

Basic boating for the Marine Scientist

- Understand “licensing” levels
- Need-to-know vessel terminology
- Need-to-know basic knots
- Expect a strong culture of safety in the workplace

- Nothing replaces experience – ask when unsure on a field trip, pay attention to what your boat operators and those with more vessel operations experience do

“I have a boating license” – what does that mean?

All states require a **“Safe Boating License”** to operate any motorboat

- Does not actually require any operating experience. Odd but true.
- 8 hours USCG endorsed course offered many places and even on-line. [Search offerings here](#). You will learn these topics and more;
 - Basic boat safety
 - Vessel types
 - Terminology
 - “Rules of the Road”
- This is NOT a “Captain’s License” and does not allow someone to take passengers for hire
- ***All marine scientists conducting field work should seek a State-issued safe boating license***

Versus

A USCG merchant mariner credential (**“USCG captain’s license”**)

- Many levels and waters of operation from “6-pack” to cruise ship captain
 - The license you are eligible to test for is based on your experience
- Requires test preparation time equivalent to 20 – > 100 college credits
- Allows operation on vessels taking “passengers for hire”
- Marine scientists with their own appropriate levels of boating experience should consider this if interested in serving on a field support team as a career like the Stockton Marine Operations team staff

Things that drive a professional captain crazy – don't do them.

- Being late to the boat
- Being unprepared for the conditions
- Being loud or yelling when nothing is wrong
 - Opposite - Not speaking loudly when needed (which is often)
- Being “giddy” – OK to have fun but keep maturity level and actions appropriate
- Being on your phone when you could be learning something instead or at least looking around at the coastal environment
- Slamming hatches shut or making any unnecessary loud noises
- Having your hands in your pockets during an operation or docking
- Not distributing your weight wisely on a small boat

There are more but avoiding these behaviors is a first step toward being a valuable deck hand on research vessels

<<<<<< Fore or forward



Always reference the axis of the boat – even if the whole team is looking aft (back) and you want something moved toward (forward) bow you ask that is be “moved forward”.

A white boat is docked at a pier. The boat is viewed from the front. To the left of the boat, there is a red rectangular box with white text. To the right of the boat, there is a green rectangular box with white text. The boat has a cabin and a mast with various instruments. The pier is made of wooden posts and has ropes attached. In the background, there are some buildings and a blue sky.

Port = left

Starboard = right

Ways to remember – Port and Left both have 4 letters.

Port wine is red.

Always reference the axis of the boat – even if the whole team is looking aft (back) and you want something moved toward (your right) you ask that it be moved to the PORT side.

Useful boating knots

Terminology

Line: Nautical word for rope

Bitter end: free/loose end of the line

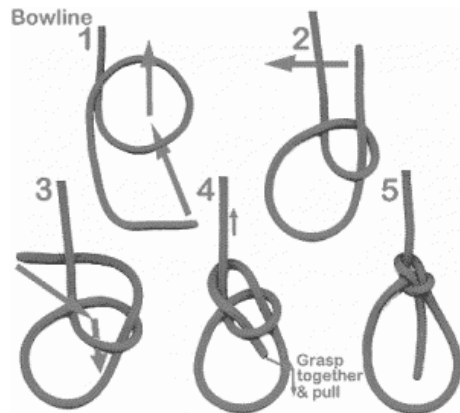
Standing end: attached or longer end of the line

