Waitere* and stopped.
- 2.17. Several passengers on the *Waitere* went to the wheelhouse and removed wooden debris to enable the injured master to be attended to by a passenger who was a doctor. Passengers tried to locate lifejackets but were unable to find any.
- 2.18. The *Waitere* engine remained running and propelling the vessel ahead. The passengers did not know how to stop it.
- 2.19. Between 1149 and 1152, several passengers from the *Waitere* made 111 calls to report the accident and advise that the master of the *Waitere* was injured. An ambulance and the Police were dispatched to Paihia.
- 2.20. The *Waitere's* shore-based designated search and rescue (SAR) person was not immediately aware of the accident. They became aware of the accident later via social media. This resulted in a delay in communicating the number of people on board the *Waitere* to the vessels responding to the accident.
- 2.21. At approximately 1157, the skipper of the *Onepoto* called Russell Radio on the VHF radio to report the collision, and that one person on the *Waitere* was injured and one passenger was in the water. The skipper of the *Onepoto* then retrieved the passenger from the water.
- 2.22. At approximately 1158 the ferry *Waimarie*, on its scheduled trip from Paihia to Russell, saw the damaged *Waitere* and stopped to assist.
- 2.23. The master of the *Waimarie* rafted up⁷ to the *Waitere* and instructed a passenger on how to stop the *Waitere's* engine and to drop the anchor. The master of the *Waimarie* then guided the passengers over to the *Waimarie*.

⁴ When referring to a vessel or its engine, moving in reverse

⁵ The left side of a vessel when the viewer is facing forward

⁶ The part of a vessel from which a person steers

⁷ The term used to describe multiple vessels tied together

- 2.24. At approximately 1205, Russell Radio contacted the Bay of Islands Coastguard and notified it of the collision. Coastguard started mobilising crew and preparing the Coastguard vessel *BR2*.
- 2.25. A parasailing vessel operating in the vicinity heard the VHF call from the *Onepoto* skipper to Russell Radio and arrived at the accident site shortly after the *Waimarie*. Two passengers on the parasailing vessel were nurses and were able to help the doctor to transfer the injured master to the parasailing vessel.
- 2.26. At approximately 1210, the parasailing vessel and the *Onepoto* proceeded towards Paihia. At about the same time the Police requested a medevac⁸ helicopter.
- 2.27. Upon arriving at Paihia, the parasailing vessel and the *Onepoto* were met by the Police and paramedics. The paramedics attended to the injured master.
- 2.28. The skipper of the *Onepoto* was immediately interviewed by the Police and volunteered an alcohol test, which was negative.
- 2.29. At approximately 1305, the Coastguard vessel *BR2* arrived at the anchored *Waitere*. They reported that there were no people onboard, and that the vessel had extensive damage extending up to the waterline and was possibly taking on water (see Figure 6 and 7).
- 2.30. A second Coastguard vessel, *Kokako*, arrived at the accident site and stayed with the damaged ferry. The Coastguard vessel *BR2* did not have access to a passenger count and so started a search of the immediate area looking for any passengers in the water.
- 2.31. At approximately 1316, a medevac helicopter arrived at Paihia.
- 2.32. The Coastguard crew boarded the *Waitere* and set up a salvage pump to discharge water, but the pump was unable to keep up with the water ingress⁹ and the *Waitere* sank at approximately 1408.
- 2.33. At approximately 1413, the medevac helicopter departed for Middlemore Hospital with the injured master.
- 2.34. On 15 April 2023, the sunken wreck of the *Waitere* was refloated and taken to the Bay of Islands boatyard at Opuā.

The Waitere

- 2.35. The *Waitere* was a 14.01 m wooden passenger ferry built in 1944 with a 111.3 hp (83 kW) engine. The vessel, known locally as the *Blue Ferry*, was owned and operated by Waitere Cruises Limited (Waitere Cruises).¹⁰
- 2.36. The *Waitere* was one of three ferries that operated on a Northland Regional Council public transport timetable, running a regular hourly service between Russell and Paihia from September to May every year. The *Waitere* started its first service from Russell at 0940 and departed Paihia for its last service at 1710. Each trip took approximately 20 minutes.

⁸ Medevac is the transportation of patients from the accident site to a medical facility

⁹ When water makes its way into the boat through a leak or crack

¹⁰ Waitere Cruises Limited was removed from the Companies Office Register on 20 October 2023

- 2.37. The *Waitere* could carry a maximum of 60 passengers and the minimum safe crewing document required the vessel to have a minimum crew of one, namely the master.¹¹
- 2.38. Waitere Cruises operated under the Maritime Operator Safety System (MOSS) as specified by Maritime Rule Part 19: Maritime Transport Operator – Certification and Responsibilities.
- 2.39. The master of the *Waitere* had operated the vessel for 25 years and held a valid Master of Restricted-Limit Launch qualification.¹²

The Onepoto

- 2.40. The *Onepoto* was a 9.74 m recreational vessel built by Boston Whaler in 2011 and equipped with two 300 hp outboard engines.
- 2.41. The skipper of the *Onepoto* had completed an optional training course (see paragraph 2.69) and held a Boatmaster Certificate.¹³ They had operated the *Onepoto* for about nine years.

Site and wreckage information

- 2.42. As a result of the collision, the *Waitere* suffered extensive damage: the wheelhouse was completely destroyed (see Figure 6) and the hull sustained damage on the port side just below the waterline (see Figure 7).



Figure 6: The damaged *Waitere* showing the destroyed wheelhouse
(Credit: Bay of Islands Coastguard)

¹¹ See Appendix 1, showing Table 11 of Maritime Rule Part 31.84(4)(b)

¹² Skipper Restricted Limits < 24m with passenger endorsement has superseded the Master of Restricted-Limit Launch qualification, which has been grandfathered over

¹³ A non-commercial certificate issued by Coastguard



Figure 7: The *Waitere* hull damage as a result of the collision

- 2.43. The *Onepoto* sustained damage to the bow, anchor pulpit¹⁴ and stainless-steel bow rail (see Figure 8). There was some gouging of the fibreglass under the waterline, but there was no water ingress. The skipper of the *Onepoto* was able to manoeuvre the vessel under its own power and returned to the Bay of Islands Marina after the accident.



Figure 8: The *Onepoto* after the collision

Recorded data

- 2.44. The GPS data from the *Onepoto* was recovered and downloaded. This information was used to recreate the vessel's track and speed leading up to the collision.
- 2.45. The *Waitere* did not have a GPS device onboard.

¹⁴ A protrusion at the bow of a boat designed for securing an anchor

Meteorological and ephemeral information

- 2.46. It was a bright sunny day, with a few clouds and good visibility.
- 2.47. The sea was calm, and the prevailing wind was a gentle north-westerly breeze of about 10 kt.¹⁵

The collision prevention framework

The COLREGs and Maritime Rules

- 2.48. The Convention on the International Regulations for Preventing Collisions at Sea (the COLREGs) was introduced by the International Maritime Organization¹⁶ (IMO) in 1972. The COLREGs set out, amongst other things, navigation rules to be followed by vessels to prevent collisions between two or more vessels.
- 2.49. Maritime Rule Part 22: Collision Prevention have given effect to the COLREGs in New Zealand. Part 22 applies to all New Zealand ships, wherever they are, and to all foreign ships when they are in New Zealand waters.¹⁷
- 2.50. In addition, the Northland Regional Council Navigation Safety Bylaw 2017 includes the following Collision prevention bylaw:

3.16 Collision prevention

3.16.1 No person shall operate any vessel in breach of Maritime Rule 22 (Collision Prevention), made under the Maritime Transport Act 1994.

