

Accident Report

Collision

Sinbad 7 & Stingray 1

23 October 2006

Class B



NARRATIVE

At approximately 1510 hours New Zealand Daylight Time (NZDT) on Monday 23 October 2006, the water taxi **Sinbad 7** was approaching Bon Accord Harbour on Kawau Island after a voyage from Sandspit. Based on the readout from the Global Positioning System receiver, **Sinbad 7** was travelling at a speed of 24 knots over the ground. It was bound for Schoolhouse Bay (See *Figure 1*), where the vessel was due to pick up eight passengers.

At this time, the recreational vessel **Stingray 1** was heading in an easterly direction along the southern side of Bon Accord Harbour at a speed of approximately 10 -12 knots. It was towing an inflatable sea biscuit (See *Photograph 1*), upon which a 7 year old child was lying down on his stomach.

Sinbad 7 was navigated along the northern side of Bon Accord Harbour until it reached a position off Stockyard Bay (See *Figure 1*), when the Skipper altered course to head south east towards Schoolhouse Bay.

The Skipper of **Sinbad 7** first noticed the presence of **Stingray 1** fine on his starboard bow when he was approximately 250 metres off the other vessel. The Skipper decided, as he was the overtaking vessel with the duty, as the give way vessel, to keep clear, that he would pass astern of **Stingray 1**.

As he approached Schoolhouse Bay, the Skipper of **Sinbad 7** reduced speed to approximately 15 knots. When **Sinbad 7** was approximately 70 metres off **Stingray 1**, the Skipper of **Sinbad 7** altered course approximately 10 degrees to starboard to place **Stingray 1** right ahead of the water taxi. The Skipper did not alter any further to starboard as he expected **Stingray 1** would maintain its course and speed and pass clear onto the port bow of **Sinbad 7**. At that point, it was the Skipper's intention to turn to port and continue on passage to Schoolhouse Bay. The Skipper stated that he expected to pass clear of **Stingray 1** by approximately 10-15 metres. By this stage, the Skipper of **Sinbad 7** stated he had slowed to a speed of approximately 10 knots.

When **Sinbad 7** was approximately 25 metres off the port quarter of **Stingray 1**, the Skipper of the recreational vessel looked astern and observed **Sinbad 7** for the first time, just as the water taxi collided with the tow line of the sea biscuit. When this occurred, the child on the sea biscuit was thrown into the water and the sea biscuit was ripped apart by the propeller of **Sinbad 7**.

The mother of the injured child, who was a passenger on **Stingray 1**, stated she first observed **Sinbad 7** out of the corner of her eye. It appeared to be angled straight at the sea biscuit. She said it was on the plane at full throttle. She then saw her son go under the bow of the water taxi. The remains of the damaged sea biscuit then surfaced on their side of the water taxi and a few seconds later, she saw her son at a point astern of the water taxi.

The Skipper of **Stingray 1** had immediately powered off and stopped towing when he saw that a collision was imminent.

The Skipper of **Sinbad 7** felt the vessel lurch and he realised he must have hit something. He immediately put his engine into neutral. He then heard screaming and saw the child in the water on the vessel's starboard quarter. He put the engine astern to go and help.

In the meantime, the Skipper of **Stingray 1** had restarted his engine and instigated a round turn to port in order to return to the point of collision and assist.

Once close to the child in the water, one of the children on board **Stingray 1** jumped into the water to assist.

The people on board **Stingray 1** retrieved the two children from the water. The Skipper of the **Sinbad 7** retrieved the damaged sea biscuit.

The child who had been on the sea biscuit was distraught by what had occurred and was screaming.

As the water taxi was faster than *Stingray 1*, the Skipper of *Sinbad 7* was asked by the child's mother if he would take the injured child to Sandspit for medical attention. The Skipper offered to assist with first aid and to call another water taxi but declined to go to Sandspit as he had passengers to pick up.

