

26 February 2014

**Ref: FOL/12/30657
COR 2012/5005**

Christine Paterson
Coroners Registrar
Level 11, 222 Exhibition St
MELBOURNE VIC 3000



Dear Ms Paterson

**RECOMMENDATION IN THE MATTER OF THE FINDING INTO DEATH WITHOUT
INQUEST OF KAYE D WARD**

Thank you for your correspondence dated 22 November 2013.

The Coroner's recommendation in relation to the death of Kaye D Ward on 25 November 2012 was that:

"Transport Safety Victoria (TSV) consider seeking a modification to the Australian Standard for Type 1 inflatable PFD's to require that a crutch strap be a part of the design of these devices."

Please find enclosed TSV's response to this recommendation.

Statement of Action

Under the *Marine Safety Regulations 2012 (Vic) (MSR)*, occupants of a vessel under 4.8m operating in coastal waters (as in this case) are required to wear Personal Flotation Devices (**PFDs**) that comply with at least one of twelve standards specified in Schedule 1. The Director Transport Safety may approve further standards but has not elected to do so to date. Four of the standards specified in the MSR are Australian Standards:

- (a) AS 1512—1996 "Personal flotation devices—Type 1"; or
- (b) AS 4758.1—2008 "Personal flotation devices—Part 1: General requirements" relating to Level 275 PFDs; or
- (c) AS 4758.1—2008 "Personal flotation devices—Part 1: General requirements" relating to Level 150 PFDs; or

(d) AS 4758.1—2008 "Personal flotation devices—Part 1: General requirements" relating to Level 100 PFDs.

TSV is a standing member of the Standards Committee CS060 for Australian Standards for PFDs. At the core of the work of this committee has been consideration of the compromise between wearability and absolute safety performance. The committee gave careful thought to setting adequate performance standards to ensure PFD performance whilst maintaining ease of use and comfort and encourage users to wear the PFD. Each of the Australian Standards in this list includes crotch straps specified as optional accessories.

Crotch straps are recommended for boaters undertaking higher risk activities, such as boating in coastal offshore localities where the time to rescue may be long, and in such cases the wearer may elect to secure the crotch strap during a time of particular or imminent risk. Tipton and Golden make comment on the value of crotch straps in securing PFDs, and note that "*even correctly secured life jackets are likely to be effective only if the sea is relatively calm.*"¹ The design of lifejackets is such that in keeping the wearer oriented facing up, they tend to turn the wearer to face into oncoming waves in which case wave splash becomes a considerable hazard.

TSV seeks leave from the Coroner to share the findings of this matter with the Australian Standards Committee CS 060 to facilitate consideration of crotch strap specification.

In the interests of preventing this type of incident from reoccurring, TSV has issued two relevant safety alerts to accompany media releases on the matter of correct anchoring procedures (Attachments 1 and 2) and in safety and emergency planning for recreational boaters (Attachments 3 and 4).

I trust that this information satisfies your request for a response to these recommendations under section 72(3) and 72(4) of the Coroners Act 2008 (Vic). We are happy to discuss the marine safety issues with you and your colleagues and to provide any further assistance that we can to further improve marine safety.

Yours sincerely



PETER CORCORAN
Director Maritime Safety

Attachments

1. Media release 10 January 2013 *"Anchoring safety warning issued to boaters"*
2. Safety Alert 2013- Maritime 01 – *"Anchoring of vessels - selection of anchor and anchoring techniques for disabled vessels"* 08 January 2013
3. Media release 21 January 2014 *"Regulator issues safety alert following boating deaths"*
4. Safety Alert 2014- Maritime 01 – *"Think first, go boating second"* 22 January 2014

¹ *Essentials of Sea Survival*, Frank Golden MD PhD and Michael Tipton PhD, Human Kinetics, 2002



For immediate release – 10 January 2013

Anchoring safety warning issued to boaters

Transport Safety Victoria (TSV) has issued a safety alert to vessel operators to have appropriate anchors onboard and be ready to correctly deploy them in an emergency.

