

BOWSPRIT AND JIB BOOM RIGGING

HMS Bellerophon - as completed in 1787 1:64 scale

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ref books:

- 1) MRESW The Masting and Rigging of English Ships of War 1625-1860 by James Lees
- 2) RPS *Rigging of Period Ships* by Lennarth Peterson
- 3) STEELS Steels tables from *The Elements and Practise of Rigging and Seamanship Vols 1 + 2,*Standing and Running Rigging to a Ship of 74 Guns
- 4) ANS *The Anatomy of Nelson's Ships* by C. Nepean Longridge
- 5) TFFM *The Fully Framed Model Vols IV* by David Antcherl and 3D renderings created by Dennis Ranaric of Croatia and distributed by Greg Herbert of Admiralty Models (USA)
- 6) REES -REES'S NAVAL ARCHITECTURE (1819-20) by Abraham Rees

Lines identified as possibly feeding through the Bowsprit Fairlead that has nine (9) holes:

- 1. Jib Staysail In/Down Hauler (1); 7/8" dia.; secures at Forecastle Timberhead #6
- 2. Jib Staysail Out Hauler (1); 1-1/4" dia.; secures at Forecastle Timberhead #5
- 3. Fore Topmast Staysail Down Hauler (1); 7/8" dia.; secures at *Forecastle Timberhead #3?
- 4. Fore Staysail Down Hauler (1); 7/8" dia.; secures at *Forecastle Timberhead #4?
- 5. Spritsail Topsail Lift and Sheet (1 port); 7/8" dia.; secures at Forecastle Timberhead #1
- 6. Spritsail Topsail Lift and Sheet (1 starboard); 7/8" dia.; secures at Forecastle Timberhead #8
- 7. Spritsail Lift (1 port); 1" dia.; secures at Forecastle Timberhead #2
- 8. Spritsail Lift (1 starboard); 1" dia.; secures at Forecastle Timberhead #7

*Forecastle Timberhead locations 3 and 4 available as listed for Flying Jib Out/In Haulers

With nine holes the hole located at 12:00 would be left empty as a spare. This leaves a 20 inches wide clear walkway on the top of the bowsprit.

SPRITSAIL YARD - hung with a sling about 2 feet beneath the Bowsprit.

- 3) STEELS pg 31 Slings (2): 6-1/2" = 2.069" (0.032")
- 4) ANS pg 236 hung with a sling about 2 feet beneath the Bowsprit.
- 6) REES pg 91 description

SPRITSAIL TOPSAIL YARD - suspended from a parrel about 34 inches below the Jib Boom to clear the guys and jib outhauler per my layout... need to do this after the jib boom guy is installed to minimize the drop

- 3) STEELS pg 31 Parrel Ropes: 2-1/2" = 0.796"dia. (0.012")
- 4) ANS pg 213 image and rigging description of parrel for "topsail yard" (180° wrap)
- 4) ANS Pg 239 the Spritsail Topsail Yard has no sling. The weight is taken by a parrel.

GAMMONING - TWO locations, 9 to 11 turns, twisted or crossing over itself, then frapped (cross turns) by the same number of turns, whipped and seized to one of the turns (per REES pg 87)

- 1) MRESW 8" = 2.5" dia. (0.039"), or 2) 6" = 2" dia. (0.031")
- 3) STEELS pg 31 8" & 140 fathoms = 840 ft (13.13")

ROPE WOOLDING - FIVE locations along the length of the mast; 13 to 15 turn, wooden hoops each side. 3) STEELS pg 31 - 3-1/2" = 1.11" dia. (0.017)" & 190 fathoms = 1140ft (17.8ft)

HEEL LASHING (ROPE CRUPPER) - secures the Jib Boom to the Bowsprit; per Historic Ship Models by Wolfram zu Mondfeld pg 302: about 7 turns followed by frapping cross turns (between masts to tighten it up); per ANS pg 227: 3 or 4 turns with one passing through the hole in the heel of the Jib boom.

- 1) MRESW Excel Table : 2.48" = 0.79" dia. (0.0123")
- 4) ANS pg 227 description

BOWSPRIT HORSES (MAN HAND ROPES) - TWO, one end spliced to the upper eye bolt on the side of the Bowsprit Cap, run through Bull's Eyes attached to the Fore Preventer Stay Collar, other end was seized around a thimble, lashed to an eyebolt on the top of each Knightshead post. These ropes had knots tied into them at 3 foot intervals along their length

- 3) STEELS pg 31 5" = 1.59" dia. (0.025") & 22 fathoms = 132ft (2.1ft)
- 4) ANS pg 227 description
- 5) TFFM Vol. IV pg 43/45 images

BOBSTAY - TWO, equivalent to the backstay on a vertical mast; cabled, connecting to holes in the Bobstay Piece directly below the figurehead

