

HIGH SPEED BOAT OPERATORS FORUM
REPORT ON
HIGH SPEED VESSEL WORKSHOP – TASMANIA
13/14 SEPTEMBER 2011

Preamble

Although vessel numbers are small, the operators in Tasmania carry well in excess of 120,000 passengers a year from two primary locations on the south east coast of Tasmania.

Operators work out of Pirates Bay and Port Arthur on the Tasman Peninsula and Adventure Bay on Bruny Island with some also from Hobart and Triabunna.

Workshop

The Tasmanian workshop came about following a number of injuries sustained during sightseeing and eco trips.

Although the injuries reported are a very small percentage of the passengers carried, it is suspected that within Tasmania and elsewhere the actual injuries sustained are far in excess of those reported. The majority of passengers carried are from overseas or outside Tasmania. It is thought unlikely they would report what may be a minor injury until arriving home, and so the data is not captured.

The types of injuries were well known and it was thought that they related to the vessel dropping off steep waves, the issue is how to prevent these injuries occurring.

Specifically, an injury onboard the vessel MV Attitude created discussion leading to the idea of a local workshop to examine the issue. It was initially intended this workshop would just incorporate the Tasmanian operators.

A short time after this and during a discussion with officers from Maritime New Zealand, MAST came to the conclusion that the problem was more widespread than just the Tasmanian operations. It was then decided to extend the

workshop to cover all interested parties. Subsequent contact was received from all Australian states and Territories, as well as New Zealand, USA, UK and Europe.

Finally, attendees came from all Australian states and New Zealand, with results sent to other interested parties in the UK and Europe.

Prior to the Marine and Safety Tasmania workshop, Maritime New Zealand ran a one day meeting of all interested parties which I attended. This meeting provided valuable information which was able to be further elaborated on during the Tasmanian workshop.

Workshop Presentations

The intention of the workshop was to obtain opinions and experiences from as wide a range of operators, clients, regulators and builders/designers as possible. However, to set the scene MAST was able to obtain the views of a person who had been injured on a vessel, detailing not only his injuries but life during and after recovery.

Paul Dean described how his accident occurred, with the vessel coming off a wave and how he was treated throughout the rest of the voyage. He detailed what happened in hospital and his recuperation over a period in excess of 12 months, and how his personal and family life was affected.

Paul's injury was a T12 fracture of the spine.

The description of what happened to Paul set the tone for the workshop and certainly created some lively initial discussions.

Presentations were given by a variety of speakers on a wide range of topics:

Charles Weston – The Tasmanian Story – Is there a way to reduce the frequency of back injuries?

Dr Ellen Frydenberg – What Happens to the Human Body

Malcolm Riley – Bureau of Meteorology - Weather and Coastal Waves

Rob Kirby – Build and Fitout of High Speed Passenger Craft

Rob Pennicott – Operation of High Speed Vessels in Tasmania

Trevor Williams – Sydney Harbour Operations

Domonic Venz – Maritime New Zealand – Operations in New Zealand

David Lugg – Western Australian Perspective

The focus of the workshop was to make an attempt to find out what causes the injury, what the injury is and then try to find some way to reduce, or ideally, eliminate injuries caused by the action of the vessels at sea.

Subsequent to the presentations each day, a short workshop was held with questions and comments from the floor.

Major Topics of Discussion

Vessel Categories:

Following on from the Weston report it was felt by the majority that high speed vessels should be separated into three different categories.

Category 1 – Thrill rides which would encompass high speed turns, stops etc. Typically these vessels would be jet boats, some small and some larger but would, in all cases, provide thrills for the clients on inshore waters.

A sub category would be similar vessels but operating in offshore waters with similar actions

Category 2 – Primarily Eco tourism type vessels which, although operating at a reasonably high speed enabling greater distances to be covered, would frequently stop for sightseeing, photographic experiences, whale watching.

Category 3 – These vessels are ferry type operations, generally point to point and in smooth water operational areas.

