



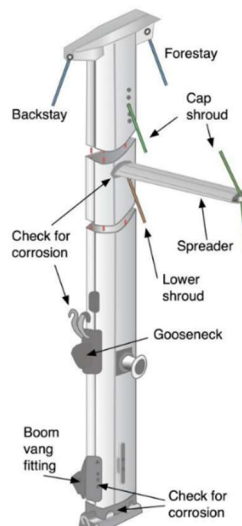
## Talk Report – Ropes and Rigging – “What can possibly go Wrong?” by Martin Bean, Spencer Rigging.

Martin took the trouble to catch a Fast Cat from Cowes, get picked up by a good friend who was his driver for the evening, and make his way to the club in good time, all the time sporting a box of broken bits and pieces. It all looked good for the talk ahead.

Some 35 members in the clubhouse and on Zoom attended this last talk of the 2023-4 Winter Programme, with noticeably a scarcer number of lady members than usual. Perhaps Ropes and Rigging, or perhaps Problems, are more of a man's thing? Or was it the cold, dark dingy evening. I digress .....



Martin started with the basis of a full survey – what is included, what isn't, and why, in their opinion, it is not a quotation for works to be done. Most surveys are carried out for the purposes of a pre-purchase check, and just sometimes as a result of one obvious issue opening up a catalogue of deeper problems.



Martin used pictures, hundreds of them (!), to illustrate his theme that most deficiencies are not mast-threatening, at first, and why early rectification can be much quicker and cheaper. This means that a diligent owner will keep a close watch on chafe, shackle condition, and general interference of parts to avoid the problems that can occur when the “going gets tough”.

He challenged the audience on many pictures to analyse what was wrong, and what the solution would be. This was fun, and towards the end, the audience were almost as good as he was!!

Let's cover some of the key areas:

- Guardrails – whether wire or plastic-covered wire, always make sure that there is sufficient thread on the end-fittings to keep the wire at the right tension. This is a safety factor
- Furlex – always have a minimum of 3 or 4 turns around the drum to relieve any direct pulling pressure on the line bitter end attachment point. This is to avoid a sudden parting of the line just when you need to reef, probably in a F5/6/7!
- Spreaders – keep an eye open for mast attachment, or spreader-end mouldings, showing signs of age deterioration, or cracking
- Electrolysis is a constant issue because of the differing materials. Use lots of specialist “gunk” when fixing, and where possible, ease bolts and screws every year or two to reduce the potential for seizing
- Lashings – not affecting most of our GRP boats and modern aluminium rigging, but certainly an issue for Sail Training Ships and older style barges, where even UV-resistant materials can suffer chafe and general deterioration
- Gooseneck fittings on the boom attachment to the mast – many pictures were shown on this topic, and we were able to spot problems as experts by the end! Most involved the softer gooseneck being abraded by constant movement of harder metals, whether the fixing pin, or the boom tongue, or the holding pin. This is a very obvious item to keeping an eye on, there are several methods of improving the fit, and it is usually relatively easy to replace yourself.
- Swaging – this is the capture of a wire cable into a compression fitting for attachment to something else. Some example of wire deformation, and damage were passed-around, where impact of a forestay blade, or perhaps a boom had caused significant damage, even to substantial wire.

Martin did take a mid-point break, and at the end, opened up to Questions and Answers from the audience. Some of the work that Spencer Rigging have undertaken include re-rigging of the Cutty Sark in its new concrete berth, sail training vessels, and boats up to 100m LOA.

Overall, I came away with the impression that as long as an owner does look carefully at his mast from time to time, ideally press-ganging a younger crew member to go up the mast and examine the mast head fittings and connection points, there really is no reason why a rig shouldn't remain standing for longer than we think. Although some insurance companies have arbitrary ages for replacement, and owners should always take into account the history of the rigging, there is no cause for worry caused by normal usage.

For some more general information on this subject I also attach some guidance from a website “wot I found”.

### Checklist

- Deck check – split pins, adequacy of threaded fittings, chafe or breakage of stranded wires, rig cracking, rust streaking, condition of mast collar sheaves, halyard alignment, halyard chafe guards, forestay condition.
  - Masthead – halyard sheaves rotate freely and are sound, bushes, split pins intact, electrical wires are clamped correctly and are chafe free, lights are operating, halyard shackles in good condition, Windex and wind gear operating correctly.
  - Forestay – roller furling headstay, halyard leads at correct angle to swivel car, inspect halyards for wear on sheaves, fairleads and check swivel cars, mast tang pin hole, corrosion around mast tangs, threaded fittings, no broken strands of wire, signs of cracking or rust.
  - Mast stay wires and mast fittings – no broken strands of wire, no visible signs of cracking along swage section, no signs of rust streaking, Tbar plates have retaining plugs or locking tabs, corrosion around mast tangs, fastenings secure, threaded fittings are sound, rigging screws locked.
- Spreaders – no visible signs of cracking, fastenings secure, no signs of rust streaking, broken wire strands, lights are working, wires clamped correctly, no chafe, no corrosion,
  - Gooseneck, Vang and Knuckles – check for signs of corrosion, split pins are protected to safeguard sails, fastenings secure, excessive wear or elongation of fittings.
  - Chainplates – check for excessive wear on spacers or bushes, signs of elongation in pin holes, alignment with stay angles, evidence of fracture at deck level, are fastened securely below deck to the hull.
  - Spinnaker pole ring – attachment points secure, signs of corrosion around mast tangs.

**Next week (12<sup>th</sup> March) is a session in preparation for the Skippers and Stowaways Day-Sail Weekend being held in May. It would be very helpful if all Members who have signed up for this Weekend are able to attend this Planning/Discussion/Briefing meeting. Thank you .....**