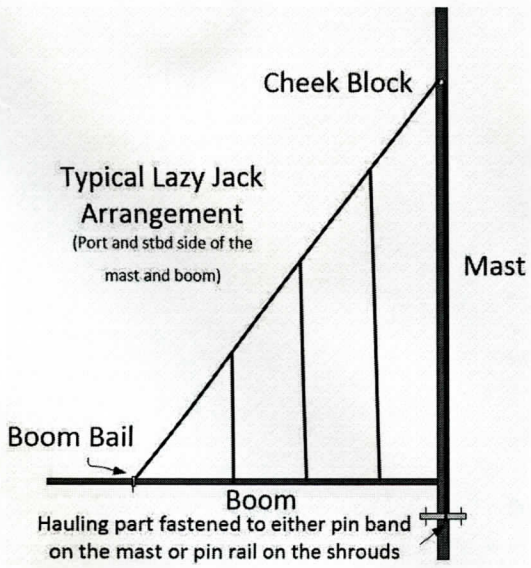
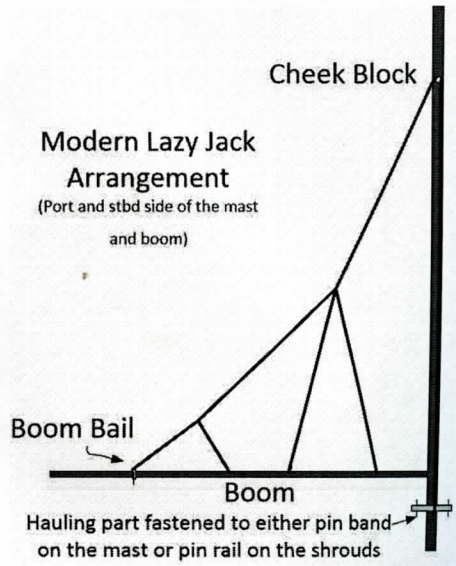
Tech Tips: Lazy Jacks and Topping Lifts

By Bill Whitney

One of the greatest consistencies among Friendship sloops are their enduring inconsistencies. Not only do they vary remarkably in length and beam but also in standing and running rigs. While proofreading "Lasting Friendships" prior to publication, I was struck by the subtle variations in the running rigging between vessels that I had not noticed before. Two of these stood out: topping lifts and lazy jacks. Most boats had lazy jacks but topping lifts were noticeably absent on some. That, and a question from our stalwart newsletter editor, got me thinking: Why the difference between such similar boats?

Before getting too far into the discussion, let's define what we are talking about. "Lazy jacks" are the lines fastened at the boom bail band and run through a cheek block on both sides of the mast, just under the spreaders (if rigged for a topmast), or just under the mast hounds where the shrouds cross below the masthead. The falls are normally distributed evenly along the length of the boom, from the boom bail band to the gooseneck, and the hauling parts are cleated to the port and starboard side of the mast band or pin rail.





The modern style lazy jack configuration causes a little less chafe than the traditional version but cannot be used as a topping lift because of the greater angle of pull. However, if bullseyes or miniature blocks are incorporated into the falls they become self adjusting, spreading the load evenly. You can achieve the same thing with the traditional rig but it is somewhat time consuming to adjust each leg individually.