3.16.2 Every person commits an offence against this bylaw who, when required to do anything by an officer of the council under clause 3.16.1 of this bylaw, fails to comply with that requirement as soon as is reasonably possible.

3.16.3 Every vessel must at all times maintain a proper lookout by sight and hearing as well as by all available means appropriate to the prevailing circumstances and conditions, so as to make a full appraisal of the situation and the risk of collision.

Maritime Rule 22.5: Look-out

- 2.51. Maritime Rule 22.5 states that every vessel must at all times maintain a proper lookout by sight and hearing as well as by all available means appropriate in the prevailing circumstances and conditions, so as to make a full appraisal of the situation and the risk of collision.
- 2.52. The skipper of the *Onepoto* and the master of the *Waitere* were both in control of power-driven vessels making way through the water. They were required to keep a proper lookout for other vessels and, if a risk of collision existed, take appropriate action to avoid collision.

¹⁵ According to the Beaufort wind force scale, which describes wind intensity based on observed sea conditions

¹⁶ A specialised agency of the United Nations that is the global standard-setting authority for the safety, security and environmental performance of international shipping

¹⁷ New Zealand waters means: (a) the territorial sea of New Zealand; (b) the internal waters of New Zealand; and (c) all rivers and other inland waters of New Zealand

Maritime Rule 22.15: Crossing Situation

Maritime Rule 22.15 addresses a crossing situation. When the paths of two power-driven vessels are crossing, creating risk of collision, the vessel that has the other on its own starboard side must keep out of the way. The vessel required to keep out of the way must, if the circumstances of the case allow, avoid crossing ahead of the other vessel (see

2.53. Figure 9).

2.54. The *Onepoto* was on a northerly course at a speed of approximately 20.5 kt. The *Waitere* was on a southwesterly course at a speed of approximately 6 kt, and on the starboard side of the *Onepoto*. The *Onepoto* was the give-way vessel, and the *Waitere* was the stand-on vessel.

Action by the give-way vessel

2.55. Maritime Rule 22.16 states that “every vessel that is directed to keep out of the way of another vessel must, so far as possible, take early and substantial action to keep well clear.”

Action by the stand-on vessel

2.56. The stand-on vessel is required to maintain its course and speed and monitor the give-way vessel. If the give-way vessel is not taking appropriate actions to avoid collision the stand-on vessel must take action to avoid collision.

2.57. Maritime Rule 22.17 states:

(1) If one of two vessels is to keep out of the way, the other must keep its course and speed.

(2) As soon as it becomes apparent to the stand-on vessel that the vessel required to give way is not taking appropriate action in compliance with this Part—

(a) it may take action to avoid collision by its manoeuvre alone; and

(b) if it is a power-driven vessel in a crossing situation, if the circumstances of the case allow, it must not alter course to port for a vessel on its own port side.

(3) When, from any cause, the stand-on vessel finds itself so close that collision cannot be avoided by the action of the give-way vessel alone, it must take whatever action will best avoid collision.

(4) This rule does not relieve the give-way vessel of its obligation to keep out of the way.

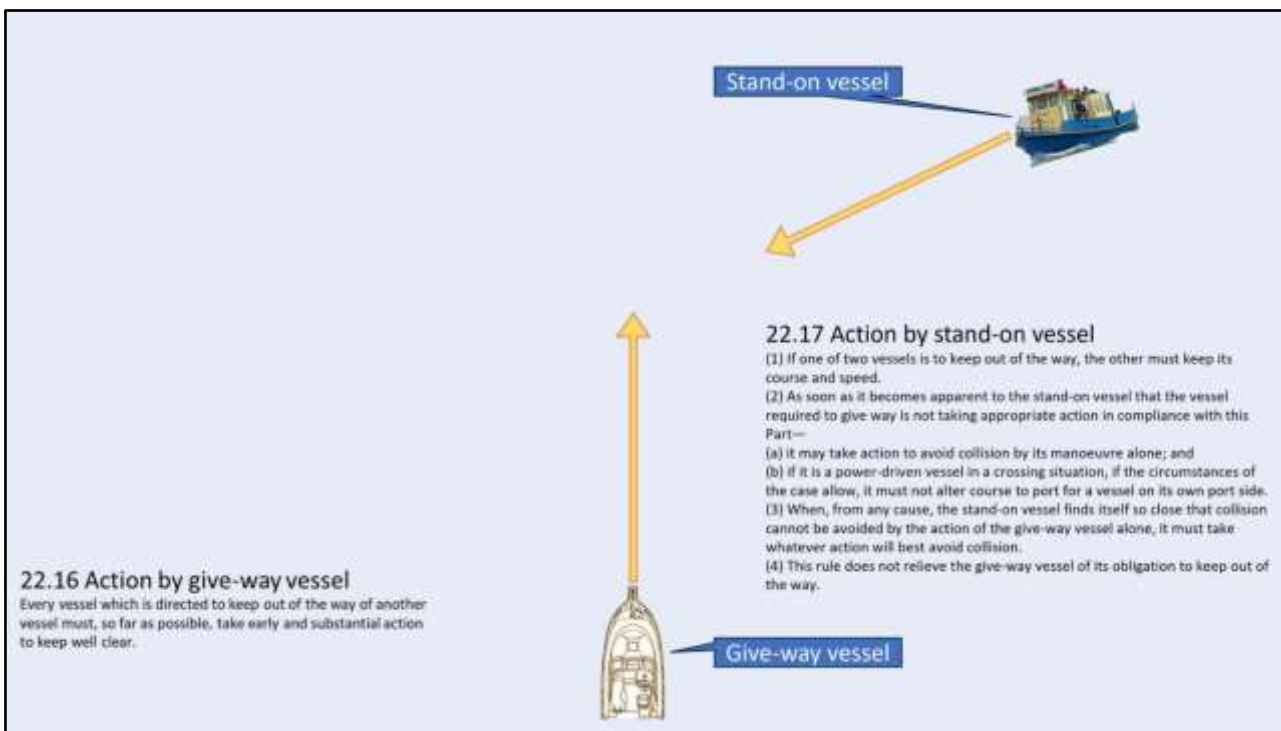


Figure 9: Action to be taken in a crossing situation

The Maritime Operator Safety System

- 2.58. The Maritime Operator Safety System (MOSS) was implemented on 1 July 2014 as a new regulatory system for maritime safety. MOSS was introduced to improve safety and protection of the marine environment associated with domestic commercial vessels in New Zealand.
- 2.59. Under MOSS, an operator is required to develop and prepare a Maritime Transport Operator Plan (MTOPlan) for each vessel they operate.¹⁸ The MTOPlan details specific risks associated with the operator’s intended maritime transportation activities and procedures and controls to mitigate these risks.
- 2.60. The MTOPlan is assessed by Maritime New Zealand to ensure that the various components, such as risk management, training and maintenance, are included. Additionally, Maritime New Zealand conducts a site visit, in which the operator demonstrates the various aspects of the MTOPlan, to ensure they are appropriate.
- 2.61. The Director of Maritime New Zealand must grant a Maritime Transport Operator Certificate (MTOC) if they are satisfied that the operator’s MTOPlan has met all the requirements specified in Maritime Rule Part 19¹⁹ and the Maritime Transport Act 1994 section 41²⁰. The MTOC is valid for ten years.
- 2.62. It is the operator’s responsibility to ensure that the MTOPlan is a living document, by assessing risks and addressing them as they arise.²¹ Maritime New Zealand conducts periodic MOSS audits to assess how the operator is performing against the vessel’s MTOPlan. The initial MOSS audit is usually done within 18 months of the operator coming into the system. A risk-profiling tool is used after each MOSS audit to determine the operator’s risk profile, and to determine the date by which the next audit must be completed. The maximum time between two audits is 48 months.

