

## Constructing and Installing a Mast Whip

Mast whips are almost always required for Martin 242's that have full-length upper battens, as the mast whip helps extend the backstay line further aft than normal, and in that manner the roach of the mainsail is less likely to catch when tacking or gybing. These are typically built from a standard sail batten.

The first basic question is: how long should the mast whip be? Most 242's have one that extends about 2 feet or so aft of the mast crane. Helpful, but not perhaps optimal.

In the example below on Too Wicked, #304, the owner decided to install a much longer and stiffer mast whip that extended 4 feet aft of the mast crane (plus 6" of attachment area, for a total of 4'6" in length).

The mast whip was also made of fairly robust material, with the following dimensions:

- 3/16" thick (1/8" is fine, but is much more bendy)
- 1/2" wide (although 5/8" is fine)

A Harken or Schaefer bullet block can be hung at the end of the whip on an eyestay bolted to the batten.



The 4'6" mast whip with bullet block installed.



Eyestrapping bolted on to mast whip aft end.



Mast whip bolted/screwed in 3 spots on the mast crane, with the Windex bolt forming one of the attachment points. Tapping screw holes into the aluminum crane can also work, but is more effort and trickier.



Side view of installed whip. The backstay line (which is attached to the mast crane cross-bolt using a simple bowline knot, plus a half-hitch, and then firmly taped) is from Wesco Industries at 7832 Enterprise Street, Burnaby and is made of 3/16" black Technora, which is similar to Vectran and super strong.

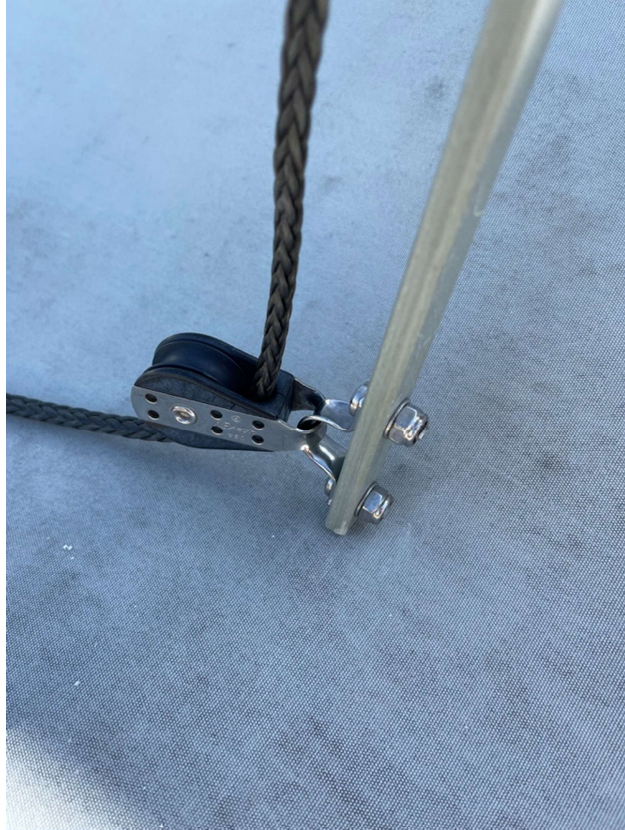
Wesco also carry Amsteel in varying diameters. Ditto for Technora. Wesco have an "odd-lot" bin at the front of the shop where discounted lengths can be obtained.

<https://www.wescovan.com>





Under-view of the mast crane with two of the nuts holding the mast whip in place. The aft screw is not visible.

