

## Final Report Tuhinga whakamutunga

Maritime inquiry MO-2024-201
Passenger vessel, Fiordland Navigator
Grounding
Doubtful Sound
24 January 2024

**April 2025** 



## The Transport Accident Investigation Commission Te Kōmihana Tirotiro 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.

#### **Commissioners**

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Chief Commissioner David Clarke (from 1 October 2024)

Deputy Chief Commissioner Stephen Davies Howard

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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 vessel Fiordland Navigator



**Figure 2: Location of accident** 

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### 1 Executive summary Tuhinga whakarāpopoto

#### What happened

- 1.1. The *Fiordland Navigator* was a passenger vessel that operated from Deep Cove in Doubtful Sound, New Zealand. It offered an overnight tourism voyage in Doubtful Sound, with the route depending on the conditions at the time. On 24 January 2024, as the vessel was being turned to exit an arm of Doubtful Sound (Crooked Arm), it is **virtually certain** that the master fell asleep and the vessel ran aground.
- 1.2. There were nine crew and 57 passengers on board. The grounding resulted in a number of minor injuries to the crew and passengers and moderate damage to the vessel. The emergency response was effective, with the passengers evacuated to Deep Cove then on to Te Anau that evening. The vessel returned to Deep Cove that night.

#### Why it happened

- 1.3. The master was **very likely** subject to fatigue impairment due to inadequate rest periods. The Operator's Fatigue Management Guidelines did not assure adequate rest periods for the crew, and those rest periods were not implemented effectively. The master was also taking medication that had the potential effects of drowsiness. While it may have contributed to the master's impairment, the Transport Accident Investigation Commission was unable to determine if it had.
- 1.4. The master held a current Maritime New Zealand Certificate of Medical Fitness that should have identified the risks of medication side effects, but the master had begun taking the medication after the certificate was issued. There were no prompts or requirements for Certificate of Medical Fitness holders to ensure they met the prescribed medical standards throughout the two-year validity of the certificate.
- 1.5. The *Fiordland Navigator* was operated by a sole-charge master. However, the hazards presented by a sole-charge master, such as incapacitation, had not been explicitly identified or mitigated in the vessel's risk register. As a result, there was inadequate mitigation in place when the master became incapacitated.
- 1.6. The implementation of elements of the vessel's safety management system was ineffective because the manager responsible was burdened with a workload significantly beyond that which one person could have reasonably handled. This hindered the fatigue management of the masters and crew and diminished the likelihood of effective risk identification and mitigation-control implementation.

#### What we can learn

- 1.7. A person's medical fitness for duty should be considered an ongoing state rather than a state judged through a one-time certificate for approval.
- 1.8. When a person is operating in a safety-critical role, any new medications they take should be considered for potential performance-impairing effects.
- 1.9. Master incapacitation is a significant risk on sole-charge vessels.

1.10. Adequate resources are necessary to ensure the effective implementation of safety management systems.

#### Who may benefit

1.11. The people and entities that may benefit from the findings and recommendations in this report include: people with safety-critical roles who could be affected by fatigue or medication; sole-charge operators; those associated with Certificates of Medical Fitness; those who operate safety management systems; auditors and regulators; maritime schools; and maritime industry bodies.

## **2 Factual information** Pārongo pono

#### **Narrative**

- 2.1. At about 0700 on Thursday 18 January 2024, the master and eight crew of the *Fiordland Navigator* (a cruise vessel offering overnight tourism voyages) met at Manapouri to transit by road to Deep Cove in Doubtful Sound. Once there, they began preparing for their shift.
- 2.2. At about 1000 the *Fiordland Navigator* returned at Deep Cove from its previous voyage and its crew began disembarking the passengers. The outgoing and incoming masters conducted a handover that took about 10 minutes.
- 2.3. The crew undertook hospitality duties (such as providing clean laundry), loaded stores and had lunch. The *Fiordland Navigator* was then taken off the berth to free it for the *Milford Wanderer*, and subsequently returned to the berth. The crew embarked the passengers on board the *Fiordland Navigator* at about 1430 and the vessel departed for the first voyage of the swing<sup>1</sup>.
- 2.4. The master directed the *Fiordland Navigator* to an anchorage, where the passengers engaged in water activities such as kayaking. The vessel was secured at a fixed mooring so that the master could leave the wheelhouse<sup>2</sup> to deliver training to three crew members.
- 2.5. At about 1830 a dinner service was delivered for the crew and passengers, and at about 2000 the master had their dinner. They retired to bed at about 2200.
- 2.6. The master woke at about 0545 the next day and began preparing the vessel for service at around 0600. The vessel then departed the anchorage and returned at Deep Cove at 1000 to disembark the passengers. The crew then began preparing the vessel for the next voyage, with passengers embarking at around 1430.
- 2.7. The crew undertook similar routines in the next five days, Friday through to Tuesday.
- 2.8. On Wednesday 24 January at 0545, the master awoke and began preparing the vessel for service.
- 2.9. At about 0630 the master started the vessel's engines, weighed anchor and returned to Deep Cove to disembark the passengers at about 1000.
- 2.10. As a result of a disagreement between the team leader<sup>3</sup> and another crew member the previous evening, the team leader disembarked the vessel and was replaced by the onshore-based overnight manager.
- 2.11. The vessel was taken off the wharf at 1020 to allow access for the *Milford Wanderer* and was back on the wharf at 1040. The vessel was taken off again at 1220 and returned at 1245.

<sup>&</sup>lt;sup>1</sup> A swing shift is a work schedule that falls outside normal business hours and spans both daytime and nighttime. The crew *Fiordland Navigator* crew operated on a week-on/week-off swing with change-over days on Thursdays

<sup>&</sup>lt;sup>2</sup> The skipper usually remained in the wheelhouse when the vessel was anchored.

<sup>&</sup>lt;sup>3</sup> Crew member responsible for leading the hospitality services team.

- 2.12. The crew began embarking passengers at 1430. Once this was complete, the vessel departed for Crooked Arm at about 1445. The *Fiordland Navigator* anchored for water activities<sup>4</sup> between 1550 and 1620, then was moved and anchored again from 1640 to 1740 (*see* Figures 3 and 4).
- 2.13. The master commenced the transit out of Crooked Arm, and at approximately 1804 began the turn to port.
- 2.14. It is **virtually certain** that the master fell asleep during the turn to port and the vessel continued turning. At approximately 1807 the *Fiordland Navigator* ran aground while travelling at about 10.8 knots (20 kilometres per hour).
- 2.15. The master woke when the vessel came to a sudden stop. They were still sitting in the master's chair. They immediately assessed the situation and began the emergency response, mustering the passengers using the public address system and calling the onshore manager to alert them to the accident.
- 2.16. The crew reported to their muster stations. Two crew were assigned to damage assessment and one to the operating bilge pumps. The remainder had roles mostly around mustering passengers and assessing them for injuries.
- 2.17. The vessel damage included a small hole below the waterline, but the rate of water ingress was not a material threat to the safety of the vessel. The use of a small bilge pump was enough to clear incoming water.
- 2.18. The *Milford Wanderer*, a sister vessel, was nearby, so a crew member there used the tender<sup>5</sup> to travel to the *Fiordland Navigator* and assist in the response.
- 2.19. At about 1920 the tide had come in enough to lift the vessel off the rocks and enable the *Fiordland Navigator* to get underway<sup>6</sup>.
- 2.20. Two nearby fishing vessels came alongside and rafted-up<sup>7</sup> to the *Fiordland Navigator*. The passengers were transferred to the fishing vessels and departed for Deep Cove at about 2000.
- 2.21. Meanwhile, in Te Anau, RealNZ (a company that operated tours, cruises and other activities in the area) had assembled two response teams to go to Doubtful Sound by helicopter. One team would assist the passengers when they reached Deep Cove, and the other would travel to the vessel to assist on board.
- 2.22. On their arrival at Deep Cove, the passengers were assessed by a doctor from the response team before departing for Te Anau by bus at around 2115.
- 2.23. The response team then travelled to the vessel, arriving on board at around 2200. The vessel began making way<sup>8</sup> for Deep Cove at about 2230 and was alongside by 2357.
- 2.24. Repairs and requisite surveys were conducted, and the vessel returned to service in the following week.

