

## NOT SO MANY KNOTS

Buy a knot book and start thumbing through it and you'll find hundreds of different knots with several possible alternatives for every application on a sailboat. Trying to learning every knot would quickly discourage all but the most dedicated crewmembers, and in fact most sailors regularly use only a handful of "old reliables" for the dozens of applications on board. Crewmembers who master just seven knots will find they know what to do with a line in almost every situation. So which seven of those hundreds of knots do we really use regularly while living aboard and sailing thousands of miles every year?

You can almost get by knowing only one knot – the ubiquitous bowline. The bowline forms a strong but easy to untie loop that doesn't slip in most types of line. It is used to tie jib sheets to the jib clew and to tie dock lines to bollards or rings. Putting a round turn around the ring or bollard before tying the bowline greatly reduces chafe, particularly with nylon lines. Every crewmember should be able to tie this knot, and any serious sailor should be able to do it in the pitch dark on a cold, rainy night.

However, it is difficult to tie a bowline in a line under tension and joining two lines using bowlines creates an unwieldy mess that is prone to chafe. Four additional knots fill in these few weaknesses in the bowline.

1. **Sheet Bend.** Structurally identical to the bowline, the sheet bend is a compact, almost chafe-proof method for tying the ends of two lines together. Remember that if the two lines are different sizes, the smaller line should form the part of the knot that doubles back on its self. A double sheet bend can be used in very slippery line, or the tails can be whipped to the standing parts as discussed below.
2. **Round turn and two half hitches.** For use when tying lines under tension, as when tying dock lines to pilings or fenders to life-lines, this knot allows you to quickly attach a line to a fixed point and to easily vary the length of the line without completely undoing the knot. Though somewhat bulkier than the more commonly used clove hitch, the round turn and two half hitches is easier to tie properly when dog tired, will not slip as the clove hitch can when exposed to shock loading, and can be more easily untied when the line is under tension.
3. **Rolling hitch.** A non-slipping knot that can be tied to a line under tension, the rolling hitch has several important uses aboard a sailboat, including when a riding turn jams a sheet winch. In this case, attaching a short line with a rolling hitch to the sheet a few feet forward of the winch allows the sheet tension to be taken up by the short line, freeing the winch end of the sheet so the riding turn can be worked off the winch. Other applications include attaching a nylon snubber to a chain rode, tensioning up a flag halyard or tying a dock line to a ring or piling from the boat. In the latter case, taking a round turn and then tying the line back on itself with a rolling hitch works if

the line is not long enough to be cleated back on board. The icicle hitch is an alternative knot that grips better than the rolling hitch, but most people find it more difficult to tie properly when dead tired at 2am with waves breaking over them.

4. **Buntline hitch.** The buntline hitch is a strong slipknot with less chafe and bulk than a bowline. While more difficult to untie, it can (almost) always be levered apart with a spike. Most of our shackles are spliced to their lines, but where the tapered entry to a splice would tend to jam in a sheave as is the case with spinnaker sheets and guys in the spinnaker pole fitting, we use the buntline hitch because the bulk of it prevents jamming.

We whip the tail of the line to the standing part when using any of the above knots in a situation where we really don't want them to work loose, as while these knots are quite secure, they all can work loose if exposed to prolonged cycling or surging loads. When preparing to set our drogue in storm conditions, we tie two 300' anchor rodes together (using anchor bends) and whip the tails back to the standing parts to make a 600' rode, and we tie a spare sheet 75' along this warp (using an icicle hitch again whipping the tail to the standing part) to create a bridle.

Two other applications require non-bowline solutions. Stopper knots should be tied in the tail end of every halyard to prevent them flying up the mast and in jib sheets to keep them from trailing off the boat. We use the classic figure-eight knot for this purpose.

The tugboat hitch is probably the least well known knot we commonly use. We often use our winches to grind the boat into the dock, but leaving dock lines loaded around winches can damage the pawls in the winch if there is any surge. While moving dock lines to cleats once the boat is positioned has to be considered "best practice," sometimes the line is so loaded we don't want to take it off the winch. In this case, a tugboat hitch removes the load from the winch pawls.



**Tug Boat Hitch**

### **Rolling Hitch**

There are two specific applications on the boat where splices are much better than knots. The first is when connecting hi-tech line to shackles, for example on main and jib halyards. Here a “core-to-core” splice will preserve the high line strength you have paid so much money for. The second is connecting anchor line rode to chain. With a rope to chain splice you can make a strong compact connection that will run smoothly over a windless gypsy. With 3-strand line most people use a crown splice (the irony splice is strong if perfectly made, but rather difficult to make properly) and with braided line a shovel splice.

These seven knots and 3 splices provide solutions to 95% of the knotty problems on board an offshore boat. With just these knots in hand, so to speak, you’ll rarely be at a loss for what to do with that line you’ve just been handed and you’ll find a warm welcome on most sailboats.