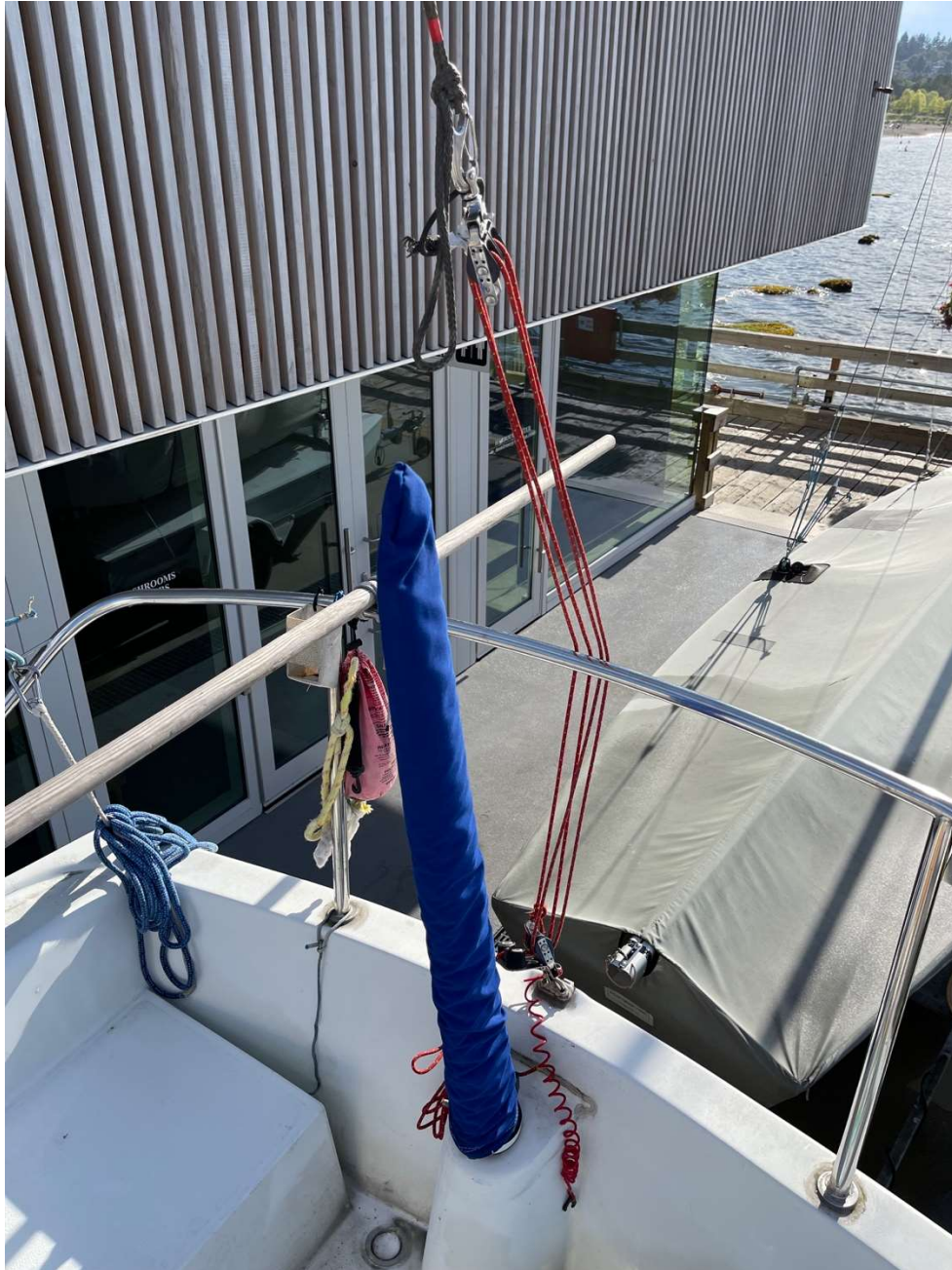


Closeup of the bullet block with the backstay line running through it.



The extra-long mast whip as seen from the upper deck at RVYC using a zoom lens. Note how far aft the backstay line is projected.





Because the backstay whip extends the backstay line so far aft, there's a lot more backstay line to pull in to apply maximum tension on the backstay. Accordingly, the red line running through the backstay blocks had to be much longer than usual (about 1 foot or more for each strand), which is not a problem.