

SAFETY ALERT 04/23 – RIGID INFLATABLE BOATS

What happened?

On 29 June 2023, a student taking part in a Royal Yachting Association (RYA) powerboat level 2 (PB2) training course at St. Andrews Sailing Club, Fife, Scotland was injured when they fell out of the boat during a man overboard (MOB) manoeuvre and were struck by the boat's propeller.

Three students were being taught by one of the sailing club's RYA powerboat instructors on board *Midsummer*, a rigid inflatable boat (RIB) owned by the club. The instructor had demonstrated an MOB recovery procedure using a buoyancy aid to simulate the casualty before starting the practical exercise. One of the students then took the helm, the two other students sat on the port sponson and the instructor sat on the starboard side sponson (Figure 1).



Figure 1: Library picture showing the position of *Midsummer's* occupants during training (The students on the port sponson were sitting further aft on 29 June 2023)

With the RIB travelling at approximately 15 knots, the instructor threw the buoyancy aid overboard and shouted, "Man overboard!" to initiate the drill. The student reduced the RIB's speed slightly, instructed the crew to point to the 'man overboard' and to hold on, before putting the helm to starboard to turn back towards the simulated casualty. During the turn the RIB banked to starboard and the student sitting forward on the port side sponson fell backwards into the water; as the boat continued its turn the student was struck by the boat's engine and propeller. As soon as the instructor and other students realised what had happened the RIB was driven back to the student in the water and they were recovered on board and taken ashore for medical attention. The injured student fractured a bone at the base of their thumb and required stitches for a laceration to their

right buttock and an operation to repair a deep laceration in between the thumb and index finger of their right hand.

The boat used for the training was a Valiant 4.5m RIB fitted with a 30 horsepower outboard engine. It was equipped with lifelines along the sponsons, had a single handhold on the port side of the console with a two-person seat attached (Figure 2).

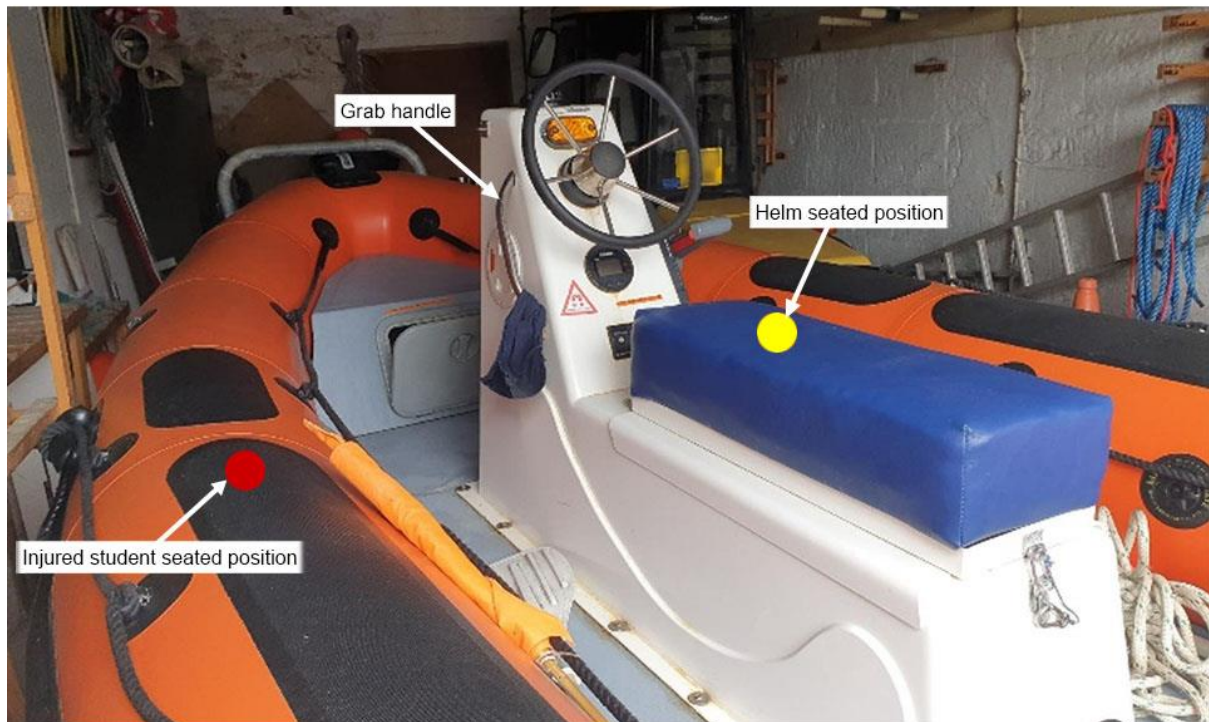


Figure 2: Lifelines and the single handhold on *Midsummer*

Why did it happen?

A preliminary assessment by the Marine Accident Investigation Branch identified that:

- As the RIB started to turn it tilted away from the students on the port side sponson and they leant back to maintain their balance and not topple into the RIB.
- The student who fell overboard overbalanced and fell out of the boat because they were unable to reach a suitable handhold with which to steady themselves.
- Examination of the RIB showed that there were insufficient handholds available for three people to sit safely on the sponsons when the craft was underway.

What action was taken?

The Royal Yachting Association has:

- Directed the sailing club to engage with an RYA powerboat trainer to deliver one day of continuing professional development to all the club's powerboat instructors, focusing on procedures and the practical delivery of the PB2 course, specifically the MOB element.
- Issued a Training Guidance note (TG 05-23) on the correct method of teaching the MOB recovery procedure and highlighting the need for adequate handholds for occupants sitting on the sponsons of a RIB.

St. Andrews Sailing Club has:

- Amended its risk assessments and standard operating procedures.
- Engaged with an RYA trainer to ensure that all instructors have received a full day of continuing professional development.
- Fitted additional grab handles to both of its training RIBs.

What can others learn from this?

Whilst rowing clubs may not necessarily conduct MOB training, there will be clubs that use similar RIBs for coaching and/or safety purposes. The potential exists for a similar incident to occur if, for any reason, a RIB turns at speed and passengers are sitting on the boat's sponsons without accessible hand holds. Clubs operating similar RIBs should review their risk assessments and ensure that controls are in place to either ensure passengers do not sit on sponsons or that suitable and sufficient handholds are in place.