The injured child was taken to Sandspit by *Stingray 1*. An ambulance was called and the child was taken to Starship Hospital in Auckland where he and his parents arrived at approximately 1645 hours.

On examination, the child was found not to be seriously injured. He was subsequently discharged from hospital at approximately 2030 – 2100 hours the same day.

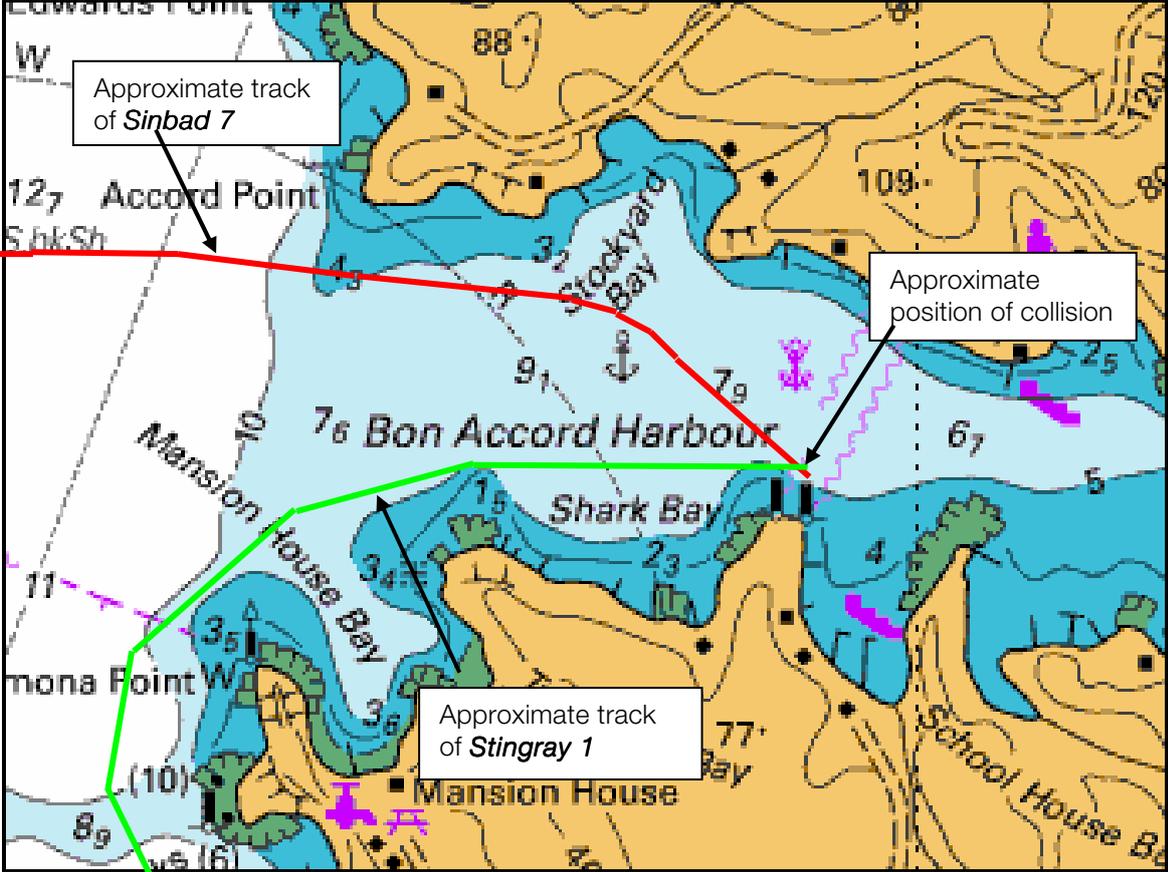


Figure 1
Extract From Chart NZ 5227

COMMENT AND ANALYSIS

WEATHER AND TIDAL CONDITIONS

The sea conditions at the time of the collision were calm with a 10-15 knot northerly wind. Visibility was good and it was partly cloudy and fine. There were no other vessels in the near vicinity.

