

## **Report 96-212**

## Restricted-Limit Fishing Charter Boat Lambo

## foundering

Owhiro Bay, Wellington, south coast

26 November 1996

### **Abstract**

On Tuesday, 26 November 1996, at about 1326 hours, the restricted-limit fishing charter boat *Lambo* shipped waves through an open foredeck hatch, flooded and capsized in rough seas. The skipper and four passengers on board were rescued from the capsized boat without injury. A safety issue identified was the failure to heed an accurate weather forecast before embarking on the trip.

# **Transport Accident Investigation Commission**

# **Marine Accident Report 96-212**

Vessel Particulars:	
Name: Type: Class: Limits:	Lambo Trailer "Shark Cat" catamaran Not classed (under 6 m) Wellington and Porirua Regional and Extended River Limits
Passenger capacity:	Seven (in regional limits) Five (in extended river limits)
Length: Beam: Construction: Built: Propulsion:	5.64 m 2.46 m Glass Reinforced Plastic (GRP) By Gulfstream in 1989 Two 80 hp Yamaha outboard engines
Speed: Operator:	30 knots Owner/skipper
Location:	About one mile south of Owhiro Bay on the coast south of Wellington
Date and time:	Tuesday, 26 November 1996 at 1326 hours <sup>1</sup>
Persons on board:	Crew: 1 Passengers: 4
Nature of damage:	Saltwater damage to outboard motors and equipment
Investigator in Charge:	Capt. Tim Burfoot

96-212

<sup>&</sup>lt;sup>1</sup> All times in this report are NZDT (UTC + 13 hours)

#### 1. Factual Information

### 1.1 History of the voyage

- 1.1.1 On the evening of 25 November 1996, the skipper of the charter fishing vessel *Lambo* obtained a recorded Metphone weather forecast for the Wellington recreational marine area. A group of four passengers had booked a fishing trip for the following day.
- 1.1.2 According to the skipper, the forecast was for 15 knot winds from the north-west, gusting up to 25 knots. He thought those conditions would be acceptable for a fishing trip along the coast south of Wellington.
- 1.1.3 At about 0500 hours on Tuesday, 26 November, the skipper obtained another recorded Metphone weather forecast for the same area. The forecast had been updated at 0432 hours that morning (half an hour before the skipper telephoned). According to the skipper the forecast was for a north-west wind 15 to 20 knots, rising to 30 knots in the afternoon and did not mention anything about a gale warning being in force for Cook Strait. The skipper still thought that the forecast weather conditions were suitable for the *Lambo* to operate safely along the south coast.
- 1.1.4 The recorded Metphone message that the skipper heard (provided by the New Zealand Metservice) was as follows:

Here is the forecast for the Wellington recreational marine area, recorded at 0432 hours New Zealand Daylight Time;

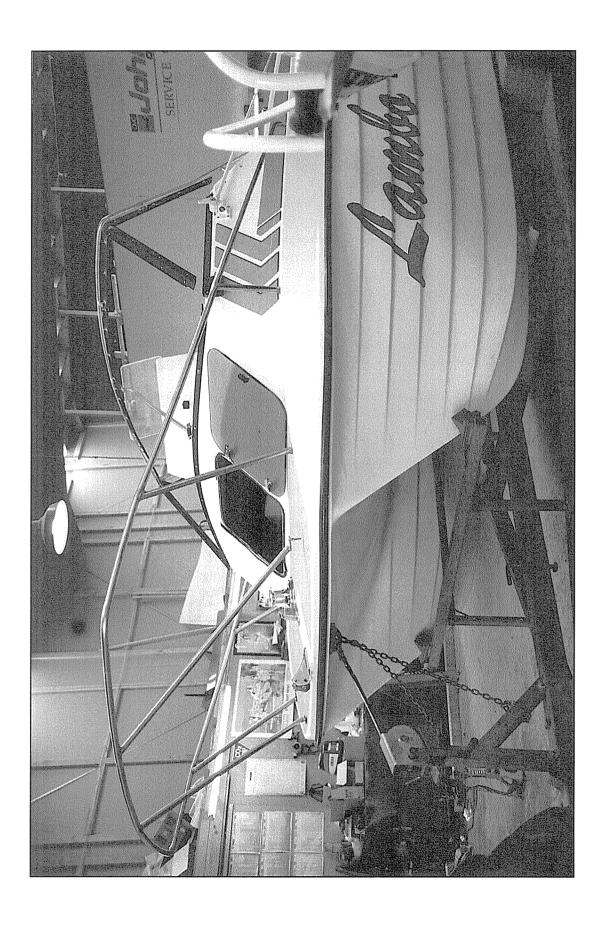
Situation; a ridge lies across northern New Zealand and a front is moving over the South Island. This front should reach Cook Strait late tomorrow morning.