The advice follows TSV incident data analysis which reveals that in 2011-12 there were 1,085 recreational vessel disablements; the highest in three years.

TSV spokesperson Paul Corkill said that anchoring is an invaluable safety measure, especially in the event of an emergency.

“In Victoria over the past four years, an average of 978 recreational vessels and 30 commercial vessels became disabled annually and required search and rescue assistance.

“If your vessel becomes disabled, anchoring correctly will keep the vessel safely aligned with the bow head on to the prevailing wind and waves.

“Effectively, anchoring correctly will also allow you to maintain your position and prevent the vessel being blown away, either offshore or onto the shore, while you call for and await assistance.

“The anchor, chain and line must be of sufficient strength and durability to secure the vessel and must be appropriate for that purpose in the area of operation of the vessel.

“The chain and/or line must be secured to the anchor and vessel at all times

“Vessel masters are reminded that it is illegal and dangerous to anchor in shipping channels or transit lanes, and to tie up vessels to navigational aids such as channel marker piles or buoys,” Mr Corkill said.

When anchoring at night or in time of reduced visibility correct anchor lights must be switched on when the vessel is at anchor.

The correct anchor light for vessels less than 50 metres in length is an all-round white light with a visibility of at least two nautical miles.

For information about anchoring and/or to read the safety alert, visit the TSV website (www.transportsafety.vic.gov.au)

For further information, please contact Eugene Dolgikh, Communications Adviser, on (03) 9655 6073, 0418 242 821 or by email eugene.dolgikh@transportsafety.vic.gov.au

Safety Alert



SA. No. 2013 - Maritime - 01

NOTICE TO OWNERS AND OPERATORS OF ALL VESSELS

Safety alerts are published by the Director, Transport Safety under section 197 of the *Transport Integration Act 2010* (Vic) to promote the safe operation of transport services. Safety alerts are intended to provide information only and must be read in connection with obligations under relevant legislation.

Subject

Anchoring of vessels - selection of anchor and anchoring techniques for disabled vessels

Issue

Recent incidents have highlighted the need for all vessel operators to:

- have on board anchors appropriate to where they operate or intend to operate
- be ready to correctly deploy these anchors, especially in the event of an emergency.

Over the past four years an average of 978 recreational vessels and 30 commercial vessels became disabled annually and required search and rescue assistance.

If your vessel becomes disabled, anchoring correctly will keep it safely oriented with the bow head on to the prevailing wind and waves. Effective anchoring will allow you to maintain your position and prevent the vessel being blown offshore or onshore while you call for and await assistance.

Recreational power boats and yachts operating in enclosed and coastal waters are required to carry an anchor and chain or line under the *Marine Safety Regulations 2012* (Vic). All commercial vessels are required to carry anchoring equipment in accordance with the National Standard for Commercial Vessels **Part C Subsection 7D Anchoring Systems**.

Points to note about safe anchoring.

- Ensure the anchor rope and/or chain is securely attached to both the anchor and to your vessel.
- It is good practice to be able to release your anchor line should it become snagged. If the anchor cannot be retrieved and you need to move the vessel to safety, carrying a knife will enable you to cut the anchor rope at the attachment point on the vessel. If you use a chain-only anchor line you should connect the chain with a rope lashing to the vessel that can be cut with the knife.
- Always lower the anchor rather than just throwing it overboard as this minimises the chances of tangling the anchor with the anchor line.
- When anchoring in an emergency situation, unless it is not possible to do so, always anchor your vessel from the bow. Under some circumstances, anchoring from the stern or midships can lead to your vessel being swamped or capsizing.
- Regularly check that the anchor is not dragging by inspecting the anchor line tension and monitoring your position.
- When retrieving your anchor always retrieve your anchor over the bow. Anchors being retrieved over the side of the vessel have led to capsizes and vessel losses.
- If it is not possible to anchor to the bottom, a sea anchor may be used. Sea anchors or drogues are used to keep the vessel's head to prevailing wind and waves whilst the vessel

drifts as this orientates the vessel to the safest possible attitude. It is good practice in an emergency situation to deploy the sea anchor from the bow of the vessel and use a length of anchor line of about half the distance between wave crests multiplied by at least five.

