TRANSLATION LINKS

1. type into your browser ... **english+italian+glossary+nautical terms**
2. utilise the translation dictionary 'Nautical Terms & Expressions' from Euromodel website

An *interpretive* review of the Euromodel Kit

Royal William

1st. Rate English Vessel

Originally launched in 1670 as the 100-gun HMS Prince
Re-built and launched in 1692 as the HMS Royal William
Finally re-built again and ...

Launched 1719

Scale 1:72

Checked the *Essential* Resource Information File ?

15. FORE MAST RIGGING

September 2021

This paper is based on the supplied drawings, external references, kit material – and an amount of extra material. It serves to *illustrate how this ship might be built.The level of complexity chosen is up to the individual*

This resource information was based on the original text supplied by Euromodel and then expanded in detail as the actual ship was constructed by MSW member piratepete007. [Additional & exceptional support was gratefully received from another MSW member **marktiedens**. My sincere thanks to him and other MSW members.]

Neither the author or Euromodel have any commercial interest in this information and it is published on the Euromodel web site in good faith for other persons who may wish to build this ship. Euromodel does not accept any responsibility for the contents that follow.

This is not an instructional manual but is a collaboration amongst a number of MSW members whose interpretations were based on the drawings and the supplied kit.

- Additional material used was dictated by personal choices.
- Greater simplification would be achieved by using the material as it is supplied.

Model Ship World Forum

I am indebted to those members who were, or are, involved in their own build of the Royal William and have allowed me to add photos from their posts – but not utilising their personal text - in the belief that the images could add both a stimulus and an interest to new builders of this ship. So my grateful thanks go to … Brian C; Denis R; KeithW; marktiedens; Vince P, Ken3335

They have taken the RW build to a much higher level than intended by this kit.

Reference Texts

Fighting at Sea in the Eighteenth Century; The Art of Sailing Warfare by Sam Willis (2008)
Historic Ship Models by Wolfram zu Mondfeld (1989)
Seventeenth Century Rigging by R.C. Anderson (1955) [almost a complete copy of his earlier book ***The Rigging of Ships in the Days of the Spritsail Topmast, 1600 – 1720*** (1927)]
The Construction and Fitting of the English Man of War 1650-1850 by Peter Goodwin (1984)
The Masting and Rigging of English Ships of War 1625 – 1860 by James Lee (1984).

For the purposes of discussion, this ship is considered as an 18 C build.

[To navigate through the contents – use 'control + click']

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Chapter 1: GENERALISATIONS

Plan Sheet Translations (13– 15)

Plan Sheet 13 – Foremast

fuori scala – **not to scale**
come bracci di destra – **on the right side (starboard)**
faccia poppiera – **looking towards the stern**
Fig. opposite .... passa perla cavatoia sull serpa e da volta sul parapetto di prora – **line passes over the Prow Deck, through the ornamentation between the middle rails of the bowsprit and back to the Focs'le railing.**

al paranco come per il pennone di trinchetto **– as for the tackle for the fore yard of the foremast**
alla ringhiera del castello – **to rail on the foc'sle deck**
faccia prodiera – **looking towards the bow**
come braccio di parrochetto – **to the fore topsail yard**

Plan Sheet 14 – Main Mast

fuori scala – **not to scale**
faccia poppiera **– facing aft**
faccia prodiera – **facing forwards**
ad anelli sulla coffa – **to rings on the topmast top**
legare alla ringhiera di sinistra – **tie to the railing on the left**
legare alla ringhiera di destra – **tie to the railing on the right**
per I riferimenti dei pennoni vedi tav. 3 – **for flag pole references, see Plan Sheet 3**
paranco come per pennone di maestra – **hoist as for the main lower yard**

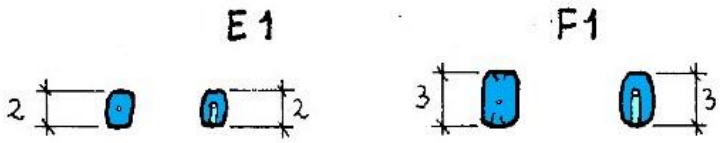
Plan Sheet 15 – Mizzen Mast

faccia poppiera – **looking towards the stern**
faccia prodiera – **looking towards the bow**
fa dormiente sull 'ultima sartia poppiera dell ' albero di maestra a destra e a sinistra – **the line is fixed on the last shroud of the Main Mast on both the right and left**
danne volta a 2 anelli sulla coffa – **allow for two rings on the top**
fanno dormienti sullo stroppo delle bigotte della coffa di bompresso – **make fixed onto the deadeye strop of the bowsprit top**
Il pennone di mezzana ha la sold funzione di poter tesdre la vela di belvedere - **mizzen flagpole has the only function of being able to tension the mizzen topsail.**
particolare dell'attacco della vela al pennone (inferitura) **– detail of the sail attachment to the flagpole**

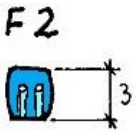
Blocks

N.B. The plan sheet shows a larger variation of block sizes than that provided in the kit. This kit has amalgamated a number of blocks with similar sizes together – e.g. E1 and F1 both use the same sized block.

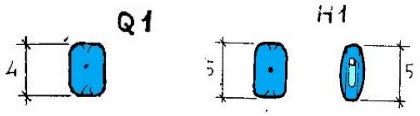
E1 + F1 : 3mm., 1 hole(160) - Bozzelli da mm. 3 a 1 foro (Art.22/026)



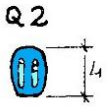
F2 : 3mm., 2 hole(5) - Bozzelli da mm. 3 a 2 foro (Art.22/031)



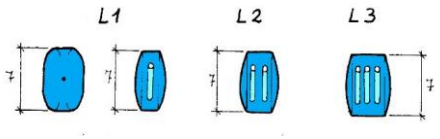
Q1+ H1 : 5mm., 1 hole (98) - Bozzelli da mm. 5 a 1 foro (Art.22/028)



Q2 + H2 : 5mm., 2 hole (8) - Bozzelli da mm. 5 a 2 fori (Art.22/032)

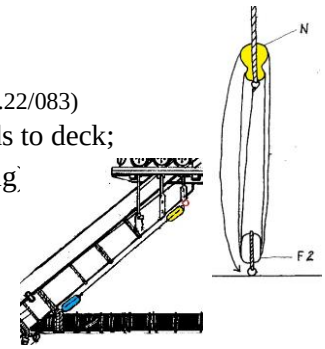


L1 : 7mm., 1 hole (14) - Bozzelli da mm. 7 a1 fori (Art.22/030)
L2 : 7mm., 2 hole (4) - Bozzelli da mm. 7 a 2 fori (Art.22/034)
L3 : 7mm., 3 hole (16) - Bozzelli da mm. 7 a 3 fori (Art.22/039)



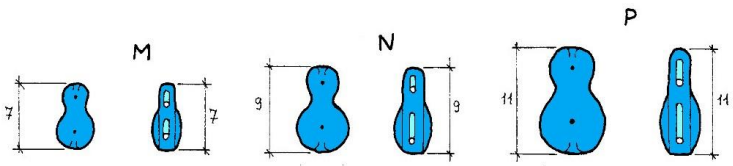
M + N : **Fiddle, 7 mm. (4) -** Bozzelli a violino da mm. 7 (Art.22/083)