Forecast to midnight tonight for Wellington Harbour and the south coast from Sinclair Head to Baring Head; northerly 15 knots rising to 20 knots this morning and to 30 knots during the afternoon and evening. Slight sea becoming rough. Fine weather

Outlook until midday	y Wednesday;	becoming north-west 20	knots.
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Swell	tore	cast	•••••						
	The	next	update	of this	s forecast	due	by 05:4	40	am.

- 1.1.5 The skipper telephoned his clients and confirmed with them that the trip was on. The group met the skipper at the Evans Bay boat ramp, where the *Lambo* was launched from its trailer. The group comprised three adults (The trip organiser was in a wheelchair) and a 12 year old youth (the organiser's son).
- 1.1.6 The group each donned a life-jacket and boarded the boat. The skipper gave the group a safety talk, which included a description of what sea conditions to expect outside the harbour.
- 1.1.7 At 0712 hours the skipper called Wellington Harbour Radio (*Beacon Hill*) on VHF radio Channel 14 and reported that the *Lambo* was leaving Evans Bay; bound for just off Moa Point with five people on board; and that they expected to be back about mid-afternoon.
- 1.1.8 Beacon Hill acknowledged the message, gave the traffic movements around the harbour at that time and stated, "We have a northerly of about 15 at this end with a slight sea and swell at the entrance" (transcript from VHF recording). The skipper acknowledged the reply.



- 1.1.9 The skipper later recalled thinking the operator said "15 knots, gusting to 25 knots". He normally asked *Beacon Hill* for the latest forecast; on this occasion he assumed their forecast was 15 to 25 knots.
- 1.1.10 The skipper anchored the *Lambo* off Moa Point at about 0800 hours. He would normally have fished in the slight chop and ground swell that was running there, but with five people on board, and one of them in a wheelchair, he decided to move in closer in the lee of the coast off Houghton Bay. (Refer to Figure 1 for locations)
- 1.1.11 Between 0900 and 1100 hours the skipper tried several fishing spots in the area off Houghton and Island Bays. The wind had started to rise, gusting up to 30 knots. Between 1100 and 1200 hours the wind increased further still.
- 1.1.12 At about 1300 hours the skipper heard one of the Rail Ferries reporting to *Beacon Hill* on VHF Channel 14 that the wind was gusting to 40 knots in Cook Strait. The skipper discussed the situation with the group and it was agreed that they would head back at about 1500 hours due to the increasing wind.
- 1.1.13 The skipper decided to anchor close in off Owhiro Bay and try fishing there where he expected to find calmer sea conditions.
- 1.1.14 Three attempts were made to anchor off Owhiro Bay but the grapnel anchor would not hold. On the third attempt the skipper let the boat drag the anchor to about one nautical mile offshore, hoping that it would catch on a patch of rocky bottom.
- 1.1.15 The anchor would not hold so the skipper decided to retrieve it, move closer in-shore, batten the hatch down and return to the launching ramp. The sea had built up to a one-metre chop with the wind gusting up to about 40 knots.
- 1.1.16 According to the skipper, when he opened the forward-facing, side-opening hatch from inside the cabin to retrieve the anchor, the hatch securing cleat handle broke off in his hand. The *Lambo* had begun to take seas over the foredeck so he pulled the hatch closed over the rope and retrieved the excess rope, chain and anchor from over the side and stowed them in the cockpit.
- 1.1.17 Unable to secure the hatch using the cleat, the skipper intended to secure it by alternative means once back in sheltered waters.
- While the skipper attended to the anchor the *Lambo* had turned with its bow facing away from the wind. The skipper then turned the boat into the wind and brought it up onto the plane, heading back into Owhiro Bay at a speed of about 15 knots.
- The group organiser noticed that the hatch was open so he sent his son into the cabin to close it. The skipper, who could not see the hatch from his conning position, was unaware that it had blown open. When he saw the youth enter the cabin, and realised what he was attempting to do, he knew that he would have difficulty closing the hatch with the boat pounding into the sea as it was.
- The skipper reduced both motors to idle; the boat came off the plane, settled momentarily into a bow-down attitude, and a wave came through the front hatch. Before the skipper had time to react a second wave came through the hatch, filling the front cabin and washing the youth back out through the cabin doorway.