¹⁸ Maritime Rule 19.41

¹⁹ Maritime Rule 19.22

²⁰ Maritime Transport Act 1994, section 41: *Issue of maritime documents and recognition of documents*

²¹ Maritime Rule 19.61 (b)

Safety briefings for ferries

- 2.63. The Maritime Rules prescribe the operating and training procedures to manage emergency situations aboard vessels or to prevent such situations occurring.²²
- 2.64. Under the Maritime Rules, the master's responsibilities included the safety and wellbeing of the passengers. The master was required to provide every person on board with clear instructions on the procedures to be followed in case of an emergency.²³ Illustrations and instructions for the correct use of life-saving appliances and for essential actions to be taken in an emergency had to be conspicuously displayed on the vessel. The master had to ensure that every passenger had been made aware of the posted instructions. (See Appendix 2 Maritime Rule 23.27.)
- 2.65. In September 2019, Maritime New Zealand published a guideline for *Single handed operations carrying passengers* (see Appendix 3). This guideline recognised that there would be no time to give instructions in an emergency; therefore providing a clear safety briefing was a good way to make sure passengers knew what to do in an emergency.
- 2.66. The guideline emphasised that safety briefings needed to be tailored to the specific operation. The safety briefings could include safety equipment and how to use it, and were an opportunity to inform passengers of 'no go' areas and other hazards specific to the vessel and operation.

Recreational boat skipper competence and training

- 2.67. In New Zealand, there is no requirement for the skipper of a recreational vessel to have any formal training or certification. However, there was an optional Day Skipper course and a Boatmaster Certificate course available.
- 2.68. The objective of the Day Skipper course was to provide all the basic knowledge needed to help recreational vessel users understand the maritime environment, the rules of the sea, boats and their capabilities, and dealing with emergencies.
- 2.69. The Boatmaster Certificate course was for recreational vessel users with current knowledge and experience. It covered a wide range of vessels, including yachts, launches and powerboats. The training was intended to extend the participant's current knowledge in chartwork, navigation techniques, distress signals, emergency procedures, knots and rope work, and provide a thorough explanation of the rules at sea including proper lookout duties and collision avoidance.
- 2.70. Maritime New Zealand recommends that skippers undertake some form of boating education to understand the Maritime Rules.
- 2.71. The skipper is responsible for the safety of the vessel and its occupants and for complying with all the relevant Maritime Rules, regulations and Regional Council bylaws.

Safe speed

- 2.72. At all times every vessel must proceed at a safe speed, so that proper and effective action to avoid collision can be taken, and the vessel can be stopped within a

²² Maritime Rules Part 23: Operating Procedures and Training

²³ Maritime Rule 23.27

distance appropriate to the prevailing circumstances and conditions.²⁴ These conditions can include visibility, sea conditions, navigational hazards, distractions, and other marine traffic.

- 2.73. Maritime New Zealand recommends that skippers operate their vessels at a safe speed by slowing down in situations in which it may be difficult to see another boat (eg, in waves, rain, fog or when there may be glare on the water).
- 2.74. The maximum speed permitted for all vessels in the Bay of Islands region is 5 kt when within 200 m of shore or any vessel with a dive flag, and within 50 m of any other boat or swimmer.
- 2.75. The speed of vessels in the accident area was also prescribed in the Northland Regional Council Navigation Safety Bylaw 2017, clause 3.2.1 (see Figure 10).

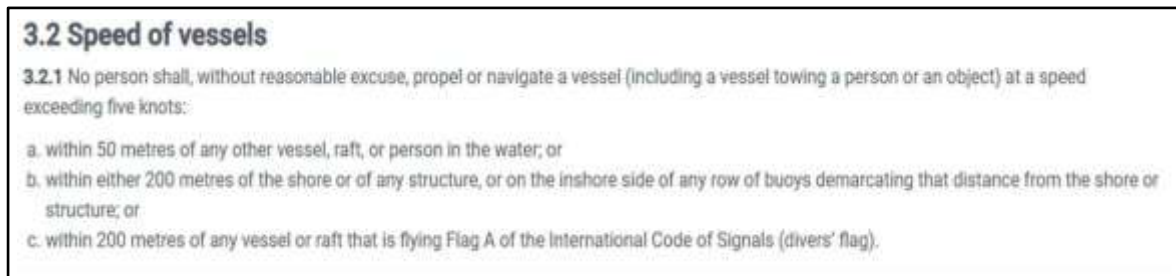


Figure 10: Northland Regional Council Navigation Safety Bylaw 2017

²⁴ Maritime Rule 22.6

3 Analysis

Tātaritanga

Introduction

- 3.1. The following section analyses the circumstances surrounding the event to identify those factors that increased the likelihood of the event occurring or increased the severity of its outcome. It also examines any safety issues that have the potential to adversely affect future operations.
- 3.2. Both vessels were compliant with all relevant maritime legislation for their type and operation and no mechanical or equipment failure contributed to the accident.
- 3.3. The immediate cause of the collision was poor watchkeeping by the people in charge of both the vessels. Two sets of circumstances increased the risks, namely the *Onepoto* was travelling at a speed that was unsafe for the changed conditions, and *Waitere's* MTOP, and Maritime New Zealand's assessment of it, were not fit for purpose in supporting safe operations of a passenger ship.
- 3.4. The *Onepoto* on a northerly course and the *Waitere* on a southwesterly course were in a crossing situation. Neither the skipper of the *Onepoto* (the give-way vessel) nor the master of the *Waitere* (the stand-on vessel) had sighted or heard the other vessel approaching. As a result, they had not assessed whether a risk of collision existed and did not take appropriate actions.
- 3.5. During interview, the skipper of the *Onepoto* stated that they were distracted for a few seconds by an alarm on the vessel's engine monitoring system. When the skipper attended to the alarm, their attention was divided between resolving the alarm, controlling the vessel and continuing to keep a lookout. This compromised the skipper's ability to keep a proper lookout. When the skipper then looked up again, it was the first time they noticed the *Waitere* crossing.
- 3.6. The skipper of the *Onepoto* was aware that they were approaching the ferry-crossing route as they had crossed paths with the ferries on previous visits to Russell. The skipper had not considered adjusting the *Onepoto's* speed to a safer speed while they resolved the engine alarm.
- 3.7. Had the skipper of the *Onepoto* considered all factors affecting safe speed they may have reduced the vessel's speed accordingly. A reduction in speed would **very likely** have allowed the skipper enough time to avoid the collision.
- 3.8. During interview the master of the *Waitere* stated that the visibility was perfect. They had the port side wheelhouse door open, and they were looking out of the wheelhouse windows. When they saw and heard the *Onepoto* it was just a few metres away.
- 3.9. Ferry masters should be vigilant for northbound or southbound vessels, especially when crossing the Veronica Channel, in order to monitor developing situations. People in charge of other vessels in the vicinity of the ferry route should also be vigilant for crossing ferries.
- 3.10. While acknowledging the speed difference between the two vessels and the effect this may have had on their ability to avoid the collision, this does not detract from the Commission's finding that had a proper lookout been kept on both vessels, it is

virtually certain that action to avoid collision in accordance with the Maritime Rules, would have been taken by one or both vessels, and either the collision would have been avoided or the consequences of the collision would have been reduced.