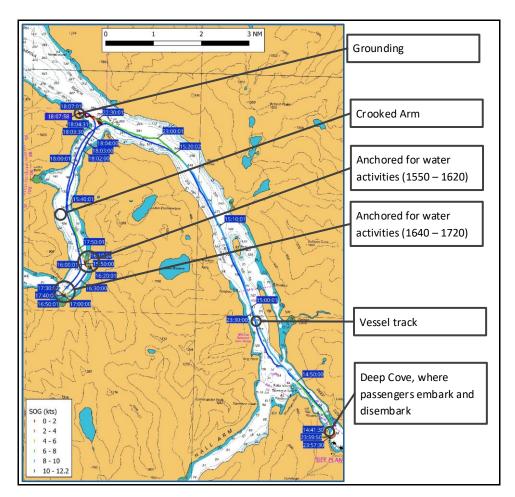
<sup>&</sup>lt;sup>4</sup> Various water activities, such as kayaking, were available to the passengers

<sup>&</sup>lt;sup>5</sup> A small vessel carried by a larger vessel, used to transport people and goods to and from a shore or another vessel

<sup>&</sup>lt;sup>6</sup> When underway, a vessel is no longer secured to a wharf, a seabed or any other stationary object.

<sup>&</sup>lt;sup>7</sup> Raft-up means to secure one vessel to another, with the vessels arranged side by side so that a person can walk between them.

<sup>&</sup>lt;sup>8</sup> Propelling itself to move through the water.



**Figure 3: Accident voyage of** *Fiordland Navigator* 

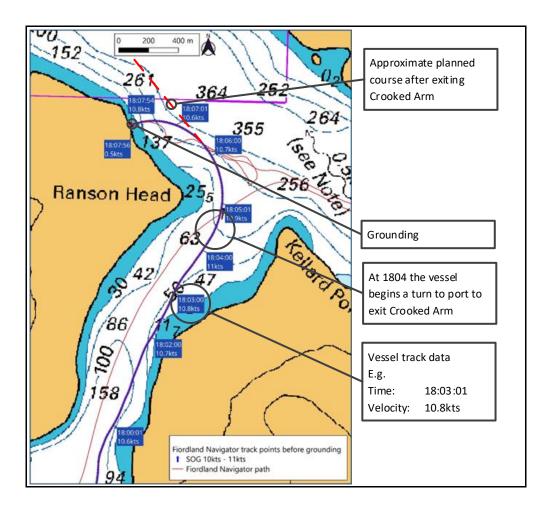


Figure 4: Track of vessel immediately prior to grounding

#### **Vessel information**

- 2.25. The *Fiordland Navigator* tourism operation involved taking passengers on overnight trips to Doubtful Sound. Doubtful Sound is a popular destination for tourists and the second-largest fiord in Fiordland National Park. It is isolated, with no direct road access, and home to abundant wildlife.
- 2.26. The *Fiordland Navigator* was certified to carry 150 passengers within enclosed water limits<sup>9</sup> and 85 passengers within inshore limits<sup>10</sup>.
- 2.27. The vessel was a three-masted schooner constructed in steel in Invercargill in 2001. The vessel particulars were:

| Port of Registry   | Invercargill                           |  |  |
|--------------------|--|--|--|
| Type of vessel     | Passenger                              |  |  |
| Registered length  | 38.20 metres                           |  |  |
| Registered breadth | 10.00 metres                           |  |  |
| Registered depth   | 2.75 metres                            |  |  |
| Gross tonnage      | 693 tonnes                             |  |  |
| Propulsion         | Two 485-kilowatt coupled to shafts and |  |  |
|                    | propellers                             |  |  |

<sup>9</sup> The specific areas identified in Part 1 of Appendix 1 of Maritime Rule Part 20 and all New Zealand inland waters.

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<sup>&</sup>lt;sup>10</sup> The limits set out in Part 2 of Appendix 1 of Maritime Rule Part 20 and in relation to a ship, any defined section of the coastal limits not beyond the limit of the territorial sea of New Zealand (which has been assigned to that ship as an inshore limit by a surveyor under rule 20.20(1)), subject to rule 20.20(4).

2.28. The vessel was operating within enclosed waters and had 57 passengers on board at the time of the grounding.

#### **Personnel information**

- 2.29. The *Fiordland Navigator*'s Minimum Safe Crewing Document (MSCD) required a crew complement of four: one person with a Skipper Restricted Limit (SRL) <3000 gross tonnage qualification and three other seafarers.
- 2.30. The master held a Commercial Launch Master Certificate of Competency issued in 1997, which had the same privileges as the SRL and also >3000 gross tonnage. They had joined RealNZ in 1998 and been master of the *Fiordland Navigator* for the previous 15 years.
- 2.31. The *Fiordland Navigator*'s on-board hospitality service required nine crew, including the master. They operated on a week-on/week-off swing, with change-over days on Thursdays. The crew were as follows:

| 7'41         | Title Number of Pole |  |  |  |  |  |
|--------------|----------------------|--|--|--|--|--|
| Title        | Number of            | Role   |  |  |  |  |
|              | people               |  |  |  |  |  |
| Master       | 1                    | Responsible for ensuring the safe operation of the vessel, the safety and wellbeing of all passengers and crew, and the compliance of the vessel and crew with all relevant regulations. The master was also responsible for assuring RealNZ that the vessel's safety management system had been implemented properly. |  |  |  |  |
| Nature Guide | 1                    | Responsible for delivering tourism commentary for the passengers. They tended to have significant experience on board the vessel and spend a lot of time in or near the wheelhouse, assisting the master as needed.  |  |  |  |  |
| Chef         | 1                    | Responsible for food preparation and assisting at the bow during mooring operations.   |  |  |  |  |
| Team Leader  | 1                    | Responsible for leading the hospitality services team.   |  |  |  |  |
| Crew         | 5                    | Responsible for delivering hospitality services and undertaking some maritime operations, for example mooring operations and driving the tender during kayak activities.   |  |  |  |  |

Table 1: Crew of the Fiordland Navigator

- 2.32. The eight crew members were at various stages of training in the RealNZ internal training system. The system had three stages, with stage 3 being the highest level. Stage 3 was at a lower level of training than the historical internal RealNZ position of 'Masters Assistant', which had become obsolete during the COVID-19 pandemic. 'Masters Assistant' had been a New Zealand Qualifications Authority-approved qualification, and part of the role had been to support the master as needed.
- 2.33. While not having a formal maritime qualification recognised by Maritime New Zealand (Maritime NZ), a person qualified at stage three could stand watch in the wheelhouse should the master need to leave for short periods, such as to respond to radio calls.

#### **Medical information**

- 2.34. The master's SRL qualification required them to have a Maritime NZ Certificate of Medical Fitness National or Ring-Fenced Seafarers (Certificate of Medical Fitness)<sup>11</sup>. The master held the qualification with no special restrictions. At the time of the grounding, they were taking medication that had the potential side effect of drowsiness.
- 2.35. The Certificate of Medical Fitness template is shown in Appendix 1.
- 2.36. Maritime Rules Part 34: Medical Standards sets the standards of medical fitness for seafarers.
- 2.37. Part 34.23: Examination of seafarers for certificate of medical fitness states that:

A medical practitioner carrying out a medical examination of a seafarer... must... comply with the instructions and take into account any guidance for the conduct of medical examinations outlined in Part 3 of the International Labor Organization and International Maritime Organization guidelines on the medical examination of seafarers.

