

# Sea safety

STORY AND PHOTOS BY JEFF MERRILL

There are many things that can go wrong when you are far from shore, so it's best to think ahead and anticipate not only what can happen, but how you will handle various situations. A big part of safe voyaging is preparation, both in equipment and in thinking. Most of this is common

cruising boats who want to make sure that they have the appropriate safety gear aboard. In addition to the standard USCG requirements — life jackets, flares, fire extinguishers, etc. — there are a “raft” of other important pieces of equipment that every cruiser should consider including in their inventory. For a new owner of a boat, the temptation to break out the checkbook for a plethora of “upgrades” needs to be tempered and I always recommend that they hold off on major

The only exception is when it comes to safety. I advise that peace of mind and ensuring a safe return to port should have an unrestricted budget. To be blunt, you could ask, “How important is it to make sure your family is safe?” Naturally, the sky is the limit. Whatever safety gear you feel is essential is a personal decision and you need to have a game plan that includes where this equipment will be stored so that it is easily accessible and in current, safe, good working order.

Many problems at sea develop due to risks taken to meet schedules. Cruisers can avoid putting themselves into the teeth of a storm if they are more conservative with their travel plans — if in doubt, wait it out. Everyone will be much happier being safe and tied to the dock versus tossed about at sea. Knowing the weather and monitoring it closely is paramount. Minor inconveniences can blossom into full-blown disasters due to poor judgment or hasty decisions — often the direct result of lack of sleep, so make sure you are well rested and have a posted watch schedule that will break up the time and allow for regular inspections of your operating equipment while



Heading offshore puts you in a different world than when coastal cruising, requiring additional gear like the ditch bag, right.

sense and includes proactive maintenance of all of your yacht's systems and equipment. Your crew should be briefed as to location and operation of all of the safety gear you have aboard.

As a yacht broker, I am constantly working with clients purchasing new and used

purchases until they have spent six months or a season aboard first, to get familiar and acclimated.

you are underway.

Seasickness by one or more crewmembers can dramatically shift the burden of responsibility for the safe operation of your boat, and precautions should be in place to take proper medication in advance of symptoms.

To get a handle on what safety supplies you may need it is important to first assess the likely dangerous situations that can occur at sea that would require special safety gear.

Sure, almost anything can happen, but some of the biggest safety concerns that boaters face when they head out to sea are: fire, man overboard, collision, running aground, flooding from a penetration, major illness or injury, abandoning ship and bad weather

## Fire

Fire is probably a sailor's number-one fear, as it can spread quickly and there aren't a lot of options on where you can go to escape it. Smoke detectors, combined with CO2 alarms, may give you an alert that could save your life. The Coast Guard requires appropriate fire extinguishers, which must be inspected regularly, and many offshore cruisers supplement this with built-in fire suppression systems. Additionally, having a couple of smoke masks in key locations and a fire blanket near the galley should help you be ready for an onboard fire.

## Man overboard

If a man overboard situation occurs, sound the horn five times so that the person who splashed knows you are aware they are missing. I'm aware of several seasoned cruisers who provide each crewmember with a personal locator beacon. These are relatively inexpensive and if you have it on your person and slip overboard, you will be easier to find. The requirement for a Type IV throw ring is great, but it is going to work much better if the ring has some floating polypropylene line in a heaving bag and is attached to a strobe light that activates when it hits the water, turns upright and starts blinking.

This is especially helpful for a man overboard situation at night because the "swimmer" can see the strobe and work their way towards the light and then gather in the life ring. Once you get the tired swimmer back to the boat, you need a plan to get them safely aboard. They will be tired and weak and difficult to retrieve. Swim ladders are hard to use in a rolling sea; the Lifesling with a pre-designed block and tackle to lift up a crewmember is something many cruisers have ready to deploy to assist with recovery.

## Collisions

Collisions can happen when you least expect it. Don't forget that the first priority is the

safety of your crew, and all should immediately don life jackets. Wearing comfortable life jackets (like inflatable harness PFDs) make this easier for the crew to move about on the deck of the boat. For traversing the deck, installing jack lines that you can clip into with a tether to an inflatable

harness will help prevent a slip overboard. I also suggest that life jackets be fitted with a water-activated strobe light and a whistle.

Many cruisers buy a six-pack of PFDs that are the bulky orange type

and would not be very comfortable if you actually had to depend on one to keep you afloat. The best way to avoid collisions is to keep a keen eye on and communicate with the other traffic in your vicinity via VHF. Equipping your boat with AIS will help others know who you are and let you see what the speed, course and time to closest possible approach is in advance of an intersection. Your boat's signature can be enhanced with a radar reflector or Firdell Blipper.

