

Personal Safety at Sea

It's one thing to have a safe boat — strong rigging, watertight hatches, and a well-stocked toolbox — but it's another thing entirely to make sure **you** and your crew are prepared for the unexpected. Personal safety at sea isn't just about the vessel; it's about the individual sailor being equipped, protected, and ready to respond when conditions change. A boat can be perfectly seaworthy, but if the people on board aren't wearing the right gear, carrying the right tools, and knowing how to use them, that seaworthiness doesn't matter much. This is about personal safety — the vests, tethers, radios, beacons, lights, rafts, and tools that keep you alive and give you options when the sea reminds you who's in charge.

Staying on the Boat

1. LifeVest (foam type): Reliable, durable, and always buoyant. Even if everything else fails, this will keep you afloat.

2. Inflatable LifeVest: Comfortable enough to wear all day. Mine are Mustang onshore racing vests with hydrostatic inflators, which means they only deploy when fully submerged, not from spray or rain. Offshore, that makes a huge difference in reliability. And like all quality inflatables, they also have a manual pull-tab for activation, as well as an oral inflation tube — so you're never relying on just one system.

- Crotch Straps: They don't come standard with crotch straps, which is fine for inshore use, but offshore it's a weak point since you can slip out if you fall overboard. To solve this, I bought five sets of West Marine crotch straps. Offshore, I clip them on for security; inshore, I leave them off for comfort.

- What I Carry in the Pockets:

- ACR Strobe: High-intensity emergency light for visibility at night.
- Signal Mirror: A simple but effective tool for daytime signaling.
- Whistle: Lightweight and reliable, perfect for drawing attention fast.

- Personal Locator Inside the Vest: Each Mustang vest also has a personal locator beacon** mounted inside with Velcro, and further secured by the short length of line that comes with it. I run that line through the vest and tie it to the zipper or the inflator mechanism, so even if the Velcro fails, the beacon stays attached. The one limitation is that these PLBs aren't hydrostatic — they don't switch on automatically. If I were to fall overboard unconscious, they'd need to be activated manually, which is the tradeoff.

3. Tether: Offshore safety means using a dual tether — two separate legs so you can clip onto the next jack line point before unclipping from the last, always staying connected. The webbing is elastic and bunched, designed to stretch under sudden load so it absorbs shock instead of slamming you to a dead stop. Just as important, the tether should attach to your LifeVest or harness with a quick-release shackle. That way, if you get

dragged or pinned, you can detach instantly instead of fumbling with a carabiner.

4. Jack lines: The most important thing when rigging jack lines is to run them as close to the centerline of the boat as possible. The goal isn't just clipping in — it's staying on the boat. A centerline jack line reduces the chance of you being tossed over the lifelines and dragged alongside in heavy seas. They also need to be secured at more than just the stern cleat and bow cleat; use strong, dedicated attachment points along the deck. Properly rigged jack lines let you move safely fore and aft, tethered the whole way.

Calling for Help

5. ACR Personal Locator Beacon (PLB): A small, portable emergency beacon that transmits your position via satellite when activated. I keep mine mounted inside my inflatable LifeVests, secured with Velcro and tethered to the vest itself so there's no chance of losing them. Essential for solo sailors or anyone moving about the deck at night.

6. ACR EPIRB: Registered to the vessel, this beacon automatically or manually alerts rescue services worldwide with your position. On my boat, it's mounted just inside the companionway — easy to grab on the way out in an emergency. Another option is to mount an EPIRB outside the cabin on the hull in a hydrostatic release bracket. In that setup, if the boat were to sink, the pressure of the water would automatically release the EPIRB and activate it, even if no one had the chance to manually deploy it.

7. ACR OLAS Tags: These are wearable Bluetooth-enabled devices designed to trigger an alarm if someone goes overboard. They can be paired directly to a smartphone, which will sound an alert if a tag goes more than about 30 feet away or loses connection. For a more robust setup, you can add a base station that flashes and alarms when a tag disconnects, and even wearable OLAS watches exist for wrist use. If someone falls overboard, the app not only sounds the alarm but also drops a GPS pin marking the exact location, making it easier to circle back. The downside: false alarms are not uncommon. Still, I'd rather deal with the occasional false alert than miss the real thing.