- 1) MRESW pg 49/50 image of Bobstay Collar
- 2) RPS pg 20 image
- 3) STEELS pg 32 Bobstay: 8-1/2" = 2.7" dia. (0.042") & 38 fathoms = 228ft (3.6ft)
- 3) STEELS pg 32 Collar: 6-1/2" = 2.07" dia. (0.032") & 9 fathoms = 54ft (0.85ft)
- 3) STEELS pg 32 Seizing: 1-1/2" = 0.5" dia. (0.0075") & 30 fathoms = 180ft (2.2ft)
- 3) STEELS pg 32 Lashing: 2" = 0.64" dia. (0.0099") & 9 fathoms = 54ft (0.9ft)
- 3) STEELS pg 32 Lanyard: 4" = 1.27" dia. (0.019") & 18 fathoms = 108ft (1.7ft)
- 4) ANS pg 187 one set each below the Fore Stay and Forestay Preventer Collars

BOWSPRIT SHROUD - FOUR (2 port + 2 starboard) connecting to eyes on the hull

- 1) MRESW pg 49/50 image of Bowsprit Collar
- 2) RPS pg 20 image
- 3) STEELS PG 31 Shroud: 8" = 2.5" dia. (0.039") & 38 fathoms = 828ft (13ft)
- 3) STEELS PG 31 Collars: 6-1/2" = 2" dia. (0.032") & 12 fathoms = 72ft (1.2ft)
- 3) STEELS PG 31 Seizings: 1" = 0.318" dia (0.0049") & 16 fathoms = 96ft (1.5ft)
- 3) STEELS PG 31 Lashings: 2" = 0.64" dia. (0.0099") & 12 fathoms = 72ft (1.4ft)
- 3) STEELS PG 31 Lanyards: 3-1/2" = 1.11" dia (0.017") & 20 fathoms = 120ft (1.9ft)
- 4) ANS pg 187 one set from the from each side by the Fore Stay and Forestay Preventer Collars

FORESTAY - Foremast rigging to the Bowsprit.

- 1) MRESW pg 41. wormed and snaked to the Fore Preventer Stay
- 1) MRESW calculated to be 5.3" dia. (0.083") or 3) pg 32 5.6" dia. (0.087")
- 2) RPS pg 15 secured with collar and lashing
- 3) STEELS pg 32 Stay (4 strand): 17-1/2" = 5.57" dia. (0.087") & 14-1/2 fathoms = 87ft (1.4ft)
- 3) STEELS pg 32 Seizing: 2" = 0.64" dia. (0.01") & 25 fathoms= 150ft (2.4ft)
- 3) STEELS pg 32 Lanyard: 4" = 1.27" dia. (0.02") & 17 fathoms = 102ft (1.6ft)
- 3) STEELS pg 32 Collar (4 strand): 9-1/2" = 3 dia. (0.047") & 8-1/2 fathoms = 51ft (0.8ft)
- 3) STEELS pg 32 Seizing: 1-1/2" = 0.5" dia. (0.0075") &12 fathoms = 72ft (1.2ft)

- 3) STEELS pg 32 Lashing: 2-1/2" = 0.8" dia. (0.012") & 6 fathoms 36ft (0.6ft)
- 4) ANS pg 214 image

FORE PREVENTER STAY - Foremast rigging to the Bowsprit

- 1) MRESW pg 41. wormed and snaked to the Forestay, image of collar shown
- 2) RPS pg 15 secured with collar and lashing
- 3) STEELS pg 32 Stay (4 strand): 11-1/2" = 3.66" dia. (0.057") & 14-1/2 fathoms = 87ft (1.4ft)
- 3) STEELS pg 32 Lanyard: 4-1/2" = 1.43" dia. (0.022") & 10 fathoms = 60ft (1ft)
- 3) STEELS pg 32 Collar (4 strand): 6-1/2" = 2" dia. (0.032") & 7 fathoms = 42ft (0.7ft)
- 3) STEELS pg 32 Lashing: 2-1/2" = 0.8" dia. (0.012") & 6 fathoms 36ft (0.6ft)
- 3) STEELS pg 32 Seizing: 1-1/2" = 0.5" dia. (0.0075") & 18 fathoms = 108ft (1.7ft)
- 4) ANS pg 214 image

FORE TOP PREVENTER STAY - Fore Topmast rigging to the Bowsprit

- 1) MRESW pg 185 & 2) pg 18 to aft port side hole in Bee
- 1) MRESW calculated to be 2.65" Dia. (0.04")
- 2) RPS pg 18 secures with a lanyard to an eyebolt in hull port side close to bowsprit
- 3) STEELS pg 33 Stay (4 strand): 6-1/2" = 2.07" dia. (0.032") & 24 fathoms = 144ft (2.3ft)
- 3) STEELS pg 33 Collar: 5-1/2" = 1.75" dia. (0.027") & 3 fathoms = 18ft (0..3ft)
- 3) STEELS pg 33 Tackle: 3" = 0.955" dia. (0.015") & 21 fathoms = 126ft (2ft)
- 3) STEELS pg 33 Strapping: 4" = 1.27" dia. (0.02") & 3 fathoms = 18ft (0.3ft)
- 3) STEELS pg 33 Seizing: 1" = 0.32" dia. (0.005") & 8 fathoms = 48ft (0.75ft)
- 3) STEELS pg 33 Lashing: 2-1/2" = 0.8" dia. (0.012") & 6 fathoms 36ft (0.6ft)

