

# Marlinespike Seamanship

Chapter 4

Crew 2018

Spring 2007

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## Secure Lines to Cleats, Bitts & Posts

Secure the end of a line to a Cleat

Secure the loop end of a line to a Cleat

Dip the Eye on a Cleat and a Post

Secure a line to a Bitt

Secure a line to a Samson Post

(Secure a line to a Bull Rail)

(Use leverage Multiplier on a Dock Line)

(Tow Boat Hitch – Capstan Hitch)



## Crew Class Outline

Overview of Line and Line Types

Care of Lines

Line Usage

Parts of a Line

Bits, Cleats, Bull Rails and Cleats

Line Handling Hints

Tie some Knots..

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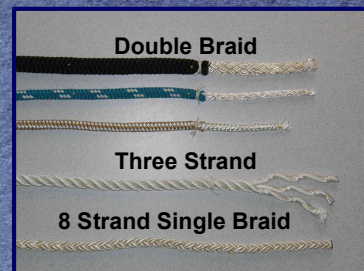


## Types of Line Construction

Double Braid

Three Strand

8 Strand Single Braid



## Tie Knots

Square Knot

Bowline in the end of a line and around an object

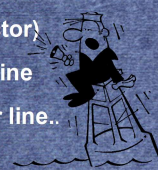
Round Turn & 2 Half Hitches

Secure a line to a rail with a Clove Hitch

(Constrictor & Double Constrictor)

Attach a heaving line to a towline

Attach a length of line to another line..



## Line Types

Natural Line

The "Good Old Days"

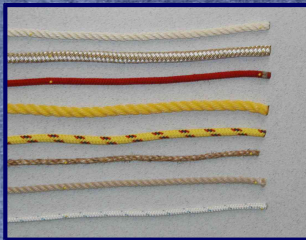
Manila

Cotton





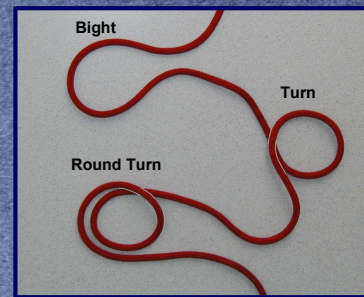
## Some Common Materials for Lines



Nylon  
Polypropylene  
Manila  
Dacron

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## Bight & Turns



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## Knots weaken a line

Table 74  
Percent of Line Breaking Strength Lost  
Excluding HM (Low Stretch) Line

Knot or Splice	% of Strength Lost	% of Strength Remaining
Square	46	54
Bowline	37	63
Two Bowlines (Eye to Eye)	43	57
Becket (Sheet) Bend	41	59
Double Becket (Sheet) Bend	41	59
Round Turn	30-35	65-70
Timber Hitch	30-35	65-70
Clove Hitch	40	60
Eye Splice	5-10	90-95
Short Splice	15	85

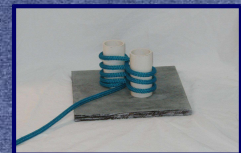
Some combinations of Knots and HM Line can loose up to 80% of the line Strength!

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## Bits



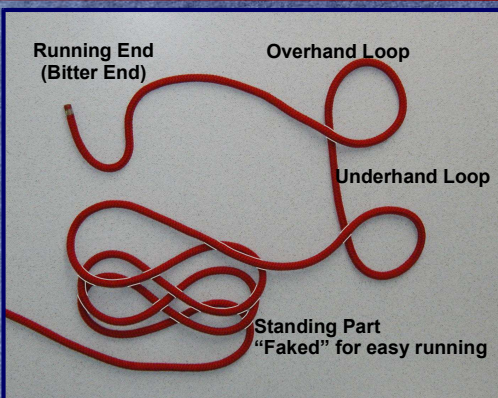
Start with a round turn or more around the first post



Finish with a Minimum of 3 figure 8's

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## Basic Parts of a Line & Loops

