



Preparation & Planning Prevents Panic

Flooding Checklist

Flooding

(download full checklist at www.edsonmarine.com)

1) Planning and Prevention

- Install a Bilge Alarm!
- Clean & and Paint Bilge White—so you can read it like a book
- Dust & Rust—follow it to the source
- Inspect all Hoses & Clamps. Replace old rusty clamps & cracked old hoses
- Look for cracks in wiring and insulation, replace bad connections

2) Test Existing Capacity—Manual & Electric Pumps

- Mark your bilge with red fingernail polish
- Pan-Pan vs. Mayday
- How many strokes? How long for 100 gal.

3) Understand How and What to Add for Pump Capacity

Flooding Rate (GPM)

		Feet Below Waterline		
		2'	4'	6'
HOLE DIAMETER	1"	28	40	49
	2"	111	157	192
	3"	250	354	433

4) Consider Important Factors (how do you use your boat?)

- Captain's Responsibility
- Where are you taking your boat?
- Offshore, Coastal, Day Sailing or Passage Making

5) Photograph It and Study Photos

6) Stereo Speakers in Cockpit

- They can be installed with a 4" hole saw. Cover or remove for offshore voyages





Flooding

Water in the boat!

- 1) Early detection is key (install a bilge alarm)
- 2) Find the leak!
 - Waterproof Flashlight taped on piece of wood
 - Close all Seacocks except Engine Intake
- 3) Stop the Leak or slow it down as much as possible!
 - What is on your boat that could be stuffed in a hole? M&M's
 - Malleable materials (finger in the dike) such as old life jackets, foam from cushions or a ball of duct tape.
- 4) Pumps can buy time, keep up with a small leak, or remove water after the leak has stopped—thru hull plugs
- 5) Consider other steps to aid your effort (call for assistance Pan-Pan vs Mayday, make sure your boat is heading back toward shore, etc.)



Fire

Fire Prevention Checklist

- 1) Inspect (wires, cracked insulations, batteries, engine, fuel tanks, etc.)
 - Prevent ignition sources : homegrown amateur wiring—replace
 - Smell burning items—electrical
 - Eliminate hazards (ie: alcohol stoves, wood & fuel) : all smell distinctly different
- 2) Equip your boat with safety equipment
 - Fire Blankets, Fire Extinguishers (chemical & halitron)
 - Buy a Digital Pyrometer & put stickers or paint on engine, etc.
- 3) Maintain your equipment and replace on recommended intervals
 - Keep a running list of items to repair
- 4) Run through drills and prepare those on board
- 5) Get a plan on paper and laminate it—put it in the head





Fire

Fire !

- 1) Move the crew to a safe location away from the fire. Upwind and move raft away from the fire or throw into the water
- 2) Determine the type of fire—by smell or if observable
- 3) Fight the fire with the appropriate equipment such as chemical extinguisher, fire blankets halytron/halon
- 4) Prevent the fire from spreading.
 - Smother—starve oxygen
 - Hose down
 - Turn off electrical panel
 - Starve fuel or interrupt as many sides of the fire triangle as possible
- 5) Have your crew assist (call for help, prepare to abandon ship, etc.)
- 6) Laminate maps for thru hulls with placement of the following emergency items :
 - fire extinguishers
 - ditch kit
 - flares
 - emergency tiller
 - emergency pump



Steering Failure

Steering Inspection Checklist

(download full checklist at www.edsonmarine.com)

Sailboat— Wire

Powerboat—hydraulic

- 1) Inspect your system thoroughly at the start of each season (above & below deck—don't forget the rudder!)
 - Look for black, silver or gold dust
 - Look for rust
 - Thermal image rudder
- 2) Lubricate components and replace hardware when appropriate
 - Caribbean chain
- 3) Tension steering cables properly—the lazy cable is your enemy
- 4) Carry tools onboard to make adjustments and repairs. Put in steering compartment
- 5) Practice using your manual emergency tiller and “electronic emergency tiller” (ie: linear drive autopilot)
- 6) Practice deck plate removal and attaching key to emergency tiller
- 7) Know your system! Prepare for a knockdown—what can fall into your steering system
- 8) Paint your wire rope clamps with red fingernail polish or paint. This can help indicate slippage
- 9) Steering cables not rigging wire—there is a huge difference.



Steering Failure

Steering Failure !

Practice

- 1) Make sure you and your crew are safe—Pan-Pan /Mayday
- 2) Analyze the problem. Are your cables clear (can you use the autopilot and/or emergency tiller?)
Is your rudder moving or is it jammed? Did the rudder fail?
- 3) Keep the boat safe. Are you in clear open water?
- 4) Slow the boat down and make those in your vicinity aware of your problem. If it makes sense, anchor.
- 5) Work to correct the issue. This will vary with every scenario.



Rigging and Mast Checklist

- 1) Inspect thoroughly at the beginning of each season (stays, fittings, mast, mast stop, chain plates, etc.)
 - Look at fittings under roller furling systems
 - Cotter Pins not split rings
- 2) Replace and maintain stays and hardware = replacement interval for standing rigging is
10 yrs in the Caribbean and 15 yrs in New England
- 3) Tune your rig
- 4) Inspect regularly throughout the season (make sure clevis pins are secured, check shroud tension etc.)
- 5) Think—"What if"



Rig Failure

Mast Down!

- 1) Pan-Pan or Mayday if someone is hurt
- 2) Make sure you and your crew are safe
- 3) Prevent the mast from putting a hole in the boat
- 4) Think through what you need to do next—each situation is different! Start by notifying someone else about your situation.
- 5) Clear debris from the deck and...
 - A) clean-up the mast, rigging, and sails if you need to create a jury-rigged mast
 - B) or, tie a line and fender to the mast and let it go overboard

YOUR CHOICE HERE WILL DEPEND UPON YOUR SITUATION.