MTOP not fit for purpose

Safety issue: The Maritime Transport Operator Plan (MTOP), prepared by Waitere Cruises Limited and assessed by Maritime New Zealand as part of the Maritime Transport Operator Certificate (MTOC) certification process, was not fit for purpose and therefore did not sufficiently support safe operations. In particular, the MTOP:

- (i) *omitted procedures for safe watchkeeping and keeping a proper lookout*
- (ii) *contained ambiguities and irrelevant and inaccurate information*
- (iii) *did not identify and mitigate the risk of the sole-charge master being incapacitated.*

3.11. The MTOP prepared by Waitere Cruises Limited included information that was not relevant to their maritime operations, while at the same time omitting procedures for watchkeeping and managing risks identified in Maritime New Zealand's guidance publication.

(i) The Waitere's MTOP omitted procedures for safe watchkeeping and keeping a proper lookout

3.12. Keeping a safe navigational watch includes actively monitoring the vessel's position, track, speed, stability, propulsion system and the VHF radio, and keeping a proper lookout.

3.13. Keeping a proper lookout means to actively monitor what is happening around the vessel by sight and hearing and, if electronic navigation aids are available, to use them appropriately when underway.

3.14. The standing orders²⁵ in the *Waitere's* MTOP included one statement relating to watchkeeping: "Keep a proper lookout at all times." There were no procedures or guidance for master's regarding the basic principles of keeping a navigational watch or proper lookout, such as maintaining a continuous state of vigilance by sight and hearing to make a full appraisal of the risk of collision, stranding and other dangers to navigation.

(ii) The Waitere's MTOP contained ambiguities and irrelevant and inaccurate information

3.15. The Commission found that the *Waitere's* MTOP contained ambiguities and irrelevant and inaccurate information, including:

- The MTOP was ambiguous with respect to safety briefings. One section stated that before starting a trip all passengers would be briefed on safety procedures. Another section stated that no verbal briefing was required but that the master controlled the entrance to the vessel and could indicate appropriate information to the passengers. The Passenger Policy section contained instructions for a passenger safety briefing before starting a trip. It stated that if the weather deteriorated, further instructions were to be given to passengers including instructions on donning lifejackets, but the vessel had no lifejackets for passengers. Lifejackets were only available for the crew. The Passenger Safety

²⁵ The rules that are posted by the vessel's captain and/or the operator to be understood by each watchkeeper operating the vessel

Briefing section stated that as the vessel was a public transport vessel no verbal safety briefing was required.

- The MTOP Emergency Preparedness procedures for Overdue Ship or Stricken Vessel were not relevant to a vessel operating in enclosed waters²⁶ on 20-minute trips; the procedures were for vessels that operated beyond enclosed waters. This oversight was not identified and amended during subsequent MOSS audits and MTOP reviews.
- The MTOP did not include procedures to comply with Maritime Rule 23.27(6), which required that the master count the number of passengers onboard and record that information ashore. There was no evidence that the number of passengers for each trip was recorded ashore. Immediately after the accident the local emergency services, Bay of Islands Coastguard and Russell Radio were not aware of the number of passengers onboard.
- The MTOP recorded the minimum crewing numbers as one crew and the maximum number of passengers as 60. The MTOP stated that “Extra crew is used when required to assist passengers”, but there was no supporting information on when this applied or how this would be implemented.
- The instructions for the master and crew implied that there was always more than one crew member on board, despite there only being the master onboard the *Waitere*.
- The standing orders section in the MTOP was poorly written and referred to the vessel’s radar, a Global Positioning System (GPS) and a plotted track for steaming, none of which were on the vessel.

(iii) The Waitere’s MTOP did not identify and mitigate the risk of the sole-charge master being incapacitated

- 3.16. The *Waitere*’s MTOP contained a Hazard Identification and Control Register, which included *Navigation hazards – Collision and Groundings* as possible with extreme consequences. The risk controls that had been put in place relied on the sole-charge master managing the risk.
- 3.17. The risk of the sole-charge master being incapacitated was not identified in the Hazard Identification and Control Register and was not mitigated.
- 3.18. Maritime New Zealand’s guideline for *Single handed operations carrying passengers* encouraged operators to consider specific risks associated with relying on passengers to contribute to an emergency response when an operation is run by a single person (see Appendix 3).
- 3.19. This guideline reflected Maritime Rules Part 23, which prescribes various operating and training procedures to be implemented to manage emergency situations or to prevent such situations occurring.
- 3.20. On the morning of the accident the *Waitere* departed Russell wharf with 19 passengers onboard, including 4 children. None of the passengers interviewed by the Commission remembered a safety briefing being conducted before departure or whether any instructions were provided by the master as they boarded the vessel.

²⁶ Enclosed waters are inland waters or waters within sheltered waters

- 3.21. The collision incapacitated the master, resulting in the passengers being left to manage themselves in a situation that they were not familiar with.
- 3.22. Soon after the collision, there was panic among *Waitere's* passengers as they searched for lifejackets and buoyancy aids. The *Waitere* did not carry lifejackets for the passengers. The vessel had four lifebuoys on board, which were not suitable for small children, and six ridged buoyant life-saving pontoons located on the vessel's canopy, which the passengers did not know how to deploy. A safety briefing would have helped to mitigate some of the challenges faced by the passengers.
- 3.23. The collision destroyed the wheelhouse of the ferry, including the control panel. The engine was still running after the collision, and the vessel was making way through the water. One passenger managed to pull the throttle back, but none was able to stop the engine immediately following the collision.
- 3.24. The lack of a safety briefing did not contribute to the collision; however, it was another factor that increased risk to the passengers following the collision.
- 3.25. As *Waitere Cruises* is no longer operating, the Commission has not made any recommendations with respect to their MTOC.

Maritime New Zealand's MTOC assessment process

- 3.26. In 2017, *Waitere Cruises* developed an MTOC and provided it to Maritime New Zealand for assessment. Having assessed the MTOC, Maritime New Zealand issued an MTOC to *Waitere Cruises*, valid for ten years.
- 3.27. It is the operator's responsibility to ensure that the MTOC is a living document by assessing risks and addressing them as they arise. Any updates to the MTOC are documented on the MTOC Update Record (see Figure 11).
- 3.28. Maritime Officers from Maritime New Zealand conduct periodic MOSS audits to verify how an operator has performed against their MTOC. Maritime New Zealand had conducted a MOSS audit in November 2018 and as a result *Waitere Cruises* was considered a low-risk operation. This qualified it to conduct a self-audit, which was scheduled for November 2021. Self-audits were adopted during COVID as an interim measure and were not carried out frequently.

MTOP Update Record

Date	Section	Reason	Signature
8/05/2017	Operational Parameters	defining adverse conditions	[Redacted Signature]
10/10/2018	in order	revision	
20/11/2021		Review	

Figure 11: Waitere MTOP update records

3.29. The self-audit was completed in November 2021 (see Figure 12) using an audit template provided by Maritime New Zealand. Section 12 of the audit template addressed the procedures for emergencies but did not include a safety briefing or emergency procedures in the event of an incapacitated master, as highlighted in the guideline for *Single handed operations carrying passengers*. Had the audit template been amended to include emergency procedures related to single-person operations carrying passengers, it may have prompted the operator to review its procedures regarding passenger safety briefings and an incapacitated master.