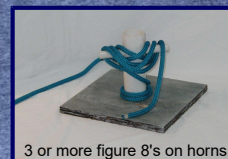


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## Samson Post



Start with a round turn on base



3 or more figure 8's on horns

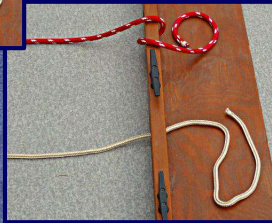
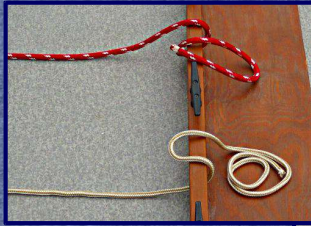


May finish with a weather hitch

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## Bull Rail



## Tow Boat Hitch – Capstan Hitch



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## Bull Rail



## Tow Boat Hitch – Capstan Hitch



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## Line Handling Hints

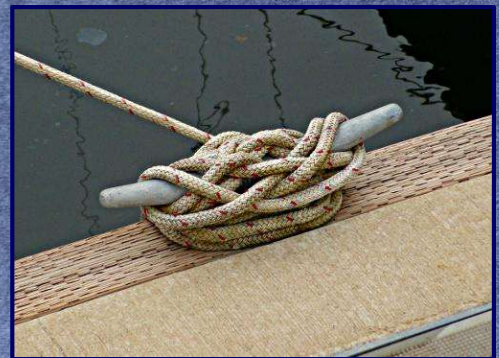


Coiling  
Line Storage / Hanging  
Faking / Flemishing  
Stopping a boat  
Force Multiplying...



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## Is This Your Cleat?

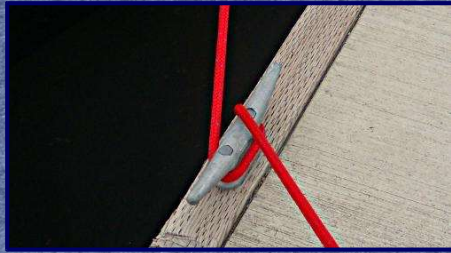


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## Start



Start Around Base Farthest From The Load  
Wrap The Turn Around The Base  
Come Up Over The Top Of The Cleat...

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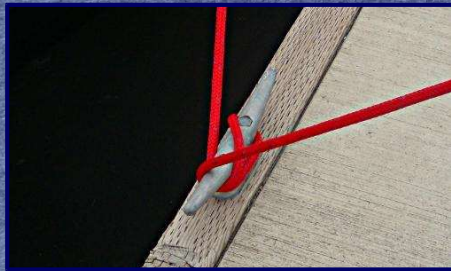
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Pull The Slack Out Of The Line  
And You Are Styled!!...

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Go Over The Top Of The Cleat  
Then Under The Horn You Started Around...

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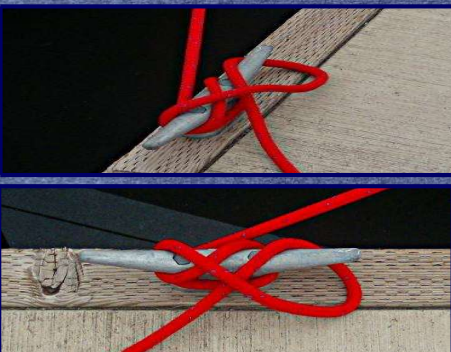
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Adding A Second Hitch For Slick Line...

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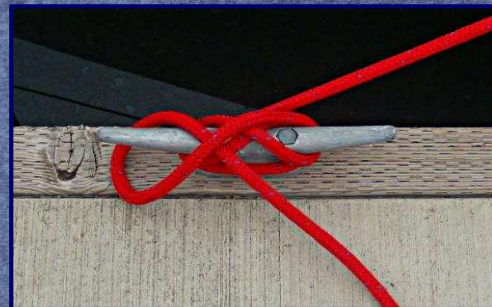
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Put A Half Hitch / Weather Hitch Around  
The Second Horn  
Only One Weather Hitch is Required...

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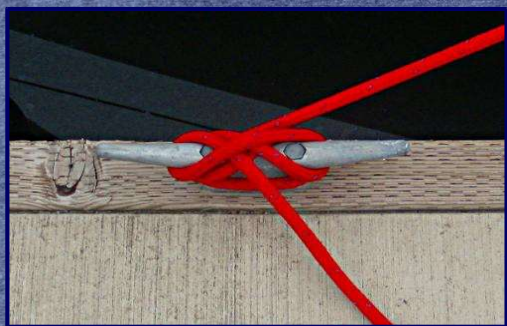


Adding A Second Hitch For Slick Line...

