# LOOP KNOTS: A loop knot, like a hitch,

fastens a rope to another object. A loop knot may be tied in the hand and then placed over the object, while a hitch is tied directly to the object. However, since a loop knot is generally a more secure and permanent type of knot, a marine technician should be proficient at tying these knots around or to the object when necessary. When a loop knot is properly tied and drawn tight, it will not slip. Also, since it does not lose its shape the same knot may be used many times over. With that being said however, if the loop is intended to be permanent a splice is stronger and safer. The only loop knots you are required to learn for this class are bowlines. We will differentiate our loop knots by two sub-categories: the "end-of-the-line bowlines" and the "middle-of-the-line-bowlines".

# Bowline: The bowline knot is certainly the primary or basic knot

of sailors and/or marine technicians. The bowline is commonly referred to as the "King of Knots" and it is the most useful way to form a loop in the "end-of-a-rope". Though simple in construction, it never slips or jams and after severe tension has been applied, wet or dry, a simple push of the finger will loosen it enough to easily untie it. The bowline is tied by forming an overhand loop, through which the working end of the line goes up from the back, around the standing part, and back down through the formed loop. If you plan to tie the bowline to a ring or other object you should pass the working end around or through the object before passing it up through the overhand loop. A sequential tying procedure is shown on the following slide. Note the difference between the standard bowline and a left-handed bowline – both are acceptable, although the left-handed version has a slightly lower efficiency.





Working end finished to left of loop

# Tying the Bowline:



through the ring.



Make an overhand loop in the standing part.



Pass the working end up from the back and through the overhand loop.



**Continue with the working end around the standing part (4) and back down through the overhand loop (5-6).** 







#### **Left-Handed Bowline Sequence:**







Double Bowline: The double or French Bowline is also an end-of-the-line bowline. It is especially advisable to use this bowline as a sling when lowering or hoisting a person as it allows a person to use both hands and is virtually impossible for a <u>conscious person</u> to drop out of this type of sling. A person sits in one of the loops, passing the other loop about their chest and back under the armpits. The person's weight in one loop draws the other loop under the arms taut. When used for making a bridle, any number of loops may be formed. To tie, start with an overhand loop exactly as in the ordinary bowline. The difference being that you pass the end through the overhand loop twice – making two lower loops. The end is then passed behind the standing part and down through the first loop again as in the ordinary bowline. A sequential tying procedure is shown on the following slide.





### Tying the Double Bowline:



Make the first loop exactly as in the ordinary bowline.



After passing the end through the overhand loop make another lower loop.





Pass the working end up from the back and through the overhand loop.



Continue with the working end around the standing part and back down through the overhand loop.







**Correct Double Bowline** 

**Bowline on a Bight:** The bowline on a bight is formed on the bight of a line when the ends are inaccessible (middle-ofthe-line). If dealing with an unconscious victim during rescue work, one leg is put through each loop and the bight is passed under the arms. This is also an excellent knot to use with the end of the line as a "cincher". A sequential tying procedure is shown below and on the following slide. This knot will not slip if tied correctly.



1

Form a bight

Make an overhand loop, as if the bight were an "end".





Pass the bight up through the "overhand" loop as if you were tying a standard bowline.

**Completed Bowline on a Bight** 

#### **Bowline** on a **Bight** continued:





After bringing the bight up through the overhand loop (4) pass the bight down (5) and over the two loops (6) formed by the bowline on a bight. Position the "bight" behind the standing parts (7) prior to drawing the knot up.







When drawing up the bowline on a bight, grasp the "overhand loop" at their junction (8) and pull the two loops downward.

Pull the loops downward.



Standing narts

**Correctly tied Bowline on a Bight** 

"Overhand loops" section

Check the completed bowline on a bight by grabbing the standing parts and pushing down on the " overhand loops" section. A correctly tied knot will not capsize or slip. **Spanish Bowline:** The Spanish bowline is another middle-of-the-line bowline that can be used for water rescue. Although it is generally better suited for hoisting long objects in a horizontal position or rigging a bridle. Either loop may be used independent of the other and the loops will not slip if properly tied. It is tied in four steps utilizing three initial loops. The central large loop is bent over the side loops. A sequential tying procedure is shown below and on the following slide.



Top and Bottom view of a correctly tied Spanish Bowline



**Prepare three initial loops in the middle of the line.** 



## Spanish Bowline continued: <sup>3</sup>





Reach into each of the side loops and pull a section of the central loop out of each one.







**Correct Spanish Bowline** 



Bend the larger central loop over the side loops.



After bending the central loop over the side loops, pull the side loops up and over so a portion of the central loop is centered under each of the side loops. **Slipped Knots:** Slipped knots are simply variations of traditionally tied knots which incorporate a "slipper" for quick and easy release. Use slipped knots only if the situation or conditions dictate it. Several examples are shown below but they represent only a few of the many variations that can be used with a slipper.





**Slippery Reef Knot** 



















Shrimper's Bag Knot: This knot, also referred to as a Cod-End Knot, is the most common type of a slipped knot used by fisheries technicians. It is designed to secure the "cod-end" or tailbag of a trawl during towing. When the trawl is retrieved, the tailbag can easily be untied with the added weight of the "catch" bearing down on the knot. If tied correctly, this knot will not jam. A sequential tying procedure is shown below and on the following slide.

**Correctly Tied Cod-End Knot** 



Minimum of Six "Slip Overhands"



Start with a turn or the preferred round turn around the cod-end.



After the round turn insert a slippery overhand knot (1). Continue the "slip knots by inserting alternate bights into the slippery bights(2).



#### Shrimper's Bag Knot continued:





The Shrimper's Bag Knot is complete once you have inserted a minimum of six slippers. Let the ends drag freely when finished. Do not lock up the knot by inserting an end through a hight.





**Once the trawl has been retrieved the knot can be easily untied by applying equal pressure on each of the lines.** 

Running Bowline: The running bowline is merely a standard bowline made around the standing part of a rope to form a running noose or "lasso". It is very reliable and runs freely on the standing part to "cinch" down on an object.







Standard bowline tied with the loop around the standing part. If you want more resistance on the "slip" portion, simply pull the loop tighter against the standing part.

Loop of standard bowline. **Standing Part** 

"Slip" portion defined from the second secon