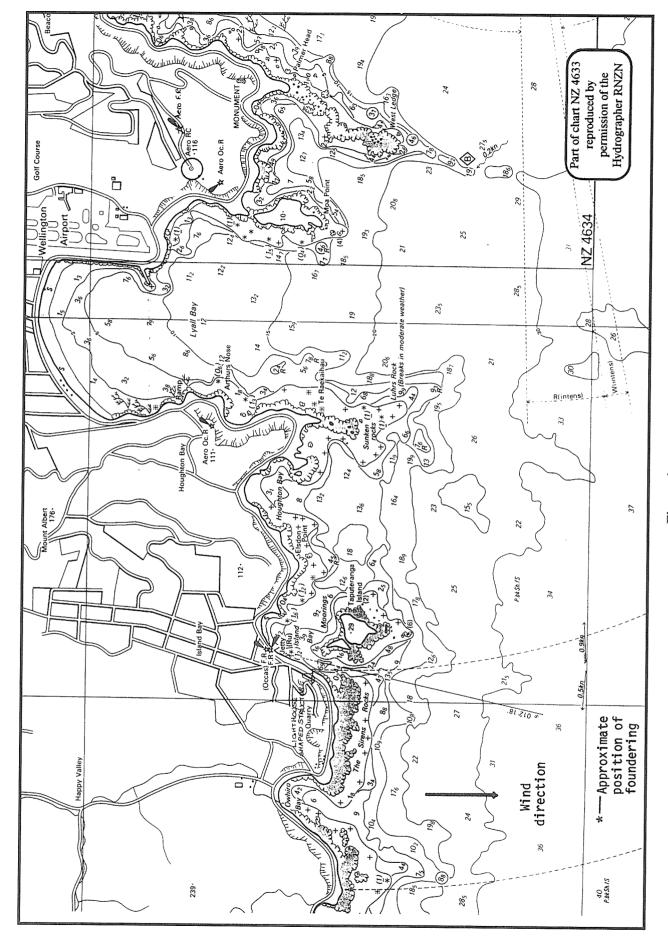


Figure 1 Part of south coast, Wellington

- 1.1.21 With the *Lambo* at a steep bow-down angle, the skipper put both motors into reverse in an attempt to stop more water entering the hatch. He sent out a mayday call on VHF channel 14 (recorded at 1327 hours) and repeated it on Channel 16. A person, who had a VHF radio in his car, responded on channel 16 and raised the alarm. *Beacon Hill* responded on channel 14 and alerted the Westpac rescue helicopter.
- 1.1.22 With the engines in reverse, the skipper turned the stern of the *Lambo* around and started backing into the waves, towards the shore. The passengers used two 20 litre buckets and a chilli-bin to assist two automatic bilge pumps (one in each hull) in removing the water from the boat.
- 1.1.23 The astern progress of the *Lambo* into the waves was causing the boat to ship spray and occasional waves over the stern, but in spite of this, the water level in the cockpit decreased. The skipper decided to try and power the Lambo ahead again to lift it onto the plane and drain the remaining water through the scuppers at the back of the cockpit; however, the starboard engine stopped during the transition from astern to ahead. The port engine alone could not produce enough thrust to raise *Lambo* onto the plane and more water entered the forward cabin through the hatch and over the top of the windscreen.
- 1.1.24 The skipper engaged the port engine in reverse again, but it too stopped and the boat began to list to starboard, filled with water and capsized.
- 1.1.25 As the *Lambo* capsized, the youth climbed over the gunwale and clung to the underside of the cabin between the two hulls. The other four occupants entered the water and later joined him on the hull. The group organiser, despite his disability, was a strong swimmer and was able to climb up onto the hull unassisted.
- 1.1.26 Within 10 minutes of the *Lambo* capsizing the rescue helicopter was overhead the stricken craft. A few minutes later a fishing vessel, which had heard the mayday, arrived and took the five occupants on board.
- 1.1.27 The survivors were taken ashore to hospital for observation, and later released. The boat, which remained afloat, was taken in tow by another fishing vessel and later retrieved onto its trailer at Island Bay.