- 2.38. Maritime NZ provided two guidance documents pertinent to the Certificate of Medical Fitness: Guidance for medical fitness National or Ring-fenced seafarers (Guidance for Medical Fitness) and the GP [General Practice] Summary Guide for Medical Fitness National or Ring-fenced seafarers.
- 2.39. The Guidance for Medical Fitness stated that the purpose of the Certificate of Medical Fitness was to certify seafarers' fitness for two years.
- 2.40. It also prompted a consideration of medications and potential side effects:
  - 11. If prescribing medications for a seafarer or reviewing the medications being taken:
    - some medications can have side effects, affecting the performance of duties
    - effectiveness/use of oral medication at sea may be prevented by nausea and vomiting.
  - 12. International guidance on medications that can impair routine and emergency duties include those that:
    - affect central nervous system functions (e.g. sleeping tablets, antipsychotics, some analgesics, some anti-anxiety and anti-depression treatments and some antihistamines)
    - increase the likelihood of sudden incapacitation (e.g. insulin, some of the older anti-hypertensives and medications predisposing to seizures)
    - impair vision (e.g. hyoscine and atropine).
- 2.41. The GP Summary Guide included a prompt to:

Discuss / cover medical history – Past and current illnesses, diseases, surgery, conditions, injuries and medication.

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<sup>&</sup>lt;sup>11</sup> Issued by a doctor (see Appendix 1).

#### **Organisational information**

- 2.42. The *Fiordland Navigator* was operated by RealNZ. RealNZ was the trading name for Real Journeys Ltd. RealNZ's vessel operations spanned tourism, passenger, general cargo and work boat activities. RealNZ also operated land transport, including buses.
- 2.43. The RealNZ fleet comprised 34 vessels (one being the *Fiordland Navigator*) with overall lengths of about 6–50 metres, and operational bases in seven locations in the South Island. The bases were divided into three areas: Queenstown; Te Anau/Manapouri/Milford/Doubtful Sound; and Bluff/Stewart Island. The fleet was operated by up to 50 Launch Masters, of which one was the master of the *Fiordland Navigator*.
- 2.44. There had been a management restructure in 2023. Prior to the restructure, all Launch Masters had reported to the Chief Launch Master, who had reported to the Head of Maritime Operations.
- 2.45. Under the restructure, the Chief Launch Master role was disestablished and divided into two roles: a Senior Launch Master (SLM) for Queenstown operations and an SLM for Fiordland/Rakiura operations. The SLMs reported to their respective General Managers of Experience (GMs Experience)<sup>12</sup> rather than the Head of Maritime Operations. There remained a 'dotted report line' to the Head of Maritime Operations for 'technical/compliance leadership'.

#### **Previous occurrences**

2.46. The Transport Accident Investigation Commission (Commission) has previously made recommendations on safety issues similar to those described in this report. The previous findings and recommendations are summarised below.

#### **Fatigue management**

- 2.47. The Commission recommended that KiwiRail implement arrangements to detect and manage stress and fatigue, including proper rest breaks and nutrition.<sup>13</sup>
- 2.48. The Commission recommended that KiwiRail review its Fitness for Work Policy to better manage workloads and mitigate fatigue risks for safety-critical personnel.<sup>14</sup>
- 2.49. The Commission recommended that KiwiRail develop and implement a comprehensive fatigue risk management system.<sup>15</sup>
- 2.50. The Commission recommended that Oceanic Fishing Ltd establish appropriate fatigue-management policies and procedures for its fleet.<sup>16</sup>

#### **Medical fitness**

2.51. On 22 August 2023<sup>17</sup> the Commission recommended that Lyttelton Port Company Ltd review the medical screening of stevedores to ensure it provided adequate assurances of medical fitness for their duties and responsibilities.

<sup>&</sup>lt;sup>12</sup> The SLM Fiordland reported to the General Manager of Experience Fiordland/Rakiura and the SLM Queenstown reported to the General Manager of Experience Queenstown.

<sup>&</sup>lt;sup>13</sup> RO-2011-102, recommendation 014/13.

<sup>&</sup>lt;sup>14</sup> RO-2014-105, recommendation 017/17.

<sup>&</sup>lt;sup>15</sup> RO-2017-101, recommendation 019/18.

<sup>&</sup>lt;sup>16</sup> MO-2021-203, recommendation 003/22.

<sup>&</sup>lt;sup>17</sup> MO-2022-202, recommendation 027/23.

- 2.52. In 2017<sup>18</sup> the Commission found that there was the potential for applicants for aviation medical certificates to circumvent the process and inaccurately represent their health by misreporting their treatments, failing to disclose medications and using multiple GPs and other health professionals. The Commission noted that this risk was shared by other transport modes that required people to hold medical certificates or make declarations on their health status. The development of a national health database would provide one means to address this risk. On 28 June 2017 the Commission recommended to the Chief Executive of the Ministry of Health that it consider adding the following functions to the national electronic health record database that was then under development:
  - that a person's occupation be added to the record to allow monitoring of individuals who hold transport-related documents that require periodic medical checks, and who have potentially adverse health conditions or medications, so that the appropriate authority can be alerted to possible public safety risks
  - a mechanism to draw the attention of all health practitioners to their obligation to notify the appropriate transport authority when a person or patient has a health condition or need for medication that could pose a threat to public safety in that individual's occupation.

On 3 July 2017 the Chief Medical Officer for the Ministry of Health replied:

The National Electronic Health Record Business Case project is a significant project that is working though a Treasury Better Business Case (BBC) process. This process is for agencies that have significant proposals that will have a whole of life cost of more than \$25 million.

The BBC process has a number of stages and at this point we are close to completing stage 2 of 4. At the completion of stage 4 we expect that we will begin to implement the solution for the National Electronic Health Record, timing for the duration of the implementation phase is yet to be determined. With our current timeline, we expect this to begin no earlier than late 2018 pending approval from Cabinet and successfully delivering the business case process and large scale procurements required.

With these timings in mind, we recognise that there is a requirement to hold the occupation for an individual and to be able to undertake reporting and processes related to the occupation should potentially adverse health and/or medications be identified. At this stage we cannot commit that the functionality that has been suggested will be implemented and will not be in a position to do so until the Business Case process is completed. However, while we cannot yet confirm the details of this type of functionality, we can and will take this into account during our deliberations and include in our business case documentation the advantages of having this type of functionality tied into the Electronic Health Record once established.

2.53. In 2015<sup>19</sup> the Commission recommended that KiwiRail introduce a system in which KiwiRail medical professionals would be automatically granted access to employee medical records held by private medical practitioners as necessary, to ensure that

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<sup>&</sup>lt;sup>18</sup> Addendum to Final Report AO-2015-002, recommendation 022/17.

<sup>&</sup>lt;sup>19</sup> RO-2012-104, recommendation 011/15.

employees who performed safety-critical roles were not impaired by prescription or over-the-counter medications

#### Sole-charge master

- 2.54. In 2012<sup>20</sup> the Commission recommended that Maritime NZ require New Zealand-registered coastal vessels conducting one-man bridge operations to have bridge-watch navigational and alarm systems to mitigate the known risks of sole watchkeepers falling asleep or becoming distracted from monitoring the progress of their vessels.
- 2.55. In 2024<sup>21</sup> the Commission found that the Maritime Transport Operator Plan (MTOP)<sup>22</sup> of a passenger ferry had not identified and mitigated the risks of a sole-charge master being incapacitated, and instead had relied on one person (the master) to manage the safety of the passengers in an emergency.

<sup>&</sup>lt;sup>20</sup> MO-2010-202, recommendation 019/12.

<sup>&</sup>lt;sup>21</sup> MO-2023-202.

<sup>&</sup>lt;sup>22</sup> A comprehensive safety management plan that vessel operators must develop and maintain to ensure the safe operation of their vessels.