Low water at Mansion House Bay (See *Figure 1*), was at 1452 hours.

EXPERIENCE AND QUALIFICATIONS OF THE TWO SKIPPERS

The Skipper of ***Sinbad 7*** is a 34 year old male. He holds a valid Commercial Launch Master's Certificate of Competency which was issued in 1995. He has 18 years experience as a professional mariner, the last 11 years as Skipper. He has worked for Reuben's Water Taxi's (Reuben's), the owners and operators of ***Sinbad 7***, for the previous two years and has been Skipper of ***Sinbad 7*** for approximately seven months. At the time of the accident, the Skipper was the only person on board ***Sinbad 7***.

The Skipper of ***Stingray 1*** is a 51 year old male who holds a Coastguard Offshore Yacht Master's Certificate. He has considerable maritime experience including several ocean voyages. At the time of the collision, in addition to the Skipper, there were four adults and two children on board the vessel and the child on the sea biscuit. One of the passengers held a Coastguard Coastal Yacht Master's Certificate.

PARTICULARS OF THE SEA BISCUIT

The sea biscuit, which was coloured predominately red and yellow, was 1.3 metres in diameter. The length of the tow a rope was approximately 27 metres. For the purposes of interpreting **Maritime Rule Part 22 – Collision Prevention**, a towing vessel and the vessel towed are treated as one vessel. Accordingly, in this accident, ***Sinbad 7***, as the give way vessel, was also required to keep clear of the sea biscuit.



Photograph 1
Remains of Sea Biscuit

The child on the sea biscuit was wearing a bright yellow Personal Floatation Device (PFD) which was of the correct size for his height and weight.

NAVIGATIONAL EQUIPMENT AND CERTIFICATION

Sinbad 7's navigational equipment includes a radar, a GPS receiver, a chart plotter and a speed log. The radar was not in operation at the time of the collision. The Skipper stated that he sometimes used the radar at night and also in bad weather but not in conditions such as this where it was daytime and the visibility was good.

Stingray 1's navigational equipment includes a speed log, but this was not operational at the time of the collision.

Sinbad 7 had a valid Safe Ship Management (SSM) Certificate that was issued on 22 March 2006 and is valid until 28 September 2009.

DRUGS AND ALCOHOL

A Police Officer from Warkworth Police questioned the Skipper of **Sinbad 7** when the vessel arrived at Sandspit shortly after the collision. The Police Officer observed no evidence to suggest that the Skipper had consumed any alcohol. A breath test was not conducted.

The Skippers of both vessels deny that they had consumed any alcohol or taken any drugs on the day of the accident. Neither Skipper was fatigued.

CONNING POSITIONS OF THE TWO VESSELS

The Skipper of **Sinbad 7** was seated at the conning position on the starboard side of the wheelhouse. This position offers good all round visibility that is marred only slightly by the presence of a mullion on either side of the wheelhouse canopy. The Skipper stated that he had a clear view ahead from his seat at the conning position.

When Maritime NZ inspected **Sinbad 7** after the accident, it was noted that because of the lack of any raised surround, to help minimise glare on the radar screen, echoes of targets such as vessels, were extremely difficult to pick up when seated at the conning position. Accordingly, even if the radar had been operational, it is doubtful that the Skipper would have picked up the echo of **Stingray 1** at an earlier time.

The Skipper of **Stingray 1**, who was standing, was conning the vessel from the starboard side of his vessel in the open air. He had good all round vision except to the extent that the presence of the other six people on his vessel would have marred his vision somewhat.

COLLISION

It is believed that **Sinbad 7** collided with the tow line at a point close to the sea biscuit.

Based on the evidence of both vessels it is estimated that this collision occurred about 100 metres off the southern coastline of Bon Accord Harbour.