Emergency preparedness

12	Procedures for emergencies (MR 19 Appendix 1.4.1.1(g))	
When was the last review of procedure for the following emergencies?		
• → Fire		22/11/2021
• → Pollution	→	22/11/2021
• → Person overboard		22/11/2021
• → Medical emergency	→	22/11/2021
• → Mechanical failure	→	22/11/2021
• → Grounding, collision, capsize or sinking	→	22/11/2021
• → Overdue ship (See trip report)	→	22/11/2021
When were the last emergency drills conducted?	→	21/11/2021
Any other comments?		

Figure 12: Completed self-audit template for Waitere

3.30. A recommendation has been made to Maritime New Zealand to review its process of assessing MTOps to ensure they are satisfied that vessels included in the MTOP will be operated in accordance with safety systems that are specific and appropriate to their maritime transport operations.

Speed – a factor that increased risk

- 3.31. When the skipper of the *Onepoto* looked down to investigate the alarm on the engine-monitoring system, the *Onepoto* was approximately 0.68 nm from the ferry-crossing track and, travelling at a speed of 20.5 kt, it would take approximately 2 minutes to cover that distance (see Figure 13).

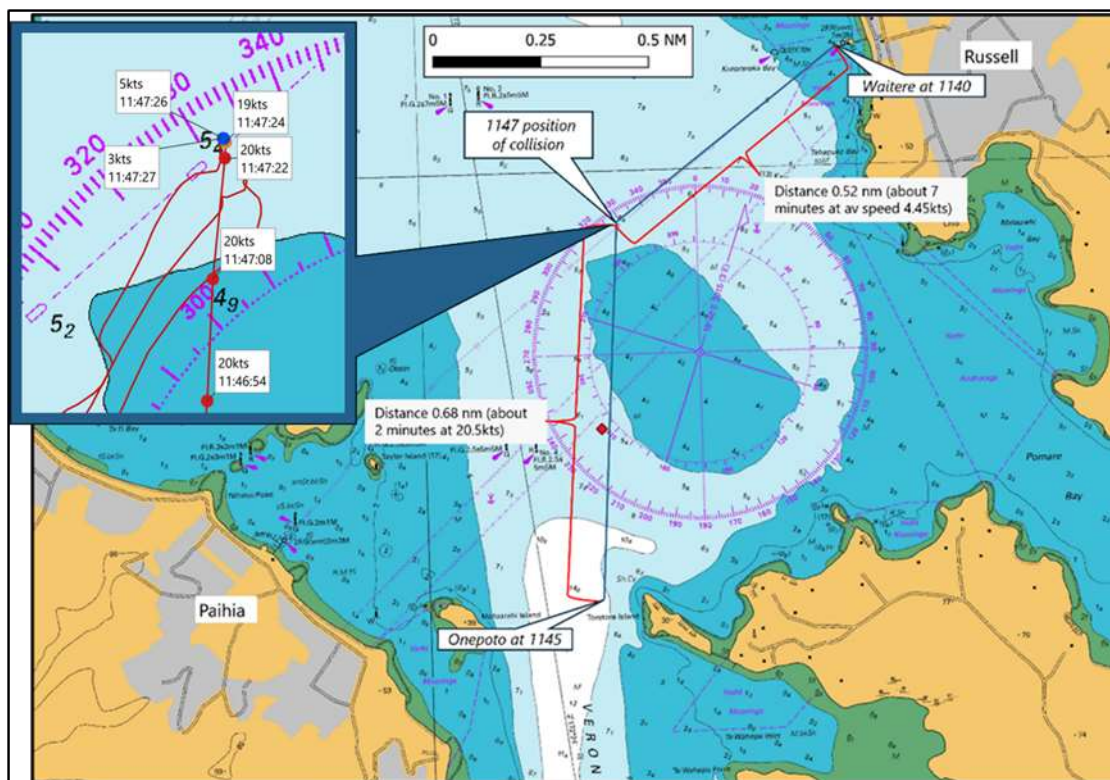


Figure 13: *Onepoto*'s speed and position before the accident

- 3.32. Although there was no speed restriction in this area, there were factors present that should have influenced the skipper's assessment of a safe speed, namely the approach to the ferry-crossing track and the presence of an unresolved engine-monitoring alarm.
- 3.33. When the vessels were within 50 m of each other, each vessel should have been travelling at a speed of no more than 5 kt, in accordance with the Northland Regional Council Navigation Safety Bylaws 2017 (see Figure 10).
- 3.34. If the *Onepoto* had been travelling at a safer speed for the conditions, it is **very likely** that either the collision would have been avoided or the consequences of the collision would have been reduced.

4 Findings

Ngā kitenga

- 4.1. Immediately before the collision, neither the skipper of the *Onepoto* nor the master of the *Waitere* was keeping a proper lookout. Had a proper lookout been kept on both vessels so that detection and assessment of the risk of collision had occurred, it is **virtually certain** that action would have been taken by one or both vessels, and either the collision would have been avoided or the consequences of the collision would have been reduced.
- 4.2. If the *Onepoto* had been travelling at a safer speed for the conditions, it is **very likely** that either the collision would have been avoided or the consequences of the collision would have been reduced.
- 4.3. The skipper of the *Onepoto*, the give-way vessel, was distracted by an engine alarm and did not see the *Waitere* until it was too late and therefore was unable to take early and substantial action to keep well clear.
- 4.4. The master of the *Waitere*, the stand-on vessel, did not see or hear the *Onepoto* until it was only a few metres away and did not take any action to avoid collision when the *Onepoto* did not give way.
- 4.5. There was no safety briefing for passengers on board the *Waitere* and the MTOP was ambiguous as to whether a safety briefing was required.
- 4.6. The *Waitere's* MTOP was not fit for purpose and did not support the safe operation of a ferry passenger service, relying on one person (the master) to manage the safety of the passengers in an emergency.
- 4.7. Vessels in the area responded quickly to the collision, which resulted in all passengers being safely rescued and transferred ashore.

5 Safety issues and remedial action

Ngā take haumarū me ngā mahi whakatika

General

- 5.1. Safety issues are an output from the Commission's analysis. They may not always relate to factors directly contributing to the accident or incident. They typically describe a system problem that has the potential to adversely affect future transport safety.
- 5.2. Safety issues may be addressed by safety actions taken by a participant. Otherwise, the Commission may issue a recommendation to address the issue.
- 5.3. One safety issue was identified in this investigation.

Safety issue: The Maritime Transport Operator Plan (MTOP), prepared by Waitere Cruises Limited and assessed by Maritime New Zealand as part of the Maritime Transport Operator Certificate (MTOC) certification process, was not fit for purpose and therefore did not sufficiently support safe operations. In particular, the MTOP:

- (i) *omitted procedures for safe watchkeeping and keeping a proper lookout*
- (ii) *contained ambiguities and irrelevant and inaccurate information*
- (iii) *did not identify and mitigate the risk of the sole-charge master being incapacitated.*

- 5.4. On 9 June 2024, Maritime New Zealand informed the Commission that it fully appreciates the critical importance of effective watchkeeping practices and that they have had a strong focus on watchkeeping practices, working with industry over many years. Some of their initiatives are:
 - regularly targeting watchkeeping and lookout practices in MOSS audits
 - releasing new guidance on lookout requirements in February 2024, and watchkeeping guidance for commercial vessels in April 2024
 - utilising an enforceable undertaking to trigger the development of new digital and practical learning modules on watchkeeping and bridge management
 - prosecuting operators involved in particularly egregious incidents in which poor watchkeeping practices have played a role.
- 5.5. Maritime New Zealand also agreed that the *Waitere's* MTOP contained a number of gaps. Maritime New Zealand stated that their practices around MTOC certification and audit processes had significantly evolved since the *Waitere's* MTOP was last assessed. Some of the changes that Maritime New Zealand have made are:
 - self-audits for MTOPs are no longer used by Maritime New Zealand
 - as a result of the revised practice, Maritime New Zealand believes it would be well placed to work with operators on shortfalls of future audits
 - improvements in their risk assessment process
 - continually looking for opportunities within their revised processes to ensure MTOPs are of a high standard.
- 5.6. In the Commission's view, these safety actions have addressed the safety issue. Therefore, the Commission has not made a recommendation.