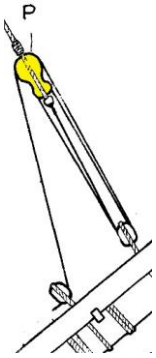
- mizzen & main topmast preventer stay halliards to deck;
- bowsprit (halliard to lower spritsail yard lashing)



P : **Fiddle, 11 mm. (1) -** Bozzelli a violino da mm. 7 (Art.22/084)

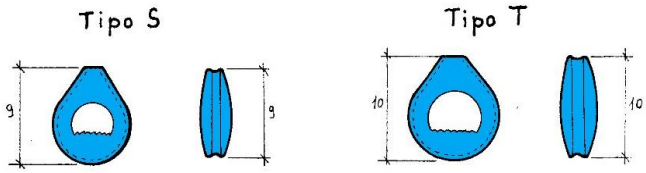
- bowsprit (lower fore topmast stay)

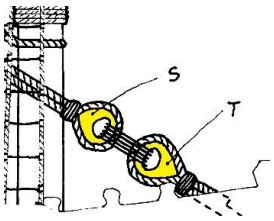




S + T : **Heart, 10 mm.(2) -** Bozzelli a cuore da mm. 10 (Art.22/085)

- main stay



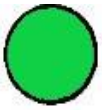


Euromodel supplies S & T as heart blocks; technically they are fiddle blocks but commercially difficult to source and the heart blocks can be rigged in a 'similar' manner.

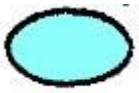
Rigging Code

105	line 105 & point of attachment
H1	block, 5 mm. 1-hole
H1/3	rope line 3 that is rove through block H1
C3	cleat number 3
R3	ring through which rope line 3 passes
H2	not available in kit; a 2-hole block equivalent is shown as Q2

Symbols, Notations & Sequence



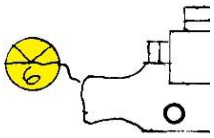
number of the belaying pin or cleat where the running rigging must be tied.



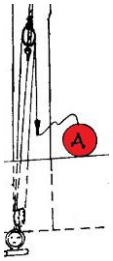
point where the rigging is *not* fixed but passing through.

e.g.

rigging must be tied to the bitt marked by the number in the circle

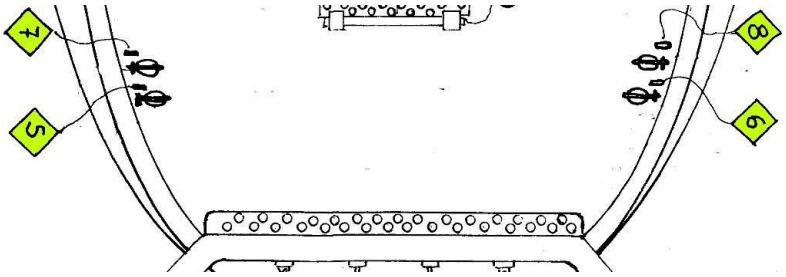


rigging is tied to the strap of the corresponding block



indicates the passage of running rigging (block or pass-through bulwarks, etc.) before being fastened/ seized.

indicates the sequential order of fixing of the rigging.



"3H,, 3 ("3H,, 4) code in brackets indicate the corresponding block on the opposite side of view shown in the plan.

"3H,, 1 ... "3H,, 2 ... "3H,, 3 ... "3H,, 4 number (coloured) indicates sequence of adding blocks

Line Names & Functions

Sheet lines (green)
... attached to the outer clew on the foot of the sail to control the lower, moveable corner; released when furling the sail. The main course sheets extend aft almost the full length of the ship.

Tack line (red)
… a second line also attached to the clew along with the sheet, but the inboard end may be taken to a suitable point well forward of the sail and pulled taut to tighten the leech into some kind of leading edge; usually a single line rather than having blocks. This additional line on the clew allows for a far greater leverage on the sail when required. In Fig. 1, the main course tack passes over a sheave contained within a chesstree (yellow)

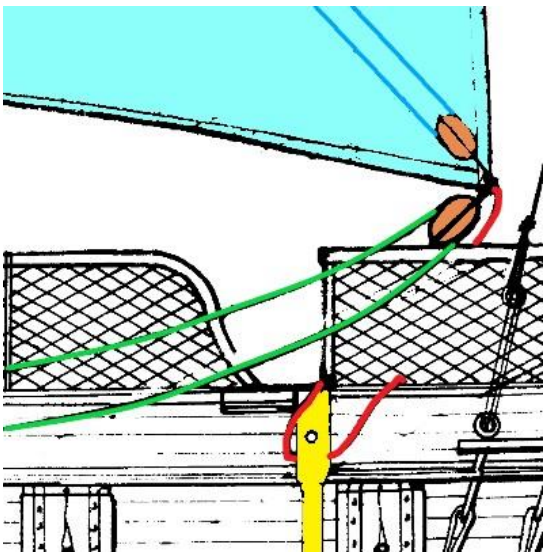


Figure 1: Main Course Sheet and Tack Lines

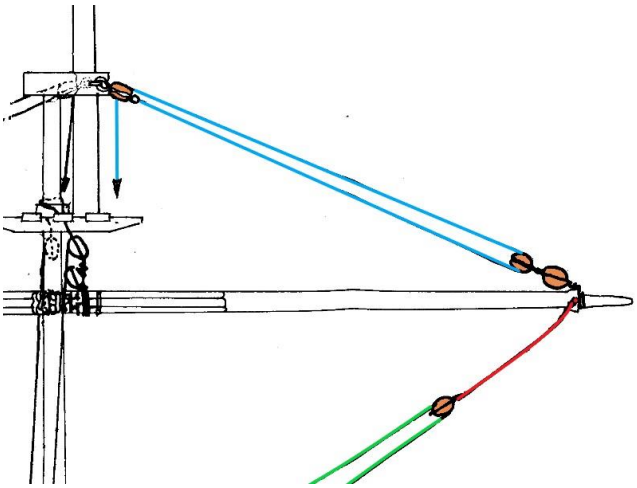


Figure 2: Fore Topsail Yard Brace and Lift

Brace lines (green)
... in pairs, they rotate the yard to allow the ship to sail at different angles to the wind.

Lift lines (blue)
...in pairs, they maintain the correct horizontal line of the yard; brace pendant shown in red.

Clew lines (dark blue) and ***bunt lines*** (purple)
... raise the sail up to the yard arm when furling – clew lines are attached to the bottom corners of the sail whilst the thinner buntlines are attached across the sail foot.

Leech lines (brown) and ***leechleg lines*** (green)
... pull the sail in and upwards during furling.