PARTICULARS OF INJURIES TO THE CHILD

The injured child suffered a bruise to his forehead, severe bruising to his ankles and possible concussion from a bump on his head. He had two days off school to recover from his physical injuries. However, both the child and his parents were significantly traumatised by the events for an extensive period of time after the accident.

ROUTINISATION

It is considered very likely that the Skipper of **Sinbad 7** had become 'routinised' in his navigational and ship handling duties. It had become 'normal' for him to operate his vessel at high speed within the confines of harbours and in the close proximity of other vessels on a regular basis.

There were no defences, in the form of documented company procedures to help maintain safe navigational practices and no system of auditing to ensure compliance, that would help prevent the Skipper from becoming routinised in his day to day operation of the vessel.

PREVIOUS INVESTIGATIONS INVOLVING REUBEN'S WATER TAXIS

This represents the third collision involving vessels owned by Reuben's in the past two years and the second collision where the respective skippers of the water taxis have failed to keep a proper lookout and travel at a safe speed. Despite the second collision, which involved the constructive total loss of an unmanned vessel, no additional procedures had been put in place by Reuben's Water Taxis of the need to maintain a proper lookout and travel at a safe speed and particularly of the need not to exceed 5 knots when operating within 50 metres of other vessels or 200 metres of the shore.

LEGISLATION

Maritime Rule 22.5 - Lookout states:

"Every vessel must at all times maintain a proper lookout by sight and hearing as well as all available means appropriate in the prevailing circumstances and conditions, so as to make a full appraisal of the situation and of the risk of collision."

The Skipper of **Sinbad 7** breached the above Rule in that he did not observe **Stingray 1** visually until it was only approximately 250 metres distant. Further, he did not observe the sea biscuit or the child at all, despite the biscuit's bright colouration, before the collision occurred. Given the prevailing conditions with a calm sea and good visibility both **Stingray 1** and the sea biscuit should have been observed at a greater distance had a proper lookout been maintained. Whilst the Skipper failed to use his radar to assist in maintaining a proper lookout, it is considered doubtful, for the reasons expressed earlier in the report, whether he would have picked up the echo of **Stingray 1** at an earlier time. It is considered unlikely that the sea biscuit, because of its size and poor reflective material, would have been picked up by radar.

The Skipper of **Stingray 1** was not aware of the presence of **Sinbad 7** until immediately before the collision occurred. Accordingly, he failed to keep a proper lookout in breach of this Rule. A proper lookout requires that a good all round lookout and not just forward of the beam is maintained at all times. If the Skipper's view astern was marred by the other people on board, he should have instructed one of them to act as a lookout and keep him informed of any approaching vessels. The injured child's mother only saw the water taxi a few seconds before the collision occurred and it was too late to shout out an effective warning so that avoiding action could be taken by **Stingray 1**.

Maritime Rule 22.6 - Safe Speed states:

"Every vessel must at all times proceed at a safe speed so that proper and effective action to avoid a collision can be taken and the vessel can be stopped within a distance appropriate to the prevailing circumstances and conditions."

In determining a safe speed, the following factors must be among those taken into account-

For all vessels-

- (a) the state of visibility*
- (b) the traffic density, including concentrations of fishing vessels or any other vessels.*

- (c) *The manoeuvrability of the vessel, with special reference to stopping distance and turning ability in the prevailing conditions.*
- (d) *At night the presence of background light such as from shore lights or from the back scatter of the vessels own lights*
- (e) *The state of wind, sea and current, and the proximity of navigational hazards.*
- (f) *The draught in relation to the available depth and width of navigable water.*

Additionally, for vessels fitted with operational radar-

- (a) *the characteristics, efficiency and limitations of the radar equipment.*
- (b) *any constraints imposed by the radar range scale in use.*
- (c) *the effect on radar of the sea state, weather, and other sources of interference.*
- (d) *the possibility that small vessels, ice and other floating objects may not be detected by radar at an adequate range.*
- (e) *The number, location and movement of vessels detected by radar.*
- (f) *The more exact assessment of the visibility that may be possible when radar is used to determine the range of vessels or other objects in the vicinity.*