Issues to consider when deciding what anchoring equipment your vessel needs.

- Choose a **type of anchor** to best match the area where you intend to operate and where you are likely to anchor. Various anchor types are available that are designed to work most effectively in different types of sea bed such as sand, mud, rock or reef. You can carry more than one type of anchor or choose an anchor designed for use in different types of sea bed.
- The **strength**, and therefore the **thickness**, of the **anchor line** you need is dependent on the size of vessel you operate. A longer, higher vessel is more affected by wind and waves and therefore needs a stronger line to hold it to the anchor.
- The **length** of the **anchor line** you require is dependent on the depth of water you are to anchor in. You will need to have a line at least as long as several times the water depth you may need to anchor in.
- You should consider the **type** and **configuration** of your **anchor line** and use one that best suits your vessel and the depth of water you may anchor in. Anchor lines should be made up of either a rope section with a short length of chain attached to the anchor or be made of chain. Where a rope and chain anchor line is used, it is recommended that the length of chain be at least equivalent to the length of the vessel.
- You should consider carrying a **sea anchor** if you intend to operate your vessel in deep water where anchoring to the bottom may not be practicable.

Legal obligations associated with anchoring include the following:

- Correct anchor lights **MUST** be switched on when the vessel is at anchor at night and in times of restricted visibility so other vessels can see you and take avoiding action if required.
- For vessels less than 50 metres in length the correct anchor light is an all-round white light with a visibility of at least 2 nautical miles.
- The anchor and chain and/or line must be of sufficient strength and durability to secure the vessel and must be appropriate for that purpose in the vessel's area of operation.
- The chain or line or combination must be securely attached to both the anchor and the vessel at all times.
- It is illegal and dangerous to anchor in shipping channels or transit lanes or tie up to navigational aids such as channel markers or buoys.

The following resources provide further guidance on anchoring techniques and anchor selection:

- www.transportsafety.vic.gov.au/maritime-safety/recreational-maritime/safe-operation/anchoring
- Victorian Recreational Boating Safety Handbook, Chapter 6: Safe operations
- National Power Boat Handling Course
- Small Ships: training and operational manual - Chapter 20 Anchoring
- National Standard for Commercial Vessels Part C Subsection 7D Anchoring Systems. This standard also provides suitable guidance for recreational vessels.

THIS ADVICE IS EFFECTIVE IMMEDIATELY

Approved:

ADRIAN MNEW
Acting Director Maritime Safety
Delegate of the Director, Transport Safety

8 January 2013

For immediate release – Tuesday 21 January 2014

Regulator issues safety alert following boating deaths

Five confirmed boating fatalities since the beginning of the year have led to the State's maritime safety regulator, Transport Safety Victoria (TSV), issuing a safety alert calling for every boater to plan and be better prepared before heading out on the water.

The most recent serious incidents at Kilcunda, Waratah Bay and Seaford occurred within a 24 hour period and have led to two fatalities, while a third man is missing.

Adrian Mnew, TSV Acting Director, Maritime Safety, has expressed concern over the spate of fatalities and has implored all boaters to have an effective safety plan before venturing out.

"Having a five point safety plan can very well mean the difference between life and death on the water.

"Critical to the plan is knowing what you want to do and where you want to go, preparing yourself in case things go wrong and equipping yourself with the know-how to handle potentially dangerous situations.

"Ensure you are maintaining awareness of all the hazards while you are out on the water. This includes monitoring the conditions, your location, weather alerts and other traffic.

"With boating, it is always a good idea to leave a big allowance for things to go wrong. This will enable you to make adjustments to your plan depending on the circumstances.

"Be aware of your boating limitations and that of your boat. You run the risk of running into real danger if you over estimate your own abilities or if the vessel is not suitable for the conditions. If in doubt, don't go out.