Bow lines (light blue)
... attached to sail cringles via bridles (red)

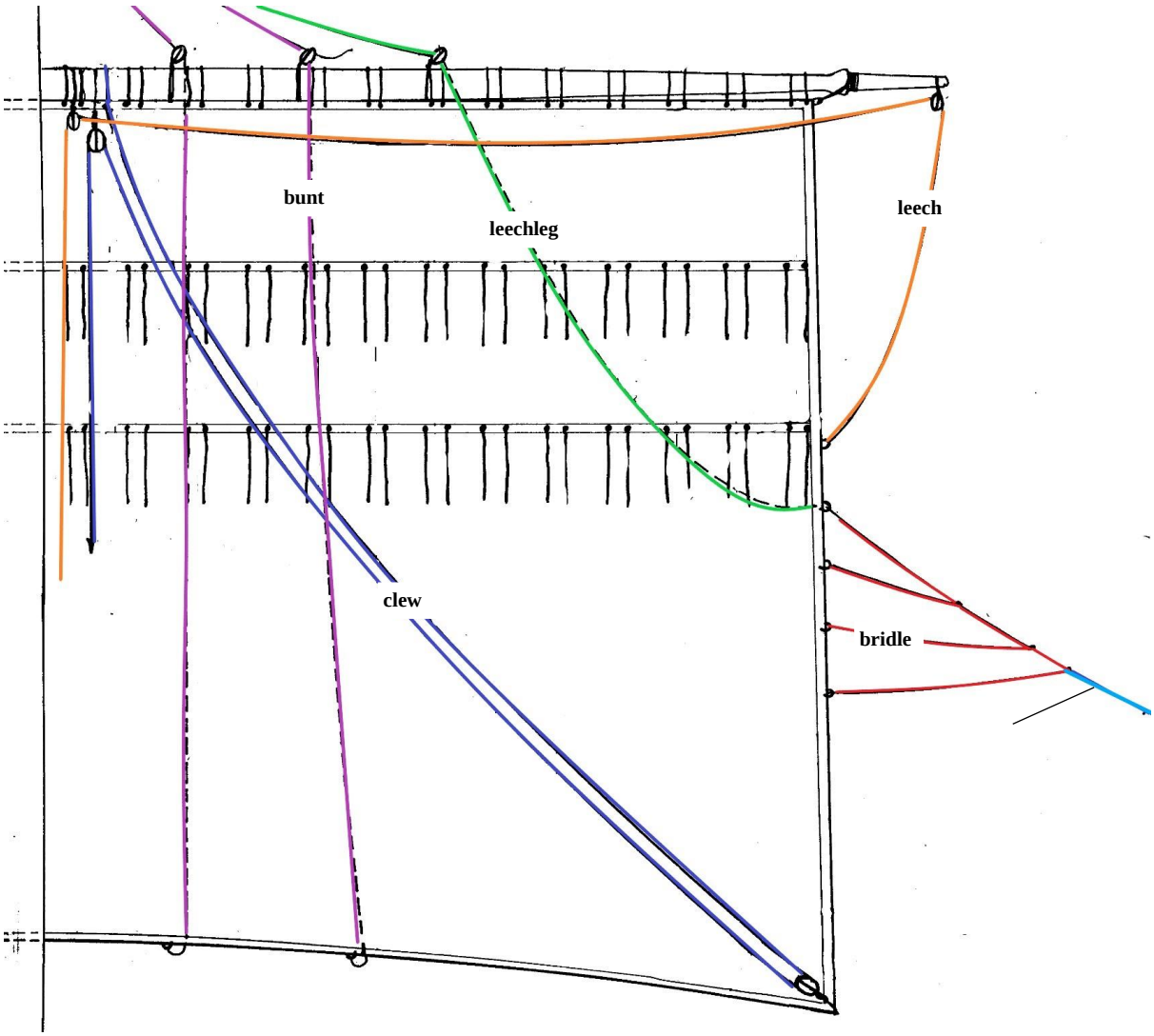


Figure 3: Running Lines

Chapter 2: FOREMAST RIGGING

After the stays and shrouds, *three* essentail areas of rigging to concentrate on (if no sails) are the yard ...

- halliard tackles
- braces
- lifts

Whilst such rigging will not be completed at this stage, the above forms of rigging may be presented in full on the following pages simply to provide an awareness of what will eventually be required. Such presentation will enable the builder to add blocks to various parts of the masting before final installation onto the ship.

Foremast – Albero di trinchetto
Fore Yard – Pennone di trinchetto
Studding Sail (stuns'l) Booms

Fore Topmast- Albero di parrocchetto
Topsail Yard – Pennone di parrocchetto
Studding Sail (stuns'l) Booms

Fore Topgallant Mast – Albero di velaccino
Topgallant Yard – Pennone di velaccio

Flagstaff – Asta per bandiera

Fore Yard

Brace Lines

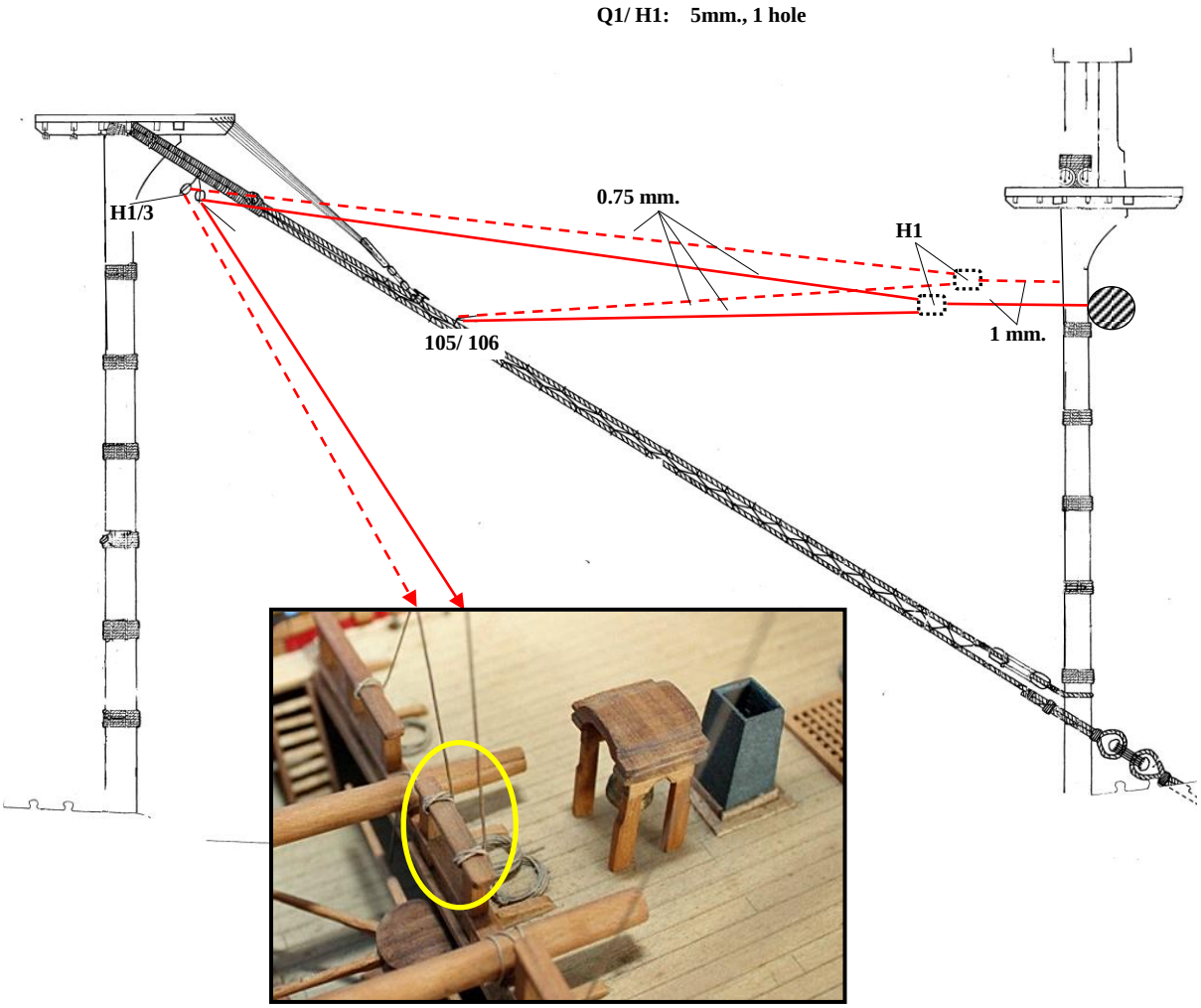


Figure 4: Fore Yard Brace Lines

fore yard (continued)