The full sea speed of **Sinbad 7** is about 30 knots. On first entering Bon Accord Harbour and later on first observing **Stingray 1**, the vessel's speed was 24 knots. The Skipper stated he first started to reduce speed after observing **Stingray 1**. He estimated that at the time of the collision, his speed would have been down to about 10 knots. He said the vessel was no longer on the plane at this time. The Skipper stated that when there are no passengers on board, the vessel gets up on to the plane when it reaches a speed of about 14 -15 knots.

Contrary to the above, the parents of the injured child are certain that the Skipper of **Sinbad 1** had not reduced speed before the collision occurred and that the water taxi was definitely on the plane with its bow up. They state it was only after the collision that the Skipper reduced speed.

Maritime Rule 22.7 - Risk of Collision states:

- (1) *Every vessel must use all available means appropriate to the prevailing circumstances and conditions to determine if the risk of collision exists. If there is any doubt, such risk must be considered to exist.*
- (2) *Proper use must be made of radar equipment, if fitted and operational, including long-range scanning to obtain early warning of the risk of collision and radar plotting or equivalent systematic observation of detected objects.*
- (3) *Assumptions must not be made on the basis of scanty information, especially scanty radar information.*
- (4) *In determining if risk of collision exists, the following considerations must be among those taken into account:*
 - (a) *such risk must be considered to exist if the compass bearing of an approaching vessel does not appreciably change; and*
 - (b) *such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large vessel or a tow or when approaching a vessel at close range.*

Sinbad 7 was fitted with operational radar which was switched off.

The difficulty in being able to properly identify echoes because of glare on the radar screen was known both by the Skipper and the owners/operators of **Sinbad 7**. Despite this knowledge, no attempt had been made to rectify the problem by fitting a raised surround around the radar to minimise glare so that the radar could be used to assist in avoiding collision situations.

Maritime Rule 22.8 - Action to Avoid Collision states:

- (1) *Any action to avoid collision must, if the circumstance of the case allow, be positive, made in ample time and with due regard to the observance of good seafaring practice.*
- (2) *Any alteration of course or speed or both to avoid collision must, if the circumstance of the case allow, be large enough to be readily apparent to another vessel observing visually or by radar. A succession of small alterations of course or speed or both should be avoided.*
- (3) *If there is sufficient sea-room, alteration of course alone may be the most effective action to avoid a close quarters situation provided that-*
 - (a) *it is made in good time*
 - (b) *it is substantial*
 - (c) *it does not result in another close quarters situation*
- (4) *Action taken to avoid collision with another vessel must be such as to result in passing at a safe distance. The effectiveness of the action must be carefully checked until the other vessel is finally past and clear.*
- (5) *If necessary, to avoid collision or to allow more time to assess the situation, a vessel must slacken its speed or take all way off by stopping or reversing its means of propulsion.*
- (6)
 - (a) *A vessel that, by any rules in this Part, is obliged not to impede the passage or safe passage of another vessel must, when required, take early action to allow sufficient sea-room for the safe passage of the other vessel.*
 - (b) *A vessel that is required not to impede the passage or safe passage of another vessel is not relieved of this obligation if approaching the other vessel so as to involve risk of collision. It must, when taking action, have full regard to the action which may be required of itself and the other vessel by this section of Part 22.*
 - (c) *A vessel the passage of which is not to be impeded remains fully obliged to comply with this section of Part 22 when the two vessels are approaching one another so as to involve risk of collision.*

The alteration of course to starboard that was made by the Skipper of **Sinbad 7** in his attempt to keep clear of **Stingray 1** was directly contrary to the requirements of this Rule in that the alteration was made only very shortly before the collision occurred, it was not a large alteration of course and it did not result in passing at a safe distance.