Training:

Training was the topic that occupied most discussion on both days, it being seen as the way forward. It would not only be the most cost effective solution but would produce the best results. The proposed training was over and above that required by the regulator, which in Australia, is a Coxswains Certificate for vessels less than 12 metres measured length with certificates increasing as the vessel size and power increases.

All were of the opinion that training was the best way of reducing injuries but the real issue was what form the training should take and who should provide the training.

- Options for training were:
 - Training formulated and provided by training providers
 - Training formulated by the regulator and provided by training providers
 - Training formulated and provided by the operators in the form of an “apprenticeship”
 - Training on an ad hoc basis, effectively type approving a skipper for a particular vessel, operation and area
- It was generally agreed that the best approach would be for industry to come up with a training package that was presented to the regulator for approval. This may take the form of a two day course and when this was successfully completed, the applicant would then be required to undertake a set number of hours on specific vessel training before taking command. It was thought a figure of 40 hours may be appropriate.
- First aid training and how to deal with back injuries was the other primary topic concerning training.
 - The question was raised as to whether or not remote area first aid training should be a requirement. After much discussion it was thought that it would be better if crew had more specific training aimed at those injuries which may be expected, that is back and neck injuries.
 - Remote area is defined in Australian Standards as being more than 40 minutes from medical care.

- Other forms of training were discussed including some form of “Ropes” type book, e-learning and the development of a high speed vessel operator’s manual.
- Discussion was held on how a new operator could enter the industry if he had not previously been engaged on these types of vessels. It was thought that one method may be to get hours up on a vessel without passengers but at full displacement

Seating:

Seating was discussed extensively, with the main points being:

- Seating should be approved to a suitable standard including both the structure of the seats and the attachment methods.
 - Comprehensive discussion was held on the subject of seat belts, should they be worn and the type of belt from lap to full harness? It was decided by the majority that seat belts should be fitted and worn by all, at least in the forward seats. Further discussion was also held regarding the fitting of more stringent restraints as the category changes, that is, Category 1 vessels to have full harnesses or 3 point harnesses, Category 2 lap harnesses and possibly Category 3 no harnesses.
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- At the Auckland meeting, it was identified that people were more prone to injuries when seating allowed for bad posture.
- The paper by Rob Kirby pointed out the design advances by Ullman Dynamics of Sweden and other companies in seating design, particularly with saddle type seating.
- While standard seating may be suitable for Category 3 vessels, it may be that at the other end of the spectrum, Category 1 vessels may require saddle type or better seating with full harnesses.

Vessel Design:

Hull design and vessel fitout occupied some discussion and it was thought that this topic is best left to industry, with the proviso that the vessel’s structure,

fitout and stability characteristics need to comply with the rules currently in use.

Summary:

Vessel specific and operation specific training was the greatest concern of all attending participants. It was felt that a combination of formal training and on the job training was required, but to a standard decided by the industry and assisted by the regulator would provide the best result.

There was a great deal of discussion on vessel categories. It was felt it would be very hard to progress other items without some means of identifying each type of vessel and, just as importantly, the type of operation.

How the formal side of training is delivered needs to be further discussed, as does its content, but the important issue is that it is delivered consistently and is specific to the industry.

The issue of fatigue was raised relating to not only the handling of a vessel, but also situational awareness and the decision making process which relates to the handling of passengers. Fatigue is brought about not only by time on the water but by other lifestyle factors.

Seating is very important with many options explored across the whole spectrum from standard seating to full military type seats.

It is worth looking further into the first aid training, maybe as part of the general vessel training, with a first aid course specific to the industry.

Throughout the discussions it was apparent that all vessels must have in place a safety management system that is approved by the authority in whose jurisdiction the vessel operates. Additionally, it was felt important to screen passengers at the time of booking, including people with pre-existing injuries, children and the elderly.

It is interesting to note that one operator has already put in place some of the recommendations arising from the workshop, namely improved safety management procedures and specific crew training.

Other companies have ongoing in-house discussions and intend to implement changes in the years 2012/13.

All participants agreed it was essential this workshop be progressed and to that end a meeting is to be held by Marine Safety Queensland and financed by Australian Maritime Safety Authority in 2012.