



Accident Report  
*Recovery II*  
Grounding, approximately 5  
miles south of Karamea  
on 17 May 2004



REPORT NO.: 04 3465

VESSEL NAME: *RECOVERY II*

### Casualty Details:

Date of Casualty: 17 May 2004

Time of Casualty: 0530 hours New Zealand Standard Time (NZST)

Casualty Type: Grounding

Casualty Location: 5 miles South of Karamea

Investigator: Domonic Venz



REPORT NO.: 04 3465

VESSEL NAME: *RECOVERY II*

### Vessel Details:

Ship Name:	<i>Recovery II</i>
Ship Category:	Fishing
Registered Length (m):	27
Gross Tonnage:	138
Official No.:	101278
Flag:	New Zealand
Ship Manager:	Donker Marine 1988 Ltd.



## SUMMARY

On 17 May 2004, the coastal trawler, *Recovery II*, left Greymouth. The vessel trawled its way north for the day; she hauled the last tow at 2300 hours, New Zealand Standard Time (NZST). The Skipper then started a slow steam north to a position that he wanted to fish in the morning. An unqualified Deckhand took the first watch from 0200 hours on 17 May. He fell asleep shortly after 0400 hours, that morning and the vessel grounded at about 0530 hours. The vessel was successfully refloated, but did sustain some minor damage to the rudder skeg propeller area.



# 1. Key Events

- 1.1 At 0800 hours, New Zealand Standard Time (NZST) on 16 May 2004, the fishing vessel *Recovery II* departed Greymouth. On board was the Skipper and three crew.
- 1.2 They cleared the Greymouth Bar and then the Skipper shot the trawl net. During the day they completed two long tows while heading north towards Cape Foulwind.
- 1.3 During the first tow, some of the crew including Deckhand 1 went to bed. They arose around 1100 hours to haul in the first shot.
- 1.4 The Skipper continued to tow for the afternoon and hauled the last shot at 2300 hours. He then left the deck and started to steam while the crew sorted and stowed the catch away.
- 1.5 Deckhand 1 and Deckhand 2 came into the wheelhouse at 0145 hours on 17 May, when the vessel was approximately 5 nautical miles (nm) west of Cape Foulwind. The Skipper told them that he wanted them to follow the course line on the GPS plotter and, if they got to the waypoint earlier than 0600 hours, then they were to stop the vessel (*See Appendix I - Vessel Seaplot chart: Position A start and position B stop*).
- 1.6 The Skipper activated the watch keepers alarm, using the key, and then went below to watch television for a short time. He then went to bed at about 0200 hours. Deckhand 2 also went to bed, leaving Deckhand 1 on watch until 0400 hours.
- 1.7 Deckhand 1 stayed in the wheelhouse on watch until about 0400 hours. He then reduced the main engine revolutions back to idle and went below to make a cup of coffee. After making the drink he returned to the wheelhouse and sat down in the navigation chair again. He decided that he didn't feel tired and would stand both watches until he woke the Skipper at 0600 hours.
- 1.8 Shortly after sitting down again he fell asleep.
- 1.9 The vessel grounded at about 0530 hours. Deckhand 1 and the Skipper woke shortly after the grounding (*See Appendix I - Position C: Grounding*) The Skipper came to the wheelhouse and realised that they were aground. All crew had assembled by now in the wheelhouse, so the Skipper sent them to check the vessel for damage and ingress of water.
- 1.10 The Skipper put the main engine full astern as the vessel was bouncing on the beach. The vessel slowly started to come astern off the beach. Momentum increased until the vessel was going astern at about 5 knots. While at this speed, the stern of the vessel struck the seabed, but continued on. The Skipper turned the vessel and headed out to deeper water.
- 1.11 The Skipper then inspected the stern gland and rudder post area and found some ingress of water around the stern gland. The rudder post had been pushed up about 20 millimetres.
- 1.12 At 0800 hours, the Owner was informed and the vessel steamed back to Nelson for slipping and repairs.