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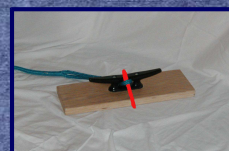
Adding A Second Hitch For Slick Line...

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## Mooring line with an eye to a Cleat

When extra security is needed or the line leads above the Cleat



Be Careful With Your Fingers

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## Many Hitches If In A Hurry



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## Bowline



King or Queen of knots

Used to tie a fixed loop in the end of a line

Can be untied after heavy loading

Left Handed People in the Class?..

See: <http://captnmike.com> if you are left handed

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## Well Punk – Are You Feeling Nautical Or Not? Go Ahead And Style A Cleat

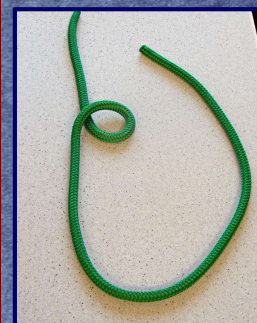


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## Bowline



Have the standing part going away from you – DON'T DROOP OVER YOUR HAND

Small overhand loop to start – hold with left hand and thumb

Large lower loop – it's a visual thing while learning..

See: <http://captnmike.com> if you are left handed

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## Bowline



Feed the end up through the overhand loop and around under the standing part of the line..

See: <http://captnmike.com> if you are left handed

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## Bowline



Completed

The size of the loop can be adjusted by working the line through the knot..

See: <http://captnmike.com> if you are left handed

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## Bowline



Feed the end down through the overhand loop and up close and personal with the loop

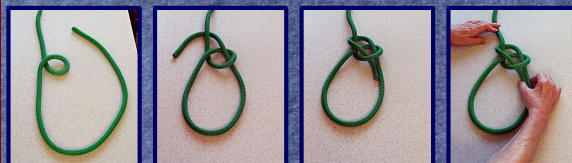
PAUSE and take a deep breath

DO NOT get in a hurry at this point!!..

See: <http://captnmike.com> if you are left handed

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## Bowline



See: <http://captnmike.com> if you are left handed

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## Bowline



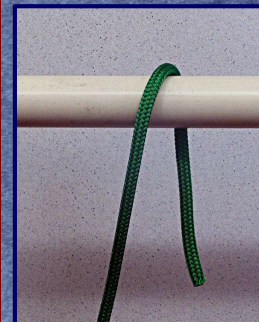
Grip the ends

GENTLY! Work the slack out of the knot..

See: <http://captnmike.com> if you are left handed

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## Clove Hitch

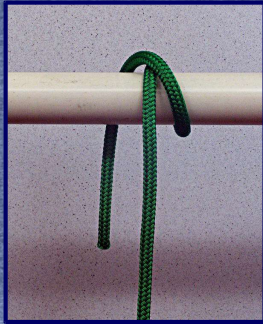


Loop the line over the object you are tying to..

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## Clove Hitch

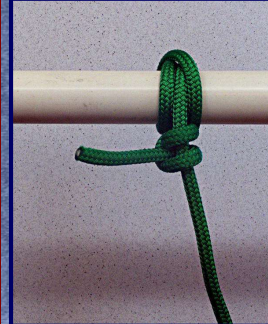


Wrap the end of the line under the object then over the top and cross to the opposite side of the standing part of the line

You can go right or left as long as you cross over to the opposite side..

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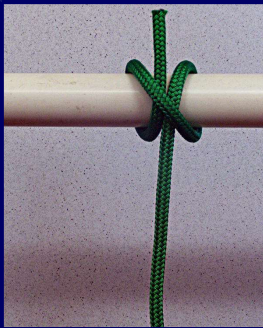
## Clove Hitch



Many people add two Half Hitches (another Clove Hitch) around the standing part of the line to prevent slippage..

