

**FIFTH EDITION / MAY 2018**

# **SAFETY ADVISORY NOTICE**



# INTRODUCTION

**THE RYA LAUNCHED ITS FIRST SAFETY ADVISORY NOTICE AT THE LONDON INTERNATIONAL BOAT SHOW IN 2014. THE PURPOSE THEN, AS NOW, WAS TO RAISE AWARENESS OF PARTICULAR SAFETY ISSUES, TO HELP TO PREVENT AVOIDABLE ACCIDENTS AND IN DOING SO ULTIMATELY TO PROTECT LIVES.**

The evidence shows that boating activities are safe and fun – that's how it should be, but it's also clear that accidents can and do happen. For that reason we are confident that everyone who reads the RYA Safety Advisory Notice will be encouraged to think about their own attitudes to safety.

The 2018 edition of the Safety Advisory Notice provides advice on six new topics that have been highlighted in the past year and builds on the information that we have provided on specific topics since 2014. When you read this edition it is worth taking a few minutes to look back over past editions; they still contain valuable advice to refresh your memory and they complement the advice we provide in the RYA safety hub on our website and promote through our training courses.

[www.rya.org.uk/go/safety](http://www.rya.org.uk/go/safety)



# EMERGENCY!

## WILL YOUR LIFERAFT FLOAT FREE OR SINK WITH YOUR BOAT?

**Your liferaft must be capable of being launched quickly and easily in an emergency. It is critical that it is stowed correctly otherwise it might not be accessible if it is needed.**

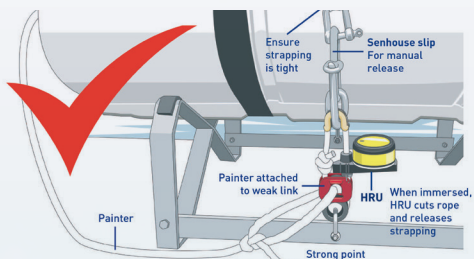
A liferaft may well be your salvation should the unthinkable happen, so it makes sense to put some thought into where and how to stow it. There is no single best solution, but good practice dictates that wherever that is, it should be capable of being launched in 15 seconds.

If you normally keep your liferaft in a locker, possibly to prevent theft, then make sure it is not covered in clutter that you have to pull out first to get to it. Better still move it to a more accessible position particularly when making offshore plans. If it's stored on deck it needs to be somewhere that does not risk accidental deployment in heavy weather or get damaged from being stepped on or sat on.

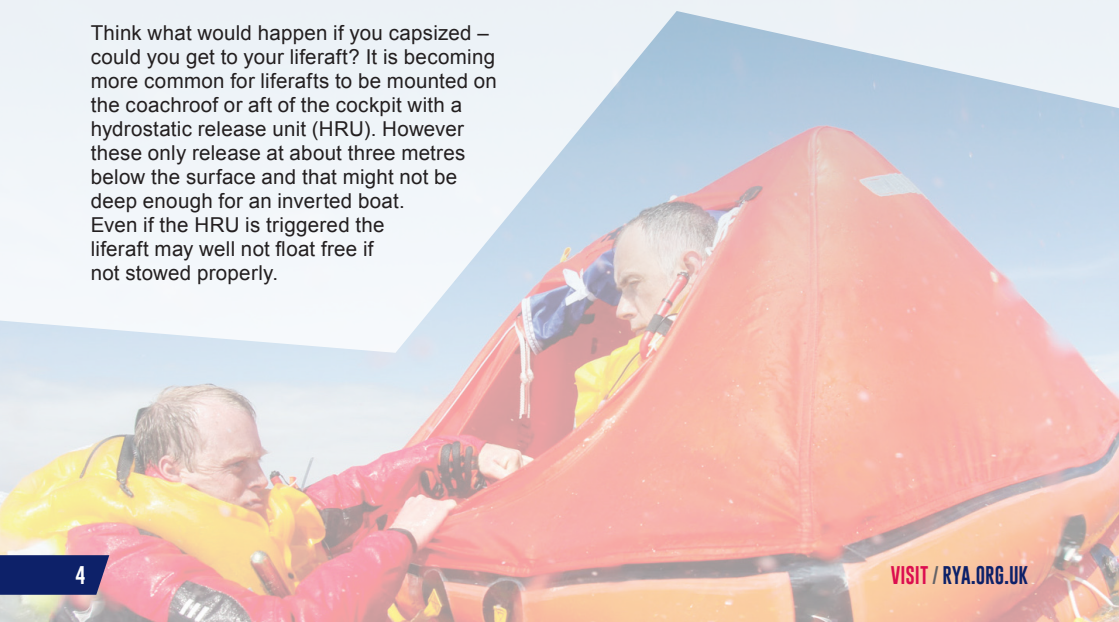
Think what would happen if you capsized – could you get to your liferaft? It is becoming more common for liferafts to be mounted on the coachroof or aft of the cockpit with a hydrostatic release unit (HRU). However these only release at about three metres below the surface and that might not be deep enough for an inverted boat. Even if the HRU is triggered the liferaft may well not float free if not stowed properly.