## 2. Key Conditions

### 2.1 Vessel Details

- 2.1.1 **Recovery II** is of aluminium construction. She has an overall length of 27.62 metres, a breadth of 6.85 metres and a gross tonnage of 138. A single 332 kW Caterpillar main engine powers the vessel through a standard fixed pitch propeller.
- 2.1.2 Endurance Fishing Company Limited owns **Recovery II**.
- 2.1.3 The vessel had a valid Safe Ship Management (SSM) Certificate with Survey Nelson Limited. The vessel was fit to ply as a fishing vessel unlimited, with special conditions noted in the SSM manual that restricted the vessel to lesser limits, when manned with lesser qualifications.

### 2.2 Manning Details

- 2.2.1 The Skipper holds a New Zealand Coastal Master's (NZCM) Certificate, obtained in 1998. He also holds a 2<sup>nd</sup> Class Diesel Trawler Engineers (2DTE) Certificate, obtained in 1999. He has been Skipper for Endurance Fishing, on various vessels, for the last 10 years.
- 2.2.2 Deckhand 1 was 17 years of age and from Greymouth. He has no maritime qualifications. He fished on **Recovery II** during the 2003 Hoki season, and started full time from Christmas 2003.

### 2.3 Navigation Details

- 2.3.1 The vessel was equipped with the following navigational aids: -

- Seaplot Pro GPS Plotter
- Furuno 96 Nautical Mile Radar
- Furuno GP 30/500 GPS Receivers
- Furuno GP 180 GPS receiver/plotter
- JRC JFV 250 Echo Sounder
- Uniden VHF Radio
- Furuno FS 1550 SSB Radio
- Wagner MK Auto Pilot
- Ocean Watch Watchkeepers Alarm
- Inmarsat C
- GM 21 Gyro Compass

- 2.3.2 All the above equipment was working satisfactorily. The Skipper had activated the autopilot and had put a waypoint on the Seaplot screen and its associated route. The Skipper had also set a cross track error alarm each side of the course to steer (*See Appendix I - Cross track error*).



2.3.3 The Skipper activated the watch keepers alarm using the key but did not remove the key as he stated he does most other times.

2.3.4 The Skipper instructed the two watch keepers to navigate the vessel to the waypoint and then to either stop the vessel, or to slowly steam north and south over the position. He had the main engine running at 600 revolutions, giving a corresponding speed of about 5 knots.

## 2.4 Weather Conditions

2.4.1 The weather conditions were described as flat sea with no wind and good visibility.

## 2.5 Human Factors

2.5.1 Deckhand 1 had been working on *Recovery II* for a number of months and was considered by the Skipper to be a competent watch keeper.

2.5.2 Deckhand 1 was well rested.

## 2.6 Training

2.6.1 The Skipper of Endurance Fishing Company Limited, did not have any formal training in place for the crewman. The Skipper had assessed him during previous watches and was happy with his ability to keep a watch.

2.6.2 In the Safety Management Policy Manual for *Recovery II*, the Skipper is required to enter all training and drills into the ships log. This had not been completed at the time of the accident.

2.6.3 There were no procedures in place to manage fatigue or formal instructions for watch keeping.

2.6.4 The Skipper/Owner, failed to train the crew and document this in the SSM manual, as required in the **New Zealand Safe Ship Management Code**: -

*'...6.3 The owner should establish procedures to ensure that new personnel and personnel transferred to new assignments related to safety and protection of the environment are given proper familiarisation with their duties. Instructions which are essential to be provided prior to sailing should be identified, documented and given....'*

2.6.5 The Skipper and Owner of *Recovery II* failed to fulfil their responsibilities, as required under **Maritime Rule Part 31 C.16 Watch Keeping Standards**: -

(1) *The owner and the Master of a fishing vessel must establish and implement Watch keeping procedures addressing:*

- (a) *for navigational watchkeeping*
- *the composition of the watch*
  - *the fitness for duty of watch keepers*
  - *navigation planning and duties*
  - *the use of navigational equipment*
  - *lookout duties*
  - *the notification of the Master of any change in weather conditions.*
  - *the protection of the environment*
  - *navigation with a pilot on board*
  - *any characteristics of the fishing vessel that may affect safe navigation*
  - *keeping an anchor watch*



- radio watch keeping

(2) The crew of a fishing vessel must comply with the watch keeping procedures established under Rule 31C.16(1).