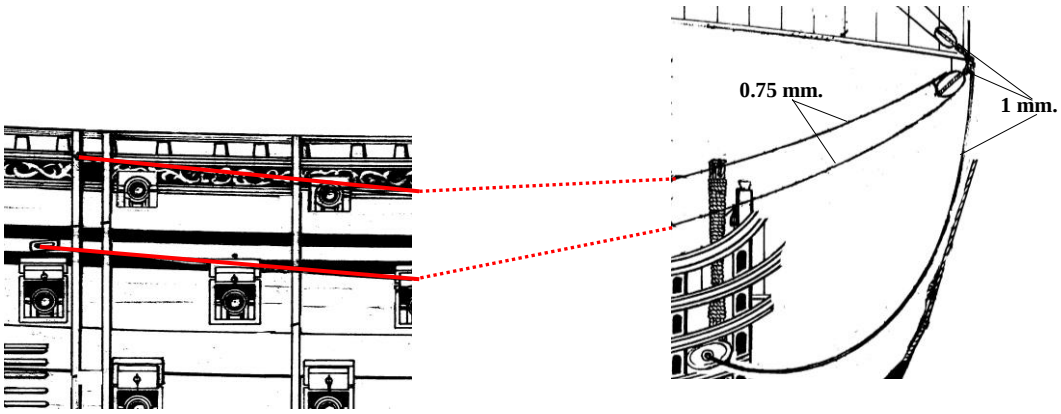


Figure 5: Rigging the Lower Clews of the Fore Course

From Plan Sheet 13 …

'*passa perla cavatoia sull serpa e da volta sul parapetto di prora' ...*

i.e. 'line passes over the Prow Deck, through the ornamentation between the middle rails of the bowsprit and back to the focs'le railing'

Figure 6: Running Line from Clew of Fore Course

fore yard (continued)

Jeer Tackle

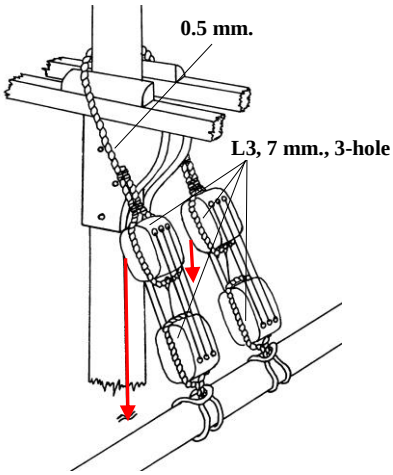


Figure 7: Fore Yard Tackle

Halliard Positioning

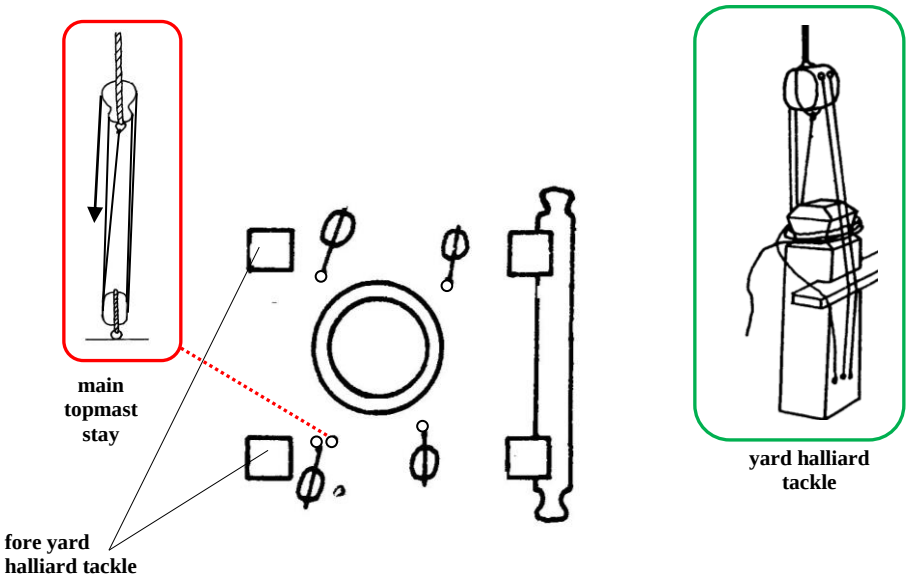


Figure 8: Topmast Stay & Halliard Rigging Points

fore yard (continued)

Figure 9: Rigging Points Around the Foremast

fore yard (continued)

Lift Lines and Clew Lines

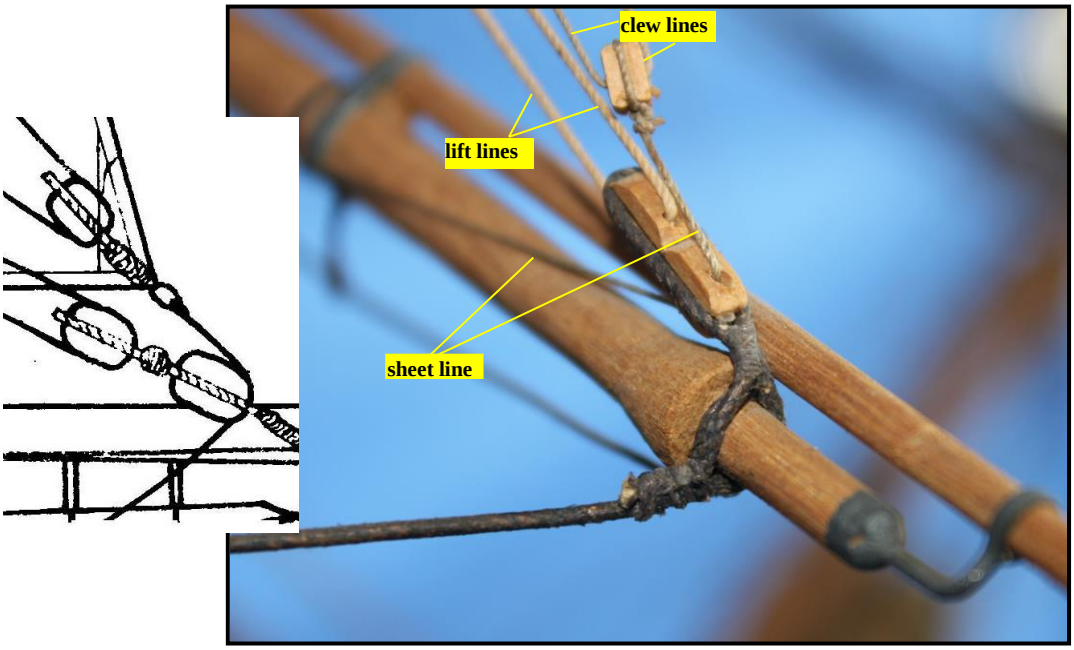


Figure 10: Clew and Lift Blocks

fore yard (continued)