## 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.

#### What happened

- 3.2. The master of the *Fiordland Navigator* was on the sixth day of a seven-day swing. The evidence indicates that it is **virtually certain** the master fell asleep while navigating the vessel, and it subsequently ran aground. The master was **very likely** suffering from workload-induced fatigue that had not been recognised or mitigated by the operator's safety management system. This may have been compounded by a potential drowsiness side effect of a prescribed medication they were taking, but the Commission was unable to make a determination on this.
- 3.3. With the sole-charge master asleep, there was no defence in place to stop the vessel continuing its track and running aground. The crew's training and performance were effective in delivering an organised response and recovery without further issue.
- 3.4. The causes and circumstances of this accident are discussed in the following sections.

### Fatigue management

Safety issue 1: The operator's fatigue-management practices were insufficient to mitigate the risk of fatigue-related impairment. As a result, it was very likely that the crew's ability to perform their duties safely was significantly compromised.

- 3.5. The Maritime Operator Safety System (MOSS) is a framework established by Maritime NZ to enhance safety in maritime transport operations. It requires commercial vessel operators to develop and maintain comprehensive safety systems that cover not just their vessels but their entire maritime operations. One component of MOSS is the MTOP.
- 3.6. Under its MTOP, RealNZ had Fatigue Management Guidelines (FMGs) that applied to all RealNZ operations, including land transport.
- 3.7. Under the FMG, land transport operations had prescribed hours of rest that were recorded and regulated<sup>23</sup>, whereas seafarers had recommended hours of rest that were not recorded or regulated.
- 3.8. The FMG noted that the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers<sup>24</sup> was applicable. In particular, the FMG required that rosters have four general limitations:
  - A minimum of 10 hours' rest in any 24-hour period.

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<sup>&</sup>lt;sup>23</sup> Hours of rest for land transport operators were regulated by the NZ Transport Agency.

<sup>&</sup>lt;sup>24</sup> Section A-VIII/1 of the Code addresses the fatigue management of seafarers.

- The rest hours to be divided into no more than two rest periods, and one rest period must be at least six hours long.
- No working period to be longer than 14 hours.
- A minimum of 77 hours' rest in any seven-day period.
- 3.9. Specific to the *Fiordland Navigator*, the workday was predicated on 14 hours of work, with an expected rest period between tourist trips while the vessel was alongside. Additionally, qualified and experienced staff were expected to be available to stand watch to allow the master short breaks.
- 3.10. The master described their workday as beginning at around 0600 and finishing at around 2200, being a 16-hour working period. This allowed them about eight hours of overnight rest. However, the quality of the sleep was difficult to determine, because sole-charge masters bear full responsibility for their vessels and their sleep may be broken by many things, including changes in weather and vessel movements.
- 3.11. The master's 16-hour workday should have been reduced to 14 hours by a two-hour rest period while the vessel was alongside. However, while the vessel was alongside the master conducted other duties that included routinely taking the vessel on and off the berth to accommodate the movement of other vessels. In addition, on the day of the accident the master was preparing the vessel for handover to the next master the following day.
- 3.12. Short rest periods were available to the master during the trips and when the vessel was moored, but some of these were used by the master to train the crew. As a result, the planned daily rest period between sailings was often reduced, and on the day of the accident it was negligible.
- 3.13. It was **unlikely** that the master fully utilised the intended daily five-hour rest periods between sailings in the seven days in which they were on board the vessel.
- 3.14. The cumulative effect of reduced rest and a seven-day working period meant it was **very likely** that the master was impaired by fatigue.
- 3.15. The FMG stated:
  - "... it is the direct responsibility of all managers to monitor the level of fatigue and general wellbeing in their workforce for signs and symptoms that fatigue and related issues are reaching a hazardous stage."
- 3.16. The FMG also stated that *all* managers were responsible both for ensuring that rosters did not lead to individuals suffering hazardous fatigue, and for monitoring fatigue within the workforce. The wording of the FMG created uncertainty in relation to which of the three managers available to the *Fiordland Navigator* (the GM Experience, the overnight manager and the SLM), or all three, were responsible for managing fatigue. The Commission's interviews of the managers also demonstrated uncertainty about who was responsible.
- 3.17. The MTOP mentioned the responsibility of only one managerial role the SLM's<sup>25</sup> being:

"responsible for ensuring the day to day practical function of the MTOP through engagement with vessel crew".

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<sup>&</sup>lt;sup>25</sup> There were two SLMs at RealNZ.

- 3.18. In addition to their role in fatigue management, the SLM carried an overwhelming workload that made it very difficult for them to ensure all practical functions of the MTOP were undertaken appropriately. This issue is discussed further under safety issue 4.
- 3.19. The FMG required all staff to take responsibility for presenting to work in a fit state, and to "look out for one another". There was evidence that operational staff did consider fatigue management: for example, masters regularly discussed weather conditions and their overnight rest periods with the GM Experience.
- 3.20. The FMG also indicated that all staff would receive formal training in fatigue management where practical. Some masters and managers had undergone this training, although not the master of the *Fiordland Navigator*.
- 3.21. The FMG referred to a self-assessment form for fatigue and wellbeing that all staff could use. However, the Commission found no evidence that this form was utilised by staff as guidance or completed and submitted.
- 3.22. No system had been established to record or monitor actual hours of work and rest, as opposed to scheduled hours of work and rest. Consequently, there was no consistent mechanism for assessing the effectiveness of RealNZ's fatiguemanagement policy.
- 3.23. Although there were guidelines in place to manage fatigue, their implementation was inadequate and there was no effective mechanism for identifying and respond to fatigue.

#### **Certificate of Medical Fitness**

Safety issue 2: The standards of the Maritime NZ Certificate of Medical Fitness for seafarers are not fully captured in the certificate itself, and therefore certificate holders may not appreciate their ongoing responsibilities should their medical conditions change. As a result, pertinent health conditions can go unknown to the operator and the seafarer and compromise the seafarer's ability to perform their duties safely.

- 3.24. The Commission was unable to determine if the medication the master was taking, which had the potential to cause drowsiness, contributed to their falling asleep.
- 3.25. The master's medical fitness for duty was assured by their Certificate of Medical Fitness, issued by a medical examiner in accordance with Maritime Rules Part 34: Medical Standards. The standards required the medical examiner to consider vision, hearing, physical capability, medication and medical conditions. Pertinent to this accident, the medical examiner was required to consider potential impairments due to medication taken by certificate holders prior to issuing Certificates of Medical Fitness.
- 3.26. Maritime Rule Part 34 Medical Standards, the GP Summary Guide for Medical Fitness, and the Guidance for Medical Fitness (outlined in section 2 of this report) indicate that the Certificate is meant to ensure a broader scope of medical fitness than that stated in the template. The template requires evaluations to be conducted in accordance with Part 34, but has only two prompts:
  - Does the seafarer meet vision standards?
  - Does the seafarer have satisfactory hearing?

- 3.27. The template includes a section for the medical examiner to record restrictions, but does not prompt the inclusion of any other health conditions the medical examiner should consider (for example, medications) or refer to the guidance documents provided by Maritime NZ.
- 3.28. The master held a Certificate of Medical Fitness that had been issued before they began taking the medication that had the potential side effect of drowsiness. So, while current, the Certificate of Medical Fitness potentially no longer met the standards specified in Part 34 of the Maritime Rules and the master was at an increased risk of operating the vessel while cognitively impaired.
- 3.29. Both the operator and the certificate holder have important parts to play in managing employee fitness. However, the master said they were not aware of the potential side effects of the medication, and it was unclear what information had been provided by the General Practitioner (GP) who prescribed it. The GP who had issued the certificate differed from the GP who had prescribed the medication.
- 3.30. Further, the Certificate of Medical Fitness template did not require a declaration of any health conditions other than those related to eyesight and hearing, nor did it require an assessment of health conditions that had changed since it had been issued. This meant there was no prompt for the master to consider the effects of medication on their medical fitness, either at the time the Certificate was being issued or during the two-year period in which it was valid.
- 3.31. RealNZ had an internal medical assessment process (see Form A in Appendix 2) that was conducted in addition to, and was significantly more comprehensive than, the Maritime NZ Certificate of Medical Fitness. However, the internal medical assessment process was discontinued when RealNZ's operations were restricted during the COVID-19 pandemic. This meant that, at the time of the accident, there was no prompt for the master to declare to the company that the medication they had been prescribed might cause drowsiness.
- 3.32. The Commission has made a recommendation to Maritime NZ on this safety issue.

