Alwest 370 Bowsprit and Power Anchor Windlass

The latest bowsprit on Catherine Ann is actually the second one that I have built. It is very close in design to the one that I built about 12 years ago, but accommodates an electric Lewmar windlass and a Bruce style anchor, whereas the earlier one had a manual windlass and a CQR style anchor. The anchor is now secured in the stored position with a custom made tipping mechanism. It can be dropped and weighed from the bowsprit location or from the helm station. The chain can even be washed as it is drawn in, before it goes through the windlass and is dropped directly into the forward hold. This chain wash can also be controlled from the helm.



A "deck wash" nozzle on the underside of the bowsprit washes the mud off the chain as the anchor is weighed

> The bowsprit is supported by two compression struts underneath. These 1" diameter stainless tubes are the same struts used on the previous bowsprit, so have worked successfully for over a decade.





The windlass that I chose is the 1000 lb Lewmar Pro-Fish Series. It has the capability to free fall the anchor for rapid deployment, but I have found it quite sufficient and more controlled to power it down. This windlass has a 70 amp breaker and needs 0 gauge wiring from the batteries. The wiring is a significant part of the installation cost.



The anchor is released from its stored position, by tipping up the lever which lowers the support roller.



Inside the forward hold, the stainless steel down tube extends far enough to drop the chain on to nylon sheets fastened to the inside of the hull. The 5/16 high strength chain will "almost always" slide down this sheet without jamming. Occasionally it does pile up. If I had this to do over, I would move the drop point a little further aft.

I have 150 ft of chain plus 200 ft of 5/8" rode. I have never gotten to the rode, but it would not likely feed back in without some assistance. The rope rode is only there for an emergency anchoring in deep water, as we typically anchor on "all chain" which feeds out and in with no manual assistance.



The bowsprit is constructed from 2" x 1/2" laminated ash My original bowsprit is on the left and the new construction is underway on the right. At this stage the new bowsprit is still in two pieces so that it will fit through my 13" planer after laminating.



The plumbing for the anchor chain wash is included inside the lay-up of the centre ash strips





Switches for the windlass and the wash pump are located on the side of the bowsprit as well as at the helm station. The 3rd switch is for a light located under the bowsprit. This light is most useful for checking anchor set, prior to turning in for the night.



With the two halves now joined together and the final shape roughed out on the bandsaw the fitting of the aluminum frame for the anchor release mechanism begins . . .

If you would like further details on this project please contact: Rob Farrow <u>rob.farrow@sympatico.ca</u> Catherine Ann - February 2009₉