

You can't step out of your

door nowadays without being asked to undertake a risk assessment addressing every aspect of your trip to work, fixing the photocopier and playing in the company five-a-side team.

K, so perhaps I exaggerate slightly but you all know what I mean. Risk assessments and a strong focus on health and safety are a fact of life in today's safety-conscious world and, of course, this is no bad thing if it is not overdone. In this article we'll take the opportunity to look in a very practical way at risk assessments and the plans that you create to both avoid and deal with the risks that you face when boating. We'll use Team RIB International's recent trip around Britain as the basis for the article, but look at how you can use the lessons from Hugo's trip to benefit your own ribbing.

So what actually is a risk assessment? Put simply, it is a common-sense analysis of the risks faced in undertaking any task. Indeed we all undertake 'risk assessments' every waking moment of our lives: we look both ways before crossing the street to ensure we don't get run over, and decide that we can

make it across before the car but would be better to wait for the truck – we assess risk and create a plan accordingly; we check the kids' fingers are clear of car doors before we shut them and we make sure ladders are secure before we climb them – it is largely common sense and we are all well versed in making assessments.

RISK ASSESSMENT:

A risk assessment tends to consist of three distinct elements. These are:

THE RISK

An example from the Round Britain Race would be: 'The possibility of a face impact on a console in rough water'.

THE ACTION

The action taken to eliminate the risk. In this example this could be: 'The RIB should be driven with care to eliminate the chance of this occurring, you should keep the head clear of hard objects, and in rough water a helmet should be worn'.

THE RISK LEVEL

The ensuing level of risk. 'Low'. A medium or high level of remaining risk would, in all likelihood, lead to you reassessing whether the approach you are taking to mitigate the risk is correct and whether it is safe to proceed with the activity.

Ahead of undertaking a trip it is wise (and in the case of the Round Britain, mandatory) to assess all of the risks that you figure you will face and work out how you will deal with them. From this list of likely risks you can then create a plan to both hopefully eliminate the risks but also to deal with them if they do occur. So, what risks did Hugo's team identify, how did they plan to deal with them and what lessons can we all take from the Round Britain Race?

Some of the team's expected risks included: man overboard; all crew overboard; capsize; collision with submerged objects; grounding due to navigation error; electronics failure affecting the navigation kit; failure of VHF; running out of fuel; fouled propeller; collision with another vessel; RIB holed; RIB sinking; illness/seasickness; fog and lost. A normal day out in the Solent, then!

Of course, ribsters would be pretty unlucky to face all of these problems in a normal day's boating, but for the Round Britain entrants these were very real possibilities – indeed there was even a sinking on the first day of the event itself! (They were all fine.) Let's look at some of those risks and how the team aimed to deal with them in the event of them happening.

We've looked at 'man overboard' before so let's look at one of the worst possible scenarios – a capsize with all overboard. Clearly prevention is better than cure so, of course, the key thing is to prevent it happening in the first place. Capsizes can

occur for a variety of reasons: it could be with the RIB ploughing into a head sea the helm gets it wrong and skies the boat with the bow coming back over; in a following sea, dropping into a 'hole' could lead to being pushed beam on and rolled, or perhaps a sudden failure of the steering system has pitched everyone overboard. On a long trip, regular changes of helm and breaks to reduce fatigue can help hugely - pack flasks and high-energy snacks - plus working as a team, so the crew can help the helm spot waves and problems before they arrive. Match speed and direction to the wave patterns you are having to deal with and beware of the great danger of complacency - particularly in following seas where it is easy to build speed and stuff the RIB into the back of a wave with potentially disastrous results. In terms of mechanical failure, hydraulic-steering systems merit close monitoring as small leaks can draw air in and, in a few cases, have led to catastrophic failure. A regular maintenance schedule addressing the entire boat and not just the engine is critical. If you do go over, then the personal kit you have and the way that you deal with the capsize could make all the difference. Good planning and training would mean that your first consideration would be for everyone to check on each other to ensure all are accounted for and no one is suffering any injuries. In the absence of a self-righting system (pretty unlikely unless you have a heavy-spec commercial vessel or a lifeboat to hand) then you need to climb onto the hull and await rescue. For long passages and in poor weather a drysuit could be a lifesaver and a personal flare pack for each crewmember makes perfect sense. Often overlooked is a waterproof hand-held radio attached to the life jacket and, as prices come down, emergency locator beacons per each crewmember are possible too. Undoubtedly capsize is a potentially

of it occurring and, if it does so, reduce the chances of it spiralling to an even worse end.

We all get lost or disorientated from time to time but doing so on the Round Britain event in potentially poor conditions and at high speed could have ended in tears. Creating a good navigation plan that everyone on board understood and bought into was the first step towards ensuring that this did not happen. Everyone accepts that electronic navigation is the primary means of navigation today, but to place total reliance on it is foolhardy, so having a manual backup is key. It makes sense to record your position every 10-15 minutes and, rather than recording latitude and longitude, think about using techniques that we've looked at before, like distance and bearing to a waypoint centred on a compass rose. Recording your speed and heading at

at every possible opportunity and don't run out – having heard the coastguard and RNLI discussions with boaters who have made this so-avoidable error, you'll want to avoid it!.

Fouling your propeller can be dangerous and frustrating. Doing so at speed could lead to a serious injury, so the team needed to have a plan to deal with the problem. As already touched on, avoiding the issue in the first place is key, so keeping a good lookout is fundamental. Pots are common around the coast, but over the last couple of years the marking has got better, so if you see one pot assume others are present too. If the team did snag a line then putting someone in the water was the last resort (and would never be attempted unless a) You were in a drysuit b) It was very calm c) You were very sure that you could get back on board). You'd also

"...we all undertake 'risk assessments' every waking moment of our lives"

each stage then allows you to plot a position manually should the systems fail.

Running out of fuel would never happen to you, would it? Certainly on the Round Britain the legs were often about 200 miles, and with the range of the RIB about 300 miles, if the teams had to pile into bad weather (with a corresponding increase in fuel usage) this didn't give too much of a safety margin, and with the possibility of needing to change course or go to the assistance of others, fuel management became a key consideration. The golden rule

when making a longer passage is not to risk things, and even if a detour would add time to your trip, if that detour brings with it fuel, then it must be done. In short, fill up need to have a very good serrated knife and a plan to get to the props to cut the line clear. Even if you have chopped off the visible line, be careful as, particularly with thinner fishing lines, the cord can wind itself into the seals behind the prop, damaging the seals and potentially damaging the leg/outboard itself.

These are just a few examples of the challenges that the teams faced and how they planned on dealing with them. What the RIB International team showed, though, was that, irrespective of the risk, it was possible to reduce the chances of it occurring and have a plan to deal with the problem if it did happen. Whilst the Round Britain Race exposed teams to an increased chance of these risks happening, the fact that problems were few and far between is testament to the planning and preparation that went into each leg for all of the teams. Even when the competitor Blue Marlin sank within 20 minutes of starting to take on water, the crew made it into their life raft without even getting wet!

In our less extreme version of ribbing we can face the same problems and can deal with them in the same way. Think through the issues you are likely to face and create a plan for dealing with them; some risks are present every trip you undertake, yet others only come to prominence in certain conditions or in certain places. Therefore assess each trip separately and talk to your crew about them, and with issues such as MOB go out and practise. That said, if you figure you are likely to face grounding, collision, capsize and fire in the same week, you might consider choosing a different pastime!

Paul Glatzel is an RYA powerboat trainer and is author of the RYA Powerboat Handbook. He is based in Poole. www.powerboattraininguk.co.uk

life-threatening event;

however, planning and care

can lessen the chances