

**REPORT NO: 03 3118 VESSEL NAME: TRIPTYCH & BAROSSA**

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**KEY EVENTS**

- 1.1 On 18 February 2003, shortly before 1535 hours New Zealand Daylight Time (NZDT), the commercial charter vessel *Triptych*, with 64 passengers and seven crew on board, was returning from the third America's Cup Race in Auckland Harbour. She, and other spectator fleet vessels, were on a southerly heading towards Rangitoto Channel.
- 1.2 When approximately two miles north of Rangitoto Lighthouse, the recreational motor launch, *Barossa*, overtook *Triptych* on her port side as she passed through a gap of approximately 40 to 50 metres between *Triptych* and the vessel *Te Aroha*.
- 1.3 At 1535 hours, when bearing about 30° on *Triptych's* port bow, *Barossa* broached to starboard, colliding with *Triptych* and causing *Barossa* to roll heavily to port
- 1.4 The impact of the collision caused three persons on board *Barossa* to be thrown into the water. Four others boarded *Triptych* whilst the two vessels were locked together.
- 1.5 After the collision, other spectator and rescue craft rescued persons from the water.

## KEY CONDITIONS

- 2.1 ***Triptych*** is a 19.8 metre wooden trimaran with a sloop rig and furling mainsail and headsail. Her beam is 14.8 metres and she has a net tonnage of 74.65. She is powered by two Perkins diesels in the main hull. Each are rated at 33.5 kW. The vessel held a current Safe Ship Management (SSM) Certificate issued on 12 February 2002.
- 2.2 The Master of ***Triptych*** held a Commercial Launchmasters (CLM) Certificate of competency issued in 1994. He purchased the vessel in 1987 and had been operating commercially as Master since obtaining his qualification.
- 2.3 ***Barossa*** is a 12 metre wooden motor launch powered by 186 kW Cummins Diesel with a conventional propeller and shaft.
- 2.4 The Master of ***Barossa*** held a Master of River Ship Certificate of Competency issued in 1962, with a Commercial Launchmasters (CLM) endorsement dated 1989. He had helmed the vessel on a number of occasions before and had extensive commercial and recreational experience. His son was owner of the vessel.
- 2.5 The initial points of collision were ***Barossa's*** starboard quarter and the bow of ***Triptych's*** port pontoon. The force of the initial impact caused ***Barossa*** to slew further to starboard causing ***Triptych's*** anchor on her stem head to impact just abaft amidships on ***Barossa's*** hull resulting in a breach of approximately 350 cm diameter, 0.61 metres above the waterline.
- 2.6 Conditions were extremely crowded with a large number of spectator vessels converging on the Rangitoto Channel from the race area.
- 2.7 During Louis Vuitton Cup and America Cup racing days the Auckland Regional Council (ARC) Harbourmaster promulgated regulations under the Maritime Transport Amendment Act 1998 No. 2 limiting speed in the harbour to 10 knots. The stated speeds of ***Triptych*** and ***Barossa*** were six to seven knots and 9.2 knots respectively. Immediately prior to the collision, a witness on ***Barossa*** observed the two vessels were in the same wave trough and determined this to be a factor that caused both vessels to move towards each other.
- 2.8 The sailing Master of ***Triptych*** stated that immediately before the collision the vessel was "*locked in to our course*" due to the boom being vang'd to starboard. An experienced helmsman is and should be reluctant to jibe as this puts excessive strain on the rig and compromises safety of passengers on the deck. He will therefore be reluctant to alter course to a point where a jibe is a possibility. In ***Triptych's*** case this would have meant a course alteration to starboard away from ***Barossa*** and into an inevitable jibe. In that sense she was "locked in".

- 2.9 Passengers on ***Triptych*** stated they received no safety instructions from the Master or crew after the collision. The passengers were given lifejackets after the collision occurred.
- 2.10 The crew thrown in to the water were on ***Barossa's*** flying bridge. Two of the four that boarded ***Triptych*** were seated on the aft section of the fore deck.
- 2.11 Both vessels were being steered manually before the collision.
- 2.12 A north west wind of approximately 12 to 16 knots combined with wake from the spectator fleet and support vessels, resulted in a confused sea. The Deputy Auckland Harbourmaster commented the sea state was extremely violent. One witness likened the conditions to being in a washing machine.
- 2.13 There was conflicting evidence as to the position of the collision. The stated position is an approximation given by a senior Police Launchmaster who was at the scene.
- 2.14 The cost of damage to ***Barossa*** was \$50 000.00. The estimated cost of damage to ***Triptych*** is \$20 000.00.
- 2.15 Section 19(c) of the Maritime Transport Act 1994 requires the Master of a ship to be responsible for compliance of Maritime Rules made under the Act.
- 2.16 The Master of ***Triptych*** stated the vessel was operating under sail alone before the collision and that the engines were in idle as they had been for most of the day. He was steering from the helm position. This allowed his head to protrude above the cabin top thus allowing better vision than from within the enclosed steering station. He first saw ***Barossa*** when she came abeam, between ***Triptych*** and another vessel that was "some 20 metres to port". She was travelling on a parallel course at a speed in excess of ten knots. He observed she was "yawing all over the place" and "was coming as bit close". He called out to ***Barossa*** telling her to keep clear. When ***Barossa*** reached a position bearing approximately 30° on ***Triptych's*** port bow she "*just started to turn, and a wave, obviously got him*". She rolled to starboard and collided with ***Triptych***. "*I had no time at all to take any evasive action*". On collision, he immediately engaged the engines in reverse and broke free of ***Barossa***.

