



# OFFICE OF THE STATE CORONER

## Non Inquest Findings

**CITATION:** Investigation findings into the death of a Sailing Competitor

**TITLE OF COURT:** Coroners Court

**JURISDICTION:** BRISBANE

**FILE NO(s):** 2013/4012

**DELIVERED ON:** 4 August 2014

**DELIVERED AT:** Brisbane

**FINDINGS OF:** John Lock, Deputy State Coroner

**CATCHWORDS:** Coroners: Sailing competition danger of entrapment, trapeze harnesses, safety and rescue procedures

## **Introduction**

The Competitor was aged 23. He was an active member of his sailing club and described as being very fit. He died from drowning when he became entrapped in his trapeze harness during a sailing competition.

## **Investigation**

### **Sailing Competition on 9 November 2013**

On 9 November 2013 the Competitor was participating in an 18 foot skiff sailing competition being conducted by the Brisbane 18 Footers Sailing Club. 18 foot skiffs are manned by a skipper and two crew members. He was considered to be an experienced sailor, as were his fellow sailors.

Approximately 10 minutes into the race, the skiff capsized. The Competitor was trapped under the trampoline and it appears that a hook from his harness hooked itself into the trampoline and possibly became twisted as he tried to free himself. The police investigation considered that it was not through any insufficient sailing capability of the skipper and other sailors that resulted in The Competitor becoming entangled with the trampoline on the skiff. All three sailors fell into the water as the yacht capsized, however it would seem that The Competitor landed with his midriff directly onto the trampoline mat causing his harness hook to catch on to the trampoline cord.

The skipper and other crew member dived down to try and attempt to free him. The other crew member then jumped to the other side of the boat and stood on the centreboard trying to right the vessel. Numerous attempts were made to try and free him with no success. One of the safety boats observed the boat capsize and quickly attended to provide assistance. A second safety boat was called to assist. A number of attempts were made to right the vessel but due to the high winds trying to push the boat back down in the water and the weight of the Competitor's body this was unsuccessful.

Eventually 3 to 4 persons were able to right the vessel and the Brisbane Coast Guard attended at the scene. The Coast Guard were able to hand a knife to one of the rescuers enabling him to get under the trampoline and free the Competitor from the boat.

The Competitor was transferred to the Coast Guard vessel that immediately returned to the shore where QAS attempted resuscitation without any success. It was estimated that the Competitor could have been under water for 10 minutes prior to being freed.

## **Autopsy Examination**

An autopsy has subsequently concluded the cause of death as being due to drowning.

## **Police Investigation**

The Coroner ordered a full investigation be conducted.

The investigating officer informed the coroner that the hook protrudes out in front of the harness and was likely caught in the netting by accident and dragged the Competitor under the water.

A rule was introduced by the International Sailing Federation in the racing rules requiring that from a specified date a trapeze harness would be required to have a device that quickly released a competitor. This was introduced in the racing rules as rule 40.2 but subsequently was removed. The investigation revealed that although such devices are available on the market, concerns were raised through the sailing community that these quick release systems can become unstable and release without warning placing sailors in jeopardy of falling in the water.

The danger of entrapment had also recently been noted in a Safety Information Notice Number 1 of 2013 issued by Yachting Australia on 26 August 2013 and made recommendations to avoid such incidents.

One of the recommendations was that "each boat carrying a sharp, well maintained and easily accessible, preferably serrated knife and ensure crew knew where knife is located and are prepared to use it to cut a harness or trampoline mesh".

It is evident that the 18 ft skiff did not carry such a knife.

One of the issues identified by the police investigation was the lack of staffing capabilities and equipment on the safety boats.

The Safety Notice stated that "All race officials and safety boat crew should be briefed on the risk and dangers of entrapment and methods of recovery. Safety boats should also be equipped with sharp knives to cut sheets, trampoline, harnesses et cetera."

It is evident that none of the safety boats were able to produce a working knife and had to wait until the Coast Guard arrived to free the Competitor from the entrapment.