6 Recommendations Ngā tūtohutanga

General

- 6.1. The Commission issues recommendations to address safety issues found in its investigations. Recommendations may be addressed to organisations or people and can relate to safety issues found within an organisation or within the wider transport system that have the potential to contribute to future transport accidents and incidents.
- 6.2. In the interests of transport safety, it is important that recommendations are implemented without delay to help prevent similar accidents or incidents occurring in the future.
- 6.3. As Waitere Cruises is no longer operating, the Commission has not made any recommendations with respect to the *Waitere's* MTOC.
- 6.4. In the Commission's view, safety actions implemented by Maritime New Zealand have addressed the identified safety issue. Therefore, the Commission has not made any recommendations with respect to Maritime New Zealand's practices around MTOC certification and audit processes.

New recommendation

- 6.5. The Commission issued no new recommendations.

7 Key lessons

Ngā akoranga matua

- 7.1. All vessels must maintain a proper lookout and use all means available to determine whether a risk of collision exists. Regardless of which vessel is designated to act, both vessels must check the effectiveness of the action taken, until the danger has gone.
- 7.2. All vessels must proceed at a speed that enables the vessel to stop in a safe distance or allows time to assess the situation and take corrective action.
- 7.3. Conducting a safety briefing and providing passengers with clear instructions is key to ensuring their safety in an emergency.
- 7.4. The Maritime Transport Operator Plan (MTO) is a living document. It is the operator's responsibility to periodically review the MTO, to ensure that it remains current, manages operational risks and is fit for purpose.

8 Data summary

Whakarāpopoto raraunga

Vessel particulars for the Waitere

Name:	<i>Waitere</i>
Type:	Passenger Ferry
Limits:	Restricted limits, Enclosed water limits
Length:	14.01 m
Breadth:	4.80 m
Built:	1942
Propulsion:	Single 83kW (111.3 hp) diesel engine
Service speed: ²⁷	6 kt
Owner/operator:	Waitere Cruises Limited
Port of registry:	Russell
Minimum crew:	1

Vessel particulars for the Onepoto

Name:	<i>Onepoto</i>
Type:	Boston Whaler 305 Conquest launch
Length:	9.74 m
Breadth:	3.20 m
Built:	2011
Propulsion:	2 x 300 hp Mercury Marine petrol outboard engines
Service speed:	38 kt
Port of registry:	Onepoto Bay, Bay of Islands
Minimum crew:	1

²⁷ The normal operating speed of the vessel while in service

<i>Date and time</i>	13 April 2023, 1147
<i>Location</i>	Bay of Islands, between Paihia and Russell
<i>Injuries</i>	The master of the <i>Waitere</i> was seriously injured
<i>Damage</i>	The <i>Waitere</i> was damaged beyond repair and had to be scrapped. The <i>Onepoto</i> received minor damage and was repairable

9 Conduct of the Inquiry

Te whakahaere i te pakirehua

- 9.1. On 13 April 2023, Maritime New Zealand notified the Commission of the occurrence. The Commission subsequently opened an inquiry under section 13(1) of the Transport Accident Investigation Commission Act 1990 and appointed an Investigator-in-Charge.
- 9.2. The Commission issued a protection order under section 12 of the Transport Accident Investigation Commission Act 1990 in relation to the vessels involved in the accident, the passenger ferry *Waitere* and the recreational vessel *Onepoto*. It was issued to preserve and protect evidence from both vessels, and to prevent the tampering with, or removal of, any items from the vessels.
- 9.3. On 15 April 2023, the sunken *Waitere* was salvaged. The *Onepoto* and the *Waitere* were stored on hard stands at the Bay of Islands Marina, Opuā.
- 9.4. On 23 August 2023, the protection order was amended to remove the *Waitere*. The wreck was handed over to the insurers.
- 9.5. On 28 September 2023, the protection order was revoked and the *Onepoto* was handed over to the insurers.
- 9.6. On 24 April 2024, the Commission approved a draft report for circulation to four interested parties for their comment.
- 9.7. Two interested parties provided a detailed submission and one interested party replied that they had no comment. One interested party did not respond despite efforts to contact them. Any changes as a result of the submissions have been included in the final report.
- 9.8. On 25 July 2024, the Commission approved the final report for publication.

Abbreviations

Whakapotonga

COLREGs	International Regulations for Preventing Collisions
GPS	Global positioning system
hp	horse power (a unit of power, 1 kW = 1.341 hp)
IMO	International Maritime Organization
kt	knot, (nautical miles per hour)
kW	kilowatt (unit of power)
MOSS	Maritime Operator Safety System
MTOC	Maritime Transport Operator Certificate
MTOP	Maritime Transport Operator Plan
nm	nautical mile
SAR	search and rescue
VHF	very high frequency

Glossary

Kuputaka

abeam	at right angles to the forward and aft line of the vessel
anchor	a heavy device (normally steel) designed as to grip the seabed to hold a vessel in a desired position
anchor pulpit	a protrusion at the bow of a boat designed for securing an anchor
astern	when referring to a vessel or its engine moving in reverse
give-way vessel	under the collision-prevention rules – a vessel that is directed to keep out of the way of another vessel
helm	the means, such as a steering wheel, by which a vessel's steering is controlled
ingress	when water from outside enters the boat through a leak or crack
master	a licensed mariner who has command of a merchant vessel
medevac	the evacuation of casualties to hospital by helicopter
port	the left side of a vessel when the viewer is facing forward
service speed	the normal operating speed of the vessel while in service
skipper	the captain of a boat or ship
stand-on vessel	under the collision-prevention rules – a vessel that is required to maintain its course and speed and monitor the give-way vessel.
standing orders	the rules posted by the vessel's captain and/or the operator to be understood by each watchkeeper operating the vessel
starboard	the right side of a vessel when the viewer is facing forward

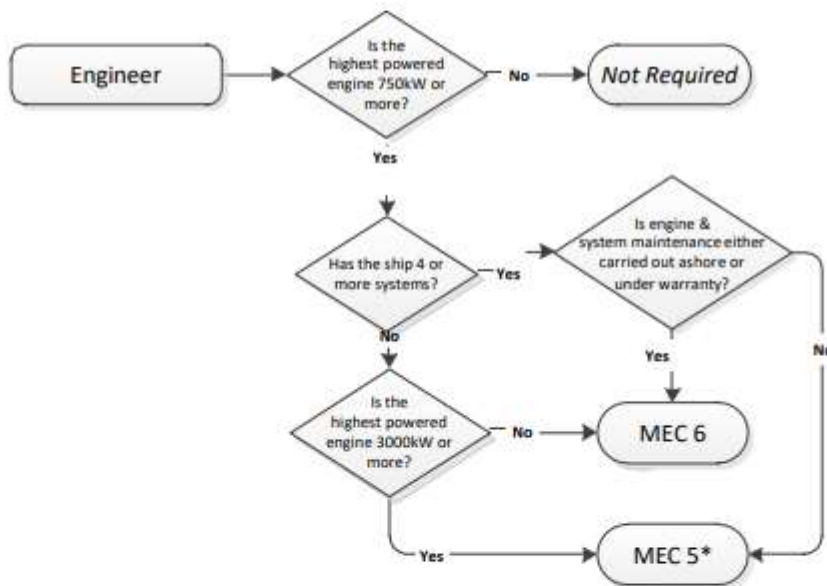
wheelhouse part of a ship or boat from which a person steers the ship or boat