FORE TOP STAY - Fore Topmast rigging to the Bowsprit

- 1) MRESW pg 185 & 2) pg 18 to forward starboard side hole in Bee
- 1) MRESW calculated to be 2" dia. (0.03")
- 2) RPS pg 18 secures with a lanyard to an eyebolt in hull starboard side close to bowsprit
- 3) STEELS pg 33 Stay (4 strand): 8-1/2" = 2.7" dia. (0.042") & 24 fathoms = 144ft (2.3ft)
- 3) STEELS pg 33 Collar: 6-1/2" = 2.07" dia. (0.032") & 3-1/2 fathoms = 21ft (0..4ft)
- 3) STEELS pg 33 Tackle: 3-1/2" = 1.11" dia. (0.017") & 24 fathoms = 144ft (2.3ft)
- 3) STEELS pg 33 Strapping: 5" = 1.59" dia. (0.025") & 3 fathoms = 18ft (0..3ft)
- 3) STEELS pg 33 Seizing: 1-1/2" = 0.48" dia. (0.007") & 6 fathoms 36ft (0.6ft)
- 3) STEELS pg 33 Seizing: 3/4" = 0.24" dia. (0.004") & 6 fathoms 36ft (0.6ft)

FORE TOPGALLANT BOWLINES - TWO - drops down from the port and starboard sides of the fore topgallant sail, through a thimble on each side of the head of the jib boom and back to the top sail sheet bitts forward of the fore mast and secure to belaying pins 3 and 7

- 3) STEELS pg 34 Bowlines: 2" = 0.637" dia. (0.01") & 74 fathoms = 444ft (7ft)
- 3) STEELS pg 34 Bridles: 2" = 0.637" dia. (0.01") & 5 fathoms = 30ft (0.5ft)
- 3) STEELS pg 34 Strapping: 2" = 0.637" dia. (0.01") & 2 fathoms = 12ft (0.2ft)
- 2) RPS pg 76 image secures to thimble at head of jib boom
- 4) ANS pg 235 image (item No.5) and description
- 4) ANS pgs 266+269 belaying image and text

FORE TOPSAIL BOWLINE - TWO - drops down from port and starboard sides of the fore topsail; run forward to a block in the upper side eye of the bowsprit cap then run aft to the topsail sheet bitts forward of the fore mast and secure to belaying pins 2 and 8

- 2) RPS pg 75 image secures to block at upper eye on sides of bowsprit cap
- 3) STEELS pg 33 Bowlines: 3-1/2" = 1.11" dia. (0.017") & 68 fathoms = 408ft (6.4ft)

FORE COURSE BOWLINE -TWO - from port and starboard sides of the fore course sail; run forward to a block lashed to the bowsprit aft of the forestay heart, then run aft to the topsail sheet bitts forward of the fore mast and secure to belaying pins 1 and 9

- 2) RPS pg 75 image secures to block lashed to bowsprit
- 3) STEELS pg 34 Bowlines: 4-1/2" = 1.432" dia. (0.022") & 60 fathoms = 360ft (5.7ft)

FORE TOPGALLANT STAY - eye spliced above the stop of the Fore Topgallant Mast, run down to the top middle of three thimbles in aft strop at the tapered head of the Jib Boom, then run back to secured to a thimble, seized to another thimble secured to the starboard side of the Fore Preventer Stay Collar

- 2) RPS pg 61 image
- 3) STEELS pg 34 Stay (4 strand): 4-1/2" = 1.43" dia. (0.022") & 30 fathoms = 180ft (2.8ft)
- 3) STEELS pg 34 -Strapping: 3-1/2" = 1.11" dia. (0.017") & 1-1/2 fathoms = 9ft (0.2ft)
- 3) STEELS pg 34 Tackle: 2" = 0.64" dia. (0.001") & 18 fathoms = 108ft (1.7ft)
- 3) STEELS pg 34 Strapping: 2-1/2" = 1.43" dia. (0.022") & 1-1/2 fathoms = 9ft (0.2ft)
- 4) ANS pg 223 description secured to eye in port side Knighthead
- 4) ANS pg 225 image and description
- 5) TFFM Vol. IV pg 85 secured to a thimble, seized to another thimble secured to the starboard side of the Gammoning, or... the starboard side of the Fore Preventer Stay Collar... or, rigged to the Knighthead

JIB HORSE (MANROPE) - ONE, fold in two, put the bight over the head of the Jib Boom to sit in aft most position in the taper, seize to make an eye, knotted every 3 feet, other ends secured to lower eye bolts on the sides of the Bowsprit Cap with a thimble and splice... or, run along the side of the cap to secure to the jib boom (wrapped around the boom and secured to itself with three seizings). TFFM suggests the possibility of additional eyebolts on the front face of the Bowsprit Cap but I've not seen anything elsewhere about this.