If you intend to use an HRU, make sure that you follow the manufacturer's instructions to ensure that it will function properly. You should also make sure that you can launch your liferaft manually – a Senhouse slip/Pelican hook is ideal. If you have to take to the liferaft there is no point in being in the water hoping for the liferaft to float free. The HRU should be viewed as a last resort rather than the primary means of deploying the liferaft.

Don't overlook where you stow your liferaft, it should be an important part of any offshore passage preparation and not an afterthought.



The diagram shows the correct way to stow a life raft when using an HRU



# CLIP ON WITH CARE

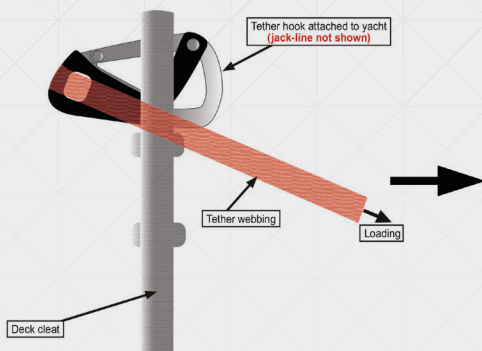
**To prevent lateral loading on safety line hooks, the method used to anchor the end of the safety line to a vessel should be arranged to ensure that the hook cannot become entangled with deck fittings or other equipment.**

An “accident” implies an unforeseen event that occurs without anyone’s fault or negligence; it cannot be anticipated or predicted. When a crewman on the Clipper Round the World Race fell overboard in October 2017 he was attached to the yacht by his safety line. The hook that was clipped to a jack-stay, deformed and released resulting in him becoming separated from the yacht. He was recovered onto the yacht but could not be resuscitated and died as a result of this tragic accident.

The MAIB investigation found that the hook at the end of the crewman’s safety line had become caught under a deck cleat, resulting in a lateral loading that was sufficient to cause the hook to distort and eventually release.

The harness tether was certified under the international standard applicable to this equipment. The standard contains detailed testing requirements that assume the safety line and its hooks will be loaded longitudinally rather than laterally. The tether hook was of a conventional design and quality of build, and is commonly used by manufacturers of safety harnesses and safety lines.

When loaded longitudinally, the safety line can withstand a load of over 1 tonne. However, when loaded laterally (as shown below) a hook will deform at a significantly lower load. It is important that hooks remain clear of obstructions and are free to rotate to align the load longitudinally.



# DIY BOAT ELECTRICS

## IS IT REALLY A GOOD IDEA?

**Although 12V DC systems that are common on recreational craft are unlikely to create an electrocution hazard, there are dangers that can catch out an amateur DIYer.**

A common problem that we have come across in older boats is 12V DC electrical systems that have been jury-rigged by the owner or an electrician who is not experienced in the marine environment. It is surprisingly easy to take a faultless system and create faults in it.