#### Risks of sole-charge master

**Safety issue 3:** The vessel grounded because the risks associated with a sole-charge master were not adequately identified or mitigated by the vessel's safety management system.

- 3.33. The *Fiordland Navigator*'s MSCD, which applied on the day of the accident, required a crew complement of one SRL and three seafarers.
- 3.34. The Maritime Rules define a seafarer as any person who is paid to work on board a vessel. There is no minimum qualification for a person to be a seafarer, so the only person on board who needed to be qualified to operate the vessel, and who was solely responsible for navigational safety, was the master.
- 3.35. The MSCD did not prescribe the crew's deployed on board. That was dependent on the operator's safety management system and risk controls.
- 3.36. A significant risk for a vessel with a sole-charge master is their incapacitation. Incapacitation can result from various events, including the master falling asleep. The only mention of the risks of a sole-charge master in RealNZ's safety management system is in the FMG, with risks for the *Fiordland Navigator* including:

"Master excess fatigue due to lack of mate/relief".

- 3.37. The FMG's mitigation for that hazard was to provide daytime relief when more than three 'day trips' were scheduled. However, the *Fiordland Navigator* day trips had been discontinued to enable more rest for the master. The mitigation also referenced qualified and experienced crew, including the master's assistant, which was no longer an operational role.
- 3.38. Most of RealNZ's vessels were under sole-charge masters. However, the hazards associated with sole-charge masters were not explicitly identified in the risk register. Consequently, there were no specific risk mitigations in place, although some measures that applied to other risks also applied in some ways to master incapacitation. For example, crew had training in how to steer the vessel and put propulsion system controls to neutral to allow the master time for bathroom breaks and similar short departures from the wheelhouse.
- 3.39. Had a risk assessment been carried out and identified sole-charge masters as a hazard, it is **very likely** that more robust mitigation measures would have been in place on the *Fiordland Navigator*.
- 3.40. After the grounding, RealNZ introduced a requirement for a second person in the wheelhouse during the navigation of the vessel, so that there would be immediate mitigation should the master become incapacitated.
- 3.41. The Commission welcomes the safety action taken by RealNZ.

#### **Implementation of MTOP**

Safety issue 4: The role within RealNZ with responsibility for the day-to-day implementation of the MTOP was not sufficiently resourced. This increased the likelihood of risk mitigations not being applied to full effect.

- 3.42. Two managers were responsible for the MTOP in the Fiordland/Rakiura area (the deliverables for the roles are described in Appendix 3):
  - The Head of Maritime Operations' role was directed towards compliance.
  - The SLM was responsible for the day-to-day implementation of the MTOP for all the RealNZ vessels.
- 3.43. The SLM role was one person, and their responsibilities included (but were not limited to):

Ensure the day-to-day practical elements of the MTOP are being adhered to through regular engagement with the vessel Launchmasters and crew. This includes but not limited to ensuring safe operating practices are always followed, planned maintenance checks, voyage/trip planning is conducted, and management of all hazards is maintained and recorded.

- 3.44. All RealNZ masters in the Fiordland/Rakiura area reported to the SLM. This meant the SLM had about 30 direct reports in addition to their MTOP responsibilities. However, they were not responsible for all aspects of the other masters' roles.
- 3.45. Further, the SLM was rostered on as an operational master for about 50% of their time.
- 3.46. The SLM's primary reporting line changed in 2023 as a result of a restructure within RealNZ. Under the new structure, the SLM reported to the GM Experience rather than

- the Head of Maritime Operations. This put an additional load on the SLM, as the GM Experience was not embedded in the daily complexities of maritime operations and had non-maritime responsibilities and deliverables alongside their responsibilities under the MTOP.
- 3.47. An internal audit of the *Fiordland Navigator* found that the annual review and updates of the safety manual and the risk register had not been conducted in 2023, and it was unclear when they had last been conducted.
- 3.48. The Commission found it was unreasonable to expect the SLM to meet their responsibilities for the day-to-day implementation of the MTOP given the number of deliverables for that role.
- 3.49. The GM Experience acknowledged during interview that the SLM role was too big for one person and, following the accident, additional resources were provided. The Commission welcomes the safety action taken.

## 4 Findings Ngā kitenga

- 4.1. The crew's training and performance were effective during the emergency response.
- 4.2. It is **virtually certain** the master fell asleep while navigating the vessel, and it subsequently ran aground.
- 4.3. The master was **very likely** suffering from work-load-induced fatigue, which had not been recognised or mitigated by the operator's safety management system.
- 4.4. Management's oversight of crew fatigue was insufficient to ensure compliance with the Fatigue Management Guidelines.
- 4.5. The actual rest hours of the master were **very likely** less than those prescribed in RealNZ's Fatigue Management Guidelines.
- 4.6. RealNZ did not have a system for recording or monitoring actual hours of work and rest, as opposed to scheduled hours of work and rest. Consequently, there was no consistent mechanism to identify breaches of RealNZ's fatigue-management policy.
- 4.7. The Commission was unable to determine if the medication the master was taking, which had the potential to cause drowsiness, contributed to the master's falling asleep.
- 4.8. The risks associated with sole-charge masters had not been explicitly identified by RealNZ. Had a risk assessment been carried out and identified sole-charge masters as a hazard, it is **very likely** that more robust mitigation measures would have been in place on the *Fiordland Navigator*.
- 4.9. A Certificate of Medical Fitness does not adequately assure that the holder is medically fit for duty during the two-year period of its validity.
- 4.10. The Senior Launch Master role was responsible for the day-to-day implementation of the Maritime Transport Operator Plan but had a workload that made it difficult for them to carry out this function.

## 5 Safety issues and remedial action Ngā take haumaru me ngā mahi whakatika

#### General

- 5.1. Safety issues are an output of the Commission's analyses. 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.

Safety issue 1: The operator's fatigue-management practices were insufficient to mitigate the risk of fatigue-related impairment. As a result, it was very likely that the crew's ability to perform their duties safely was significantly compromised.

5.3. Following the incident, RealNZ informed the Commission of the following:

The Fatigue management policy has been reviewed and now includes a specific maritime guideline appendix. This guideline assesses fatigue risks for each specific area and details controls and options to minimise risk of fatigue.

The updated fatigue policy and guidelines have been rolled out through:

- Launch Master training workshops in person
- Updated documentation on board all vessels
- In-person meetings for shore based operational staff
- Regional Launch Master forums
- skipper forums
- a requirement for Launch Masters on an ongoing basis to share and take staff through this.
- Future plans for "quick guides" to assist Masters with crew training on the key points.

Implemented an improved system to better capture the hours worked and rest breaks taken for the Launch Masters and crew on the vessels. This is to ensure that the new aspects will allow [Real Journeys] to better understand whether the Fatigue Management Policy is being complied with by staff and that the controls are effective.

Real Journeys has implemented a programme of work to install Auto Pilots on additional specific vessels. The benefits of this include reducing the Launch Masters workload and enable movement around the vessel wheelhouse rather than remaining seated when at the helm.

5.4. In the Commission's view, this safety action has addressed the safety issue. Therefore, the Commission has not made a recommendation.

Safety issue 2: The standards of the Maritime NZ Certificate of Medical Fitness for seafarers are not fully captured in the certificate itself, and therefore certificate holders may not appreciate their ongoing responsibilities should their medical conditions change. As a result pertinent health conditions can go unknown to the operator and the seafarer and compromise the seafarer's ability to perform their duties safely.

- 5.5. The Commission has made a recommendation in Section 6 to address this issue.
- 5.6. RealNZ is in the process of reinstating its internal medical assurance for critical roles. The Commission welcomes the safety action taken by RealNZ.

