

Class B Accident Report

Paihia Duck

Collision

Okiato, Southern end of Russell on 20
November 2004

KEEPING YOUR SEA SAFE FOR LIFE



Maritime Safety

MARITIME SAFETY AUTHORITY OF NEW ZEALAND
Kia Maanu Kia Ora



REPORT NO: 04 3632

PAIHIA DUCK – COLLISION

When entering the water via a boat ramp at Okiato in the Bay of Islands, the amphibious craft *Paihia Duck* sustained damage to its left front wheel and rim and broke the ‘centre bolts’ which moved the rear axle out of its alignment.



Details of Vessel, Owner & Management, Classification, Navigational Equipment, Manning & Crew:

Name of Vessel:	<i>Paihia Duck</i>
Vessel Type:	Amphibious Craft
Brand Name:	Hydraterra
Flag:	New Zealand
MSA No.:	130377
Built:	2000 (approximately, in USA)
Construction Material:	Steel
Length Overall (m):	11.89
Motive Power:	168 kW
Safe Ship Management (SSM) Company:	Survey Nelson Ltd
Accident Investigator:	Hans Wetendorf

- **Owner Details**

Dunerider Ltd.

- **SSM Certificate**

The current SSM Certificate was issued by Survey Nelson on 17 June 2003, Certificate No. 230146, and valid until 28 September 2005.

- **Skipper Details**

The Skipper holds a Local Launch Operators Certificate endorsed for *Paihia Duck*. He also holds a New Zealand Driver's Licence which is endorsed for Classes 1, 2, 4 & P.

- **Crew Details**

There was one crew member in addition to the Skipper with no relevant qualification.

NARRATIVE

(See Appendix 1 – Chart)

On Tuesday 29 November 2004 at about 1445 hours New Zealand Standard Time (NZST), *Paihia Duck* entered the water at Okiato via a boat ramp next to the main ferry ramp, which was occupied at that time.

As *Paihia Duck* entered the water it struck an under water object; first at the left front wheel and later at the rear axle.

The Skipper decided to berth *Paihia Duck* alongside the pylons at the ferry ramp.

He checked the passengers and tried to ascertain the extent of the damage by lifting hatches. No damage or water ingress was noticed. The Skipper informed Dunerider Management about the situation and decided to proceed to the Opuā Marina boat ramp.

The Skipper managed to drive up onto the Opuā boat ramp and used the embarkation ladder to disembark all passengers.

Passengers were checked again and two passengers were driven to a local doctor and one to a physiotherapist. All three were checked and had only minor injuries.

Paihia Duck was inspected. The left front tyre and rim were seriously damaged and the centre bolts of the rear axle needed replacing.

Paihia Duck's front left wheel was changed and it was then driven to a workshop for further repairs.

Paihia Duck is an amphibious craft carrying passengers on public roads from Paihia to Waitangi and back to Paihia entering the water via a boat ramp to 'sail' to Russell. It returns to the road at Russell and proceeds to Okiato where it enters the water again and sails to Opuā. *Paihia Duck* then returns by road to Paihia.

The weather conditions on the day were described by the Skipper as fine. He obtained weather forecasts from a website and carried out a visual inspection of the sea conditions prior to the journey.

The Skipper joined Dunerider Ltd on 1 September 2004 and was trained by the owner/operator for about three weeks. He also met the previous Skipper and exchanged experience with him.

The Skipper, together with the owner, inspected all boat ramps at low water that were used in the journey and identified hazards.

Upon receipt of the draft report, two of the passengers had the following comments to make:

Passenger 1

“The vehicle toured the mainland at Pahia and then crossed over the water to Russell where we also did a land tour and when entering the water again at the Okiato boat ramp, the vehicle, for some reason, cut his turn onto the ramp and ran over some large rocks doing considerable damage to the underside of the vessel. It then listed to the left and collided with the jetty. The impact was quite severe and several people were thrown within the vessel, causing slight injuries. Many people, some elderly, were in shock and the driver would have been one of them.

