



Accident Report  
*Marina*  
Grounding, Port Taranaki on  
17 May 2004



REPORT NO.: 04 3466

VESSEL NAME: *MARINA*

### Casualty Details:

Date of Casualty: 17 May 2004

Time of Casualty: 1938 hours New Zealand Daylight Time (NZDT)

Casualty Type: Grounding

Casualty Location: Port Taranaki

Weather Forecast Area: Abel

Investigator: Domonic Venz



REPORT NO.: 04 3466

VESSEL NAME: *MARINA*

### Vessel Details:

Ship Name:	<i>Marina</i>
Date of Build:	1938
Ship Category:	Fishing
Certified Operating Limit:	Offshore
Overall Length (m):	17.44
Maximum Breadth (m):	4.36
Gross Tonnage:	38
Net Tonnage:	13.45
Flag:	New Zealand
Registered Owner:	Waitapu Fishing Company
SSM Company:	SGS-M&I



## SUMMARY

On 17 May 2004, the inshore trawler *Marina* was returning to Port Tarakohe after a day of trawling in Golden Bay. On board was a relieving Skipper who had been running the vessel for three weeks. The vessel was on its final approach to Port Tarakohe when the Skipper noted that the autopilot control unit in the wheelhouse was giving an erroneous reading. He disengaged the autopilot and attempted to correct the alteration that he thought the autopilot had made. Shortly after this the vessel struck the western mole of the entry to the port. Some damage occurred to the stem of the vessel and it was slipped for repairs the next day.



# 1. Key Events

- 1.1 At 0500 hours, New Zealand Standard Time (NZST) on May 17 2004, the fishing vessel **Marina** departed Port Tarakohe bound for a day of trawling in Golden Bay. On board was a relief Skipper and two crew.
- 1.2 They trawled around the greater Golden Bay area for the day.
- 1.3 At about 1800 hours, the Skipper decided to head back to port. He made passage broadly south towards Port Tarakohe using the autopilot while the crew cased up the fish and stowed it away in the hold.
- 1.4 At approximately 1930 hours, the vessel was about 200 metres north of the entrance to the port. When the vessel was on the outer lead lights, the Skipper reduced revolutions from steaming speed down to 600 revolutions per minute, giving about 4 knots.
- 1.5 The Skipper then went to disengage the autopilot so he could hand steer the vessel into the inner harbour. As he did so he noted that the rudder indicator lights on the autopilot were showing that the rudder was over at 4 'bars' to port. This was 4 out of a maximum of 7, which would indicate to the Skipper that the vessel was altering course to port.
- 1.6 The Skipper immediately turned off the autopilot and manually altered course to starboard to correct what he believed to be the autopilot induced alteration of course to port.
- 1.7 The vessel was still closing with the entrance to the Port, and the Skipper realised that he was very close to the rocks forming the breakwater. He put the engine full astern, but it was too late and with the helm to starboard the vessel struck the western breakwater of Port Tarakohe (See Appendix I- Approximate course).
- 1.8 The Skipper and crew then checked the vessel and found a small amount of water entering from around the stem forefoot area. The vessel was backed off and went alongside the wharf where a full internal inspection was carried out.
- 1.9 A 240-volt submersible pump was used during the night to control the ingress of water.
- 1.10 On 18 May 2004, the Skipper and the Owner steamed the vessel to Nelson for slipping and repairs.



## 2. Key Conditions

### 2.1 Vessel Details

- 2.1.1 *Marina* is an offshore fishing vessel built in 1938 and is of wooden construction. She has an overall length of 17.44 metres a breadth of 4.36 metres and a gross tonnage of 38. A 112 kW Gardner main engine powers the vessel through a 52" fixed pitch propeller.
- 2.1.2 Waitapu Fishing Company of Golden Bay owns the vessel.
- 2.1.3 The vessel has a valid Safe Ship Management (SSM) Certificate with SGS-M&I. The vessel is fit to ply Offshore limits within 100 nautical miles (nm) of the New Zealand Coast.

### 2.2 Manning Details

- 2.2.1 The Skipper holds a Skipper Deep Sea Fishing Boat (SBSFB) Certificate, obtained in 1987. He was Skipper of the vessel for 3 weeks prior to the grounding. He was filling in while waiting to go back to Australia where he is the Skipper of a deep sea trawler.
- 2.2.2 The two crew were both unqualified.

### 2.3 Weather Details

- 2.3.1 While the vessel was fishing further out in Golden Bay, the Skipper said that there was a southeasterly wind of 15 knots. When approaching the Port, there was little or no wind due to the shelter afforded by the high hills surrounding the Port.
- 2.3.2 Visibility was good throughout.



