## Leo Sampson Goolden Sampson Boat Co Friends

Here we have a very technical discussion about the changes to Tally Ho's rig in 1927-1927. This was recently written and published as part of the ASA's newsletter by Thad Danielson, and includes emails exchanged between me and others involved in the process of figuring out how to rebuild Tally Ho's rig.

Warning: this will read like gobbledygook for those not familiar with gaff rig!

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## SAILS AND RIG FOR TALLY HO

On the 25 of July, Iain Oughtred emailed Jamie Clay forwarding an email received from Sean Rankin at Northwest Sails and Canvas and Jamie copied me in his answer. Here was proof that Leo was talking about sails and rig for TALLY HO. In 2013, when the ASA had taken ownership of TALLY HO and began actively searching for someone to take on her restoration, a brochure was put for publicity. We have the original sail plan as revised by Albert Strange in 1909 but the great Beken photo of TALLY HO with her racing rig in 1927 clearly shows changes in sail plan and rig, and Iain had made a drawing for the brochure based on his analysis of these changes. There is another Beken photo, labeled TALLY HO 1927, showing the original rig, but both 1927 photos taken from angles that make comparison difficult. Leo has the brochure and thus put Sean in touch with Iain and subsequently with others in the ASA.

Sean wrote to Iain and Leo about his working drawing based on what Iain had drawn for the brochure, but then asked the big question:

"Do we want to go forward with this drawing, or is there more information we want to collectively pull together towards a final working plan?"

Iain's questions of Jamie were based on Jamie earlier estimating a 20% increase in sail area.

Jamie Clay, with Mark Miller, wrote the book that included drawings and discussion of TALLY HO, ex BETTY, and had calculated the sail area for the working sails for that book. Now he went back to Lloyd's Register records and found the listed sail area, from 1910 on, had included the big topsail and the reaching foresail. Jamie's research led to this on July 28:

"So did Stalbridge re-rig the boat for racing or not? There are several points to be weighed up;

- 1. It seems odd to me that a reaching foresail should have been included in the sail area in the first place, rather than the working foresail. Perhaps the larger topsail is less odd, as the jib-headed topsail is labelled 'small' and might therefore be considered in the same category as, for example, a No.2 jib, i.e. not part of the full 'working' sail area.
- 2. It could well be that Betty's owners just filled in the Lloyd's form every year, copying the same measurements as last year. But there are a few changes, though; 3 or 4 different engines, even minor changes to the main dimensions, and she was kept under Lloyd's survey for many years and these details are there, so it would be odd if, when new suits of sails were made, and were to some new design, a revised sail area would not have been entered.
- 3. There is no doubt that **someone** did make a pretty major change to the rig by ditching the pole mast and introducing a new main mast with fidded topmast. I always assumed this was Stalbridge and was part of a project to increase the sail area for racing. My assumption is based on the 2 Beken photos of Tally Ho. One is in my book, and is also the one used by Leo on his YouTube site. The other is also attached below. They are both labelled Tally Ho by Beken. This is the name Stalbridge gave the boat, and he is first listed as owner in the 1927 Lloyd's, so he can only have bought her sometime in 1926 earliest. One shows the pole mast, the other the fidded topmast. So it was he who changed the rig almost without doubt. Then just comparing the two photos, the rig does just look much bigger in the fidded topmast form. But is that down to the angle and the fact that she is flying that huge spinnaker? (It doesn't help that in the pole mast photo she is carrying a yard topsail but no jackyard, so not as big as the yard topsail shown separately in Strange's plan).
- 4. If he went to the expense of a new main mast and fidded topmast, would he have stayed with the original mainsail size? Would he have changed the mast only to set a larger topsail (and that jib topsail)? I can't help wondering if the **luff** length of the mainsail was increased on a slighly taller main mast, even if the gaff and boom remained the same. 5. If we accept the 1686 area is the original (using the particular sails as specified), then we are not looking for a specific 20% increase in the Stalbridge rig maybe just 'a bit' to pep her up for racing. Or maybe none at all. The total luff length of the AS jackyard topsail looks pretty much the same as that in the fidded topmast rig photo (as a proportion of the mainsail luff). The fidded topmast allows for a shorter topsail yard and makes a jib topsail a more useful sail. Maybe that was all Stalbridge was after better light weather performance."