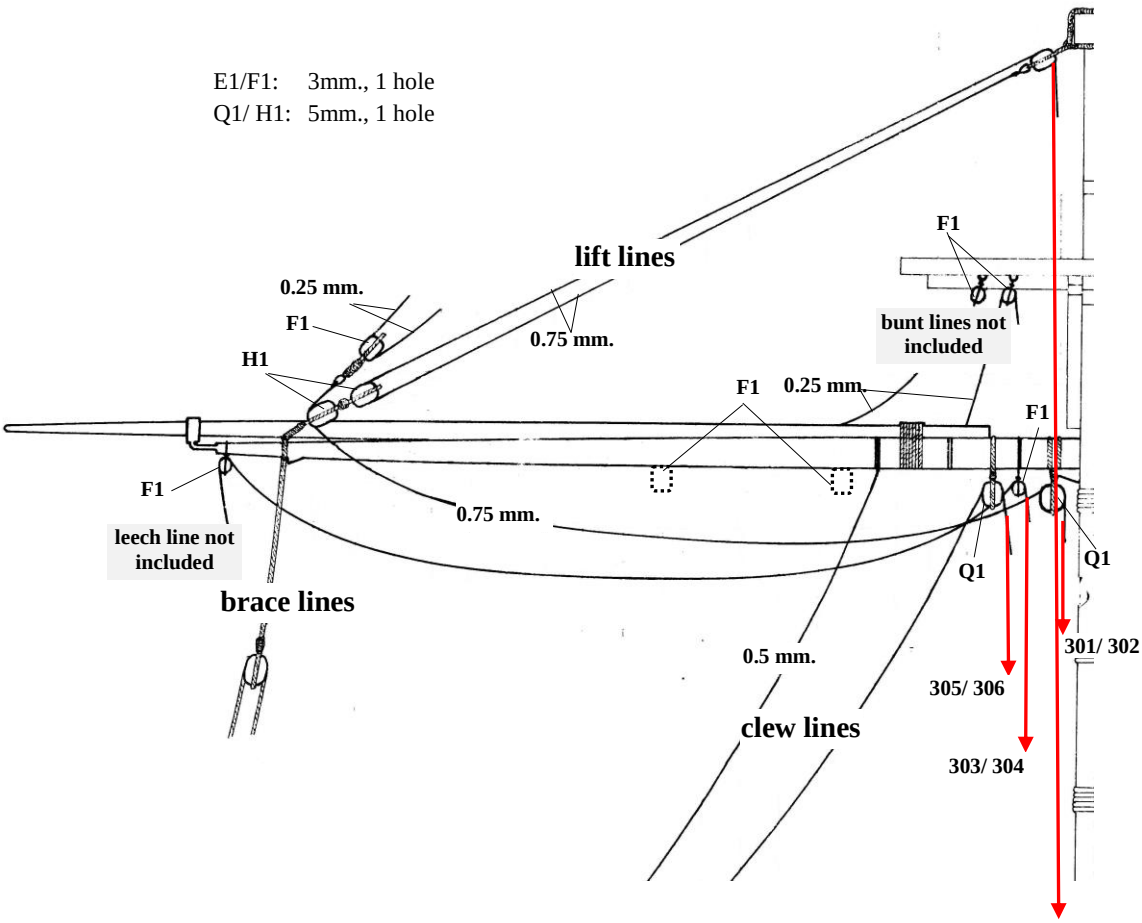


Figure 11: Fore Yard Lift and Clew Rigging

Fore Topsail Yard

Brace Lines

Standing braces for the foresail yard are seized to points 107/ 108. Running brace lines rove through two Q1 blocks (5 mm. 1-hole) seized to the main topmast stay.

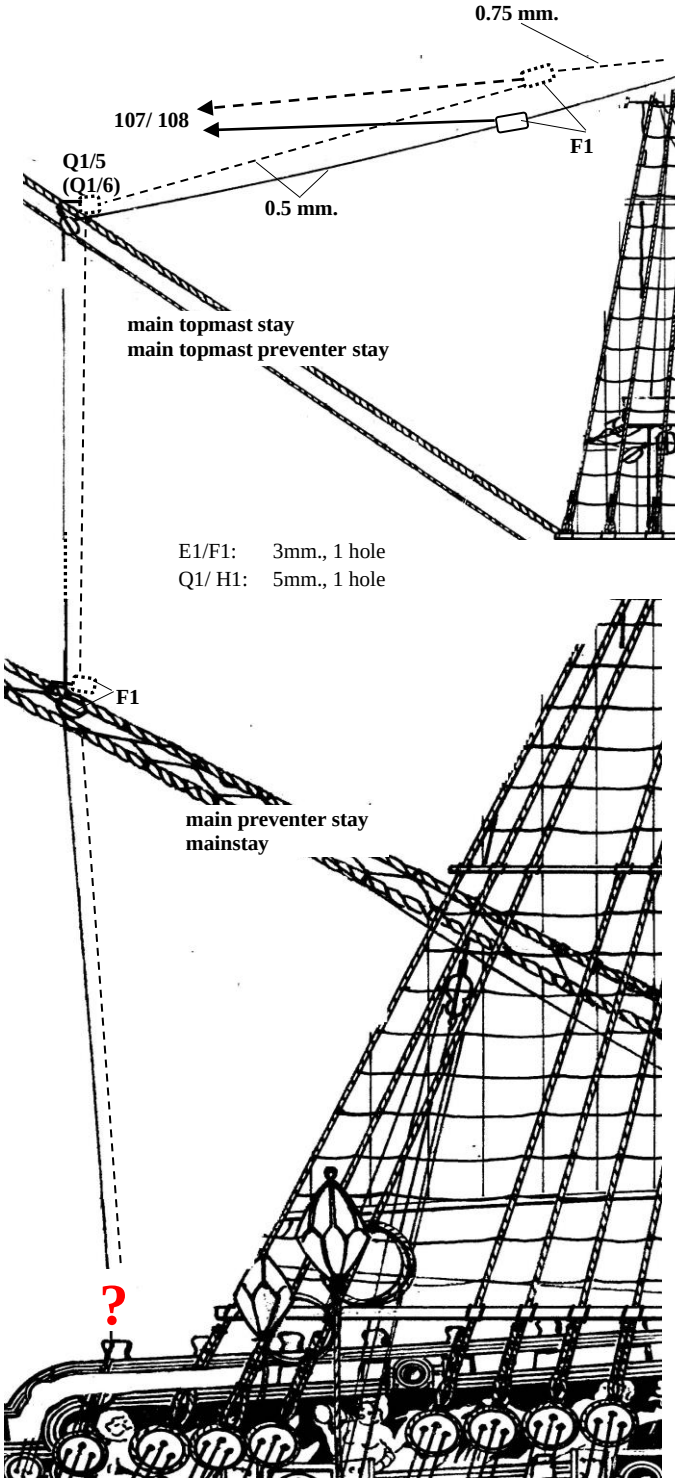


Figure 12: Foresail Yard Brace Belaying Points

The brace lines are seized to a timberhead as shown in Fig. 12.