Appendix 1 Table 11 from Maritime Rules Part 31

Maritime Rules

Table 11 Crewing for Passenger ships – Enclosed Water Limits

Ship Length	Passengers on board	Minimum Required Certificate		Minimum crew
		Position	Certificate	
24 m or more but less than 500 GT	50 to 99	Master	SRL < 500 GT with passenger endorsement	2
	<50	Engineer	In accordance with the flow chart and may be the master	
Less than 24 m	20 to 99	Master Engineer	SRL ¹⁰ with passenger endorsement In accordance with the flow chart and may be the master	1
	1 to 19	Master Engineer	SRL ¹⁰ In accordance with the flow chart and may be the master	



* If steam propulsion, engineer must hold MEC 5 Steam, MEC 5 Motor and Steam, or MEC 5 with Steam Endorsement

¹⁰ SRL <24m required if vessel is 12m or more in length

Appendix 2 Maritime Rule 23.27

- 23.27 Passenger ships that are less than 45 metres in length that proceed beyond enclosed water limits but do not proceed beyond inshore limits and passenger ships that do not proceed beyond enclosed water limits**
- (1) The owner and the master of a ship to which this rule applies must ensure that clear instructions to be followed in the event of an emergency are provided for every person on board.
 - (2) A ship to which this rule applies must have illustrations and instructions in English and such other languages that are likely to be understood by the persons on board, conspicuously displayed in all passenger spaces to inform passengers of -
 - (a) the essential actions to take in an emergency; and
 - (b) the correct use of lifesaving appliances.
 - (3) The master of a ship to which this rule applies must ensure that the illustrations and instructions required by rule 23.27(2) are drawn to the attention of every passenger on board.
 - (4) The owner and the master of a ship to which this rule applies must ensure that the general emergency signal for summoning passengers and crew to muster stations and initiating the instructions required by rule 23.27(1) consists of 7 or more short blasts followed by 1 long blast on the ship's whistle or siren.
 - (5)
 - (a) The master of a ship to which this rule applies must ensure that all members of the crew –
 - (i) know where all lifesaving and fire appliances and equipment provided to the ship are stowed; and
 - (ii) are trained in their use.
 - (b) If such ships carry one or more lifeboats or rescue boats, training must include –
 - (i) the swinging out and lowering of such craft at regular intervals; and
 - (ii) if such craft are equipped with an engine, the operation of that engine.
 - (6) The owner and the master of a ship to which this rule applies must ensure that all persons on board are counted prior to departure and the information kept ashore and made readily available to search and rescue services when needed.
 - (7) The owner and the master of a ship to which this rule applies which has been certified to carry more than 50 passengers in its Certificate of Survey in inshore limits on fixed routes must ensure they have on board a plan for co-operation with appropriate search and rescue services in event of emergency that comply with the requirements of rule 23.12.
 - (8) The master of a ship to which this rule applies must record in the logbook details, including the date, of all training sessions held.

Appendix 3 Maritime New Zealand guideline – Single handed operations carrying passengers



Single handed operations carrying passengers

This guideline is for single handed operators that carry passengers. Other small operators carrying passengers may also find content useful.

Single handed operations carrying passengers

Last updated: September 2019

This document is uncontrolled if printed. Please refer to the Maritime New Zealand website for the latest version.

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1. About this guideline

This guideline is for single handed operators that carry passengers. It is intended to encourage consideration of the specific risks associated with single handed operations, including in an emergency. Content will also be relevant to other small operators.

This guideline was developed after a death on a fishing charter. Maritime NZ's investigation highlighted the risk involved in relying on passengers to contribute to an emergency response when an operation is run by a single person.

This guideline should be used in conjunction with other Maritime NZ guidance regarding Maritime Operator Safety System (MOSS) and the Health and Safety and Work Act 2015 (HSWA).

Disclaimer

These guidelines provide information and explanations about the requirements set out in legislation, but are not a substitute for the law itself.

This guideline is intended to prompt consideration and increase awareness of the risks associated with single handed operations that carry passengers, particularly in an emergency. It does not necessarily cover all the risks that need to be considered in relation to a single handed operation and operators need to consider the risks specific to their operation. Operators must ensure that they meet their duties under HSWA.

maritimenz.govt.nz/rules

2. Emergency preparedness

Commercial operators need to have safety systems in place to manage the risks specific to their operation.

The Maritime NZ *MTOP guidance – template* document prompts some of the considerations that should be given to operations carrying passengers. This section of the guideline outlines possible scenarios to help drill further down. It is intended to prompt discussion and encourage robust risk identification and management.

Scenarios

Person overboard

To prepare for a person overboard scenario, ask yourself:

- How will you deal with a person overboard scenario:
 - when the vessel is at anchor, or
 - when the vessel is underway?
- Do passengers know what they need to do in either scenario?
- Have you pointed out the location of life-saving equipment? Is it accessible and easy to use?
- Have the passengers been briefed on what they need to do e.g. continuously point at the person in the water?
- How will you bring your vessel alongside a person overboard?
- How will you recover a person overboard?

Fire

To prepare for a fire scenario, ask yourself:

- Do passengers know to tell the skipper straight away if there is a fire?
- Do passengers know to avoid an enclosed space if there is a fire?
- Do they know the location of fire-fighting equipment?
- Do they know which equipment to use for which type of fire?

3. Emergency preparedness (continued)

Abandon ship

To prepare for an abandon ship scenario, ask yourself:

- Do passengers know where the lifejackets are?
- Do they know how to fit lifejackets and put them on correctly?
- Have you pointed out the location of life-saving equipment and how to use it?
- Do passengers know how to safely get off the vessel e.g. into a life raft if they need to abandon ship?
- Do passengers know what to do if they end up in the water e.g. stay with the boat, cold water huddle?

Incapacitated skipper

You may also want to consider the following when developing your safety briefing:

- Do passengers know how they can assist you if needed?
- Do passengers know how to stop/anchor the vessel if needed?
- Do they know how to call for help if the skipper can't?
- Is there a VHF radio guide that is visible to passengers?

Other factors to consider

There are other risk factors that may need to be considered when an operation is run single handed:

- Will passengers need assistance during boarding/disembarking?
- How will you make sure the vessel is well secured for boarding/disembarking and that there is always someone at the controls/able to make the vessel immediately safe if there are any issues?
- How will you make sure that passengers stay sitting/in a safe zone while securing the vessel?
- How will you ensure your vessel is secure for sea (gates and handrails closed and in place) and remains secure for sea during the voyage?
- How will you manage passengers who are standing close to the edge of the vessel while fishing?
- How will you manage passengers during a voyage if needed e.g. if they are moving around the vessel, seasick, creating distraction or consuming alcohol?
- When will you screen passengers before departing to ensure that the lifejackets on board will fit and to identify any high risk passengers e.g. small children/elderly people?