**Safety issue 3:** The vessel grounded because the risks associated with a sole-charge master were not adequately identified or mitigated by the vessel's safety management system.

5.7. Safety actions taken by RealNZ following the incident included adding a second person to the wheelhouse during the navigation of a vessel to support the master, and:

The role of a vessel Master's Assistant was re-instated in 2024. A new competency framework was designed and implemented.

These roles are in place now with ongoing training and development. This role supports the vessel Launch Master in a navigational and maritime context.

Post the 2024 season, we are further reviewing the Master's assistant training to assess the effectiveness of the role, and improvements for 2025.

Crew training continues to include Master Incapacitation training for the Real Journeys Stages 1-3 training levels.

Refer to the above-mentioned Auto Pilot programme.

5.8. In the Commission's view, this safety action has addressed the safety issue. Therefore, the Commission has not made a recommendation.

Safety issue 4: The role within RealNZ with responsibility for the day-to-day implementation of the MTOP was not sufficiently resourced. This increased the likelihood of risk mitigations not being applied to full effect.

5.9. The safety actions taken by RealNZ following the incident included reducing the hours in which the SLM was rostered on as master, and:

Real Journeys has developed and implemented a new role of Maritime Resource Planner. The role functions include:

- planning forecasted maritime resource
- monitoring maritime resource for competency, compliance and fatigue management of Launch Masters and crew
- ensuring adequate maritime resourcing
- providing administrative support to Senior Launch Masters
- supporting the Maritime Safety function.

Real Journeys has amended the area of responsibility for the Fiordland/Rakiura Senior Launch Master. This role now has fewer direct reports. Further review of this role and the structure is currently under review.

Real Journeys has also implemented a more comprehensive personalised leadership training programme focused on the needs of the individual. This is developed and monitored through the RealNZ Personal Development Programme.

5.10. In the Commission's view, this safety action has 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.

#### **New recommendation**

- 6.3. On 27 February 2025, the Commission recommended that Maritime New Zealand implement measures to raise awareness of the standards for the Certificate of Medical Fitness for seafarers and ensure that certificate holders understand their responsibilities to maintain certificate validity and report any impacting changes. [028/25]
- 6.4. On 7 April 2025, Maritime New Zealand replied:

Maritime NZ will consider this recommendation.

Maritime NZ recognises the importance of seafarers being medically fit. We have previously sought to, and continue to ensure that seafarers and their operator employers are aware of the requirement to maintain medical certification under Maritime Rules Part 34. This is communicated through a number of stakeholder channels including publications such as Seachange (see article published in the July 2024 - https://mailchi.mp/mnz/seachange-issue-111-july-2691019).

We also monitor the validity of medical certificates through our audit activity, including checking the expiration dates of both the skipper and crew during our Maritime Operator Safety System audits.

Our work underway to develop an online interface that enables greater, and more efficient, digital interaction between the sector and Maritime NZ will allow us to more clearly communicate requirements (including medical), and seafarers will be enabled to more easily report changes to their medical status.

### **7** Key lessons

### Ngā akoranga matua

- 7.1. Medical fitness for duty should be considered an ongoing condition rather than a single moment in time when issuing a medical certificate.
- 7.2. Any new medications should be considered for potential performance-impairing effects.
- 7.3. Master incapacitation is a significant risk on sole-charge vessels.
- 7.4. Management needs to be adequately resourced to ensure the effective implementation of safety management systems.

## 8 Data summary Whakarāpopoto raraunga

#### Vehicle particulars

Name: Fiordland Navigator

Type: passenger vessel

Limits: inshore limits

Length: 38.20 metres

Breadth: 10.00 metres

Gross tonnage: 693.00 tonnes

Built: 2001

Propulsion: two 485 kilowatt coupled to shafts and propellers

Service speed: 10 knots

Owner/operator: Real Journeys Ltd

Port of registry: Invercargill

Minimum crew: 4

Date and time 24 January 2024, 1807

**Location** Doubtful Sound

Persons involved 57 passengers and nine crew

Injuries minor

**Damage** moderate

## 9 Conduct of the inquiry Te whakahaere i te pakirehua

- 9.1. On 24 January 2024, Maritime New Zealand notified the Commission of the occurrence and where the *Fiordland Navigator* had run aground. The Commission opened an inquiry into that incident under section 13(1) of the Transport Accident Investigation Commission Act 1990 and appointed an investigator in charge.
- 9.2. On the same day the Commission issued a protection order under section 12 of the Transport Accident Investigation Commission Act 1990, to preserve the evidence on board the *Fiordland Navigator*.
- 9.3. Between 25 and 29 January 2024, two investigators travelled to Te Anau and Queenstown to gather information. Another investigator travelled to Te Anau between 26 and 28 January to gather further information.
- 9.4. On 23 October 2024 the Commission approved a draft report for circulation to seven interested parties for their comment.
- 9.5. Six interested parties provided detailed submissions, and one interested party replied that they had no comment. Any changes as a result of the submissions have been included in the final report.
- 9.6. On 27 February 2025 the Commission approved the final report for publication.

# **Abbreviations Whakapotonga**

FMG Fatigue Management Guidelines

GM General Manager

MSCD Minimum Safe Crewing Document

MTOP Maritime Transport Operator Plan

SLM Senior Launch Master

SRL Skipper Restricted Limit

# **Appendix 1 Certificate of Medical Fitness – National or Ring-Fenced Seafarers**

|   |                   |                    | ARITII<br>NEWZEA       | VIE<br>LAND |
|---|-------------------|--------------------|------------------------|-------------|
| Certificate of Medical Fitness – Nat  |                   |                    |                        | S           |
| This certificate may be completed by any General Practitioner re  | egistered with th | ne Medical Council | of New Zealand.        |             |
| Seafarer Surname: F   | irst Name(s):     |                    |                        | _           |
| Date of birth (dd/mm/yyyy): Male  |                   | Female             |                        |             |
| Maritime Certificate Type: National Deck (Select one only)  |                   | Ring-fenced Dec    | k                      |             |
| National Engineer   | ing               | Ring-Fenced En     | gineering              |             |
| GP to complete: have evaluated the above-named examinee in accordance with Mari   | itime Rules Pari  | t 34.              |                        |             |
| Date of examination: (DD/MM/YYYY)   |                   |                    |                        |             |
| Does the seafarer meet vision standards?  | Yes               |                    | No                     | ]           |
| Does the Seafarer have binocular or monocular vision?   | Binocular         |                    | Monocular              | ]           |
| <ul> <li>Does the seafarer meet the vision standards without<br/>visual aids?</li> </ul>  | Yes               |                    | No                     | ]           |
| Does the seafarer meet colour vision standards?   | Yes               |                    | No                     | ]           |
| Ooes the seafarer have satisfactory hearing?  | Yes               |                    | No                     | ]           |
| Medical category: Choose from A, A(   | DBCD              | or F               |                        |             |
| f category B, state any restrictions below (i.e. restrictions on duties, g  |                   |                    |                        |             |
| realists y D, state any restriction of below (i.e. restriction of structure), g   | yoograpi iio aroo | , 0.0/.            |                        |             |
|   |                   |                    |                        |             |
|   |                   |                    |                        |             |
| f C or D, the seafarer can be re-examined after weeks (ca   | itegory C) or     | months             | (category D)           |             |
| Expiry: Standard - Certificate valid for 2 years from   | date of exami     | nation             |                        |             |
| Limited – Certificate validity limited to date _  |                   | (DD/MM/YYYY)       |                        |             |
| Medical practitioner's name and signature:  | Sea               | farer's signature: |                        |             |
|   |                   |                    |                        |             |
|   |                   |                    |                        |             |
| ICNZ ID:  |                   |                    |                        |             |
| afarers: Camy a copy of this certificate when working on a ship. If you are iss<br>emailing <u>seafarers@maritimenz.govt.nz</u> | ued a category E  |                    | you can apply for re-e |             |