8. Garmin inReach: The sailor's best friend — onshore, offshore, up a mountain, in a valley, anywhere on the planet. This small device combines the SOS capability of a PLB or EPIRB with the power of two-way satellite messaging. You can send texts from anywhere in the world, either through the unit itself or paired to your phone. I keep mine clipped to my LifeVest when I'm alone at sea. The downsides: it's not waterproof (though cheap cases solve that) and it's not free. A new unit runs around \$300, with a subscription starting at \$19/month. The battery holds charge for a year in standby. I also use mine to automatically send tracking data to my PredictWind page. Bonus: it works just as well on a hike in Fiji as it does on deck mid-ocean.

9. Standard Horizon Handheld VHF Radio: Every boat needs at least one handheld VHF, no exceptions. Personally, I use the Standard Horizon HX890, though you can find models both less expensive and more advanced. The point is redundancy: it's a backup if the fixed-mount radio fails, and it's also essential every time you leave the boat in the dinghy. Dinghies break down, and they always seem to do it in the most inconvenient spots — having a handheld radio means you can call for help instead of rowing miles. I actually keep two on board: one always on the charger, the other staged at the helm. Bonus if you buy one with GPS and DSC calling — another layer of safety.

10. Signaling Gear: Beyond whistles and mirrors, it's worth carrying layered signaling tools ready for both day and night. A proper offshore kit should include:

- Handheld red flares and parachute flares for night distress signaling.
- Orange dye markers for daytime visibility in the water.
- AIS MOB beacons that trigger automatically when submerged and broadcast your position directly onto nearby vessels' AIS screens.
- Radar reflectors or radar-target enhancers to make a raft or MOB easier to pick up in poor conditions.

When All Is Lost

11. Life Raft: If you're going offshore, you need a hydrostatically released life raft. Make sure it's up to date, not expired, and that you know what equipment is packed inside. Each raft is built for a specific number of people — and they mean it. A four-person raft will hold four, tightly, but don't expect to cram six aboard. I've done classes and sat in these things — they are compact survival pods, not yachts. Mine is hard-mounted in a cradle on the foredeck. In an emergency, I can throw it overboard or let the hydrostatic release do the job if the boat sinks below a meter.

12. Ditch Bag: This is your portable survival kit for when you have to step off the boat and into the raft. Inside mine: food, water, medical supplies, flares, flashlights, glow sticks, sunscreen, hats, bandanas, and even a deck of cards to keep morale up. I also pack handheld comms, signal devices, and other small essentials. My personal rule: if there are four people on board, I carry enough provisions in the bag for four people for four weeks. Beyond food and water, the ditch bag should also have exposure protection gear.

- Redundant Garmin inReach: I keep a backup inReach unit inside the ditch bag itself. I pull it out and charge it once every six months, then return it to the bag. That way, if my primary inReach is lost with the boat or fails, I still have a fully functional satellite communicator ready to go in the raft.

13. Ditch Bag 2.0 (Dry Bag of Identity): Sitting right next to my ditch bag is another dry bag — call it the "Ditch Bag 2.0." This one holds the critical *identity and continuity*

items:

- Boat paperwork and insurance documents
- Passports and IDs
- Credit cards and cash
- Phone chargers, laptops, laptop chargers
- External hard drives with my information and footage
- Ship's logbooks and any essential records

Here's why it's separate: once you're in the life raft, the primary ditch bag will be opened and closed constantly, and things inside can get wet. You don't want vital documents, electronics, or money ruined in that shuffle. The purpose of this second bag is to make sure that if you lose your boat in a foreign country, you still have a way to prove who you are, buy what you need, and communicate.

14. The Rule of Threes: Survival priorities follow a simple rule:

- Three minutes without air (or from severe bleeding).
- Three hours without shelter/exposure protection.
- Three days without water.
- Three weeks without food.

Plan your ditch bag and raft provisions around these four "threes."

Tools and Essentials

15. Waterproof Headlamp/Flashlight: I always keep one at the helm hanging off the binnacle. My waterproof flashlight is actually a dive light, so if I need to free the prop at night, I can grab it, throw on a mask, and go straight overboard. My headlamp has both white and red light settings. Red light keeps night vision intact and won't blind crew on deck, while white light gives you full visibility when you need it. Having light instantly available on deck is critical for emergencies.

16. Multitool & Quick-Grab Tools: One of the most important items on board. My go-to is a Leatherman kept in the companionway where it won't rust. Alongside it, I keep a line spike. In fact, I keep a whole chalk bag with essential tools staged by the companionway: an eight-way screwdriver, multitool, pliers, line cutters, a mini flashlight, a universal socket with ratchet, a crescent wrench, and even a rubber mallet. These aren't my full tool kit — they're the "90% tools" for quick emergency fixes. When the boat's taking on water, you don't want to be searching through lockers; you want these tools within arm's reach.