#### 1.2 Vessel information

- 1.2.1 The *Lambo* was a 5.6 m Shark Cat catamaran constructed in GRP. A large cockpit and small forward cabin sat atop the twin hulls. The forward cabin could be accessed from the cockpit and a hatch with a 10 mm thick perspex cover gave access to the foredeck from within the cabin. The hatch cover, which was normally secured from inside the cabin by one window-latch, opened outwards and sideways to the port side of the boat.
- 1.2.2 The single window latch was the original type fitted by the boat builder during the construction of *Lambo*. The boat builder now fits a designated marine hatch with a four point securing system to each of his boats.
- 1.2.3 The skipper of the *Lambo* was surprised that the hatch had come open, despite it not being secured with the latch. He recalled operating the *Lambo* on many other occasions with the hatch cover unsecured and, according to him, it had not come open on those occasions.
- 1.2.4 The skipper could not recall what type of latch was fitted to the hatch. The handle was not recovered.

- 1.2.5 On the foredeck was an anchor winch, cleat and fairlead all enclosed by a stainless steel rail. There was no anchor-well fitted outside the cabin, so the anchor, chain and line had to be stowed inside. The only anchor carried was a grapnel anchor with six metres of 8 mm chain linking it to an 8 mm polypropylene line.
- 1.2.6 In each hull there was a 100 litre under-floor fuel tank (each motor drew from one tank) and, directly aft of the fuel tank, a large under-floor storage bin. Forward of each fuel tank, where the hull extended into the cabin, there was another storage space which was self contained from the rest of the hull. Each of these had been filled with loose blocks of polystyrene for additional flotation. Apart from the forward compartments the hulls were continuous, drain holes having been drilled in the transverse bulkheads to allow any water to drain back to the automatic bilge pump located at the rear of each hull.
- 1.2.7 Propulsion was by two 80 hp, standard shaft outboard engines which were operated using dual remote controls located at the helm position.
- 1.2.8 Navigation aids installed on the *Lambo* included the following:
  - GPS navigation
  - One VHF radio
  - One depth sounder
  - Two magnetic compasses
- 1.2.9 Safety equipment carried on the *Lambo* included the following:
  - One EPIRB
  - One flare pack containing parachute, hand-held and smoke flares
  - A life-jacket for each occupant
  - A line thrower with buoyant line
  - A first aid kit
  - Bailers
  - Flashlights
  - Deck knives

#### 1.3 Survey and operational information

- 1.3.1 The *Lambo* was under six metres in length; therefore, it was not required to be surveyed under the Maritime Transport Act 1994.
- 1.3.2 Being a restricted-limit boat, under 20 m in length, the skipper of the *Lambo* was required to, and did, hold a Local Launchman Licence.
- 1.3.3 The Wellington Regional Council (WRC) required any operator of a vessel plying for hire and reward to be duly licensed under the Wellington Harbour Board Bylaws.
- 1.3.4 In March 1996 the *Lambo* was inspected by a WRC officer and a licence issued to carry five persons in Wellington or Porirua Extended River Limits, and seven persons in Wellington or Porirua Regional River Limits.
- 1.3.5 The skipper was experienced in the operation of the *Lambo* and was knowledgeable in local conditions in and around Wellington Harbour, having fished the area for many years.

- 1.1.21 With the *Lambo* at a steep bow-down angle, the skipper put both motors into reverse in an attempt to stop more water entering the hatch. He sent out a mayday call on VHF channel 14 (recorded at 1327 hours) and repeated it on Channel 16. A person, who had a VHF radio in his car, responded on channel 16 and raised the alarm. *Beacon Hill* responded on channel 14 and alerted the Westpac rescue helicopter.
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- 1.3.5 The skipper was experienced in the operation of the *Lambo* and was knowledgeable in local conditions in and around Wellington Harbour, having fished the area for many years.