## Running aground

Running aground takes the same first priority: put on life



A method for getting crewmembers back aboard, like this Lifesling module, could be critical offshore.



Another must-have when offshore is a life raft adequately sized for the numbers of your crew.

cuts, burns and broken bones. Taking a Red Cross first aid and CPR class should be mandatory for cruisers, and having some basic first aid books on board can help refresh you on how to respond. Warm blankets to stabilize an injured crewmember and pillows to wedge around them for stability should also be on hand.

### Abandon the vessel

In the event you have an emergency that requires you to abandon ship, you will want to have a good life raft (when was it last inspected?), an EPIRB (with a good battery and correct identification) and a ditch bag (filled with a hand-held VHF, GPS and survival provisions). Don't forget that you might be able to float off with your dinghy as well so you can create a bigger footprint for a rescuer to find. Put yourself in the eyes of a helicopter search: They are looking for a small floating speck on a large body of water. This is why you want to stay on your wounded boat as long as possible and remember the old rule that you only step up into a life raft.

If the going gets rough, sometimes the best response is to ride out the weather with a sea anchor or a drogue. If you have room to maneuver (i.e., plenty of water) slow down your speed or change your course; even heading back towards the direction you came may make the ride more comfortable while you bide your time.

All of these safety features are readily available and there are many more choices to evaluate. You need to figure out what is appropriate

jackets and then do what you can to stabilize the boat. Check all of the bilges; it may be that your hull is holed with water pouring in. Forespar makes a product called a Sta-Plug that is a soft, high-density foam cone that can be squeezed into place to fill a gap created by a smaller hole like a failed through-hull. These are easier to use than wooden bungs. I've heard of some boaters wedging a bed mattress into a large void and others carry a collision mat — a piece of canvas with grommets that they drape over the hull and secure with line to mitigate water intrusion.

Having some spare plywood and two-by-fours along with duct tape and an assortment of tools may also help you rig up some supporting structure to stem the flow. SeaKits damage control kits offers a toolbox filled with emergency patching and repair supplies. If you have run aground the only good news is that means you are probably near shore — subscribing to a service like BoatUS Towing or Vessel Assist may be a smart investment so that you

can call on VHF 16 to arrange for assistance. Have aboard some large-diameter towing line (at least 200 feet) and think about how you would tow another boat in distress and how you would want to be towed if you are the boat requiring help.

### Flooding

Your bilge pump system is another vital safety component. Electric bilge pumps and hydraulic bilge pumps should be serviced regularly and tested for reliability, and strainers should be cleaned out periodically. Manual bilge pumps like those built by Edson move a lot of water. Make sure your bilges are clean and your limber holes are clear of debris that can clog your pumps.

### Illness

While at sea you need to be self-sufficient, and this is particularly important with regards to first aid. There are several first aid packages available like the Medical Sea-Pak that offer first aid accessories like splints, dressings and bandages for



for your boat and the type of cruising you will do. Give some careful thought to where you will install these critical safety components so that they are ready for immediate use. Talking through worst-case scenarios before you depart the dock will help with your crew's confidence and show that you have a plan in place. Many safety products are fitted aboard boats but never used; if they were needed, there typically will have been little advance practice. You can learn a lot by searching online and watching YouTube videos. You may not be able to fully simulate a disaster situation, but you should think about how you will react and develop some strategies.

Communication becomes essential in an emergency. Using a SPOT (satellite GPS tracker) or DeLorme inReach (two-way satellite text messaging) device can notify your loved ones ashore of your position and situation. The crew aboard needs to remain calm and focused to stabilize the situation. Once you gather your wits, a VHF hail, satellite or cellphone call should go out to help connect you with onshore support.

In the best case, the expense you incur on safety equipment turns out to be a big waste of money. All told, it can add up to a sizable investment of onboard gear. But if you don't have it with you, a dicey situation could be devastating to be in and you'd regret that you didn't plan for the worst by having the necessary equipment to take care of you and your crew. I know one cruiser who has used a bicycle helmet and

underwater headlamp to cut away a net that fouled his propeller. You want to be very careful if you send someone into the water on purpose; this requires a wetsuit, mask, snorkel and fins, maybe even a suction grip handle and certainly a long leash so that they stay connected.

Ultimately it is your call, but here is a list of some other key items to consider, all of which are designed to help you in a dangerous situation: hand-held spotlight, hand-held strobe light, PLB (personal locator beacons), FLIR (night vision), sea dye marker, Sea Rescue streamers, Cyalume snaplight glow sticks, smoke flares and immersion survival suits.

You may not need all of this gear. It's expensive and needs to be properly maintained, but if you're out there and you need it, it's nice to know that you have it. After all, "safe boating is no accident!" ■

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