## **Appendix 2 RealNZ internal medical assessment** form

#### Real NZ Medical Examination (Form A)

 $\label{lem:medical} \mbox{Medical questionnaire and examination report for Coach Driver's \mbox{License} \\ \mbox{and/or Launch Master Ticket validation}.$ 

| Date          |  |
|---------------|--|
| Name          |  |
| Date of birth |  |
| Gender        |  |

Are they a patient of this Practice

YES / NO

If not, have you access to their past medical history

YES / NO

Have they previously been issued a certificate

YES / NO

#### 1. Past and Present medical history

|   | YES | NO | N/A | NOTE |
|---|-----|----|-----|------|
| Cardiovascular Disease / CVRA >10%              |     |    |     |      |
| Respiratory Disease                             |     |    |     |      |
| Neurological problems including<br>Epilepsy     |     |    |     |      |
| Fainting attacks, blackouts, giddiness, vertigo |     |    |     |      |
| Insulin dependent diabetes                      |     |    |     |      |
| Gastrointestinal disorders (IBD, etc)           |     |    |     |      |
| Significant psychiatric or mood disorders       |     |    |     |      |
| Drug or alcohol problems                        |     |    |     |      |
| Eye Problems                                    |     |    |     |      |
| Hearing Defects                                 |     |    |     |      |



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|                                | _ |  |
|--------------------------------|---|--|
| Disorders of Loco Motor System |   |  |
| Other disorders                |   |  |
| Allergies of note              |   |  |
| Prescribed medications         |   |  |
| Notes                          |   |  |
|                                |   |  |

#### 2. Medical checks completed

|  | YES      | NO | N/A | NOTE |
|--|----------|----|-----|------|
| Height and Weight                            |          |    |     |      |
| Visual acuity and visual fields              |          |    |     |      |
| Hearing (Audiogram within past 2 years?)     |          |    |     |      |
| Blood Pressure                               |          |    |     |      |
| CVS examination incl. Risk Factor assessment |          |    |     |      |
| Respiratory Examination                      |          |    |     |      |
| Focused Neurological Examination             |          |    |     |      |
| Alimentary System Examination                |          |    |     |      |
| Locomotor System                             |          |    |     |      |
| Mental Capacity                              |          |    |     |      |
| Genitourinary System                         |          |    |     |      |
| Notes  | <u> </u> |    | 1   | 1    |



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#### 3. Immunisation Currency

| Have these been offered? If required for employee's role | Declined | Given | Current | NOTE |
|--|----------|-------|---------|------|
| Hepatitis A  |          |       |         |      |
| Hepatitis B  |          |       |         |      |
| Tetanus  |          |       |         |      |

#### 4. Medical tests completed

|   | YES | NO | N/A | NOTE |
|---|-----|----|-----|------|
| Urine   |     |    |     |      |
| ECG (2 yearly)                                    |     |    |     |      |
| Spirometry (2 yearly)                             |     |    |     |      |
| Glaucoma Check                                    |     |    |     |      |
| Blood Tests (HbA1c, Lipid profile as appropriate) |     |    |     |      |



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## NOTES ON MEDICAL CHECKS, TESTS, AND IMMUNISATIONS

| Doctor Name |  |
|-------------|--|
|             |  |
| Practice    |  |
|             |  |
|             |  |
|             |  |
| Date        |  |
|             |  |
| Sign        |  |
|             |  |

#### Patient consent for information release

I hereby consent to the release of this information to Real NZ in the event it is deemed necessary by my medical practitioner.

| Name |  |
|------|--|
| Date |  |
| Sign |  |



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# **Appendix 3 Role deliverables**<sup>26</sup> Head of Maritime Operations

The Head of Maritime is the Maritime expert for the Wayfare group. The role acts as the Maritime advisor to all parts of the operations as well as the custodian of the MTOP (Maritime Transport Operator Plan), holding responsibility for the day-to-day management and administration of all activities conducted under this plan.

#### Role Deliverables

As the Head you will lead, drive, and own the end-to-end maritime operations across all our locations and experiences. You will have full responsibility for providing assurance across all maritime operations, vessels and ensure maritime employees comply with NZ Maritime statutory regulations, MTOP and the Wayfare group maritime policies and procedures. The role has responsibilities to the Health and Safety committee of the Board.

#### Maritime Compliance, Documentation and Reporting

- Develop, maintain and be the subject matter expert of the company's Maritime Transport
   Operator Plan (MTOP) including providing leadership, guidance, and advice in this space.
- Ensure stakeholders involved in the operation, management and maintenance of maritime assets operated under the MTOP thoroughly understand, implement and adhere to the MTOP.
- Maintain comprehensive knowledge of all Maritime NZ (MNZ) legislative rules and local authority regulations in relation to the management of vessels, maritime employees, and marine infrastructure.
- Ensure all maritime related documentation, manuals, logs, registers, and procedures are relevant, regularly maintained and easily accessible on the company's sharing and document storage platforms.
- Ensure all vessels are always carrying the correct documentation and certification and MNZ Operator Certificates are displayed as required in each location.
- Lead the relevant monthly, quarterly, and annual vessel audit activities, reporting and corrective actions as per the MTOP and legislative requirements.
- Lead maritime related investigations across the group, including the reporting both externally to MNZ and internally and managing any outcomes.
- Work closely with the Chief Operating Officer, Chief Experience Officer and General Managers of Fiordland/Stewart Island and Queenstown Experiences to identify and manage the maritime risks.

<sup>&</sup>lt;sup>26</sup> Note that the Wayfare Group was formed in 2018 but was relaunched as RealNZ on 1 October 2021.

- Responsible for identifying, monitoring, and managing non-conformance required actions in accordance with the MTOP.
- Lead by example with organisational excellence encouraging others to ensure all administration, documentation and reporting is accurate, detailed and meets requirements.

#### **Maritime Operations**

- Partner with the Chief Experience Officer and GMs of Experiences to ensure the maritime component of the experiences meets expectations and requirements. Ensure any new or enhanced maritime related products take into consideration operational parameters and collaborate with the Experience teams to solve complex maritime issues.
- Partner with and provide advice to the Head of Asset Management and Engineering team
  with regards to vessel modifications and improvement requirements. Provide expert
  advice on user requirements with regards to wharves, moorings, and lines. Ensure these
  meet all the required legislative and safety needs. Maintain assurance that all maritime
  infrastructure is maintained to the appropriate standard, and where required
  certification is held.
- Partner with the Head of Asset Management and relevant GMs of Experiences to develop and deliver the Fleet Maintenance Plan.
- Responsible for ensuring all maritime equipment and vessels are operated and maintained in accordance with the parameters set by the manufacturers.
- Work with the Experience teams to consider operational risk and contingency planning.
- · Support any emergency response requirements.
- Commit to sustainable management and regularly look for new initiatives to foster this;
   keep a watching brief on local environmental issues and developments.
- Act as the maritime primary point of contact for MNZ, Harbour Masters, Third Parties and Local Authorities
- Partner with the Chief People Officer and the Health & Safety team to ensure the maritime specific components meet legislative requirements and that the company's health and safety policies and procedures and systems are adhered to across the maritime operations.
- Work closely with Experience and Commercial teams in the marine sections of the Insurance programme.

#### Leadership & Development

- · Lead the Maritime working group.
- Develop and coach high performing operational teams who continue to contribute to the smooth running of our day-to-day maritime experiences, delighting our customers and delivering unique memories.
- Create an environment for empowerment, agility and learning for your teams to run their
  operations with a clear focus around customer experience, compliance, safety, and
  excellence in operational delivery.
- Challenge your team to exceed their expectations, targets and support them in achieving their personal growth and development goals.
- Foster innovation within your team and encourage them to make decisions that create value.
- Act as a role model setting the standards for professionalism within the maritime space.