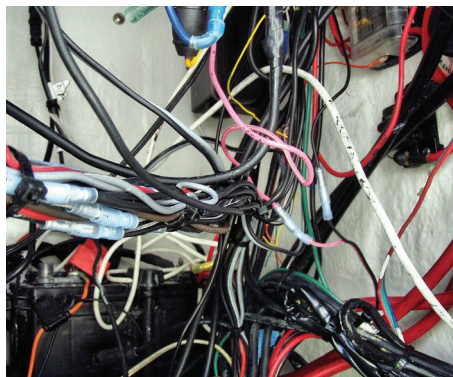
A typical problem starts like this: an owner has bought a new piece of equipment, however there are no spare switches or breakers (fuses) in the electric switch panel and it is too difficult to add another one. To make matters worse, the ideal place to install the new piece of equipment is nowhere near the switch panel and it is impossible to feed new wire to it even if they wanted to. So the owner finds a convenient circuit that they can take power from and connects into it. If that is not possible, the owner may run new wiring straight to the battery terminals, bypassing the switch panel altogether.

When the power is turned on the electrics are energised and that is when the problems can start if the circuits have not been properly planned. The boat manufacturer will have selected wiring that safely carries the normal current loads for the equipment it serves. If you splice a new connection into it, the additional load may exceed the current rating for the wiring.

This may not be enough to blow a fuse or circuit breaker, but wiring heats up dramatically when it carries 100% of its rated value for anything more than a few minutes, this may be enough to cause damage, dangerous overheating and even a fire.

If wiring is connected straight to the battery terminals without fuse or breaker protection (fuses and circuit breakers are intended to protect wiring) then there is a risk of a short circuit in which current flows through the wiring but not the equipment it is powering (the load); a common cause of this is insulation failure caused by chaffing. A short circuit can result in extremely high currents, overheating and fire. Fuses and circuit breakers will blow at these high currents before damaging the wire.

The RYA recommends that unless you really know what you are doing, get the job done and your wiring checked by a competent marine electrician.



**DO YOUR ELECTRICS LOOK LIKE THIS?**

# FIRE SAFETY

**Fire on board can take hold quickly and when it does, it can wreak havoc on a vessel in minutes. A smoke detector can give you those precious few minutes of warning to help you and your crew to get out safely.**

Early detection of fire is vital, so it's important to install alarms and to test them regularly to make sure they work. If you are unlucky enough to have a fire on board then early action is essential and an alarm will help you do that. Do not worry about setting off a fire extinguisher for what might seem like trivial fire – fire will make more of a mess of your boat than any dry powder extinguisher. And remember, once the fire is out then keep monitoring the affected area to ensure that it does not flare up again.

If you suspect that there is a fire in an engine room do not remove the covers, this will allow the air and therefore oxygen to reach it which will only add to your problem. An automatic fire extinguisher in the engine compartment is an excellent precaution in the event of an engine fire. And while we are talking fire extinguishers, don't skimp. You need to be confident they are up to the job and won't run out before the fire is put out.

If it becomes obvious that a fire cannot be contained then you will need to make a distress call and abandon ship. If you don't you may also lose your dinghy or liferaft and you do not want to be around if the flames reach gas bottles and fuel tanks. A little thought about what you would do in this situation is always a good idea.

A good quality liferaft (ISO 9650 or similar) will have a certain amount of survival equipment packed in it, but it is always a good idea to make sure that you have a grab bag ready to hand for a few vital essentials. Right up there is a hand held VHF, PLB/EPIRB, GPS, waterproof torch, medical supplies, water, warm clothing and reading glasses if you need them.

The RYA recommends that you fit a smoke alarm that meets British Standard BS5446 Part 1 and carries an approval mark such as 'kitemark' and that you test it regularly.

We provide a considerable amount of advice on fire prevention and fire-fighting equipment on our Safe Boating hub at [rya.org.uk/go/safety](http://rya.org.uk/go/safety).



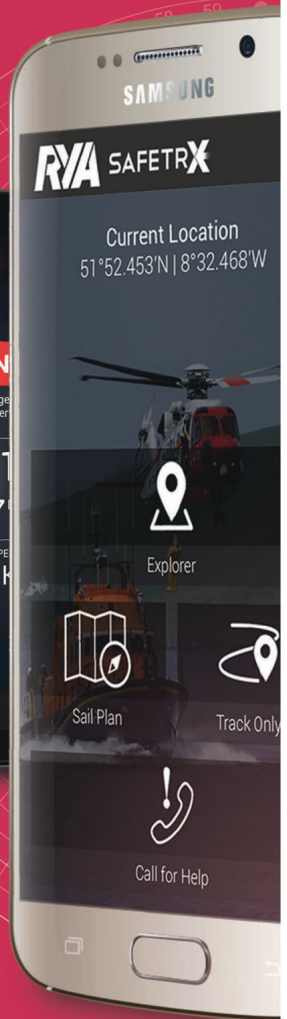
[www.rya.org.uk/go/safetrx](http://www.rya.org.uk/go/safetrx)