There is a conflict between Anderson and Lee on where the brace lines were made fast on the focs'le deck during this time period. Fig. 12 portrays Anderson's view. However, there are not necessarily hard and fast rules and variations did occur. Lee describes their belaying to cleats on the focs'le rail.

Four lines are shown (from the Euromodel Museum) fastened over the focs'le breast rail. This relates to the reference made on Plan Sheet 11 for the brace lines of both the foresail and the fore yard [*alla ringhiera del castello – to the rail on the foc'sle deck*]. **Lee's explanation** of the brace lines belayed to the focs'le rail supports what is seen in Fig. 13.

However, **Anderson's explanation** along with the Fig. 13 drawings taken from Plan Sheet 1 supports the foresail yard brace being belayed (along with the topgallant brace lines) to the timberhead instead.

Here is a quandry – the plans were drawn and then validated through the model construction. It appears that Lee's explanation was adopted during the rigging rather than following what is clearly shown in the drawing. At that time, both methods were in use.

It was decided that only the topgallant brace lines were to go to the timberhead; the rest would go to the foc'sle breast rail.

There is the question of whether belaying pins or cleats should be used on the focs'le breast rail.

Fore Topsail Yard (continued)

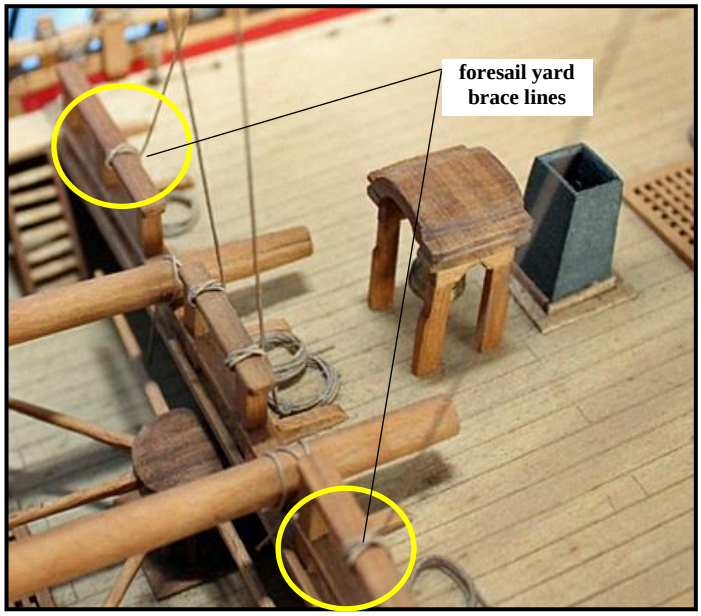


Figure 13:Forsail Brace Lines on Focs'le Breast Rail

Tye/ Halliard

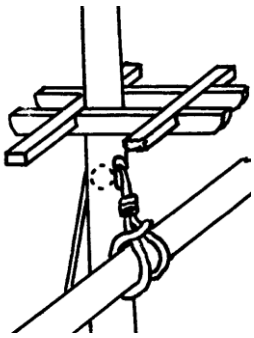
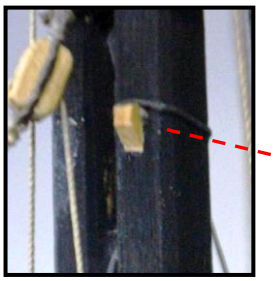


Figure 15: Suggestion in Plan Sheet 16



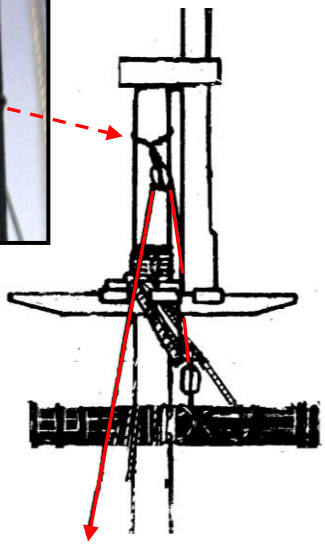


Figure 14: From Plan Sheet 1

Figure 16: Topsail Yard Rigging

The rigging method shown in Fig. 14 was adopted.

Fore Topsail Yard (continued)