- 3) STEELS pg 31 4" = 1.27" dia. (0.019") & 20 fathoms = 120ft (1.9ft)
- 4) ANS pg 227/235 description and image
- 5) TFFM Vol. IV pg 81/82 images
- 6) REES pg 91 description

JIB GUY PENDANTS - equivalent to the shrouds on a vertical mast; must run above the spritsail topsail yard; runs from the head of the jib boom to 11" Block and tackle to the cathead with the standing end of B+T run to an 11" block above the roundhouse secured at

- 2) RPS pg 58 image
- 3) STEELS pg 31 4-1/2" = 1.43" dia. (0.022")& 34 fathoms = 204ft (3.2ft)
- 3) STEELS pg 31 Falls (2): 3" = 0.95" dia. (0.015") & 36 fathoms = 216ft (3.4ft)
- 3) STEELS pg 31 Strapping (1): 4" = 1.27" dia. (0.019") &1-1/2 fathoms = 9ft (0.2ft)
- 3) STEELS pg 31 Strapping (1): 3" = 0.95" dia. (0.015") & 2 fathoms = 12 ft (0.2ft)
- 3) STEELS pg 31 Lashers (4): 1" = 0.32" dia. (0.004") & 14 fathoms = 84ft (1.4ft)
- 4) ANS pg 227/228 full description; the Guys run aft <u>over</u> both the Spritsail Topsail Yard and the Spritsail Yard
- 4) ANS pg 235 image at jib boom head
- 4) ANS pg 236 the (aft) Spritsail Yard hangs about 2 feet beneath the Bowsprit
- 6) REES pg 91 description

JIB STAY - secures to the Jib Stay Traveller at one end, runs up through a sheave on the starboard side of the head of the Fore Topmast, then down to a block and tackle secured to aft most deadeye on the Fore Channel.

- 2) RPS pgs 19/21 images
- 3) STEELS pg 31 Stay: 4-1/2" = 1.43" dia. (0.022") & 33 fathoms = 198ft (3.1ft)
- 3) STEELS pg 31 = Strapping: 4-1/2" 1.43" dia. (0.022") & 1 fathoms = 6ft (0.1ft)
- 3) STEELS pg 31 Tackle fall: 2-1/2" = 0.79" dia. (0.012") & 26 fathoms = 156ft (2.5ft)
- 3) STEELS pg 31 Strapping: 2-1/2" = 0.79" dia. (0.012") & 1 fathoms = 6ft (0.1ft)
- 6) REES pg 96 description

JIB STAY TRAVELLER - iron ring

4) ANS pgs 234/235 - description and image

JIB STAY DOWN HAULER - Pulls the jib sail down; connects to the tack (top) of the jib sail, fed through rings on the Luff side of the sail (against the stay), then runs down to a block on the port side of the Traveller, then back on the port side of the Bowsprit Cap through the Fairlead to secure to Timber Head #3 (2nd outward from the centre on port side)

- 3) STEELS pg 31 2-1/2 = 0.79" dia. (0.0124") & 40 fathoms = 240ft (3.8ft)
- 4) ANS pgs 234/235 description and image
- 6) REES pg 96 description

JIBSTAY INHAULER - Pulls the jib sail aft; connects to an eyebolt on the starboard side of the Bowsprit Cap, run through a block on the Traveller starboard side, and then run back through the Fairlead to secure to Timber Head #5 (nearest to centre on starboard side) - REES'S clearly states there is an INHAULER on pg 96

- 1) MRESW pg 126 "the downhauler also acted as the inhauler when a traveller was used"
- 3) STEELS pg 31 not listed on table assume same as Out Hauler
- 4) ANS pgs 234/235 description and image said to be 1" circumference smaller on HMS Victory (2.5" vs. 3.5") whereas Steels clearly shows the out hauler at 4"
- 5) TFFM Vol IV states **the Down Hauler and In Hauler are the same thing** (I suppose the down hauler can also haul the traveller in once the sail is down enough)
- 6) REES pg 96 description

JIBSTAY OUT HAULER - Pulls the jib sail forward; connects to the Jib Stay Traveller at one end, rove forward to the sheave in the Jib Boom, down under and back to a block and tackle at the Bowsprit Cap. This block and tackle rope runs to the port side of the cap, through the Fairlead and secures to Timber Head #4 (nearest to centre on port side)