As the stand on vessel, **Stingray 1** was required to keep its course and speed until such time as it found itself so close that collision could not be avoided by the action of **Sinbad 7** alone.

Maritime Rule 22.13 - Overtaking states:

- (1) *Despite anything contained in subsections 1 and 2 of Section 1 of this Part, any vessel overtaking any other must keep out of the way of the vessel being overtaken.*
- (2) *A vessel will be considered to be overtaking when coming up to another vessel from a direction of more than 22.5 degrees abaft its beam, that is, in such a position where at night the stern light, but neither sidelights of the vessel being overtaken, would be visible.*
- (3) *When a vessel is in any doubt as to whether it is overtaking another, it must assume that it is and act accordingly.*
- (4) *Any subsequent alteration of bearing between the two vessels-*
 - (a) *does not make the overtaking vessel a crossing vessel within the meaning of this Part*
 - (b) *does not relieve the overtaking vessel of its duty to keep clear of the other vessel until it is finally past and clear.*

The Skipper of **Sinbad 7** failed to keep out of the way of **Stingray 1** and the towed sea biscuit and accordingly was in breach of this Rule.

Maritime Rule 22.16 - Action by Give Way Vessel states:

Every vessel which is directed to keep out of the way of another vessel must, so far as possible, take early and substantial action to keep well clear.

The Skipper of **Sinbad 7** failed to take early and substantial action to keep well clear of **Stingray 1** and the towed sea biscuit and accordingly was in breach of this Rule.

Maritime Rule 22.17 Action by Stand-on Vessel states:

- (1) *If one of two vessels is to keep out of the way, the other must keep its course and speed.*
- (2) *As soon as it becomes apparent to the stand-on vessel that the vessel required to give way is not taking appropriate action in compliance with this Part-*
 - (a) *it may take action to avoid collision by its manoeuvre alone; and*
 - (b) *if it is a power-driven vessel in a crossing situation, if the circumstances of the case allow, it must not alter course to port for a vessel on its own port side.*
- (3) *When, from any cause, the stand-on vessel finds itself so close that collision cannot be avoided by the actions of the give way vessel alone, it must take whatever action will best avoid collision.*
- (4) *This rule does not relieve the give-way vessel of its obligation to keep out of the way.*

As the stand on vessel, the Skipper of **Stingray 1** should have taken action to avoid collision by his manoeuvre alone when he found himself so close that any action by **Sinbad 7** would not be enough to avoid a collision. However, due to the lack of a proper all round lookout, the Skipper of **Stingray 1** did not see the other vessel in time to take such action.

Maritime Rule 22.34 - Manoeuvring and warning signals includes:

- (1) *When vessels are in sight of one another, a power-driven vessel underway, manoeuvring as authorised or required by this part, must indicate that manoeuvre by the following signals on its whistle-*
 - (a) *One short blast to mean "I am altering my course to starboard".*
 - (b) *Two short blasts to mean "I am altering my course to port"*
 - (c) *Three short blasts to mean "I am operating astern propulsion"*
- (5) *When vessels in sight of one another are approaching each other and for any reason either fails to understand the intentions or actions of the other, Or is in any doubt whether the action being taken by the other to avoid collision, the vessel in doubt must immediately indicate such by sounding the following signal on its whistle-*

At least five short and rapid blasts

This signal may be supplemented by a light signal of at least 5 short and rapid flashes.

The Skipper of **Sinbad 7** was in breach of this Rule for failing to sound one short blast to indicate that he was altering course to starboard. Had such a signal been sounded it would have alerted those on board **Stingray 1** to the near approach of the water taxi and enable avoiding action to be taken on their part.

Stingray 1 should have sounded five short and rapid blasts as a warning to **Sinbad 7** that the action it was taking was insufficient to keep clear but did not do so as it was not seen in sufficient time for this action to be taken.