## 2.7 Inspections and Audits

- 2.7.1 The local Maritime Safety Authority Safety Inspector (MSI), conducted the last flag state inspection of the vessel at Nelson on 15 October 2002. No deficiencies were noted at the time.
- 2.7.2 Survey Nelson Limited conducted an in water inspection followed by an out of water inspection between 21 and 29 October 2003.
- 2.7.3 Stability calculations were completed and forwarded to the vessel on 16 February 2004.

## 2.8 Safety Management Policy

- 2.8.1 **Recovery II** has a Safety Management Policy Manual, compiled by Survey Nelson Limited. Under the section **Designated Persons**, Land Based, there is a passage that reads “The land based designated person with the authority to ensure safe management of the ship is the Safety Manager of Survey Nelson Ltd” (See Appendix II - Excerpt from SSM manual).
- 2.8.2 Referring to the **New Zealand Safe Ship Management Code (NZSSMC)**, there is a definition contained under section 4 for Designated Person, which states “To ensure the safe operation of each ship and to provide a link between the owner and those on board, every owner, as appropriate, should designate a person ashore having direct access to the highest level of management. The responsibility and authority of the designated person or persons should include monitoring the safety and pollution protection aspects of the operation of each ship and to ensure that adequate resources and shore based support are applied, as required” (See Appendix III - Excerpt form NZSSMC).
- 2.8.3 As the Designated Person, Survey Nelson Ltd failed to fulfil their responsibilities to ensure that the vessel was operated in a safe manner, and that adequate resources and shore based support was applied.
- 2.8.4 On page 25 of the Safety Management Policy Manual, there is an acknowledgement table drawn up for all crew to sign. This had not been completed when the vessel was inspected after the grounding. Firstly, this would indicate that no persons sailing onboard **Recovery II** had read or understood the manual. Secondly, that Survey Nelson Ltd has not audited this particular part of the operation of the vessel.



### 3. Contributing Factors

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

- 3.1 The Skipper and Owner not having any formal training in place.
- 3.2 Deckhand 1 thought he was not tired and did not wake up his relief.
- 3.3 Deckhand 1 may have been fatigued.
- 3.4 No radar sector alarms were set and no shallow water echo sounder alarms were set.
- 3.5 The watch keepers alarm master key was left in the alarm and not with the Skipper, as it should have been.
- 3.6 The Owners and Safe Ship Management Company's failure to follow the procedures, as laid down in the NZSSMC, with regard to the proper training and shore based support for the Skipper and crew.
- 3.7 There was a systemic failure by the Skipper of ***Recovery II***, Survey Nelson Ltd and Endurance Fishing. All three failed to implement audit regimes, formal training procedures and formal operational procedures. The latter two failed to provide the Skipper with appropriate shore based support.



## 4. Cause

### Human Factor

- |  |  |  |
|--|--|--|
| <input checked="" 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 checked="" type="checkbox"/> Improper watch keeping 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 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 watch keeper fell asleep after deciding to do an extra watch.