On that same date I noted

"The things the fidded topmast gives with it's added height is the high halyard hoist for spinnaker and flying jib, as well as a shorter yard for the topsail."

But, Jamie had already sent Leo a note with this:

"I don't know if you have good copies of the two Beken photos, but I think a very careful study of them might shed more light. In particular, I'm thinking that sail cloth was a standard width and two false seams were usually put in? So counting the cloths along the foot of the mainsail would give an idea if the fidded topmast rig had a bigger mainsail. Food for thought!"

A week and a day later Leo had done us all one better, here is his email:

"Hi Jamie (et al),

Sorry for the delay. Thanks a lot for all the extra information and the effort you've put into this. It does sound like we are getting a little closer to figuring out what was really going on. No worries about the "20% increase" - an reasonable supposition based on the information you had.

I've been doing a bit of analysis on the two photos in question. Do we have any reason to believe that the mast itself was actually ever changed?

I believe that the mast, the mainsail and other working sails are the same in the two photos. Here is my reasoning;

- both main sails seem to have the same number of seams and reefing ties
- I divided off the distance between the mast hoops in the later photo. There are 11 mast hoops (not all visible) in both photos. The distance between the top 2 mast hoops is smaller than the distance between the 2nd and 3rd mast hoops, in both photos.
- the location of the bottom mast hoop corresponds between the photos if you take into account that the tack of the mainsail is much higher in the later photo.
- the stays'l halyard block is a similar distance above the spreaders in both photos.
- I measured the length ratio of the gooseneck fitting spreaders jib halyard block. It seems to be very similar in both photos.
- the mains'l sheet, halyards (gaff bridle positions, throat blocks), and lazyjacks all seem to be in the same place.
- Finally, I measured the ratios of the gooseneck-spreaders: spreaders-topmast cap / tops'l head. I transferred the measurements of the topmast and topsail from the later photo onto the earlier photo. See attached photo/sketch. Suddenly, the rig looks much bigger, far more comparable to the later photo.

So my hypothesis is that after Stalbridge bought the boat he wanted better light-wind performance, and so he;

- $\operatorname{cut}$  the original mast just above the jib halyard block
- added a topmast
- had a new tops'l and probably a new flying jib / yankee made.

Another observation to support this theory is that the "new" sails (tops'l and flying jib) in the later photo both have the same design of patch at the clew. None of the other sails have this style of patch. This suggests to me that they could have been made together by a different sail-maker.

One more point - if the earlier photo was taken around 1926 (as suggested by the name "Tally Ho" on the photo, which was only changed after Stalbridge owned her), then there was probably only months or at most a year between the two photos. The mails'l in the earlier photo appears to be in very good condition. Stalbridge was by all accounts a seamanlike fellow, and although he may have been wealthy, I doubt that he would have discarded a perfectly good mains'l just to have a new one built that was only marginally larger with no other changes. The same applies to the mast (although we have less clues about its condition).

What do you think? Leo"

Impressive work and very sensible, that's what I think. Iain Oughtred put it thus:

"Hi Leo, Jamie, Thad, Sean –

Well done Leo. I think that, as Jamie said, we have been vaguely wandering up and down various 'garden paths', when what was needed was simply a much closer detail analysis of the two photos. Which, it turns out, contain a lot more information than we thought – but you need to look for it. It looks like the addition of the topmast, flying jib, and topsail at the time added the required increase quite adequately, efficiently, without the cost and complications of replacing most of the rig.

And what i like about this, if it's all agreed, is that it simplifies the whole Rig re-building project!

Fair Winds - Iain"