Bight: part of the line folded back on itself

Cleat: hardware used for securing a line, usually metal with two horns

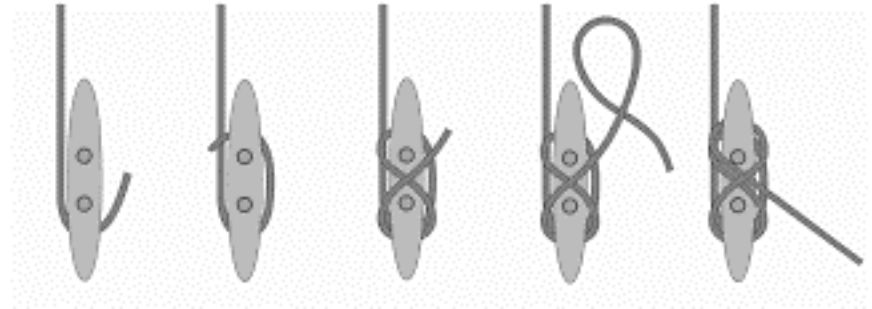
Bowline

Creates a loop in the line that tightens under strain but is easy to untie. The loop can go through a ring or other opening. (Advanced skill: Tie with one hand)



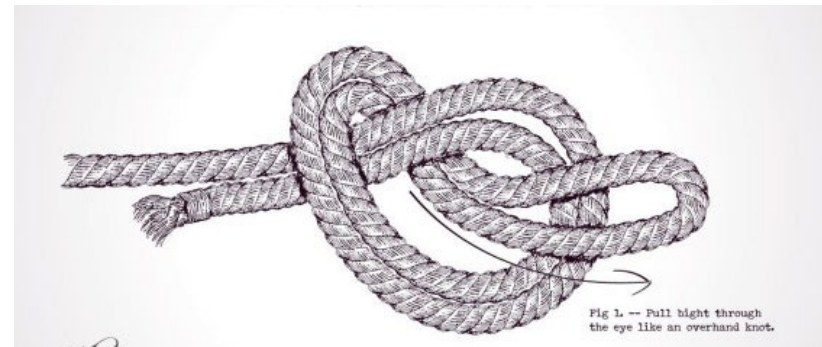
Cleat hitch

Use for securing a line to a cleat when docking or to prevent equipment from swinging.



Overhand loop

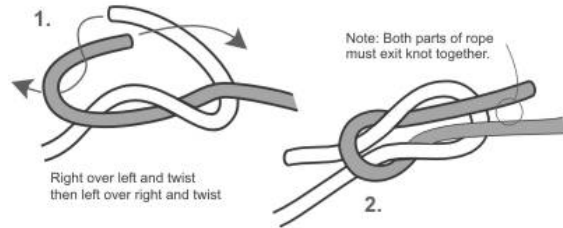
Creates a loop in the line that tightens under strain and is less likely to loosen when strain is released (preferred over a bowline if the line will be under variable tension)



Useful boating knots

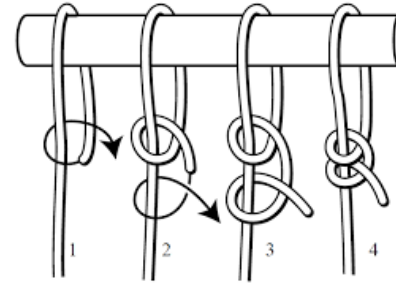
Square knot

Connects two lines (or two ends of the same line). Easy to untie. This knot is not secure when under strain and should only be used for tying items that will not be lifted (such as furlled sails).



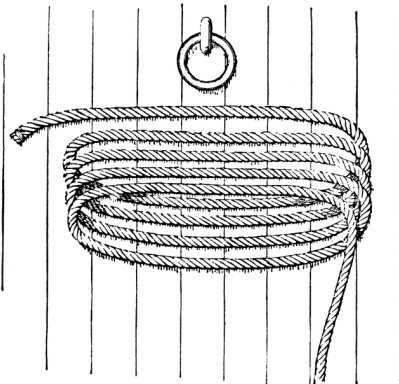
Half hitches

An overhand knot tied around a pole or line. Not secure on its own, but multiple half hitches can be used to secure the bitter end of another knot. Two half hitches around a pole is called a **clove hitch**.



Faking a line

Laying a line on the deck of a ship in a way that will allow the line to run smoothly from its working end without tangling.



Coiling a line

Used to store line to prevent twists or tangles in the line when it is next used.