- 3) STEELS pg 31 Out-Hauler: 4" = 1.27" dia. (0.0199") & 12 fathoms = 72ft (1.2ft)
- 3) STEELS pg 31 Tackle Fall: 3-1/2" = 1.11" dia. (0.017") & 30 fathoms = 180ft (2.9ft)
- 3) STEELS pg 31 Strapping: 2-1/2" = 0.79" dia. (0.0124") & 1 fathoms = 6ft (0.1ft)
- 4) ANS pgs 234/235 description and image
- 4) ANS pg 266 image of Timber Head layout for securing lines
- 6) REES pg 96 description

JIB STAYSAIL HALYARD -

- 3) STEELS pg 31 Out-Hauler: 4" = 1.27" dia. (0.0199") & 46 fathoms = 276ft (4.4ft)
- 3) STEELS pg 31 Strapping: 4" = 1.27" dia. (0.0199") & 1 fathoms = 6ft (0.1ft)

6) REES pg 96 - description

FORE TOPMAST STAYSAIL HALYARD -

- 3) STEELS pg 33 3-1/2" = " = 1.11" dia. (0.017") & 41 fathoms = 246ft (3.9ft)
- 6) REES pg 96 description

FORE TOPMAST STAYSAIL DOWNHAUL -

- 3) STEELS pg 33 2-1/2" = " = 0.79" dia. (0.012") & 32 fathoms = 192ft (3ft)
- 6) REES pg 96 description

FORE STAYSAIL HALYARD -

- 3) STEELS pg 32 4" = 1.27" dia. (0.019") & 30 fathoms = 180ft (2.9ft)
- 6) REES pg 96 description

FORE STAYSAIL DOWNHAULER -

- 3) STEELS pg 32 2 1/2" = 0.79" dia. (0.012") & 28 fathoms = 168ft (2.7ft)
- 6) REES pg 96 description

SPRIT TOPSAIL (YARD) LIFTS - TWO - there are in fact two different sets of lifts (See the Spritsail Topsail Sheet and Clue Line).

- 2) RPS (pg 65 image) DID NOT FOLLOW THIS see 4) ANS below
- 3) STEELS pg 31 Lift (2): 2-1/2" = 0.795" dia. (0.012") & 32 fathoms = 40ft (0.7ft)
- 3) STEELS pg 31 Strapping : 2-1/2 = 0.795" dia. (0.012") & 1 fathoms = 6 ft (0.1ft)
- 4) ANS pg 235 image fig 165 No.5
- 4) ANS pg 239 description
- 6) REES pg 92 description

SPRITSAIL TOPSAIL YARD HALYARD - ONE - 9" block on underside of head of jib boom

- 2) RPS pg 59 image
- 3) STEELS pg 31 Halyard (2): 2-1/2" = 0.795" dia. (0.012") & 32 fathoms = 192ft (3ft)
- 3) STEELS pg 31 Strapping (2): 2-1/2 = 0.795" dia. (0.012") & 2-1/2 fathoms = 18 ft (0.3ft)
- 3) STEELS pg 31- Lashing (2): 1/4" = 0.64" dia. (0.01") & 6 fathoms = 36ft (0.6ft)
- 4) ANS pg 235 image fig 165 and description for item 7 (9" block)
- 4) ANS pg 237 -description

SPRITSAIL TOPSAIL BRACE - TWO - The standing end secures to the Spritsail Topsail Yard; the running end passes through two blocks under the Foremast Tree (inboard of the Spritsail Brace) and secures to the Forecastle Brace Bitts abaft the Foremast

- 2) RPS pg 47 image
- 3) STEELS pg 31 Brace (2): 2-1/2" = 0.795" dia. (0.012")
- 3) STEELS pg 31 Strapping: 2-1/2" = 0.795" dia. (0.012")
- 6) REES pg 92 description

SPRITSAIL (YARD) LIFTS - TWO

- 3) STEELS pg 31 Lifts (2): 3-1/2" = 1.11" dia. (0.017") & 58 fathoms = 348ft (5.5ft)
- 3) STEELS pg 31 Beckets (2): 3-1/2" = 1.11" dia. (0.017") & 4 fathoms = 24ft (0.4ft)
- 3) STEELS pg 31 Strapping: 4" = 1.27" dia. (0.02") & 4 fathoms = 24ft (0.4ft)
- 3) STEELS pg 31 Seizing: 1/4" = 0.08" dia. (0.001") & 9 fathoms = 54ft (0.9ft)

- 3) STEELS pg 31 Standing (2): 4" = 1.27" dia. (0.02") & 10 fathoms = 60ft (1ft)
- 3) STEELS pg 31 Straps(2): 4-1/2" = 1.43" dia. (0.022") & 4 fathoms = 24ft (0.4ft)
- 3) STEELS pg 31 Lanyards (2): 2" = 0.64" dia. (0.01") & 6 fathoms = 36ft (0.6ft)
- 4) ANS pg 236 fig 168 blocks on bowsprit cap for spritsail yard lifts
- 4) ANS pg 237 description