Lift Lines and Clew Line

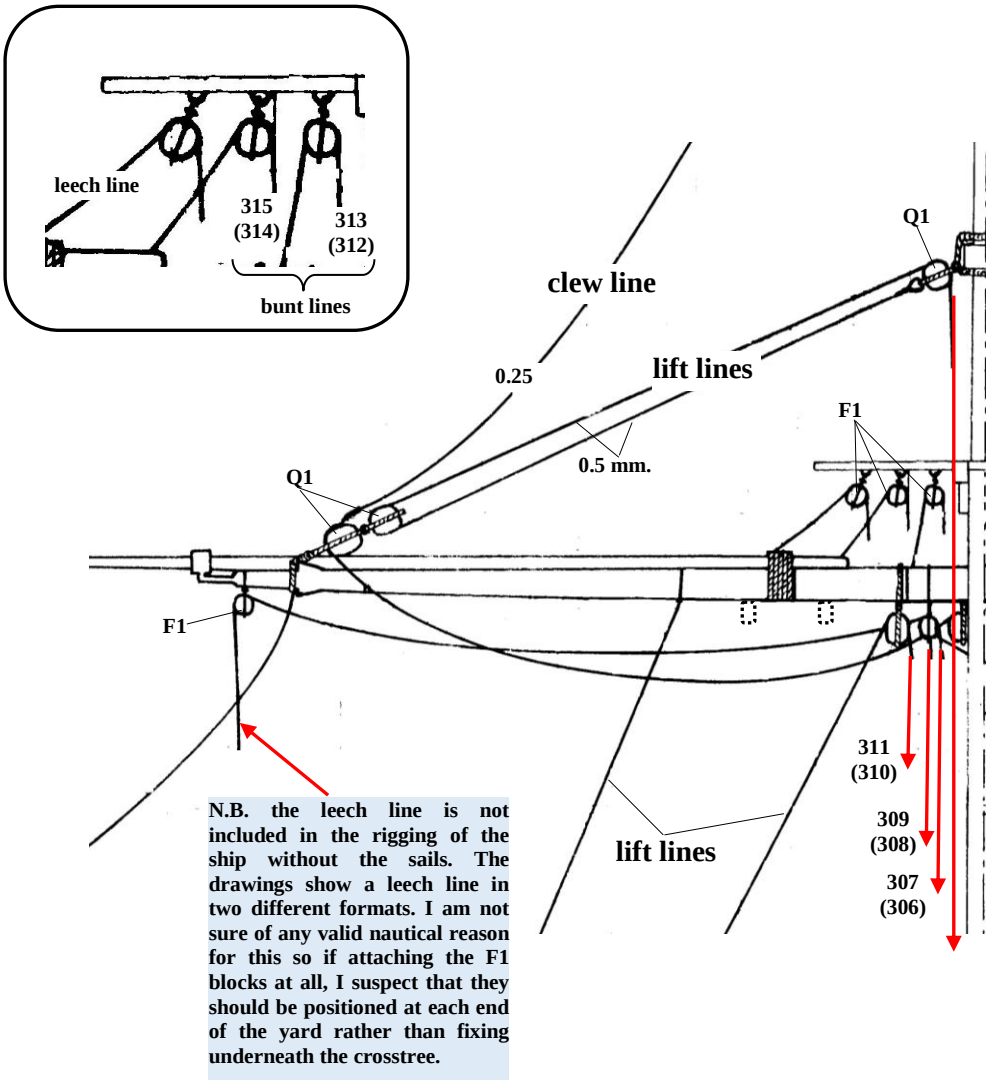


Figure 17: Topsail Lift and Clew Line Rigging

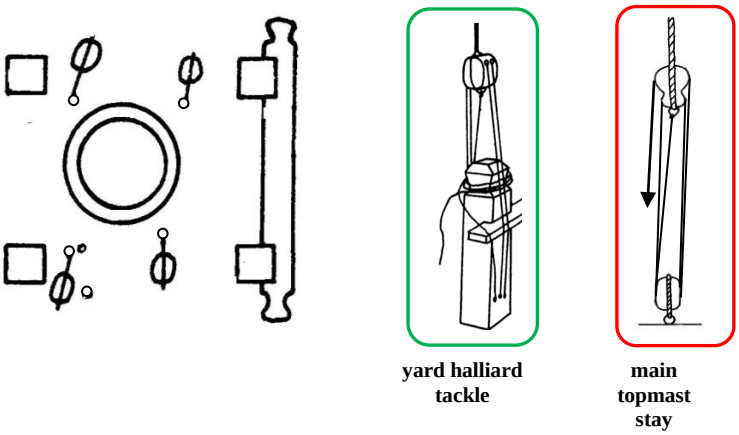


Figure 18: Topmast Stay & Halliard Rigging Points

Fore Topgallant Yard

Brace Lines

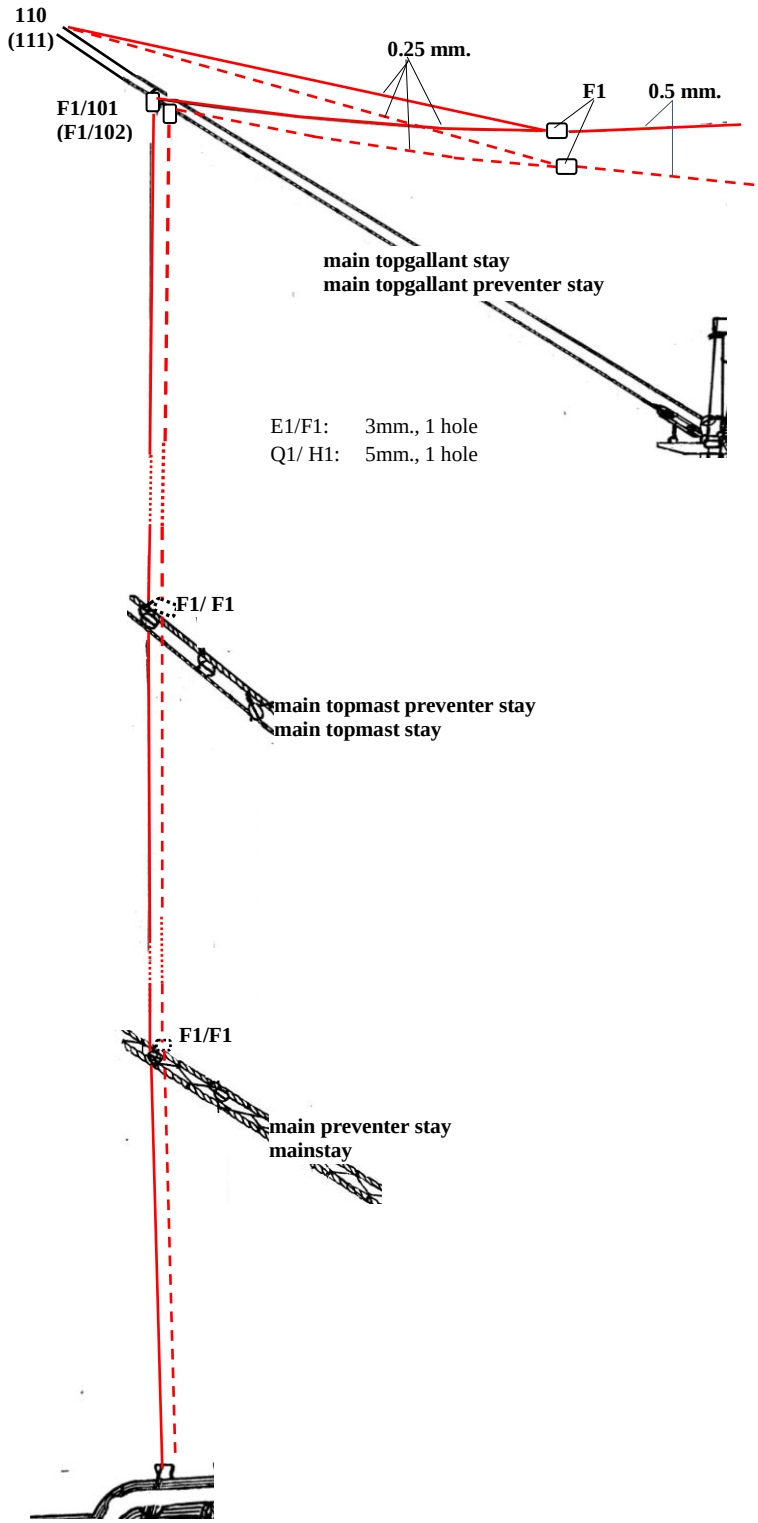


Figure 19: Topgallant Yard Brace Rigging Points

Fore Topgallant Yard (continued)