- 2.14 The skipper was working hard to recover the situation. Turning the stern of *Lambo* into the sea was a good idea in view of the open forward hatch and bow-down attitude of the boat; however with full astern power into a short steep sea, it was only a matter of time before one or both of the outboard motors ingested sea-water.
- 2.15 Given that the passengers were succeeding in lowering the water level in the boat, minimum astern power until the boat was all but empty of water would have been a more appropriate course of action.
- 2.16 The skipper's decision to change a winning situation and apply full power ahead into the sea with the use of one motor only was not a good one, and resulted in the boat foundering.

## 3. Findings

- 3.1 The *Lambo* was not required to be surveyed under the Maritime Transport Act 1994, but had been inspected, and licensed, by the WRC.
- 3.2 The skipper of *Lambo* held the required licence to operate fishing charters within Wellington and Porirua Extended River Limits.
- 3.3 The weather conditions recorded in Cook Strait and the Wellington recreational marine area on the day of the accident closely resembled those that were forecast.
- 3.4 The weather conditions on the day of the accident were marginal for the *Lambo* to operate in safety.
- 3.5 The skipper's decision to persevere with the trip left no margin in the safety limits of the vessel for any unforeseen element in the weather or sea conditions.
- 3.6 The hatch cover on the foredeck of the *Lambo* was not secure when the skipper started into the wind and sea towards the shore; the wind probably blew the hatch cover open.
- 3.7 The skipper, by suddenly reducing power when the *Lambo* was on the plane, caused the boat to settle in the water, trim forward and ship two consecutive waves through the open hatch.
- 3.8 The engines may not have stopped and the vessel may not have foundered had the skipper of *Lambo* not taken such radical measures in trying to recover the situation.
- 3.9 The skipper's decisive action in sending a mayday early resulted in early rescue and probably prevented injury to the occupants of the *Lambo*.

## 4. Observations

- Since the accident the *Lambo* has been fitted with a hatch cover with a four-point securing system, and with two new 90 hp outboard motors with long shafts to raise the level of the engines above the waterline.
- 4.2 Metservice now includes a brief mention of any gale warning in force for the parent sea area in the recreational marine area forecasts placed on Metphone.

11 June 1997

Hon. W P Jeffries Chief Commissioner

## Glossary of marine abbreviations and terms

AC alternating current rear of the vessel

beam width of a vessel

bilge space for the collection of surplus liquid

bridge structure from where a vessel is navigated and directed

bulkhead nautical term for wall

bus an arrangement of copper conductors (Bus bars) within a switchboard,

from which the circuits are supplied

cable 0.1 of a nautical mile

chart datum zero height referred to on a marine chart take over-all responsibility for the vessel

conduct in control of the vessel

conning another term for "has conduct" or "in control"

DC direct current

deckhead nautical term for roof

dog cleat or device for securing water-tight openings

draught depth of the vessel in the water

EPIRB Emergency Position Indicating Radio Beacon

even keel draught forward equals the draught aft

freeboard distance from the waterline to the deck edge

free surface effect where liquids are free to flow within its compartment

freshet term used to describe an increase of water level in the river due to rain

in the mountains

focsle forecastle (raised structure on the bow of a vessel)

GM metacentric height (measure of a vessel's statical stability)
GoM fluid metacentric height (taking account the effect of free surface)

GPS Global Positioning System

GS general service

heel angle of tilt caused by external forces

hove-to when a vessel is slowed or stopped and lying at an angle to the sea which

affords the safest and most comfortable ride

Hz Hertz (cycles)

IMOInternational Maritime OrganisationISOInternational Standards Organisation

kW kilowatt

list angle of tilt caused by internal distribution of weights

m metres

MSA Maritime Safety Authority

NRCC National Rescue Co-ordination Centre

point measure of direction (one point = 111/4 degrees of arc)

press force a tank to overflow by using a pump

SAR Search and Rescue

SOLAS Safety Of Life At Sea convention sounding measure of the depth of a liquid

SSB single-side-band radio

statical stability measure of a vessel's stability in still water

supernumerary non-fare-paying passenger

telegraph device used to relay engine commands from bridge to engine room

ullage distance from the top of a tank to the surface of the liquid in the tank

V volts

VHF very high frequency

windlass winch used to raise a vessels anchor