3. Safety briefing

There will be no time to give instructions in an emergency. Providing a clear safety briefing is a good way to make sure passengers know what to do in an emergency.

Your safety briefing will need to be tailored to your operation and may include, as appropriate:

- what to do in different emergency scenarios;
- the location of safety equipment and how to use it e.g. anchor, radio, lifesaving equipment;
- any no-go zones for passengers;
- any safety requirements e.g. passengers to remain seated while the vessels is underway, requirement to wear lifejackets;
- asking the passengers questions to confirm e.g. 'Who can tell me where the life ring is?', and;
- the opportunity for passengers to ask any questions.

You will need to tailor the safety briefing so that it is specific to the risks associated with your operation.

You may also want to consider the best way to communicate with passengers whose first language is not English to ensure that they understand the safety briefing, e.g. providing a written version of the safety briefing in the relevant foreign language.

Another way to prepare passengers for an emergency is by undertaking drills before or during the voyage, as appropriate.

Remember to check that you are meeting your duties under HSWA.

4. Background info - Safety management systems

Safety management systems are in place to ensure that commercial operators take responsibility for the daily safe operation of their vessels. Commercial operations carrying passengers need to comply with the relevant maritime transport operator safety system and the Health and Safety at Work Act 2015.

Maritime Operator Safety System (MOSS)

As part of developing a Maritime Transport Operator Plan (MTOPlan) under the Maritime Operator Safety System (MOSS), an operator will need to identify the hazards and safety risks specific to their operation. The MTOPlan will identify appropriate controls and the operator will need to ensure that everyone knows their responsibilities and follows procedure. Hazard identification and development of controls will be part of continuous improvement.

For more information about MOSS requirements, please refer to the Maritime NZ guideline *Developing an operator plan* on the Maritime NZ website:

maritimenz.govt.nz/moss

Health and Safety at Work Act 2015

The Health and Safety at Work Act 2015 (HSWA) sets out a framework of duties for businesses, senior leaders of businesses, workers and other people who might be present in the workplace. The guiding principle is that workers and others in the workplace should be given the highest level of protection against harm to their health, safety and welfare from work risks so far as is reasonably practicable. The duties imposed by HSWA apply regardless of the size/type of operation and the safety system under which it operates.

For more information about HSWA, please refer to the resources on the Maritime NZ website:

maritimenz.govt.nz/hswa

Other safety systems

Depending on the vessel size and/or type of operation, a different safety system may apply. Regardless of the safety system, operators must undertake a full risk assessment and put appropriate controls in place to manage the specific risks associated with their operation.

5. Contact us for help

If you need more information about the requirements for your application, visit the commercial safety section of our website.

maritimenz.govt.nz/commercial/safety

If you can't find the information you need, send us an email or contact your local maritime officer. Tell us what you need help with and remember to include your contact details (email address and phone numbers).

enquiries@maritimenz.govt.nz

Or you can phone us toll free:

0508 22 55 22

Tell us what you need help with and remember to include your contact details (email address and phone numbers).

Kōwhaiwhai - Māori scroll designs

TAIC commissioned its four kōwhaiwhai, Māori scroll designs, from artist Sandy Rodgers (Ngāti Raukawa, Tūwharetoa, MacDougal). Sandy began from thinking of the Commission as a vehicle or vessel for seeking knowledge to understand transport accident tragedies and how to avoid them. A 'waka whai mārama' (i te ara haumarū) is 'a vessel/vehicle in pursuit of understanding'. Waka is a metaphor for the Commission. Mārama (from 'te ao mārama' – the world of light) is for the separation of Rangitāne (Sky Father) and Papatūānuku (Earth Mother) by their son Tāne Māhuta (god of man, forests and everything dwelling within), which brought light and thus awareness to the world. 'Te ara' is 'the path' and 'haumarū' is 'safe' or 'risk free'.

Corporate: Te Ara Haumarū - the safe and risk free path



The eye motif looks to the future, watching the path for obstructions. The encased double koru is the mother and child, symbolising protection, safety and guidance. The triple koru represents the three kete of knowledge that Tāne Māhuta collected from the highest of the heavens to pass their wisdom to humanity. The continual wave is the perpetual line of influence. The succession of humps represents the individual inquiries.

Sandy acknowledges Tāne Māhuta in the creation of this Kōwhaiwhai.

Aviation: Ngā hau e whā - the four winds



To Sandy, 'Ngā hau e whā' (the four winds), commonly used in Te Reo Māori to refer to people coming together from across Aotearoa, was also redolent of the aviation environment. The design represents the sky, cloud, and wind. There is a manu (bird) form representing the aircraft that move through Aotearoa's 'long white cloud'. The letter 'A' is present, standing for a 'Aviation'.

Sandy acknowledges Ranginui (Sky father) and Tāwhirimātea (God of wind) in the creation of this Kōwhaiwhai.

Maritime: Ara wai - waterways



The sections of waves flowing across the design represent the many different 'ara wai' (waterways) that ships sail across. The 'V' shape is a ship's prow and its wake. The letter 'M' is present, standing for 'Maritime'.

Sandy acknowledges Tangaroa (God of the sea) in the creation of this Kōwhaiwhai.

Rail: rewhenua - flowing across the land



The design represents the fluid movement of trains across Aotearoa. 'Rere' is to flow or fly. 'Whenua' is the land. The koru forms represent the earth, land and flora that trains pass over and through. The letter 'R' is present, standing for 'Rail'.

Sandy acknowledges Papatūānuku (Earth Mother) and Tāne Mahuta (God of man and forests and everything that dwells within) in the creation of this Kōwhaiwhai.



Transport Accident Investigation Commission

Recent Maritime Occurrence reports published by the Transport Accident Investigation Commission (most recent at top of list)

MO-2022-203	Container vessel, Capitaine Tasman, stevedore fatality during container loading operations, Port of Auckland, 19 April 2022
MO-2022-202	Bulk carrier, ETG Aquarius, stevedore fatality during coal loading operations, Lyttelton port, 25 April 2022
MO-2022-207	Fishing vessel Boy Roel, serious workplace injury, Off Tauranga, Bay of Plenty, New Zealand, 12 December 2022
MO-2022-206	Charter fishing vessel i-Catcher, Capsize, Goose Bay, Kaikōura, New Zealand, 10 September 2022
MO-2023-201	Passenger vessel Kaitaki, Loss of power, Cook Strait, New Zealand, 28 January 2023
MO-2021-204	Recreational vessel, capsized and sinking with three fatalities, Manukau Harbour entrance, 16 October 2021
MO-2021-205	Container vessel Moana Chief, serious injury to crew member, Port of Auckland, New Zealand, 10 December 2021
MO-2020-205	General cargo vessel, Kota Bahagia, cargo hold fire, Napier Port, 18 December 2020
MO-2021-202	Factory fishing trawler Amaltal Enterprise Engine room fire, 55 nautical miles west of Hokitika, 2 July 2021
MO-2021-203	Collision between fishing vessel 'Commission' and container ship 'Kota Lembah', 84 nautical miles northeast of Tauranga, Bay of Plenty, New Zealand, 28 July 2021
MO-2021-201	Jet boat KJet 8, loss of control, Shotover River, Queenstown, 21 March 2021
MO-2021-203	Collision between fishing vessel 'Commission; and container ship 'Kota Lembah', 84 nautical miles northeast of Tauranga, Bay of Plenty, New Zealand, 28 July 2021
MO-2020-202	Bulk log carrier Funing, Loss of manoeuvrability while leaving port, Port of Tauranga, 6 July 2020

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