



Bluewater Crew Rating

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IAP 2023 Session

Bluewater Crew Rating

- Rating for sailors with some experience aboard keel boats that would like to build upon their current skills & developing a more advanced skill set
- Build the skills and confidence needed to sail on boats outside of MIT
- Sailors with Crew Rating are needed on almost all MIT sails
 - Evening cruises
 - Deliveries
 - Full day sails
 - Maine
- Join the bluewater list if you're not already

Crew Rating Procedure

Two pathways

- New to big boat sailing
 - Go out for a few pleasure sails and get some experience
 - Ask lots of questions
 - Look for “skill sessions” to be offered this spring/summer
- Significant big boat sailing experience
 - Send your ASA/US Sailing / etc. license to bluewater-skipper@mit.edu and cc me zbz@mit.edu
 - Else: take Nauticed Skipper course (see wiki for details/discount code)

Crew Rating Procedure

- Once you've completed Nauticed course or submitted equivalency: Bluewater crew rating sheet (see wiki)
 - Familiarize yourself with the wiki bluewater crew topics
 - Two sign-offs needed for each skill: "covered" and "check off"
 - Covered is taught to you
 - Check off proves mastery — you should be able to do without hesitation and from memory
 - Sign up for shore-side sessions to get many topics covered
 - Sign up for skill sessions on the water to cover additional topics
 - Attend a full-day bluewater crew class to cover the most intensive topics (e.g. MOB, sail handling)
 - Attend at least two "pleasure sails" with different skippers to get your check-offs
 - Tell the skipper at the beginning about your progress, they can aim to help you get sign-offs

Bluewater crew skills

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Item	Covered	Checkoff	Item	Covered	Checkoff
<i>Basic operation</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<i>Safety</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Mooring approach + departure			Working with new sailors		
Raising and lowering mainsail			Radio procedure		
Unfurling and furling foresail			Location and use of fire extinguishers		
Reefing mainsail			Location + use of PFDs, inflatable PFDs, throwables		
Basic sail trim			Crew overboard		
Tacking			Distress signals		
Jibing			Checking and emptying the bilges		
Assisting with docking			Familiarity with hazards of Boston Harbor		
Use of head			Safe winch operation		
Dinghy operation / driving			Use of running backs		
Knots: bowline			<i>Navigation</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
cleat hitch			Familiarity with layout of Boston Harbor		
rolling hitch			Rules of the road		
stopper knot			Coastal piloting using nautical chart		
clove hitch			Aids to navigation		
Coiling and heaving a line			Knowledge of boat's draft (8' 4" !)		
Starting and stopping engine			Use of GPS chartplotter		

Knots:

- Bowline
- Cleat Hitch
- Rolling Hitch
- Stopper Knot
- Clove Hitch
- Round Turn Two Half Hitches
- Coiling a line

Bowline Knot

The Bowline makes a reasonably secure loop at the end of a line. It has many uses, e.g., to fasten a mooring line to a ring or a post or attaching sheets to a sail. Under load, it does not slip or bind. With no load it can be untied easily. Its principal shortcoming is that it cannot be tied, or untied, when there is a load on the standing end. It should therefore be avoided when, for example, a mooring line may have to be released under load. [Bowline](#)

Cleat Hitch

The Cleat Hitch secures a line to a cleat. The cleat can be on the deck, mast, or dock. Care must be taken in certain situations where a locking hitch can cause issues, e.g. large ships, tow lines, or sheeting a sail. We always use a locking hitch aboard Mashnee. However, we don't lock off the cleat until told to do so when docking. [Cleat Hitch](#)

Rolling Hitch

The Rolling Hitch Knot attaches a line (usually smaller) to another (usually larger) when the line of pull is parallel. This knot is useful for transferring the load of a jib during an override or as a snubber for the anchor chain. It is important to note that a rolling hitch will not hold with some modern lines such as Spectra, Dyneema, or Polypropylene. These lines have a slippery outer sheath. [Rolling Hitch](#)

Stopper Knot

There are several stopper knots that are acceptable to use. We will focus on using the [Double Overhand Stopper Knot \(here\)](#) and the [Figure 8 Stopper Knot \(here\)](#). These knots are placed at the bitter end of a sheet to prevent the sheet from running free (e.g. Jib sheets, main sheet). **NEVER PLACE A STOPPER KNOT ON SPINNAKER SHEETS.** A stopper knot in the spinnaker sheets can cause a broach and can potentially lead to injury of crew and / or damage to the boat.

Clove Hitch

Aboard Mashnee, we mainly use the Clove Hitch to secure the tiller in the center position ([here](#) or [here](#)). The Clove Hitch is known to slip and bind, so it is recommended that you add half hitches to stop slipping. While the clove hitch can be used to secure a fender to the life lines, a better option would be to use a [Round Turn & 2 Half Hitches](#).

Coiling a Line

- Every time we finish a sail, we neaten up the lines on Mashnee by coiling them
- Every time we leave the dock, we coil the dock lines
- Coiling lines: braided vs. non-braided
- [Coiling a line](#)

Radio Procedures

- Crew members should be comfortable using the VHF for both emergency and non emergency transmissions
 - Mayday
 - Harbor Master
 - Marina
 - Fuel Dock
- Comfort with using the VHF is a matter of practice

Radio Procedures - DOs & DON'Ts

DO...

- Talk clearly & slowly
- Follow directions of USCG
- Use appropriate VHF channels
- Keep transmissions focused

DON'T

- Yell into microphone
- Say COPY after transmission
- Foul language / Argue
- Radio check request

Radio Procedures

For Non - Emergency transmissions...