Section 3.2 (1) of the Auckland Regional Council Navigation Safety Bylaws 2000, states as follows:

"No person may propel or navigate a vessel (including a vessel towing someone or some object) at a proper speed exceeding 5 knots:

- (a) *within 50 metres of any other vessel, raft, or person on the water; or*
- (b) *within either 200 metres of the shore or of any structure, or on the inshore side of any row of buoys demarcating that distance from the shore or structure; or*
- (c) *within 200 metres of any vessel or raft that is flying Flag A of the International Code of Signals; or*
- (d) *within 200 metres of an area designated by a harbourmaster.*

The Skippers of both **Sinbad 7** and **Stingray 1** were navigating at a speed exceeding 5 knots when they were operating within 50 metres of each other and within 200 metres of the shore and accordingly breached this Bylaw.

Section 3.3 Lookouts on vessel used for water skiing and towing states:

1. *No person in charge of a vessel may use it or allow it to be used to tow any person (whether or not on a water ski, aquaplane, or other similar object) unless there is on the vessel, in addition to the person in charge, at least one other person who is responsible for immediately notifying the person in charge of every mishap that occurs to the person being towed.*
2. *No person may cause or allow himself or herself to be towed by or from any vessel (whether or not a water ski, aquaplane, or other similar object) unless there is on the vessel, in addition to the person in charge of it, at least one other person who is responsible for*

immediately notifying the person in charge of every mishap that occurs to the person being towed.

3. *No person who is under the age of 10 years is permitted to act as lookout as required by subclauses 1 and 2.*

The Skipper of **Stingray 1** had designated an adult to be the dedicated observer who would notify the Skipper in the event of a mishap on the sea biscuit.

CAUSATION

The root cause of this accident was a combination of the active failure of the Skipper of **Sinbad 7** to adhere to the requirements of the Maritime Rules and local Bylaws and the latent failure of Reuben's to provide documented procedures governing the safe operation of their vessels.

It should be noted, however, that as in the majority of collision cases, it is rare that one vessel is found to be wholly at fault. In this instance, notwithstanding the active failures of the Skipper of **Sinbad 7**, a collision could still have been avoided by the action of the stand on vessel, **Stingray 1**, if a proper all round lookout been maintained and appropriate action taken in time in accordance with the requirements of **Maritime Rule Part 22.17**.

COMMENTS OF THE PARENTS OF THE INJURED CHILD ON THE MNZ DRAFT REPORT

In commenting on the draft report, the parents of the injured child disputed the evidence of the Skipper of **Sinbad 7** that he offered to call for another water taxi to take them back to Sandspit.

With regard to the comments under **Maritime Rule Part 22.17**, they also were of the opinion, given the short distance between the two vessels when the course of **Sinbad 7** was altered to head towards Schoolhouse Bay and in the direction of **Stingray 1**, that there would have been very little time in which they could have taken action themselves to avoid a collision.

ACTION TAKEN

The Harbourmaster of Rodney District Council (the Harbourmaster), following consultations with the Harbourmaster of Auckland Regional Council (ARC) and Maritime New Zealand (MNZ), has drafted a 'Safe Navigation Procedure Plan' (See *Appendix 1*), in conjunction with Reuben's. The Plan is specific to all areas in which Reuben's Water Taxis operate and applies to all the skippers they employ.

Since the Plan's implementation in late December 2006, which has been signed off by all skippers employed by Reuben's, on board audits of the skippers have been conducted on several water taxis owned by Reuben's to ensure compliance with the Plan. Apart from a couple of exceptions, which he is continuing to monitor, the Harbourmaster has reported a dramatic change in the behaviour of the skippers since the Plan was implemented with regard to the safe operation of their respective vessels and adherence to the 5 knot speed limit. Further auditing of the skippers will continue over the summer.