SPRITSAIL YARD HALYARD - ONE - block and tackle secured to eyes at each outer lower rear side of bowsprit cap

- 2) RPS pg 59 image
- 4) ANS pg 235 image fig 165 and description for item 7 (9" block off underside of jib boom head)
- 3) STEELS pg 31 Halyard (2): 3-1/2" = 1.11" dia. (0.017") & 40 fathoms = 240ft (3.8ft)
- 3) STEELS pg 31 Strapping (2): 4-1/2"= 1.43" dia. (0.022") & 3 fathoms = 18 ft (0.3ft)
- 3) STEELS pg 31- Lanyards (2): 2" = 0.64" dia. (0.01") & 6 fathoms = 36ft (0.6ft)

SPRITSAIL BRACE - TWO - The standing end runs up towards the Foremast Tree and is secured to the Foremast Stay; the running end passes through two blocks under the Foremast Tree and secures to the Forecastle Brace Bitts abaft the Foremast (2nd and 7th timber heads)

- 2) RSP pg 47 image
- 3) STEELS pg 31- Brace (2): 3-1/2" = 1.11" dia. (0.017") & 75 fathoms = 450ft (7.1ft)
- 3) STEELS pg 31- Pendants (2): 4" = 1.27" dia. (0.019") & 5 fathoms = 30ft (0.5ft)
- 3) STEELS pg 31- Strapping: 3-1/2" = 1.11" dia. (0.017") & 10 fathoms = 60ft (1ft)
- 4) ANS pg 238 image 169 of brace block on yard
- 4) ANS pg 237 description and secures to the 2nd and 7th timber head of the rail at the after end of the Forecastle
- 4) ANS pg 237 image of 2nd and 7th timber head locations
- 6) REES pg 91 description

CLUE LINES and **SHEETS** - TWO FOR EACH SQUARE SAIL - strops on yards with blocks to clues (lower corners) of square sails to raise them for furling (clue line) or lower them to set the sail (sheet)

- 2) RSP pg 65 image spritsail clue lines and sheets
- 2) RSP pg 47 image

SPRITSAIL CLUE LINE:

- 3) STEELS pg 31- Clue Line (2): 2-1/2" = 0.79" (0.012") & 45 fathoms = 270ft (4.3ft)
- 3) STEELS pg 31- Strapping: 3" = 0.95" (0.015") & 6 fathoms = 36ft (0.6ft)

SPRITSAIL SHEET:

3) STEELS pg 31- Sheet (2): 5" = 0.79" (0.012") & 40 fathoms = 240ft (3.8ft)

SPRITSAIL TOPSAIL CLUE LINE:

- 3) STEELS pg 31- Clue Line (2): 2" = 0.64" (0.01") & 46 fathoms = 276ft (4.4ft)
- 3) STEELS pg 31- Strapping: 2" = 0.64" (0.01") & 2 fathoms = 12ft (0.2ft)

SPRITSAIL TOPSAIL SHEET:

- 2) RPS pg 64 Spritsail yard lift and spritsail topsail sheet are the same rope!
- 4) ANS pg 100 Plate V fig 2 shows rope item 89 to sail clue and adjacent yard
- 4) ANS pg 98 sheets reeve through the sheet block at the spritsail yard arm, and hook to the clue of the sail, and lead in upon the forecastle, through a bloc lashed on each side of the bowsprit.
- 6) REES pg 91 description see lifts near bottom of page