### 2.4 Navigation Equipment

- 2.4.1 The vessel was equipped with the following navigation equipment:
- Sestral 30938/V magnetic compass
  - Furuno FS 1550 single side band radio
  - Koden MD 307 radar
  - Furuno echo sounder
  - Cetrek 725 autopilot
  - Cetrek chartnav GPS
- 2.4.2 The Skipper was navigating using all the above equipment. The autopilot was indicating that the rudder was over to port. However, this was not the case as there was a faulty connection in the line between the control unit in the wheelhouse and the rudder feedback unit on the steering gear. It was the action of the Skipper putting the helm to starboard to counteract what he believed to be an alteration of course to port that directly brought about the grounding.

## 2.5 Human Factors

2.5.1 The Skipper suffered from a loss of situational awareness, which resulted in the grounding of the vessel. Situational awareness can be defined as the accurate perception of the factors and conditions affecting the vessel and crew during a specific time period.

2.5.2 Causes and/or symptoms of loss of situational awareness includes the following:

- Fixation or preoccupation
- Perception based on faulty information processing\*
- Ambiguity\*
- Complacency/familiarity
- Confusion\*
- Distraction
- Fatigue
- Overload/underload
- Poor communication
- Failure to meet targets
- Improper procedures or departure from regulations

The Skipper of *Marina* displayed a number of the above characteristics. These have been marked with a '\*'.

2.5.3 The Skipper had seen the Port entry lead lights in transit as he was slowing down to enter the Port. He also had radar and GPS to advise him of the vessel's heading and course. He relied upon the erroneous information given to him from the faulty autopilot. He became obsessed with the operation and correction of the perceived course change and failed to assess the situation visually and understand that the vessel had not changed course at all.

2.5.4 The Skipper is a well-qualified very experienced seafarer and has ample knowledge to understand that he should not rely on one aid to navigation.

## 2.6 Autopilot

2.6.1 The autopilot was inspected and repaired while the vessel was on the slip in Nelson. The service agents found water ingress in a junction box immediately aft of the fish hold on the cable between the processor unit in the wheelhouse and the rudder feedback unit on the steering gear.



### 3. Contributing Factors

*N.B. These are not listed in order of importance.*

3.1 The Skipper losing situational awareness.

### 4. Cause

#### Human Factor

<input type="checkbox"/> Failure to comply with regulations	<input type="checkbox"/> Drugs & Alcohol	<input type="checkbox"/> Overloading
<input type="checkbox"/> Failure to obtain ships position or course	<input type="checkbox"/> Fatigue	<input type="checkbox"/> Physiological
<input type="checkbox"/> Improper watchkeeping or lookout	<input type="checkbox"/> Lack of knowledge	<input type="checkbox"/> Ship Handling
<input type="checkbox"/> Misconduct/Negligence	<input checked="" type="checkbox"/> Error of judgement	<input type="checkbox"/> Other . . .

#### Environmental Factor

<input type="checkbox"/> Adverse weather	<input type="checkbox"/> Debris	<input type="checkbox"/> Ice	<input type="checkbox"/> Navigation hazard
<input type="checkbox"/> Adverse current	<input type="checkbox"/> Submerged object	<input type="checkbox"/> Lightning	<input type="checkbox"/> Other . . .

#### Technical Factor

<input type="checkbox"/> Structural failure	<input type="checkbox"/> Wear & tear	<input type="checkbox"/> Steering failure
<input type="checkbox"/> Mechanical failure	<input type="checkbox"/> Improper welding	<input type="checkbox"/> Inadequate firefighting/lifesaving
<input checked="" type="checkbox"/> Electrical failure	<input type="checkbox"/> Inadequate maintenance	<input type="checkbox"/> Insufficient fuel
<input type="checkbox"/> Corrosion	<input type="checkbox"/> Inadequate stability	<input type="checkbox"/> Other . . .

4.1 The vessel grounded on the breakwater when the autopilot provided false information regarding the rudder angle. The Skipper wrongly relied on this information which resulted in the grounding.



## 5. Opinions & Recommendations

- 5.1 The faulty junction box has been repaired and the autopilot is operating satisfactorily.
- 5.2 It is recommended that the Skipper be reminded of the need to obtain the vessel position and course by using all means available to him including by eye and by electronic means, such as GPS and radar. Also that the Skipper understand the needs to maintain situational awareness at all times.



# Appendix 1