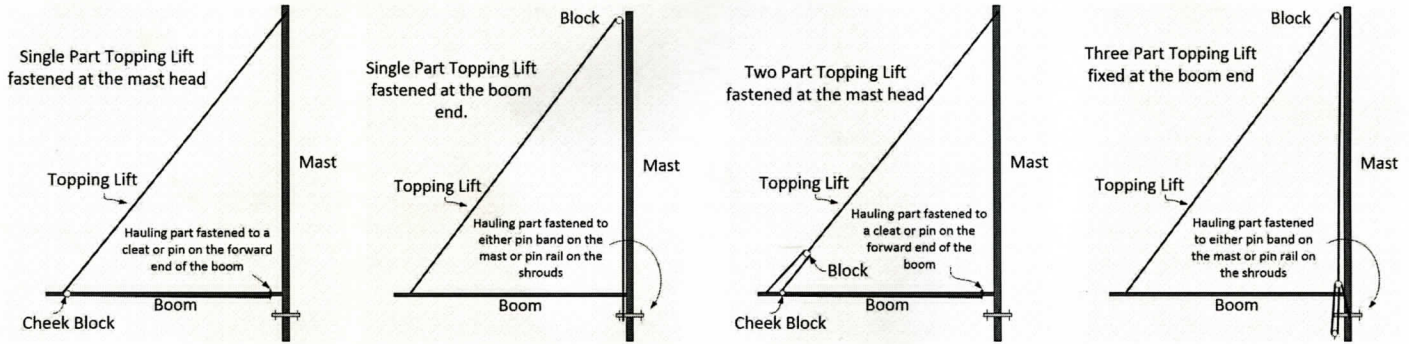
The primary purpose of the lazy jacks is to contain and control the mainsail as it is raised and lowered. Without lazy jacks the sail will fall off the boom, generally get in the way, and make furling a lot more difficult. On some traditional vessels, especially large gaff-rigged schooners such as **Adventure** in Gloucester, MA, the lazy jacks serve the dual purpose of controlling the sail, and acting as the topping lift. Obviously, due to the weight of the boom, they are considerably more robust than those on a Friendship sloop, and are usually rigged with a 4 or 6 part tackle at the trestletrees.

The topping lift also has multiple functions, depending on how the vessel is outfitted, and there are several variations in rigging. In general, the topping lift is rigged from the masthead to the tip, or near the tip, of the boom, and used to lift the boom off the crutch or gallows when raising sail, or for supporting the boom when the gaff is lowered while reefing the sail when already underway. The variations in how the lift is rigged are really dependent on the weight of the boom and the personal preferences of the designer and owner. (See illustrations on the next page)

Small boats with lighter booms can operate quite sufficiently with a single line run between the boom tip and the masthead and through a single-part block or cheek block, either at the masthead or boom tip. In the masthead block configuration, the fixed end is secured to the boom tip and the hauling part is run up through the block and down the mast, secured at the pin band at the bottom of the mast or the fife rail. The boom tip block configuration for the single part topping lift involves securing the fixed end at the masthead, and running the hauling part through a cheek block near the end of the boom, and passing the line forward through fairleads, to cleat it mid-boom or near the forward end of the boom.

On larger boats with heavier booms, the arrangements that seem to prevail are those with multi-part tackle with either masthead or boom end attachment. Most prevalent among the larger Friendships is where the fixed end is fastened at the masthead,

and various tackle arrangements are used at the boom tip to increase the mechanical advantage needed to handle the heavier boom. Two and three part tackle are often used to gain the advantage. **Gaivota**, at 31 feet, was originally rigged without a topping lift and I had to use the lazy jacks to raise the boom off the gallows. That only lasted two years. It's quite a chore for a one-part tackle on a 27' boom and an aging owner! She currently has the topping lift fastened at the masthead and a three-part tackle at the boom aft end. The line passes forward through three fairleads along the boom and is cleated on the starboard boom gooseneck fitting. I like the relative security of handling lines near the shrouds when things get a bit turbulent. Below are a few of the possible topping lift configurations:



All rigging options have their pros and cons. When looking at a rigging system, important considerations are: where do you want to control it from, how strong do you need to be to control it, and how much do you want to spend? Many factors, such as the size and length of the line, size, type and number of blocks needed, and the weight of the boom and everything attached to it (sail, fittings, etc.), can add to the cost and complexity of the installation. The best way, I think, to determine what you need, or want, is to sail on boats with the various rigging options and decide what might work best for you and your boat based on that experience. Of course, another alternative is to just sit in someone else's cockpit sipping on a Tanqueray and tonic, and quizzing the host on his or her preference of rig. This method too, has its drawbacks, but it can be great fun!