**2.17** The Master of **Barossa** stated that whilst returning from the race course with 10 persons on board he observed a gap of approximately 40 to 50 metres ahead of **Triptych** on his (**Barossa's**) starboard hand and **Te Aroha** on his port hand. He determined it was safe to pass between both vessels as they appeared to be on a "very good steady straight course". As he moved through the gap at 9.3 knots he took his eyes off **Triptych** as her bow was "just abaft of abeam of me". He had almost overtaken her when his son shouted she was "bearing down on us". He turned and saw **Triptych** surging down a wave and sheering towards him at a distance of 4 to 6 metres. He put the throttle full ahead but was unable to avoid **Triptych**. Her port pontoon collided with **Barossa's** starboard quarter. The impact pushed her bow to starboard causing **Triptych's** anchor to hit abaft of amidships. He maintained that he did not alter course at any stage before the collision. He considered **Triptych** was travelling at seven to eight knots, observed propeller wash from **Triptych** and was of the opinion she was motor sailing at the time. He did not have time to sound **Barossa's** horn before the collision occurred.

**2.18** A number of witnesses observed the events immediately before the collision and made the following statements:

*"I observed **Barossa** coming up along, on the port side of **Triptych**, with the appearance of that he was going to overtake **Triptych**, he seemed to approach fairly close to **Triptych's** port side and a bow wave picked him up, he's broached and turned right in front of **Triptych**" - Commercial Master on a vessel that was 50 metres to the port of **Barossa**.*

*"They (**Barossa**) got to the bow of **Triptych** and were caught by another wave and came around to the starboard side basically the wave pushed them around in a sort of broach type position right in front of **Triptych**. In my view the **Triptych** Master we were headed along sort of straight and narrow" - A passenger on **Triptych**.*

**2.19** Part 22 of the Maritime Rules - Collision Prevention states:

*"22.6 Every vessel must at all times proceed at a safe speed so that proper and effective action to avoid 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 in to account-*

*(b) ... the traffic density, including concentration of fishing or any other vessels:*

*(e) The state of the wind, sea, current and proximity of navigational hazards ..."*

*22.12(3) Sailing vessels when operating propelling machinery must obey the rules for a power driven vessel.*

*22.13(1) Any vessel overtaking any other must keep out of the way of the vessel being overtaken.*

*22.13(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; and*

*(b) does not relieve the overtaking vessel of its duty to keep clear of the overtaken vessel until it is finally past and clear.*

*22.18(1) requires a power-driven vessel underway to keep clear of a sailing vessel.*

*22.25(4) requires a vessel proceeding under sail when also being propelled by machinery must exhibit a black conical shape, apex downwards, forward where it can best be seen.*

*20.40(2) states in interpreting these rules, due regard must be given to all dangers of navigation, collision and any special circumstances, including the limits of the vessels involved, that may make a departure from the rules of the Part necessary to avoid immediate danger.*

## CONTRIBUTING FACTORS

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

- 3.1 The failure of the Master of **Barossa** as the overtaking vessel under Part 22.13 of the Maritime Rules, to keep clear of **Triptych** and pass at a safe distance.
- 3.2 The failure of the Master of **Barossa** to proceed at a safe speed under Part 22.6 of the Maritime Rules, having regard to traffic density of other vessels in the near vicinity.
- 3.3 The sea state due to the wake from the fleet and wind.

## CAUSE

### **Human Factor**

7 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"/> Misconduct/Negligence
<input type="checkbox"/> Improper watchkeeping or lookout	<input type="checkbox"/> Physiological	<input type="checkbox"/> Error of judgement
<input type="checkbox"/> Lack of knowledge	<input type="checkbox"/> Ship Handling	<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 Loss of control by **Barossa** due to broaching.

## OPINIONS & RECOMMENDATIONS

- 5.1 The large concentration of vessels on the day meant that close quarters situations would inevitably arise.
- 5.2 The confused sea state due to vessel wake required masters to operate with extreme care to avoid collision.
- 5.3 There is evidence to suggest the Master of *Triptych* was operating under sail and propelling machinery whilst advising other motor vessels he was operating under sail alone. However, even if this was proved to be the case, it did not absolve *Barossa*, as the overtaking vessel, to keep out of the way until finally past and clear.
- 5.4 It is recommended the Master of *Barossa* be severely censured on the following grounds:
- a) Operating a vessel in a manner causing unnecessary danger to other persons.
  - b) Failing to keep clear as an overtaking vessel.
  - c) Failing to operate at a safe speed in the prevailing circumstances and conditions.