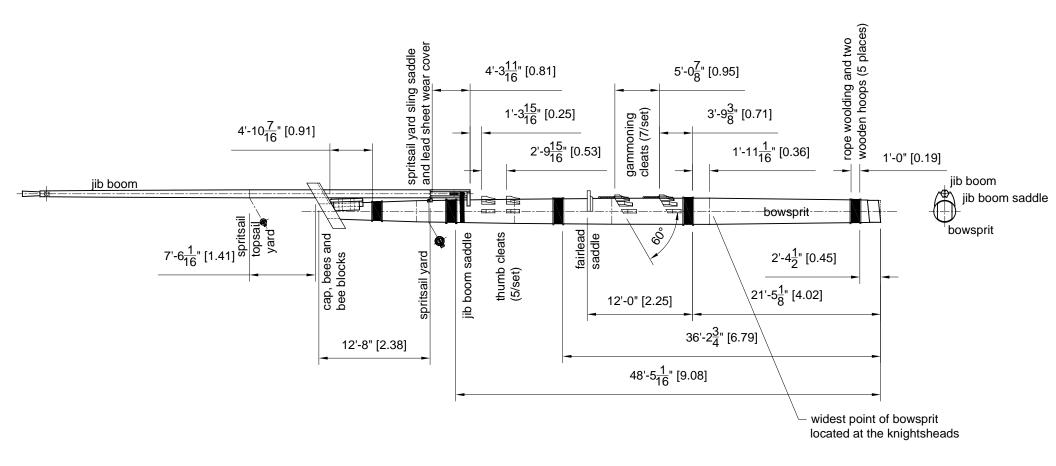
BUNTLINES - used to furl sail

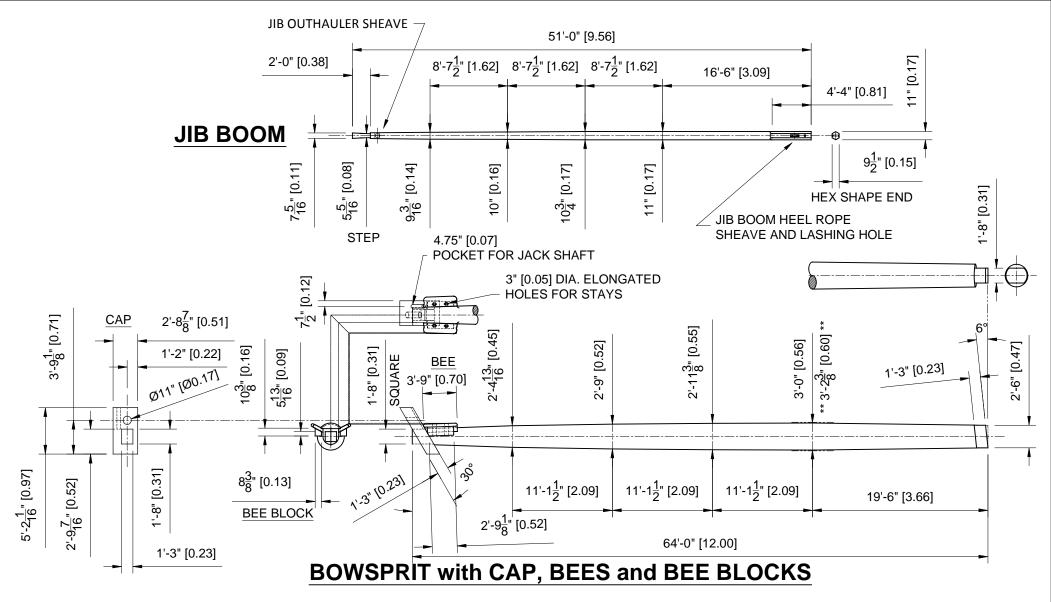
2) RPS pg 69 - image; spritsail runs to thimble on forestay preventer stay collar **SPRITSAIL BUNTINE:**

- 3) STEELS pg 31- Buntline (2): 2" = 0.64" (0.01") & 34 fathoms = 204ft (3.2ft)
- 3) STEELS pg 31- Strapping: 2-1/2" = 0.95" (0.015") & 1 fathoms = 6ft (0.1ft)

SPRITSAIL TOPSAIL BUNTLINE:

- 3) STEELS pg 31 specifically not listed on table
- 4) ANS pg 264 specifically included in list



