Missionary Sailing School

"Twenty years from now you'll be more disappointed by the the things that you did not do than by the things you did do. So throw off the dock lines. Sail away from the safe harbor. Catch the wind in your sails. Explore. Dream. Discover."

- Mark Twain

Before getting started with our lesson on "Knots" we need to first get our 'crew' back to port from their day of sailing [during our previous lessons] so watch this ***Video*** on returning to the ***slip*** [that place in the water for parking your boat, having a dock and pilings to tie to]:
http://www.youtube.com/watch?v=K6a4jgmenwk&feature=fvw

Checklist:

- Remain alert for any wind or current that will affect you.
- Watch for signs of other boats preparing to move (such as exhaust water spewing out or crew activity on deck)
- Approach slowly but with enough speed for steerage ("If you're not bored - you're going too fast")
- Use wind or current to assist turning or stopping.
- Note: With the helm hard over, applying a quick, brief thrust of reverse will increase your turning speed (the 'wash' from the prop actually 'shoves' against rudder)

Now, let's enjoy some **funny videos** and cover again a few of these important points:

- It is good if you have someone on the dock to 'guide' you in [practicing in a smaller boat is a good idea, too]
http://www.youtube.com/watch?v=SHT-0llFVVs&feature=related

- Use a ***boat hook*** for 'reaching'[stay safely within the boat]
http://www.youtube.com/watch?v=RwRQldaKvUg&feature=related

- Or, if you have to work from the dock, stay safely on the dock.
http://www.youtube.com/watch?v=hjmQohPTgAA&feature=related

[Note: The correct procedure here would have been to attach a line to the cleat with sufficient length to toss onto the dock. Then, de-board and 'snub' to dock cleat. As a good rule: always attach end of line to dock cleat or piling first, then take up 'slack' from onboard, so adjustments can always be made from onboard!]

- Make your approach at a safe speed, prepared for unexpected 'obstacles' [Boats don't have breaks!!] Don't do like Captain Ron in this video clip:
http://www.youtube.com/watch?v=8alNxLjCBJc&feature=related

• Remember: sailboats have inertia [especially with heavily weighted keels] . Slow down early so you can stop where you 'plan' to stop:
http://www.youtube.com/watch?v=ZGbapn-KcAs&feature=related

I highly recommend that before operating your boat for the first time [or as a 'refresher'] please study the notes and illustrations on the following **webpage** [from the U.S. Sailing School] about docking:
http://www.sailingusa.info/anchors_and_docking.htm

…….

Now that we're back in 'safe harbor' [as Mark Twain would call it] let's learn some of the basic knots and other skills which use line on the boat. It would be ideal for you to have a length of rope of moderate diameter, at least 3 feet in length [a long shoelace will do, however.] Any knots you are not already familiar with should be practiced until they can be accomplished under extreme, hurried circumstances.

Lesson 7: Knots (and other 'rope tricks')

First things first: since you never want to appear to be a novice while conversing with other sailors as you enter or leave a marina or fuel dock, by all means remember this important rule – rope is "rope" when you buy it at the store and while on its way home to the boat. It becomes "line" once it is assigned its onboard duty!! [Thus, the subtitle above should read "…and other line tricks", but it just didn't sound the same]

As a 'preview' of our first four knots, watch this 4 min.
Video: **http://www.youtube.com/watch?v=01paDemDYrU&feature=related**
[We'll be covering them in detail shorly]

1. The Cleat Knot Cleats are used to secure lines to. On the dock they may look like one of these three:




On boats they are usually smaller and chrome plated or colorized.

Onboard, they will be mounted on masts for **halyards**, on the deck for dock and anchor lines, and near **winches** for securing the ends of **sheets**. In all applications, a line is attached in the same fashion and, if done right, will be very secure. The following ***videos*** will demonstrate the proper **cleat knot** [I will be using a variety of videos to teach each knot, giving you various views and some added instruction.]

• Introducing the knot:
http://www.youtube.com/profile?user=BoatUSvideos#p/u/87/MauqAdKA0Q0

• A closer look:
http://www.youtube.com/watch?v=a3uftiOGUDc&feature=related

• Step-by-step: Open the following **webpage** and observe the animated image of the knot being tied. When finished, click on the #1 [blue box in lower left of picture] to see the first in the series of images:
http://www.animatedknots.com/cleat/index.php?Categ=boating&LogoImage=LogoGrog.jpg&Website=www.animatedknots.com

Now, using your piece of rope, try to imitate the moves of tying this knot as you advance through each step by hovering over the successive 'blue boxes' (#2-10). Since you probably don't have a cleat mounted nearby you can still practice this knot by laying the line carefully upon a flat surface [table] using a straight object [butter knife] to represent the cleat - or - by having a partner create a 'cleat' using their two hands in this way: both arms bent at elbows held tightly together in front of chest, hands clenched like fists with thumbs turned out in opposite directions (like trying to hitchhike in two directions at the same time) also tightly together. Hence, a 'cleat'!

Practice -- Practice -- Practice

There are some very important notes on the lower half of this webpage concerning variations in this knot. Of greatest concern is how, if the first turn is taken completely around the cleat, the line may **jam** when under very heavy load (such as when being towed or heavy winds during a major storm.) There are special cleats designed to help prevent this from occuring [as seen in the second animation on this webpage of a dock cleat. Also the 'blue cleat' seen above, on this page.] But onboard use caution to prevent this from happening - I have had to cut line away more than once!