# RYA SAFETR<sup>X</sup>



## GOING ON THE WATER?

The ultimate safety app, RYA SafeTrx offers an alternative tracking and alerting system for the UK using iPhone and Android smartphone technology. Download for free today and take the 'search' out of search and rescue



**RYA**

# LOBSTER POTS

**Snagging something around your prop, keel or rudder can cause problems ranging from the tiresome to the terrible. Avoid compounding the situation by jumping in to try and clear it, unless conditions are suitable and you are confident in your abilities.**

In some areas around our coast, the proliferation of poorly marked static fishing gear including lobster and crab pots appears to be on the increase. We believe that it poses a considerable hazard to navigation.

The Government demands compelling evidence before it will consider a change to the law so that static gear has to be marked for navigation purposes rather than simply for identification of the owner. We have repeatedly published our online reporting form and urge everyone to use it to report sightings and entanglements to gather that evidence. But the real point of this advisory notice is to warn boaters to think carefully before going over the side into the tide, cold water and without a lifejacket to cut their vessel free; doing so may well turn an irritating situation into a dangerous one.

It may be that your prop or rope cutter cuts the line and causes no problem, but some line is not easily cut and poly line can melt around the prop shaft, causing all sorts of damage. If you do snag a line, put the engine in neutral to avoid wrapping the line tighter and tighter. If you have an outboard, you can tilt it to assess the situation, but if you have an inboard or a stern-drive with an extended platform, it may not be that easy. However, provided conditions are suitable, you may be able to launch your dinghy and tackle the problem from there.

If you are sailing, a line may simply snag on your rudder or keel. If you can grab it with a boathook then you may be able to free yourself by pulling the line toward the bow which, hopefully, will pull it out the way it went in.

However if none of this works and you are caught fast you will need to assess your immediate situation. Provided you are not in any danger, it is far better to stay on the boat and call for assistance rather than taking unnecessary risks. If you are in danger and all attempts to fix the problem have failed, then you should speak to HM Coastguard.



# SEE AND BE SEEN

## **The International Regulations for the Prevention of Collisions at Sea specify the display of internationally-understood lights that shall be complied with from sunset to sunrise.**

In spite of this, it is a tragic fact that in less than a year four people have died in two separate accidents because their boats have not been seen at night and they have been run down. One of these happened during the Volvo Ocean Race in December 2017; the other was much closer to home on the South coast and involved a collision between a commercial fishing vessel and a small recreational motor boat, James 2, in August 2017. It resulted in the loss of three lives.

The MAIB published its report into the loss of James 2 in March 2018. The boat sank as a result of a collision with a commercial fishing vessel just off Shoreham-by-Sea. James 2 was undamaged by the impact of the collision, but sank because it was swamped by the wash and had insufficient reserve buoyancy to remain afloat in the flooded condition.

The MAIB report highlights other deficiencies which we can all learn from; the importance of wearing lifejackets, having a means to raise the alarm, avoiding alcohol, the need to keep a good lookout and the merits of training. All of these have been covered in previous Safety Advisory Notices. What we have not specifically covered before is the importance of seeing and being seen at night.

Navigation lights will tell a look-out what you are doing and which way you are travelling so that the steering and sailing rules can be correctly applied. If your navigation lights are not clearly visible and in the correct configuration then others will not know what your intentions are. If they cannot be seen then others may not know you are there, particularly if you are not visible on radar.

Remember, the visibility and range of lights specified in the Colregs are the minimum required. These days LED lights use little power so it's not difficult to make sure they are bright enough to be seen. But above all, you should ensure that during the hours of darkness, you show the correct navigation lights for your vessel's type and size, as well as maintaining a proper look out for other vessels and hazards.