No safety briefings were conducted by the club prior to the race to some of the boat personnel. The first safety boat on scene (Safety Boat #2) was having marine radio trouble and had to rely on the international distress signal of waving their arms to attract the attention of Safety Boat #1. Safety Boat #2 consisted of a man who had previous yachting experience but was crewed by

a man with no 18 foot skiff experience and little other sailing experience and accompanied by his 10-year-old son.

Under the operational standards and guidelines for Yachting Australia Discovery Sailing Centres it is stated: "Sufficient safety boats must be available to provide cover for all courses in progress at any one time. They should only be driven by persons holding a minimum of a Yachting Australia Powerboat handling certificate and meet their state boat licensing requirements. Safety boats must fully comply with State marine legislation and regulation, including any special equipment for club boats, in all regards, including equipment and operation."

The investigation found that it was clear that at the time of the incident, the persons in the first safety boat on scene (Safety Boat #2) were not equipped with the knowledge of and skills on how to deal with such an incident. There was no training received or any briefing prior to the commencement of the race.

The person who was crew for Safety Boat #2 stated that at no point did he feel it was safe for him to jump in and he began to signal to the other safety boat.

Immediately on arrival of Safety Boat #1, two experienced sailors were able to enter the water, bring the boat under control and with the extra weight, right the boat bringing The Competitor out of the water.

The investigation photographs also show that the VHF marine radio aerials were down which could have led to the issues of lack of communication. This should have been identified as one of the checks prior to leaving the boat ramp.

The investigation considered that there was no evidence that anybody involved on the day could have altered the outcome. It was difficult to understand the length of time The Competitor was under the water, prior to the safety boat arrival, however the investigation considered that if all persons on the safety boats were trained in how to deal with such incidents and were provided with fully equipped operational vessels, then incidents of a similar nature could have resulted in a more favourable outcome.

The police investigation recommended that sailing organisations that offer safety boats attempt to comply with similar standards as identified with the "Operating Standards and Guidelines and Yachting Australia Sailing Centres" in relation to trained operators and fully equipped safety vessels.

### **Response by Brisbane 18 Footers Sailing Club**

The club indicated that subsequent reviews by the club post incident demonstrate a range of concerns and serious responses to the event, which have been undertaken by the club in its endeavour to provide a sailing environment as safe as possible.

The Deputy State Coroner has noted that a number of meetings were conducted by the club shortly after the incident to consider a range of safety issues and improvements.

The club acknowledged that there was inattention to ensuring formal compliance in relation to safety obligations. The club relied on many years of experience of its members. However, the realisation that vigilant, regular and mandatory inspections are required has been accepted and has been implemented.

A number of changes in procedure have been adopted. All competition crew and all crew of safety boats now must attend briefings on the day of any regatta. Forms of check lists have been developed to ensure rescue boats are fully equipped to attend all emergencies that might occur.

In relation to the trapeze harness the club stated that the methodology of release has been a matter of controversy for some time. It is acknowledged that whilst under development the position is that no failsafe harness has yet been developed.

The club intends to continue liaising with other 18 foot sailing clubs in New South Wales, America and New Zealand with respect to ensuring up to date developments in any safety equipment are monitored and adopted if appropriate.

Quick release harnesses had been debated as an alternative to the fixed hook set up that is common in over 90% of commercially available harnesses. The International Sailing Federation introduced rules about this type of harness in an attempt to improve safety. However, the rule was removed when they were found to be unreliable and in some circumstances put the wearer in additional danger.

The club trialled one of these harnesses at a meeting on 16 November 2013 that was designed at the spring loaded hook retained by a pin. The club noted the pin was very hard to remove by hand and the spring-loaded hook fired away from the harness with great velocity. It was therefore the opinion of the club that a quick release harness of this type would not have changed the outcome in this incident.

The club acknowledges that the skiff involved did not have a safety knife. It would appear the knife had been removed during a maintenance repair of the skiff and, by inadvertence, not reinstated.

