

Self Launching Anchor



The custom bow Roller with 88 lb. Rocna

June 15, 2013 | Among the criteria we used to decide on an Eagle 40 was its suitability for single-handed cruising. The anchoring setup that came with the boat was not set up for Pacific Northwest conditions and was definitely not friendly for a single-hander. It would need to be changed. The issues were:

- The anchor was adequate but not the “overkill” we were most comfortable with.
- Getting the anchor through the slot in the bow took a lot of physical effort and time; definitely not self launching.
- The 175 feet of chain was wholly inadequate for deeper Pacific Northwest anchorages.
- The windlass was chain only.
- The chain locker was divided into two parts (for storing two separate rodes) but neither part was large enough to hold the required longer length of rode.

For a new anchor we chose an 88 lb. Rocna. It was definitely overkill for an Eagle 40 and we had consistently good results with that type on our previous boat. And the bonus was full sized drawings were available on the web that we could use to construct a model in foam core board of the anchor to use in the next phase.

That phase was to head to the workshop and build a full size model in plywood of a longitudinal cross

section of our bow, including the slot the anchor shank needed to fit through, the angle of the deck, the angle of the hull below the slot and the location of the anchor locker. Using this model, I designed a bow roller that allowed the foam core anchor to self launch and retrieve without the shank hitting the top of the slot and without the anchor hitting the hull. It required weeks of trial and error to locate the position of the rollers in the assembly as well as the location of the windlass chainwheel. Using the model we had it fabricated in 316 polished stainless steel. Since the new anchor roller projected some distance from the hull we added diagonal bracing to support the forces on the outside end of the roller.



Removing the chain locker center divider

While that was being made, I removed the center partition in the anchor locker to make one large locker. Since the chain was in excellent condition we decided to use it by splicing 300 feet of 8-plait rode to it to give us the length we needed.

We bought a new Maxwell windlass with a combination rope-chain gypsy and to enhance the self launching capability, installed windlass controls in the wheelhouse, so after initially going forward and

freeing the safety line, the anchor can be dropped or raised from the helm, making it possible for one person to do everything.



New windlass and custom samson post

The final touch was to have our stainless guy fabricate a strong samson post which we mounted with extra strong backing support just aft of the windlass gypsy. It has proved to be very convenient, as well as extremely strong.

We anchor a lot more than many boaters, we are told. Some 75%-80% of all our nights are spent at anchor, about half of them in remote places with no other boater around. Sometimes the conditions are less than ideal, the bottom is poor, the swinging room is limited, etc., and sometimes we have to set the anchor more than once to find the best spot. But every time we anchor we are grateful for having an anchoring system that makes it all routine.

Postscript. The anchor locker on *Mischief* is not very deep so the chain would tend to pile up in the center and get close to the deck. When it was deployed the next time it would often jam in the windlass. To prevent this someone would have to crawl forward in the berth to access the locker and push down the chain mountain as the anchor was being retrieved. We cured this problem by replacing our rode with 250 feet of 8-plait nylon spliced to 200 feet of stainless steel chain which does not tend to pyramid in the locker. Problem solved. The system is even better now.



The plan came together

Michael and Karen have been cruising the Salish Sea and beyond for more than 20 years, the last 11 aboard Mischief, a 40' Eagle pilothouse trawler with all the comforts of home. Visit them at mvmischief.com.