Tye/ Halliard Line

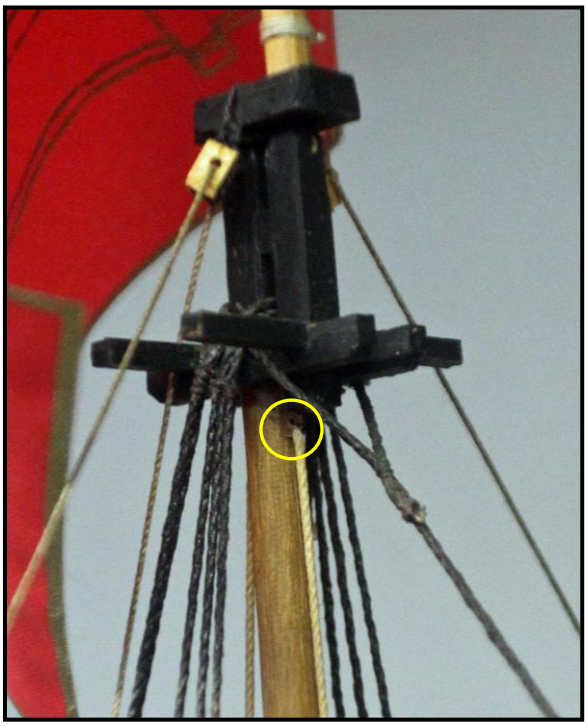


Figure 21: Fore Top Gallant Mast Sheave

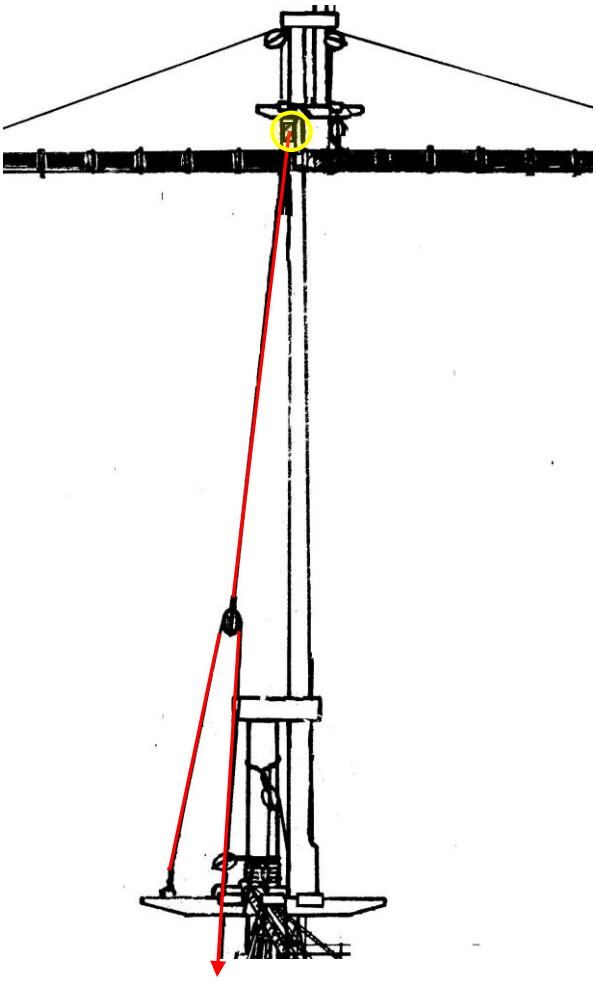


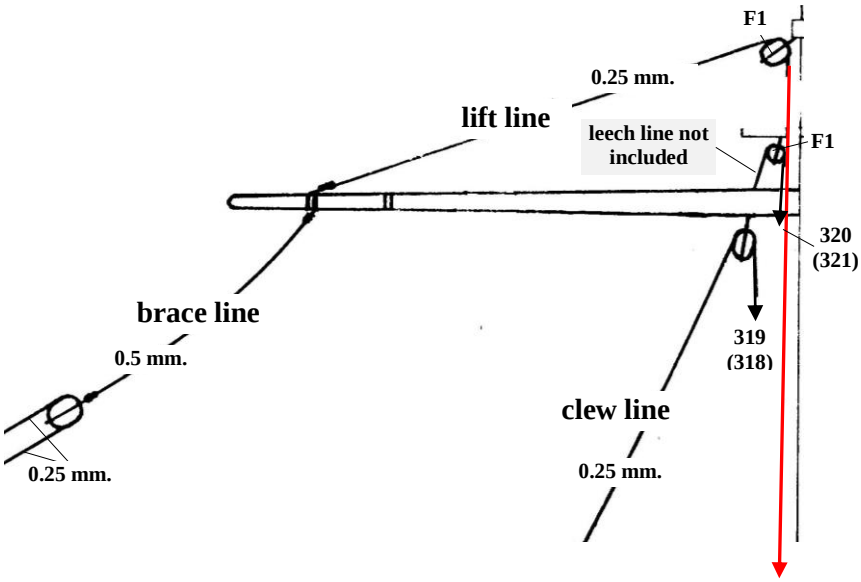
Figure 20: Topgallant Yard Tye Down to the Lower Top

Figure 22: Fore Top Gallant Yard Tye and Parrel

The tye for the topgallant yard was taken down through a fall to the lower top where it was hitched to one of the deadeyes in the top *on the port side*.

Fore Topgallant Yard (continued)

Lift Lines and Clew Lines



The running part of the lift was taken to the lower top and made fast to a deadeye, ring or cleat.

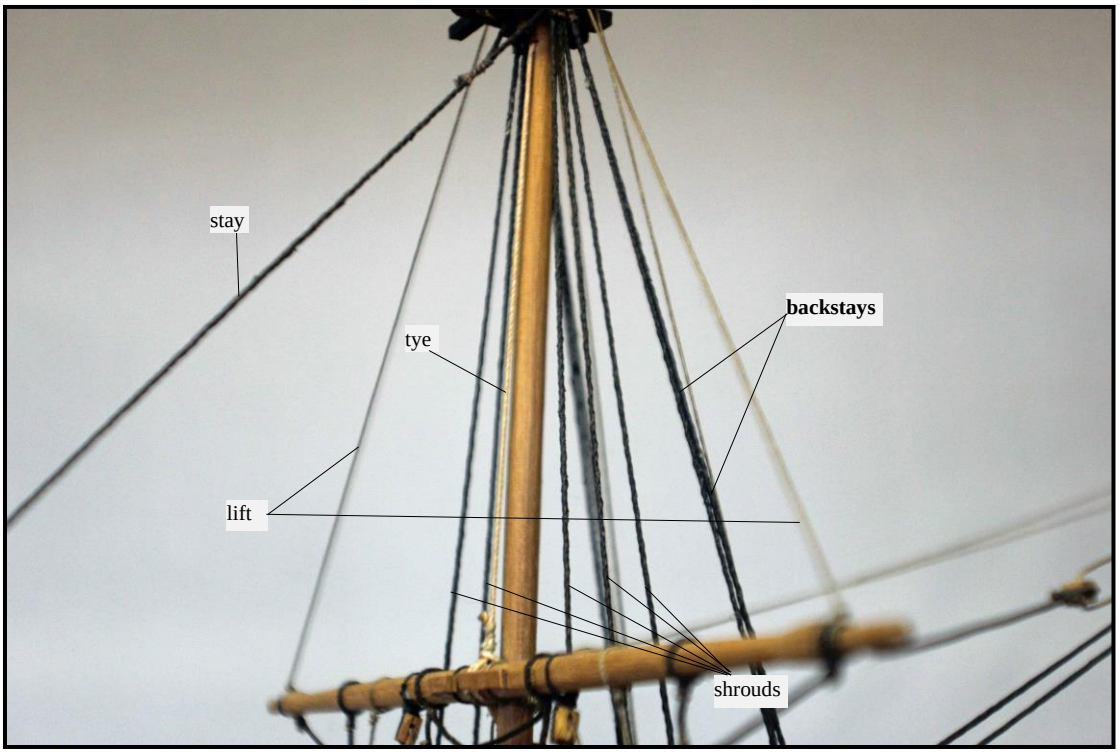


Figure 23: Overview of Topgallant Rigging