## 5. Opinions & Recommendations

### 5.1 Opinions

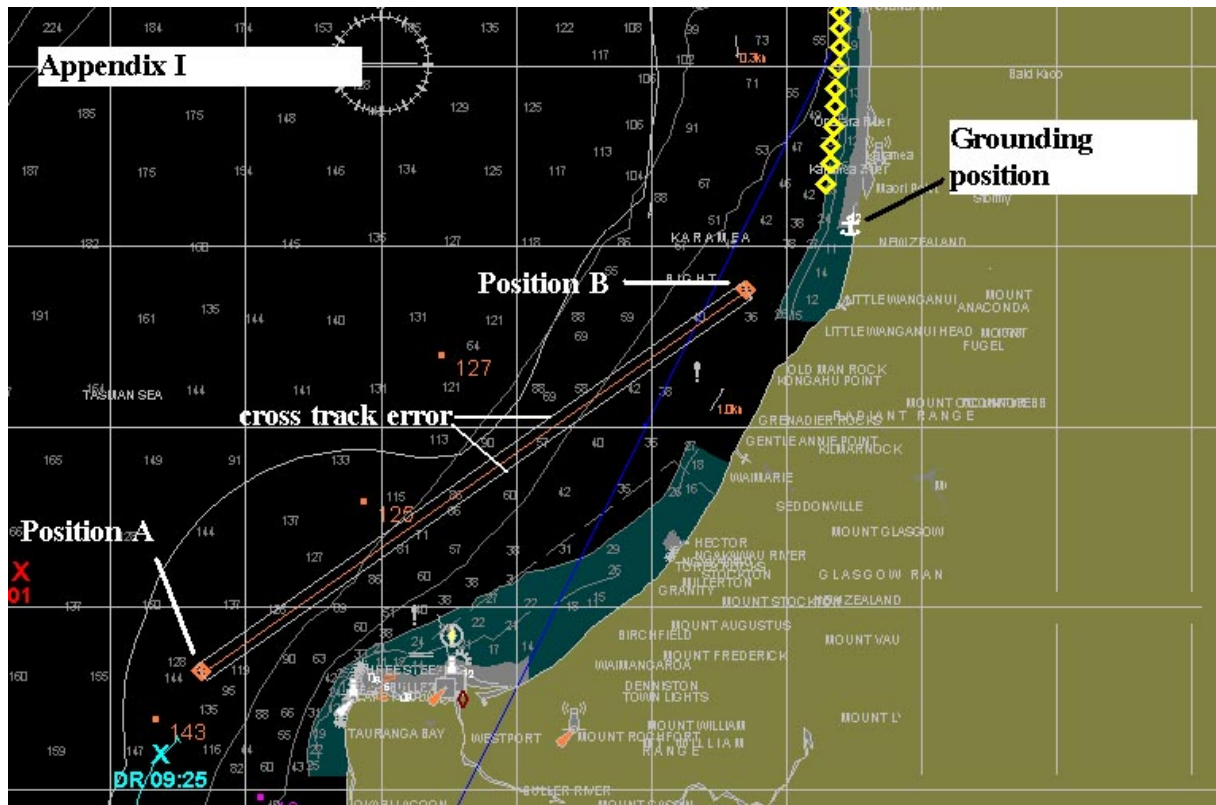
- 5.1.1 Endurance Fishing Company agreed that they did not fully understand their responsibilities as owners. A company representative attended a meeting chaired by the Operations Division of Maritime Safety Authority in late June 2004. This was to inform participants of their responsibilities contained in the Maritime Transport Act, Maritime Rules and the NZSSMC.
- 5.1.2 As Designated Person, Survey Nelson Ltd had a responsibility to oversee the safe operation of this vessel. It would be more appropriate in this case that Survey Nelson Ltd remove themselves from the Safety Management Policy Manual as the designated person and instead the Operations Manager or Shore Engineer of Endurance Fishing Company Ltd be listed as designated person.
- 5.1.3 The Skipper had been involved in a grounding on another Endurance Fishing vessel, in August 2000. He was Skipper of that vessel as well and was censured for his inattention with regard to watch keeping practises. Since this grounding the Skipper has implemented, with the support of Endurance Fishing, a number of initiatives. These include an induction training sheet to be signed by the trainer and trainee, watch keeping procedure training, to be signed by trainer and trainee, along with copies of relevant Maritime Rules.
- 5.1.4 The procedures referred to in 5.1.3 above have been implemented throughout the Endurance Fishing Company fleet.
- 5.1.5 Additional duties are required to be carried out under the Health and Safety in Employment (H&SE) Act. The crew on this vessel are all share fishermen and as such, are classed as being contractors, for the purposes of the H&SE Act. Therefore, Endurance Fishing is the Principal and has duties contained in Part 2 Section 18 of the H&SE Act, which states that no one is to be harmed while doing any work.
- 5.1.6 Endurance Fishing can be considered to be in control of a place of work under section 16 of the H&SE Act. This requires them to undertake the identification of hazards, of which fatigue is just one. The responsibilities arising under the H&SE Act, both in this instance, and with many other fishing vessel operators, is either not known or receives minimal compliance.