- Collaborate with the Chief People Officer, Chief Experience Officer and GM Fiordland/SI
  Experiences on the development and delivery of maritime focussed training and
  development through the Fiordland Learning Hub.
- Represent the Wayfare Group in Industry forums

## **GM Fiordland/Rakiura Operations**

#### Purpose of Position

Each of our Experiences form the heart of our business, continuously surprising and delighting our guests. Ensuring the experience operates efficiently and effectively are key performance deliverables – making sure each part of the experience works as it's meant to when it should and to the highest standard. Critical to the success of this role is the leadership capability to create a culture within the workforce that promotes collaboration, is aligned with our values and strives for continuous high performance.

Reports to: Chief Conservation Officer

**Direct Reports:** 

#### **Role Deliverables**

As the GM, you will lead the Fiordland/Rakiura operation, ensuring a smooth experience and the successful delivery of activities for our guests and our people across the region. You will have responsibility for the execution of the experience operations, keeping the 'cogs turning and the food flowing' as you and your team anticipate and respond to the needs and expectations of our guests, creating moments of delight throughout their time with us. A leadership role model, you inspire your team to go the extra mile, to bring their best and create an empowering culture and workplace to deliver moments of magic.

#### Operational Excellence

- Ensuring the operation is running effectively, efficiently and safely at all times is the
  number one priority. Setting your team up to be consistently delivering and
  prepared for anything that may occur, responding with a calm and measured
  approach to problem solve with ease, ensuring the confidence of those around
  you.
- Strong bias towards ensuring efficient operational spend. Enabled to make
  recommendations on spend and revenue generating options engaging with the
  respective leaders before commencing execution to ensure alignment with the
  overall strategy and direction of the group as a whole.
- Consult in planning and prioritising activity for R&M activity within your Experience.
   Working with the Asset & Engineering team for collective agreement to enable the team to deliver for the Fiordland/Rakiura Experience.

 Collective, not sole ownership, of the P&L with your business partners from across Finance and Sales. Work in collaboration to achieve the financial and commercial objectives of the Experience in line with the strategic priorities and deliverables of the business.

#### **Guest Experience**

- In collaboration with your business partners and technical experts, you will be
  collectively responsible for delivering guest centric solutions with key members of
  the product and centre of excellence teams to maximise the growth α profitability
  of the experience.
- You and your team will respond to the voice of the customer through our sales and marketing channels, developing efficiencies and streamlining touchpoints in the experience to refine and deliver a seamless guest experience that responds to the needs and wants of our guests and our trade partners.
- Role model guest-centric behaviour and be an advocate for change across your operation. Understand implications and anticipate possible impacts of relevant sector trends, issues, and requirements of our guests.
- Work with the business partners to make change simple, to ensure a 'yes and, rather than a 'but, can't' way of operating and delivering as needed.
- Be the face of Fiordland/Rakiura Experience areas, be a leader within this
  community, working closely with others across the business to maintain
  relationships with key stakeholders.
- Collaborate with the Concessions & Consents Manager and Asset teams to identify and solve complex operational or regulatory issues to ensure continuous operation and experience delivery.

#### Leadership & Development

- Develop and coach high performing operational teams who continue to smoothly run our day-to-day experience requirements, delighting our customers and delivering unique memories.
- Create an environment for empowerment, agility and learning for your experience leads to run their operations with a clear focus around customer experience, compliance, safety and excellence in operational delivery.
- Challenge your team to exceed their expectations, targets and support them in achieving their personal growth and development goals.
- Foster innovation within your team and encourage them to make decisions that create value.

## Senior Launch Master – Fiordland/Rakiura

#### **Purpose of Position**

The Senior Launchmaster contributes to the effective implementation of our Maritime Transport Operator Plan (MTOP) within their geographical areas of responsibility.

In partnership with the Experience Leads and Maritime Operations team, this role will ensure all Launchmasters/ crew operate vessels within the legislative requirements (MNZ & local body authorities) and the RealNZ Group guidelines. The role sets the standards and presentation of the Experience. This includes role modelling delivery expectations of the crew – supporting the Experience leads and ensuring delivery is in alignment with the overall strategic objectives.

As the Lead Launchmaster, you will be rostered yourself, with time allowed for the leadership aspects of your role.

**Reports to**: GM Fiordland & Rakiura Experiences

Dotted report line to the Head of Maritime Operations for technical/compliance leadership

Direct Reports: Launch Masters – Fiordland/Rakiura

#### Role Deliverables

- Ensure the day-to-day practical elements of the MTOP are being adhered to through regular engagement with the vessel Launchmasters and crew. This includes but not limited to ensuring safe operating practices are always followed, planned maintenance checks, voyage/trip planning is conducted, and management of all hazards is maintained and recorded.
- Working within the Experience leadership team, will have an active role in the development and evolution of the Experience, driving the agreed service standards and presentation of the Experience, the team and the asset.
- As a leader across the Experience, this role will uphold the highest standards of delivery and will positively coach and encourage others to deliver exceptional experiences with pride and ownership.
- Partner with the Experience and Maritime teams to ensure all LMs and crew operating within the experience, are cleared to operate vessels and hold current MNZ qualifications, medicals, endorsements, exemptions, certifications, and any other required documentation.
- Take a lead role, in collaboration with the relevant Experience Lead and Head of Maritime Operations, in the recruitment, selection and onboarding of Launch Masters

- Support the Head of Maritime Operations and Experience Managers to pro-actively manage and/or minimise known operational risks and hazards of all vessels contained within the MTOP for your area of operation.
- Take a lead role in the co-ordination of vessel/coastal relocations, working collaboratively across the Head of Maritime Operations, Experience Leads and Launch Masters.
- Work closely with the Experience, identifying opportunities to drive productivity and efficiency – always seeking to find ways to evolve and improve the experience.
- Provide support and advise (but not own) the Launchmaster roster development in conjunction with Experience leadership including the appropriate levels of support and pastoral care. Expect clear communications and discussions between Experience leads, Experience GM and SLM.
- Lead contact for any emergency in your area of operation, working together with the GM, Head of Maritime Operations, the Experience and other RealNZ staff to support the crisis.
- Maintain key relationships with partners across the region including third parties and local authorities.
  - Regular engagement with the Asset Management team; proactive planning and discussion for maintenance activities and collaboration through survey season.
- In collaboration with the Maritime Operations team, contribute to planning and completing of reviews including annual reviews of relevant documentation, SOPs and operating manuals for the LMs and the vessels.
- Partner with the HOM in LM clearances including initial and refresher clearances, and high-speed endorsement clearances for your Experience area.
- In conjunction with the Experience Lead, conduct annual competency and performance discussions, ensuring skippers and crew are competent and fit to safely operate the vessels.
- Identify training, competency gaps and opportunities to the Head of Maritime Operations and Experience GM
- Create an environment for empowerment, agility and learning for the LMs with a clear focus around customer experience, compliance, safety, and excellence in operational delivery.

#### Other Duties

To undertake any other duties as determined by your manager.

 Sometimes in the course of your role, you may be delegated responsibility by your manager, or need to report to someone who has been delegated responsibility.

## Kowhaiwhai - 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 haumaru) 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 'haumaru' is 'safe' or 'risk free'.

## Corporate: Te Ara Haumaru - 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: rerewhenua - 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-2022-206 | Charter fishing vessel, i-Catcher, capsize, Goose Bay, New Zealand, 10 September 2022                                       |
|-------------|---|
| MO-2023-206 | Fishing vessel, Austro Carina, Stranding at Red Bay, Banks Peninsula, 24 September 2023                                     |
| MO-2023-202 | Collision between Passenger Ferry, Waitere and recreational vessel, Onepoto, Paihia, Bay of Islands, 13 April 2023          |
| MO-2023-204 | Bulk carrier, Poavosa brave, serious injury, off Tauranga, 23 June 2023   |
| 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<br>September 2022                           |
| MO-2023-201 | Passenger vessel Kaitaki, Loss of power, Cook Strait, New Zealand, 28 January 2023  |
| MO-2021-204 | Recreational vessel, capsize 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                |