It was acknowledged that every boat must have a knife fitted for easy access. The need for this equipment is paramount and is part of the mandatory safety inspection checklist before a boat is allowed to compete. It was noted there have been issues where a safety knife has in itself proved a piece of dangerous equipment.

It was acknowledged that whilst a safety knife was on the rescue boats it was not properly located for immediate use. Appropriate steps have been taken to

ensure the grab bag is very visible and that its contents, including a knife, are scrupulously checked before the operators can commence duty on the boat. In addition to the grab bag each rescue boat has been fitted with a knife affixed to the superstructure of the vessel and a backup two way radio is now standard equipment on the rescue boat.

The club now ensures that all safety boats are operated by licensed drivers and has undertaken steps to ensure a high standard of experience and expertise by all safety boat personnel. Additional rules have been implemented including the provision of a minimum age of rescue boat personnel to 16 years and sign-on/off for rescue boat cruise for record keeping purposes.

The club has also implemented the use of a distress flag for all classes of skiffs.

The club did not believe there was any defect in the radio operations as there was clear evidence of radio communication from rescue boat to base. Nevertheless the additional backup of a two way radios system has been installed as a further safety procedure. The use of internationally recognised hand distress signals will continue.

The club noted it was now also considering a number of other safety considerations as technology advances occur.

### **Response by Yachting Queensland and Yachting Australia**

Neither Yachting Queensland nor Yachting Australia have received a formal report of the incident. Both organisations have provided support and encouragement to the club to conduct a review but have not been requested to provide any direct assistance.

At the time of the incident the Competitor had no formal affiliation through either organisation.

Clubs are encouraged and promoted to use qualified Race Officials who have received recognition for their training under the National Officiating Program. As well clubs are encouraged to use volunteers who have received recognition for training under the Yachting Australia Powerboat Program.

Neither organisation has any power to mandate that clubs must only use qualified volunteers. It is recognised that clubs rely on volunteers to run competitions, and it is financially difficult to ask the volunteers to give up more time, often at a cost, to be trained so they can volunteer for their respective club.

In relation to the rule about quick release trapeze harness it was noted that there were a number of problems, which eventually led to its removal. Yachting Australia advised that the International Sailing Federation rule was

foreshadowed to come into effect but it never did as it was seen to be impractical.

Yachting Australia noted there were a number of relevant rules and safety notices that were in operation at the time of the incident. This includes various templates and guides to clubs explaining about club risk management and safety and how that can be introduced.

Safety information notices about trapeze harnesses and entrapment risks were also noted in their website.

Since the incident Yachting Queensland has communicated broadly to all clubs and members with reminders about safety and related policies and procedures. Yachting Queensland sent out a bulletin detailing the events relating to this incident and prompting questions, recommendations and guidance to useful resources.

## **Conclusion**

The Competitor died in tragic circumstances during a sailing competition. His boat capsized. This is not a particularly uncommon event, is part of racing and would not usually result in such a tragedy. However, the Competitor became entangled in his trapeze harness and despite the frantic efforts of himself and of his crew he could not be released.

Each boat should have a safety knife, which could have been used to cut him free. On this occasion the safety knife was missing.

A rescue operation commenced and the two course safety boats attended.

An investigation however, found that the persons on the first safety boat that attended were not equipped with the knowledge and skills in dealing with such an incident. It is evidence that none of the safety boats were able to produce a working knife.

Subsequently the concerns relating to this incident were relayed to the sailing club and the head yachting organisations.

It is evident the club seriously considered some of the deficiencies that were evident and expeditiously introduced a number of changes to procedures to ensure that in future those deficiencies would not occur again.

Given the response the Deputy State Coroner does not consider that any further recommendations are warranted and accepts the club's response as evidence of a renewed realisation that a vigilant adherence to safety policy and risk management is necessary to provide as safe a sailing environment for its members as is possible.

John Lock  
Deputy State Coroner  
BRISBANE

04 August 2014