### 5.2 Recommendations

- 5.2.1 That Survey Nelson Ltd, investigate whether they are in the best position to be the shore based designated person. This should be a company wide investigation, and not only in respect of *Recovery II*.
- 5.2.2 That the Operations Division of the Maritime Safety Authority investigate and audit Survey Nelson Ltd with regard to the fulfilment of their responsibilities as designated persons for other vessels in the Survey Nelson Ltd SSM system.
- 5.2.3 That the Education and Communications Division of the Maritime Safety Authority give urgent attention to the implementation of an education campaign to inform fishermen and fishing vessel operators of their legal requirements under the H&SE Act.
- 5.2.4 The Skipper did not remove the master key from the watch keepers alarm when he retired to his bunk. It is recommended that he be censured for his failure to ensure the safe operation of the vessel.

# Appendix I



# Appendix II

Appendix II	Survey Nelson Ltd.	Ship Safety Manual	Recovery II
<b>Application</b>	The requirements of this manual apply to all personnel involved in the operation of the Recovery II.		
<b>Responsibility and Authority</b>			
<b>Land Based Management</b>	The land based safety management system is contracted to Survey Nelson Ltd.		
	Survey Nelson undertake to monitor and ensure the following:		
	<ul style="list-style-type: none"><li>• Safety Inspections of the ship;</li><li>• Audit of the Ship's Safety System;</li><li>• Safe Ship Management System training where necessary;</li><li>• Compliance to the Ship Safety management Code.</li></ul>		
<b>Shipboard Operation</b>	Compliance to this manual and the Code on board the ship is the responsibility of the ships Master.		
<b>Designated Persons</b>			
<b>Land based</b>	The land based designated person with authority to ensure safe management of the ship is the Safety Manager of Survey Nelson Ltd.		
<b>Shipboard</b>	The designated person with the authority to ensure safe management of the ship is the Master.		



## 1.3 Functional requirements for a Safe Ship Management System

Every owner should develop, implement and maintain a Safe Ship Management System which includes the following functional requirements:

- .1 a safety and environmental protection policy;
- .2 instructions and procedures to ensure safe operation of ships and protection of the environment in compliance with relevant New Zealand legislation;
- .3 defined levels of authority and lines of communication between, and amongst, shore and shipboard personnel;
- .4 procedures for reporting accidents and non-conformities within the provisions of this Code;
- .5 procedures to prepare for and respond to emergency situations; and
- .6 procedures for internal audits and management reviews.

## **SAFETY AND ENVIRONMENTAL PROTECTION POLICY**

- 2.1 The owner should establish a safety and environmental protection policy which describes how the objectives given in paragraph 1.2. will be achieved.
- 2.2 The owner should ensure that the policy is implemented and maintained at all levels of the organisation, both ship based as well as shore based.

## **OWNER RESPONSIBILITIES AND AUTHORITY**

- 3.1 The owner should define and document the responsibility, authority and interrelation of all personnel who manage, perform and verify work relating to and affecting safety and pollution prevention.
- 3.2 The owner is responsible for ensuring that adequate resources and shore based support are provided to enable the designated person or persons to carry out their functions.

## **DESIGNATED PERSON**

To ensure the safe operation of each ship and to provide a link between the owner and those on board, every owner, as appropriate, should designate a person ashore having direct access to the highest level of management. The responsibility and authority of the designated person or persons should include monitoring the safety and pollution protection aspects of the operation of each ship and to ensure that adequate resources and shore based support are applied, as required.

