

A new sail cover for *Broremann* and new Lazyjacks for *Johanna* ..how I simplified *Johanna's* LJ after learning from *Broremann*...

ver. 20111008

***Broremann's* sail cover** (July 2011)

After having sailed around with my 18' dinghy, *Broremann* for two summers with a JR, I decided to make a sail cover for her. I didn't want her sail to end up looking like *Johanna's* has done after only 8 years; sun-burnt on one side and mouldy on the other. The challenge was to make a cover that was so simple to fit that I would actually use it. Then I got the idea that if I stopped using ties, zippers or push-buttons to hold it, I would save much time. To make it work I would install lengths of chain inside the side hems and mostly rely on gravity to hold it in place.

Broremann's LJ basically consists of a pair of topping lifts, attached about half a metre forward of the after end. Its main job is, of course, to collect the battens and to resist the down-pulling forces from the sheet when reefed. In addition I have fitted one single pair of sail catchers. This pair of lines is much slacker than the main LJ and there is never big forces pulling on it. Since *Broremann's* batten panels are only 60cm high, any folds in the sail are no big problem, so this simple setup has proven to be good enough.



..the fore part of *Broremann's* sail cover, prior to inserting the chain in the wide side hems.
Note the big cut-outs for the mast and mast lift and the central slot for the halyard far to the right...



..The after half of the cover goes on first, only tied on at the ends, the rest being held down by the weight of the chains. Short slots have been cut where the topping lifts are attached to the boom.



.. Broermann with her simple LJ and new sail cover...

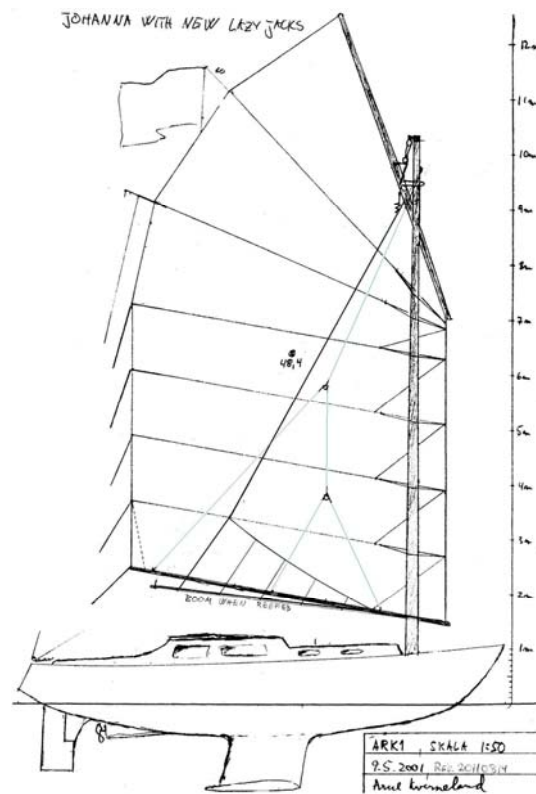
This sail cover has proven to be just as easy to handle as I had hoped for, and even in a strong blow it can hardly be seen to move at all: Definitely a success.

Johanna's new "suspension-bridge" lazyjacks (Aug 2011)

The old lazyjacks on *Johanna* were nearly nine years old and needed to be replaced. This was a good opportunity to change from the normal bridle type to a simpler type, based on *Broremann's* LJ, but with better sail catchers.

The reasons for changing LJ type were numerous:

- Most details of the new LJ can be fitted, reached and inspected from deck and are so much easier to make.
- The original bridle type LJ didn't collect the sail that well. My hope was that this suspension-bridge style sail catcher would be better.
- The new LJ will generally cut into the sail further aft, where the camber is moderate anyway.
- This LJ will give better anti-twist support when sailing with 2-3 reefs. It is also "stiffer" than the original bridle type. The two main LJ lines (topping lifts) are now 12mm, three-strand.
- Fitting a *Broremann*-style sail cover will be much easier with this LJ.



.. *Johanna's* new LJ drawn with bold line and the old type shown in fine line...

Note: *Johanna's* sail is made with 10° rise in the boom which gives generous clearance over the sprayhood. This lets me fit slack, standing lazyjacks. When reefing the sail, the boom drops quite a bit, but still leaves good clearance. I recommend this design practice as it simplifies handling: No need for adjusting the LJ while under way.



..looking at the masthead; the old LJ still in place. The new LJ is rigged in the same way...



.. and here the old LJ has been dropped onto the deck...

I only needed one trip to the masthead to drop down the old LJ and attach the new one. From then on I could finish the job, standing on deck.



.. The main part of the LJ in place. The sail ties keep the bundle tidy until the sail catchers are fitted....



.. the “cables” for the sail catchers fitted. Note the approx 20cm spans on the topping lifts, held together with lacing between spliced eyes. These let me do fine adjustments (in harbour). After a month’s use I shortened these to compensate for stretch...



.. this is how the lowered sail would look like without the sail catchers...



.. testing the new sail catchers, no sail ties on here...