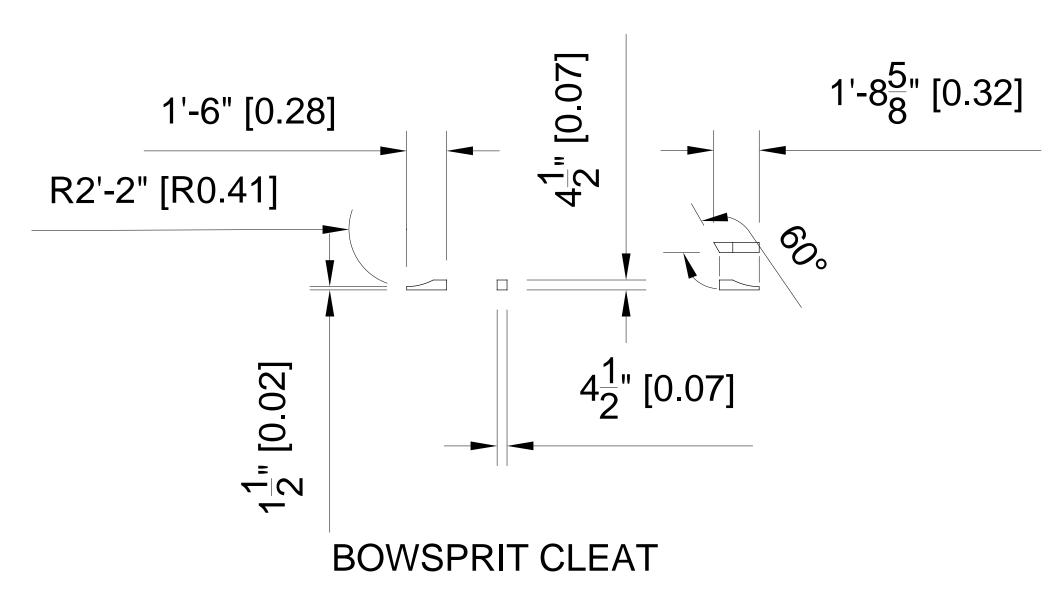


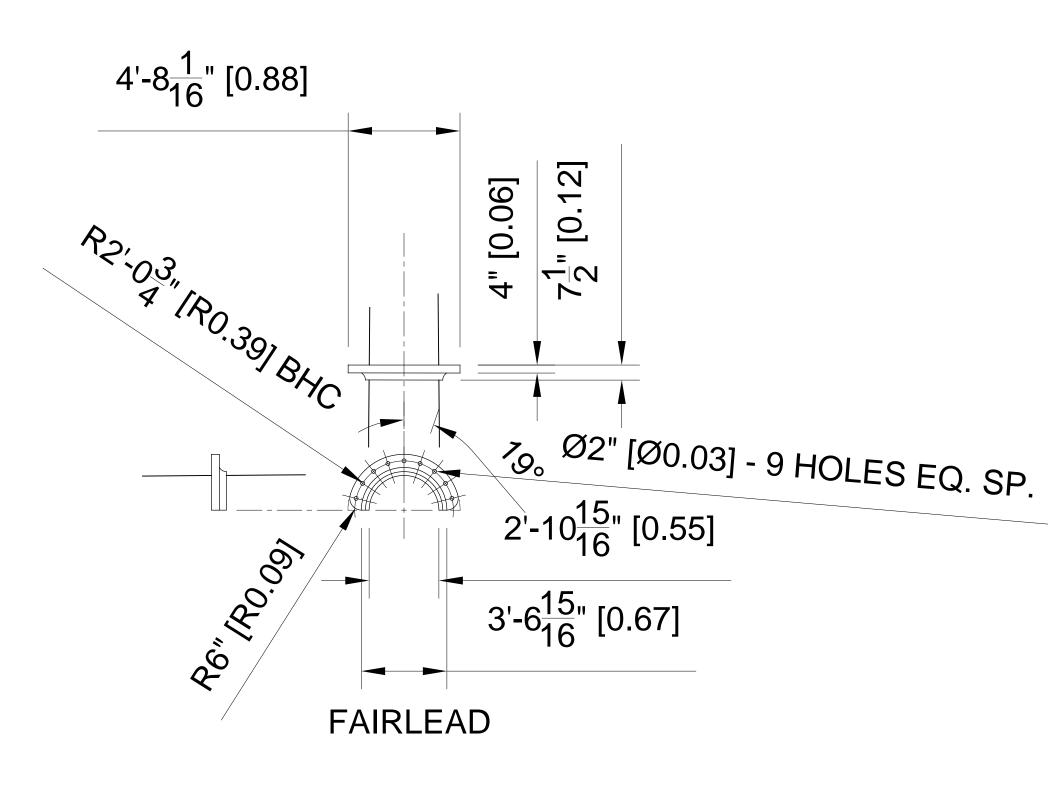
This drawing was created using information from a combination of sources:

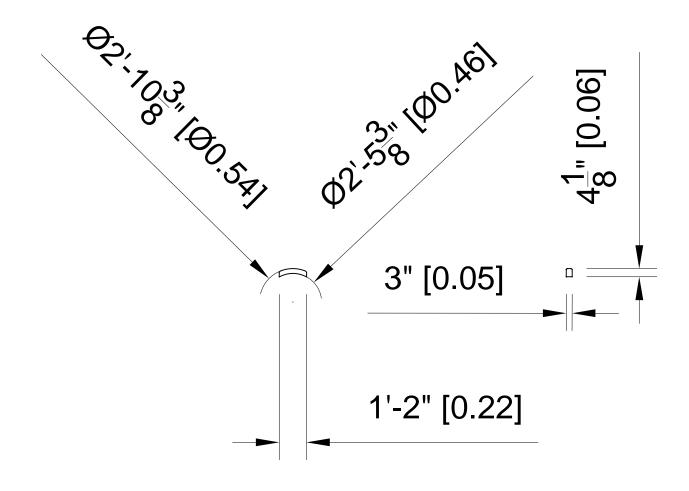
- 1) REES's Naval Architecture (1819-1820), page 106, plate VIII
- 2) The Anatomy of Nelson's Ships by C. Nepean Longridge (figure 116, page 185)
- 3) The Masting and Rigging of English Ships of War 1625-1860 by James Lee (section I and Appendix I)

Dimensions are Dual Scale at "scale FULL SIZE [scale 1:64]"

Alan O'Neill 21 March 2019 ** NOTE: DIMENSION ** 3'-2 $\frac{3}{8}$ "[0.60] ** IS THE BOWSPRIT MAJOR DIAMETER AT THE BOLLARD FRAMES I REQUIRE TO FILL MY SLIGHTLY OVERSIZED CLEARANCE HOLE.







SPRITSAIL YARD SADDLE