The underside of the vessel was not inspected for damage at that point and the majority of the passengers were keen to leave the vessel right there and then, but we were told that as we did not appear to be taking in water, we would be entering the water again to travel to a pickup point just across the water, which Passenger 1 assumed from looking at the map, was Opuia. To their horror, they were taken across the water again, in the damaged vessel and another impact occurred when the driver attempted to land on the ramp due to the damaged under carriage. They were helped out down the ladder one by one out of the vessel and walked a few steps to dry land with the aid of a walkway built up with heavy wooden slabs placed in position by one of the men from the tour party. When inspection of the underside of the vessel was done, it was found that the whole back axle was completely twisted around and the front left hand wheel was off and there was steering damage also. Some of the tour party took photographs of the damage.

Three ladies were taken by car back to Paihia, driven by the female tour guide, as they had slight injuries and one lady in particular was very distressed.

They were given tea or coffee on their return to Paihia and Passenger 1 was taken to the Doctor as she had received a blow to the cheek bone and eyebrow after impact with the ladder within the vehicle. Another lady was taken for physiotherapy for a painful neck. The young female tour guide was very helpful and caring to the passengers.

The rest of the passengers, according to Passenger 1, endured a horror ride back to Paihia in their 4x4 Dune Rider, driven by the already shocked driver, under the instructions of the owner of the business. He said he was all right as it would probably all hit him later. Passenger 1 was told, even by the men of the group, that they felt most unsafe on the journey back due to the speed driven on the road and the condition of the suspension of the vehicle. This was the general opinion of all who travelled in the vehicle.

All passengers were offered and received a refund.

Passenger 2

“The vessel continued into the water and then drifted against the jetty pylon. Passengers assisted to prevent jetty contact by pushing against the jetty. A ferry was moored on the other side of the jetty and eventually the ferry Skipper assisted by directing his jets to starboard and created a wash which gently drifted us away from the jetty (and also a ferry boat that was moored alongside at the jetty). The impact was quite severe and several people were thrown within the vessel causing slight injuries.

The driver lifted an inspection hatch adjacent to the front passenger seats and did a quick inspection. However, the passengers were told that as they did not appear to be taking on water we would be entering the water again to stay afloat and travel to a pickup point just across the water, which Passenger 2 believed was Opuu.

When inspection of the underside of the vessel was done, it was found that the whole back axle was completely twisted around and the back axle was pushed back and the front left had wheel was off and there was steering damage also. The steering arm had snapped off and the tyre had also been torn off”.

Passenger 2, in commenting on the draft report, suggested that the following needed to be addressed:

- a) The vehicle is top heavy and the undercarriage and suspension appear too light for the load it carries.*
- b) Lap sash seatbelts should be worn by passengers in case the vehicle impacts, rolls or falls on its side.*
- c) The fibreglass sheeting on the roof in a rollover would be lethal because when it breaks it cuts like a knife.*
- d) If the vehicle rolls, the aluminium roof bars would not hold and the passengers could be crushed.*

Passenger 2 recalls that the Dune Rider was driven too fast down the hills because it was a “very tired” old underpowered vehicle and considerable momentum was required to assist it to climb the other side of the hill.

FINDINGS

On Tuesday 29 November 2004, the Skipper of *Paihia Duck* used the narrow boat ramp at Okiato because the main ferry ramp was occupied. The craft was damaged by a submerged object on entering the water.

Following dissemination of the draft report for comment, the Maritime Safety Authority received a Digital Video Disc (DVD) of the accident from one of the passengers. This confirms the evidence of the passengers who commented on the report, including the fact that the driver of the vehicle cut his turn onto the ramp.

SAFETY RECOMMENDATIONS

1. The boat ramp at Okiato, to be reassessed fully by the owner/operator and the Skipper for its suitability by *Paihia Duck*.
2. The findings of this reassessment should be included in the Safe Ship Management Manual/Operations Manual and be part of future training requirements.
3. It is recommended that the local Maritime Safety Inspector conduct a Flag State Inspection of this operation, including the suitability of the vehicle used, having regard to passenger safety.