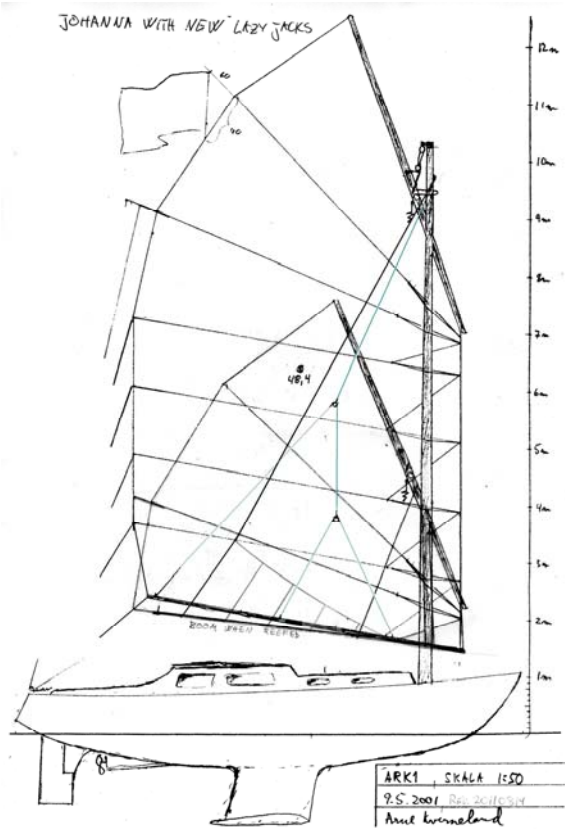


..first test sail with full sail up. The rather thick sail catchers (8mm) look a bit untidy, but they don't snag anything. The cables (10mm 3-strand) carrying the sail catchers, were terminated on the boom at the after end of the batten parrels. They could well have been moved a bit further forward, almost to the mast.



..the sail catchers (8mm 3-strand) at work with two panels dropped. I later closed the gap near the mast, by adding an extra sail catcher suspended from the mast lift. This port side of the sail is the coated side, which collects most dirt and thus gets most mouldy...

One possible snag with this type of LJ is that there will be less clearance (overlap) between the yard and LJ when the sail is lowered. On *Johanna's* sail the critical situation is as shown below; with only 3 panels set. If necessary I would have been willing to replace that bamboo stick in the end of the yard, with a 40mm aluminium tube, yard extension.



..Johanna's sail reefed on paper...

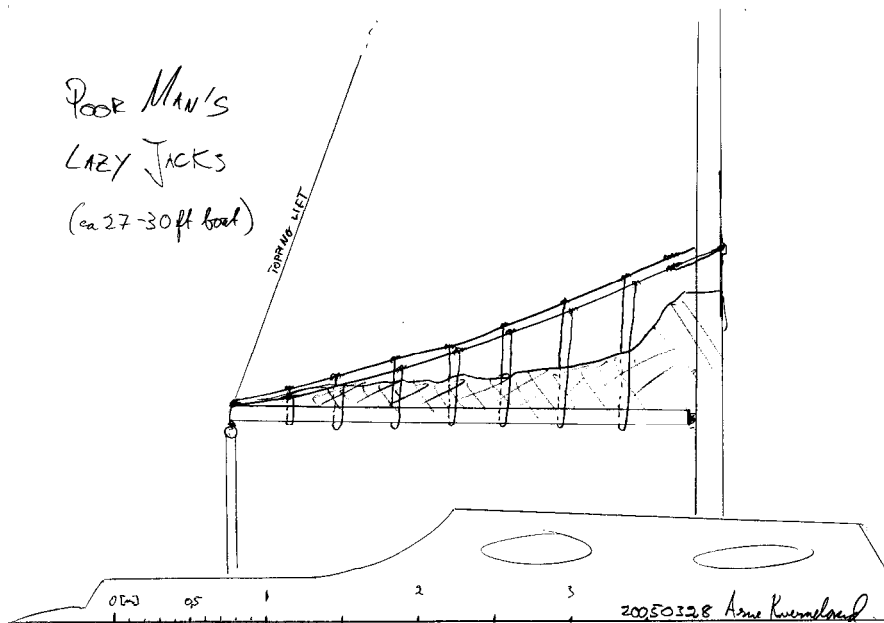


.. and in real life. Only 3 panels set...

As can be seen above, in practice the clearance turned out to be all right. On a fanned sail this should be less of an issue than on a Hasler-McLeod style sail.



.. this sail catcher is undoubtedly more effective than the original..



..Johanna's Poor Man's Lazyjacks, fitted in 2000...

Actually, this present setup reminds me of a pair of quick-and-dirty lazyjacks I made for *Johanna* while she still had the Bm rig. That thing, which I knew was very temporary, was fitted in a couple of hours without any climbing required, but to my surprise it still turned out to be as good as any LJ I have ever tried on a Bm-rigged boat. The sail cover could easily be fitted inside it.

Conclusion (so far)

This new set of lazyjacks for *Johanna* is, in my view, definitely an improvement over the traditional bridle type. It is quicker and simpler to make and collects the furled sail bundle better, too. Finally, it will make it easy to fit that chain-type sail cover as used on *Broremann*. Win-win!

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PS: Thanks a lot to Annie Hill for proof-reading this text.