"It's also very important to know how to raise an alarm in the event of an emergency. Even if it's not required, having an emergency position indicating radio beacon (EPIRB) or a personal locator beacon can assist rescue authorities in locating you.

"Lastly, make sure that you carry the right safety equipment and that it is in good working order. Consider making it a habit to wear your lifejacket at all times - it's one less thing you need to think about in an emergency and incidents can unfold very quickly." Mr Mnew said.

For more information and to view the Safety Alert, visit the TSV website (www.transportsafety.vic.gov.au).

For more information, please contact Eugene Dolgikh, Communications Adviser, on (03) 9655 6073, 0418 242 821 or by email eugene.dolgikh@transportsafety.vic.gov.au

Safety Alert



SA. No. 2014 - Maritime - 01

NOTICE TO OWNERS AND OPERATORS OF ALL RECREATIONAL VESSELS

Safety Alerts are published by the Director, Transport Safety under section 197 of the *Transport Integration Act 2010* (Vic) to promote the safe operation of transport services. Safety Alerts are intended to provide information only and must be read in connection with obligations under relevant legislation.

Subject

Think first, go boating second

Issue

Recent fatal boating incidents have highlighted the need for all recreational vessel operators to think ahead and undertake some planning to ensure they have a safe trip.

As a boater, it is essential to:

- decide the purpose and location of your trip
- prepare yourself and your boat for the worst possible scenario
- have the know-how to handle potentially dangerous situations.

If in doubt, don't go out.

Before you leave, take a few minutes to think about the trip and plan how you will deal with conditions and situations you are likely to encounter. Start by considering the five key safety issues below.

1. Hazards to safeguard against

- check the weather and weather alerts for your planned trip
- monitor the weather and any new alerts during the course of your trip
- ensure you can tell rescuers where you are
- have and understand the relevant charts or maps for your trip
- remember to monitor on-water traffic, including big shipping.

2. Margin for error

- have enough reserve fuel
- have enough energy to paddle home against a strong current
- have navigation lights and a waterproof torch
- know how to take evasive action if necessary
- know how to prevent your vessel getting into difficulty if the engine doesn't restart
- allow extra time to find shelter or return to shore before a storm comes through.

3. Your limitations and those of your vessel

- ensure your vessel has sufficient capacity for passengers, equipment and potential catch
- ensure your vessel is suitable for the type of waterways you are visiting
- know the local conditions
- have the skills or experience for your trip and anything that might confront you.

4. Raising an alarm

- carry and know how to use a marine radio for distress calls
- put your mobile phone in a waterproof pouch and attach it to you
- know how to find your GPS coordinates from your phone
- have a backup plan in case your preferred means of contact fails
- carry a distress beacon, which will assist rescue authorities to locate you more quickly.

5. Safety equipment for your planned trip

- make sure your safety equipment is in good working order and readily accessible
- plan for contingencies
- make it a habit to wear a lifejacket at all times
- check the Victorian Recreational Boating Safety Handbook for the minimum safety equipment requirements for your trip
- consider carrying extra equipment to deal with unexpected hazards
- carry a suitable anchor and adequate warp for your trip and know how to safely deploy it.

These five safety issues illustrate the types of things to consider, but you should tailor your thinking to the trip you are about to make.

Write down your plan and leave a copy behind to assist rescue authorities if required. Ensure passengers know the trip details and your plans in case you become incapacitated.

The following resources provide further guidance on safe boating operations and planning:

- Victorian Recreational Boating Safety Handbook, Chapter 6: Safe operations.
- Transport Safety Victoria Safety Alert Maritime 2013 No 3. Anchoring.
- Small Ships: training and operational manual.
- Australian Builders Plate or the manufacturer of your vessel can provide guidance on capacity of your vessel.
- A practical boating course.

THIS ADVICE IS EFFECTIVE IMMEDIATELY

Approved:

ADRIAN MNEW

Acting Director Maritime Safety
Delegate of the Director, Transport Safety

22 January 2014