17. Knife: Every boat needs knives within reach in the cockpit. On mine, I've zip-tied a dive knife to the binnacle and mounted a machete under the bimini above the helm. Lines foul, people get tangled, sails jam — there are countless reasons to need a blade in

seconds. Stage knives where they'll always be within grabbing distance.

Bonus Section

18. Tracking Page (PredictWind): My Garmin inReach updates a live PredictWind tracking page every 15 minutes. Family, friends, and followers can always see where I am. If my “dot” doesn’t move for more than a day, people know something’s wrong — even if no beacon has gone off. It’s both safety and peace of mind.

19. Float Plan: Every passage, long or short, I file a float plan. It doesn’t have to be formal with the Coast Guard (though it can be); it can be as simple as telling a trusted contact where I’m going, when I’ll arrive, and who to call if I don’t. The key is giving someone the information so if I disappear, help is notified quickly.

20. Proper Attire: Survival isn’t just about gadgets — it’s also about clothing. In cold climates, that means layers, sweatshirts, and foul-weather gear to prevent hypothermia. In heat, it’s about loose, breathable clothing, hats, gloves, and sunglasses to protect from sunstroke and exhaustion. Dress for the conditions you’re sailing in — safety starts with what you wear.

21. First Aid Kit: Offshore, a proper first aid kit is essential. Mine includes bandages, sterile dressings, suture kits, antibiotics, painkillers, seasickness medication, antiseptics, and more. Offshore, you are the hospital. Be prepared to handle injuries that could otherwise become life-threatening when help is days away.

22. WATER: The most basic but most essential survival item. Always ensure there is fresh drinking water on board for you and your crew, no matter what. This isn’t optional — it’s life or death. Store it in multiple containers and locations in case one leaks or gets contaminated.

Training & Drills

23. Training & Drills: Having the gear isn’t enough if you don’t know how to use it under pressure. The best-prepared sailors run regular drills:

- **MOB recovery practice** — using your tethers, OLAS tags, and radios in live scenarios.
- Abandon ship drills — opening the life raft, staging the ditch bag, practicing the transition from boat to raft.
- **Flare use** — safe handling and firing practice, so you’re not fumbling in the dark.
- **First aid refreshers** — treating wounds, seasickness, or hypothermia when help is days away.
- **Recovery hardware practice** — show the crew how to deploy and use the boarding ladder and the LifeSling. These tools are only effective if people know how to rig them quickly in real conditions.

In real emergencies, adrenaline and chaos can cloud judgment. Drills build muscle memory, so you and your crew react instinctively when seconds matter.

Layered Redundancy

Safety offshore isn't about one magic device — it's about stacking layers so that if one fails, another takes over. That's what creates a true survival net:

- **Stay on the boat:** Vests, tethers, and centerline jack lines are the first layer.
- **If you go overboard:** PLBs, strobes, whistles, mirrors, OLAS tags, handheld VHF's, and inReach units clipped to your vest give you multiple chances to be seen, tracked, and heard.
- **If the boat is lost:** Life rafts, ditch bags (with flares), and Ditch Bag 2.0 extend survival far beyond what a vest alone could provide, with the "rule of threes" guiding priorities: air, exposure, water, food.
- **If gear fails:** Redundancy in radios, beacons, lights, tools, and knives means you're not relying on a single point of failure. A dead battery, a jammed shackle, or a fouled line isn't the end if you've staged blades and backup gear.
- **Always within reach:** Tools, knives, and essentials staged where you live — at the companionway, on the helm, on your vest — make the difference between reacting in seconds versus minutes.
- **Eyes on shore:** (PredictWind) tracking pages and float plans extend safety beyond the boat. Even if every onboard system fails, people ashore will know your last position, your intended route, and who to call.
- **Body and health:** Proper attire keeps you functional in heat or cold, a first aid kit lets you treat injury and illness offshore, and above all, WATER sustains life when everything else fails.
- **Training and drills:** Gear alone isn't enough. Regular MOB, abandon ship, flare, and recovery drills build muscle memory, so you and your crew can act instinctively when seconds matter.

Closing

The ocean doesn't care how prepared you are, but preparation is what shifts the odds in your favor. Personal safety at sea isn't about paranoia; it's about building layers of survival so that if one fails, another takes over. From vests and tethers to ditch bags and drills, every item on this list buys you time, visibility, or resilience. And offshore, time is life. Gear gives you the tools — but awareness, planning, and training give you the edge. Sail safe, prepare for the worst, and may you never need half the things on this list. But if you do, you'll be damn glad they're there.