• How it's used: Watch two more examples of the cleat knot being tied and note their particular application:

http://www.youtube.com/watch?v=ooZ2Q2Q3yMw&feature=related

http://www.youtube.com/watch?v=UlYMkdX_duI&feature=related

Checklist:

• Lead the line around the farther 'horn' of the cleat first, which takes the load off the line while you finish knot.
• When finished, the final two lines should be parallel.

2. The Stopper Knot (or, Figure Eight knot)

This is a very helpful knot used mainly to prevent a line (such as halyards and sheets) from 'running away'. It is easy to learn, quick to tie, but will spare you a lot of hardship, especially on a day when everything else seems to be going wrong!

• Introducing the knot:
http://www.youtube.com/watch?v=fxP3IKIWxfc&feature=related

• A closer look:
http://www.youtube.com/watch?v=z26bCsQ8zr8&feature=related

• Step-by-step: [Don't forget to read the notes on the page]
http://www.animatedknots.com/fig8/index.php?Categ=boating&LogoImage=LogoGrog.jpg&Website=www.animatedknots.com

• How it's used: As stated earlier, this knot can prevent a lot of trouble from 'runaway lines'. Most common is when a jib or main sheet runs out through its respective block. As a precaution, tie a stopper knot on the end of all sheets and halyards. It can also be used as a quick solution to an unraveling line [until it can be properly tended to later.]

3. The Bowline – 'granddaddy of all knots'

Perhaps the most versatile, and most dependable, of all the knots is the ***Bowline***. Dependable because, no matter how much strain is put on this knot, it can always be released with relative ease. Learn the knot and we'll discuss its many uses further down.

• Introducing the knot:
http://www.youtube.com/watch?v=mw3wM73VqqY&feature=related

• A closer look:
http://www.youtube.com/watch?v=57CTfXEk7qk&feature=related

• Step-by-step: [Don't forget to read the notes on the page]
http://www.animatedknots.com/bowline/index.php?Categ=boating&LogoImage=LogoGrog.jpg&Website=www.animatedknots.com

• How it's used: Already mentioned during the videos and on the above webpage is that this knot is ideal for

making a loop which will retain its 'shape' even when under a load [the loop will not tighten.] Thus, it is great for 'lassoing' pilings [or cows], though you might try this guy's technique instead sometime:
http://www.youtube.com/watch?v=7gNlbdiUNxk&feature=related

Honestly, I would've just stepped off the boat and onto the dock! Did you notice, however, that he was correctly working from his mid-ship cleat? Never use a bow line [that's a line tied to the **bow** – not same as a '**bowline**'] to slow or stop a boat as it comes alongside a dock: doing so will cause the boat's bow to turn in and collide with the dock!!

Of the many usages for this great knot, including attaching halyards to sails, is that it is the only appropriate one for trying to rescue overboard crew where you need to be able to haul them in with a 'loop' that will not close in too tightly around them. Know this knot well!! [I use it for nearly every knot task on board.]

Consider also these interesting variations on how to tie a bowline:

• The 'quick method':
http://www.youtube.com/profile?user=BoatUSvideos#p/u/66/aJEMDyvGyEw
http://www.youtube.com/watch?v=1oY9iKJgIXc&feature=related

• The 'one-hander':
http://www.youtube.com/watch?v=B1ssegSwVDc&feature=related

• The 'flying bowline':
http://www.youtube.com/watch?v=6BntERyW_JI&feature=related

4. The CloveHitch

Yet another important knot, the ***Clove Hitch***, is quick to apply but will also give great hold to a cylinder object such as pilings found at many docks.

• Introducing the knot:
http://www.youtube.com/watch?v=d_CSN0U-2Jg&feature=related

• A closer look:
http://www.youtube.com/watch?v=9sS6qGhKJOg&feature=related

• Step-by-step:
http://www.animatedknots.com/clove/index.php?Categ=boating&LogoImage=LogoGrog.jpg&Website=www.animatedknots.com

Be sure to read the notes on this webpage and observe the other method of tying using the end of the rope [as demonstrated earlier.] The clove hitch makes a tight bond provided that tension remains on the line. For quick placement over a short piling you can follow the steps, dropping each loop over the piling as it is made [my favorite method.] As a precaution, an extra hitch should be added to ensure it stays together, as is illustrated in this next video:

- How it's used:
  http://www.youtube.com/watch?v=bxCYBmWDCuM&NR=1

There are as many knots as there are applications where knots are needed. A good knot is one that will hold as long as you need it to, yet will 'let go' without much effort. The previous four are the ones most often used on my boat. For further study, however, I recommend you visit these two websites, following their links, to learn of other knots and their functions:

http://www.animatedknots.com/usesboating.php?Categ=boating&LogoImage=LogoGrog.jpg&Website=www.animatedknots.com

http://www.cruising.sailingcourse.com/advanced_knots.htm

A final note: Be sure that all crew members know their knots and that the plan for handling lines is worked out in advance [so you can avoid a situation such as the one in this last video – watch it in full screen – enjoy!!]

http://www.youtube.com/watch?v=9RzAK5ApMvo&feature=related