At the direction of the two Harbourmasters (See *Appendix 2*), two yellow buoys, each marked with a 5 knot speed limit, have been deployed at the entrance to Bon Accord Harbour so as to ensure compliance with section 3.2 (1) of the local Bylaw, in all areas of the Harbour and not just within 200 metres of the shore. This applies to all vessels operating within the Harbour. The Harbourmaster reports that this action has resulted in a pronounced improvement in the reduction of vessel speed, with peer pressure from other users, playing a significant part. Following further evaluation of vessel speed, the 5 knot speed limit applying to all areas of the Harbour may be included in the ARC Bylaw rewrite as a permanent Bylaw.

The Director of MNZ imposed conditions on the maritime document held by the Skipper of ***Sinbad 7***. These require that the Skipper sit and complete to her satisfaction, a Safety Oral Examination, to be carried out by an independent examiner from the NZ Maritime School, on the 'Rule of the Road' as regards lights and shapes, conduct of vessels when in sight of one another and safe speed and the ARC Navigation Bylaws. The examination will be conducted in either late January or February 2007. The Skipper has been told by the Director of MNZ that no decision has yet been made as to what further enforcement action, if any, is appropriate and that she will defer a final decision on this until he has completed the Safety Oral Examination.

Since the above was drafted, the Skipper of ***Sinbad 7*** has successfully passed his Safety Oral Examination. As it was not a requirement to sit for a Restricted Radar Certificate when the Skipper obtained his Commercial Launch Master's Certificate in 1995, his knowledge of radar related matters was found to be limited when he was examined. For this reason, the Skipper has been instructed by the NZ Maritime School to sit a Restricted Radar Certificate within the next six months.

Having noted that the Skipper passed his Safety Oral Examination and the requirement that he sit for a Restricted Radar Certificate, the Director of MNZ has decided that no further enforcement action is warranted.

SAFETY RECOMMENDATIONS

It is recommended that Reuben's:

1. Liaise with the manufacturers/NZ agents of the radars fitted on board their vessels, with a view to purchasing/manufacturing and installing a raised surround for each radar to minimise the glare on the screen, so that radar echoes can be more readily observed when seated at the conning position.
2. Document in each vessel's Safe Ship Management Manual, a requirement that the radar must be kept switched at all times when the vessel is operating and that this should be used, as appropriate, to obtain early warning of risk of collision and radar plotting or equivalent systematic observation of detected objects in accordance with the requirements of **Maritime Rule Part 22.7 – Risk of Collision**.
3. Include as part of each vessel's Safe Ship Management Manual, a copy of the Safe Navigation Procedure Plan and compile a documented company procedure that requires that regular audits of skippers are conducted by a suitably qualified mariner to ensure compliance.
4. MNZ endorses the action imposed on the Skipper of **Sinbad 7** that he sits for a Restricted Radar Certificate within the next six months. In this regard, it is recommended that Reuben's instruct all skippers they employ, who have not obtained a Restricted Radar Certificate, to sit the examination for this Certificate within the next six months.
5. It is recommended that when reviewing their bylaws, the respective Auckland Regional Council and the Rodney District Council Harbourmasters include a requirement for the operators of all commercial vessels, which have the capability to proceed at speeds of 20 knots or more, to have an approved Navigation Safety Plan in place.

VESSEL DETAILS

Ship Name:	<i>Sinbad 7</i>
Ship Type:	Passenger
Certified Operating Limit:	Inshore
Flag:	New Zealand
Built:	2006
Construction Material:	Glass Reinforced Plastic
Length Overall (m):	7.3
Propulsion:	150 Kw Diesel
Ship Operator/Manager:	Reuben's Water Taxis
SSM Company:	Survey Nelson
Accident Investigator:	Andrew Hayton



Sinbad 7's Identical Sister Ship

VESSEL DETAILS

Ship Name:	<i>Stingray 1</i>
Ship Type:	Recreational
Flag:	New Zealand
Built:	Mid 1980's
Construction Material:	Alloy
Length Overall (m):	6.6
Propulsion:	140 hp Outboard
Registered Owner:	Robert James Andrew McGaw



Stingray 1