- Identify Boat, marina, dock 3 times
- Identify who you are 1 -3 times
- State request
- Standby for response

Radio Procedures

Fuel dock, fuel dock, fuel dock...

This is S/V MASHNEE

We are requesting permission to proceed with docking with a port tie up

Safety

- Handheld flare (Day/Night) x3
- Day Use distress flag (Orange with black circle and black square)
- Night use distress light (automatic)
- 3x B-I Fire Extinguishers
- At least one USCG-approved Type I, II, III, or V PFD for each person aboard
 - i.e. not the spinlocks

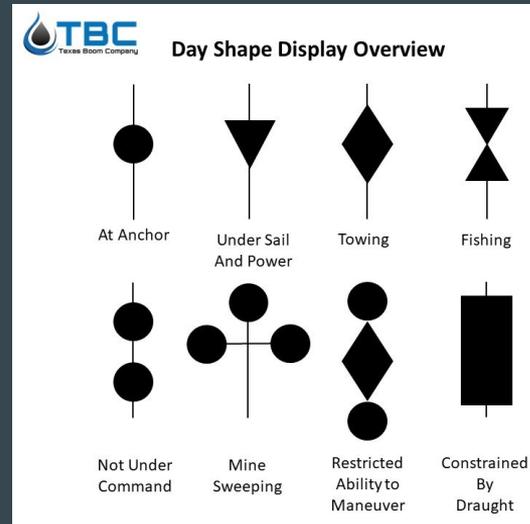
Radio Operations - Mayday

The following protocol is for a MAYDAY call. Use this protocol if there is risk of loss of life. If in doubt, make the MAYDAY call, it can be canceled.

1. Tune the VHF radio to channel 16.
2. Distress signal "MAYDAY", spoken three times.
3. The words "THIS IS", spoken once.
4. Name of vessel in distress (spoken three times).
5. Repeat "MAYDAY" and the name of the vessel, spoken once.
6. Give position of vessel by latitude or longitude or by bearing (true or magnetic, state which) and distance to a well-known landmark such as a navigational aid or small island, or in any terms which will assist a responding station in locating the vessel in distress. Include any information on vessel movement such as course, speed and destination.
7. Nature of distress (sinking, fire etc.).
8. Kind of assistance desired.
9. Number of persons onboard.
10. Any other information which might facilitate rescue, such as length or tonnage of vessel, number of persons needing medical attention, color hull, cabin, masks, etc.
11. The word "OVER"

Navigation Lights & Shapes

- Sailing Vessel underway under sail (night)
 - Red (port) & Green (starboard) sidelights visible for at least 2 nm
 - White stern light visible for 2nm
 - OR: white, red, green tricolor light at the top of the mast visible for 2nm
 - Cannot be used in conjunction with sidelights and stern light
- Sailboat underway under power (night)
 - Red & green sidelights
 - White stern light
 - White forward masthead light (steaming light)
- Sailboat underway under sail and engine (Day)
 - Conical day shape, apex downward
- At anchor
 - All-round white light at masthead (night)
 - Round black ball (day)



Rules of the Road

Pecking Order

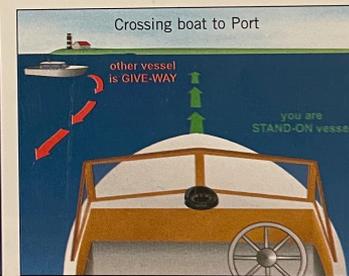
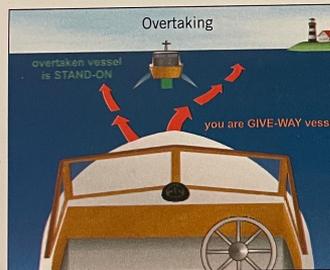
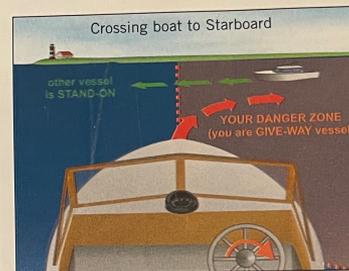
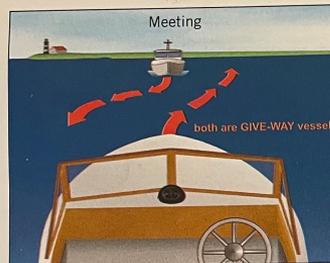
Any vessel below another on the list is the Give-Way vessel

- **Vessels not under command**
- **Boats restricted in their ability to maneuver**
- **Vessels constrained by their draft**
- **Fishing vessels or trawlers** (using lines, nets, trawls, not trolling)
- **Sailing vessels** (not under power)
- **Power-driven vessels**

Human powered

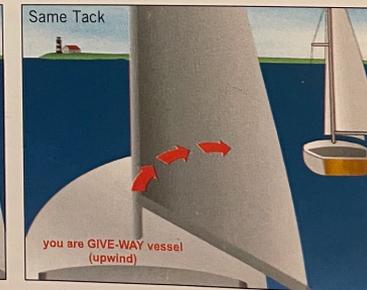
Sea planes

Powerboats



Sailboats

(not under power)



Sounds Signals

- One short (pass you on my port)
- Two Short (pass you on my starboard)
- Three short: backing
- Five short: danger
- One long: entering or exiting blind area; leaving dock/berth
- Whistle audible for 0.5nm
 - Under power in restricted visibility: one prolonged blast every two minutes
 - Under sail in restricted visibility: one long, two short every two minutes

Wrap-Up

- What did you learn new tonight?