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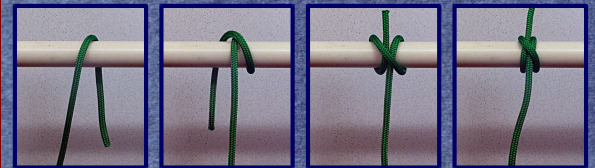
## Clove Hitch



Feed the bitter end of the line under the cross over section and along side the standing part of the line..

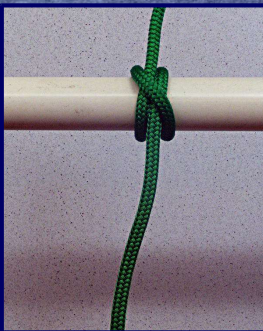
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## Clove Hitch



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## Clove Hitch



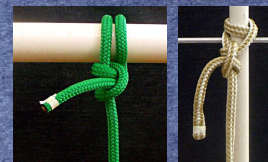
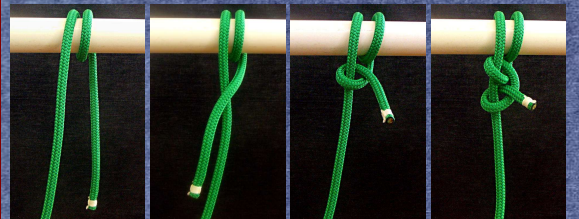
Tighten and it is done  
Used for fenders and quick to adjust up and down

Can slip..

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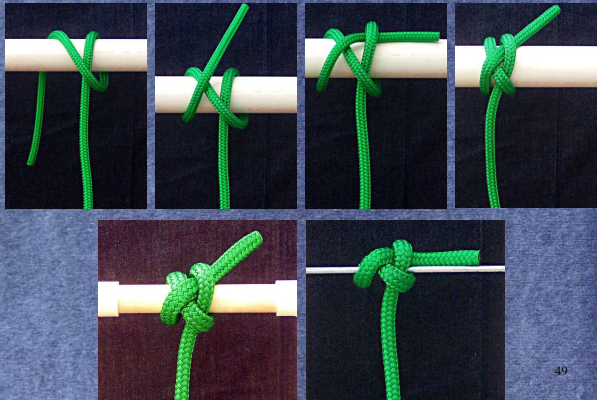
## Round Turn & Two Half Hitches



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## Spar Hitch Ground Line Hitch – Picket Line Hitch



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## Sheet Bend Slippery Sheet Bend



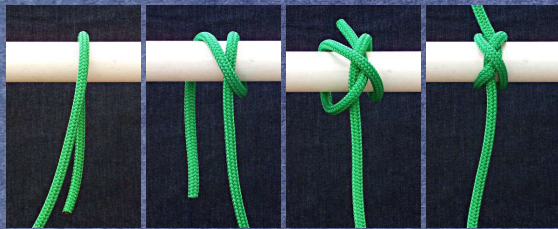
Used to tie lines of different sizes together

Can be used for lines the same size also

Becket Bend when tied in an eye.

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## Constrictor



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## Double Sheet Bend



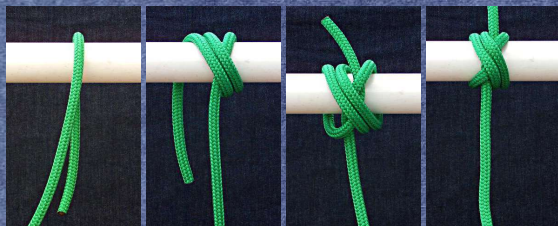
Used to tie lines of different sizes together –  
More secure than a regular Sheet Bend

Can be used for lines the same size also

Becket Bend when tied in an eye.

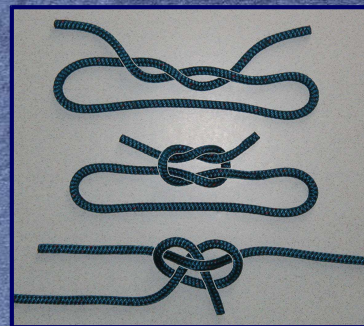
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## Double Constrictor



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## Square Knot



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## Rolling Hitch - Blue Camel Hitch - White



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## The End

Thanks  
Questions?

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