



Etchells Fleet 27

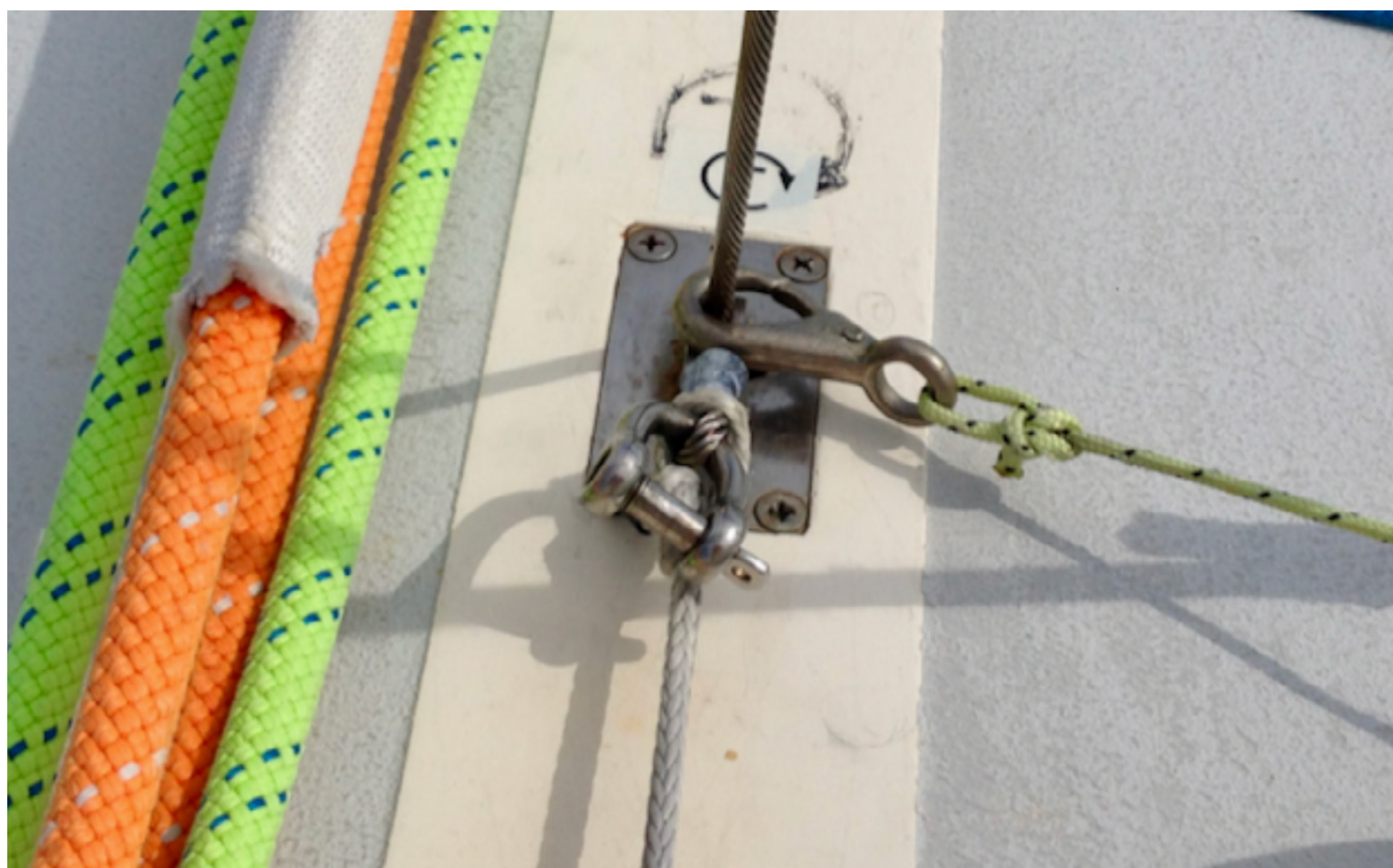
Spirited Sailboat Racing on Beautiful Casco Bay... for Over 20 Years.

RIGGING THE FRACULATOR

The fraculator pulls the top of the mast forward when sailing downwind. 99% of the boats have them. I am not sure exactly why they make the boat faster downwind, but they do.

The fraculator is comprised of a fixed ~6-foot long line attached to the jib tack at one end, with the other end hooked into the jib halyard shackle after the jib is dropped (downwind). Also, there is a shock cord retrieval segment to keep everything neatly stowed on deck when not being used.

With the fraculator attached to the jib halyard shackle (or head grommet), the jib halyard is then pulled up with all your bowman's strength to tighten the fraculator and pull the mast forward. Pull the jib halyard sufficiently tight that the mast does not move at all in the boat as the boat pitches and rolls in the waves. The pros use the jib halyard fine tune to then get the fraculator really, really tight.



Forward end of fraculator attached to jib cloth wire.

The fraculator (frac) can be made from a small (1/8 inch to 3/16 inch (3mm to 5mm) diameter), super-strong, single braid line, such as Dynema, Vectran, or Kevlar, or something like that.

The forward end of the frac line is tied to (or even spliced around) the jib cloth downhaul wire/line with a suitable knot (a clove hitch or maybe a better knot can be found from rigger Brian Toss) around the wire under the tack shackle.

You want the knot as small as possible (so as to not impact the jib cloth downhaul range) and such that the knot absolutely will not slide over the tack shackle (or become untied). Small diameter line allows for a small knot. Even better than a knot might be an eye splice (i.e., brummell splice).

The other end of the frac should have an “S” hook (or better in my view, a proper Cunningham quick release-type hook, which is what I have on my boat) so it is easy to remove from the halyard shackle when rapidly approaching the leeward mark (note: in my view, when the frac is employed, the hook should be inserted into the jib halyard shackle, not around the halyard wire).

The length of the frac line should be such that the S-hook ends up just touching the pointy end of the cuddy cabin, or maybe a couple inches short of the point of the cuddy when the line is stretched out on deck. The one in the photo is a few inches longer than it needs to be.



Cuddy end of fraculator with Cunningham (S-) hook.

A shock cord (to keep the frac stretched out on deck when it is not being used) is then attached to a small pulley that runs along frac line (this small floating pulley needs to be put on the frac line before tying/splicing the “S” hook on the end of the line).

The shock cord then runs through a small hole on the pointy end of the cuddy (see shock cord passing through cuddy shell in upper left side of Figure 5, above, and in Figure 7, at right), aft to a suitable termination near the spinnaker bag, or even further aft.

I would guess you want at least 10 or 12 feet (maybe even longer) of small shock cord for this part so there is enough stretch in it for the floating pulley to easily make it to the jib tack when the frac is deployed, but still have a little tension when the frac is in the stowed position.

Also, check out the [remote release fraculator](#) sold by Andrew “Dog” Palfrey.