

## **Newbridge Coromandel: Chinese Lug Rig.**

### **Setting Up A Chinese Lug Rig.**

1. The instructions and sketches in this folder are primarily for use when rigging the boat.
2. The rigging Warrant for the boat should accompany this folder because it will give the individual lengths for each piece of rigging and specify the type of block to be used in each instance, as well as other information for the Rigger.
3. This folder and the rigging warrant should be carefully retained by the Owner, for reference and the subsequent rigging each season.
4. The sketches in this folder are not drawn to scale and should not be used for measurements.

### **Miscellaneous Advice.**

1. We recommend that all ends of any cordage, whether 3 strand or braided, be fused over with a flame. It is not necessary to whip the ends.
2. The ends of all the ropes and lanyards should be hitched with a bowline or suitable knot and not spliced, (with the exception of the Halyard those few parts that require a thimble or the eye of a block to be spliced-in to the end). It will then be easier to renew, alter or adjust any part of the rigging quickly and easily.
3. If desired, a piece of antichafe tubing can be threaded onto the Yard Hauling Parrel at its top end. It should be seized to the parrel near yard sling to prevent it sliding down the rope; and it should of course be of such a length that it cannot enter and jam the block.
4. It is not advisable to fit antichafing tubing to any other parrel as it will cause them to stick and not to slide freely on the mast.
5. The mast wedges may take some time to settle after the mast has been stepped and may need periodic tightening with eventual replacement. When the mast is stepped, the wedges should be placed in position around the inside of the fibreglass mast collar and the retaining plate positioned underneath with the securing bolts protruding through. Place the nuts on and slowly and evenly tighten them until the mast does not 'rock'. The sealant can then be beaded around the outside of the joint.

### **The Mast**

1. The mast should be carefully checked over, then "dressed" before it is stepped in the boat.
2. Check the masthead fitting to ensure that the masthead light and any masthead instrument (if req.) is correctly mounted and connected to its flex.
3. The mast wedges should be checked to ensure that they are correctly shaped to fit snugly round the mast, and will firmly support the mast at the partners once they are knocked home. Wedges may also be required at the step to position and hold the heel firmly. All wedges should be placed conveniently on the boat for immediate use when the mast is stepped. Also ensure that the wedge retaining plate is at hand so that it can be slipped onto the mast when stepping.

4. To dress the mast before stepping it, the following rigging should be prepared and fitted to the masthead: - halyard, topping lifts, mast lift, and burgee halyard. The correct method is described in the following two sections. Their lower ends should be seized to the mast and they will be adjusted after the mast is stepped, during the process of rigging the sail, which is described in detail in these instructions.

#### **Halyard**

1. This requires two blocks. One is shackled to the crane on the mastcap, using a stainless steel shackle and wiring its pin. Note that this block be arranged so that the sheaves lie athwartships, it therefore has its eye 'across'.
2. The second block will eventually be shackled to the yard sling, but remains loose, with the halyard rove through it, when dressing the mast.
3. The correct blocks and the halyard length are shown on the Rigging Warrant.
4. The correct method of reeving the blocks is shown on Figs 1 & 2. Study these diagrams carefully to ensure you reeve the halyard correctly with the blocks in the correct plane, and the fall off the correct sheave on the correct side.
5. The fall of the halyard is led down the starboard side of the mast, and rove through the block shackled to a deck eye near the mast on the s/b side.

#### **Topping Lifts.**

1. The two top spans should be measured off, and a GMS or SS thimble spiced into the top end of each. The lower ends have either a nylon or Ss thimble spliced in for standing topping lifts.
2. Shackle the top spans to the two tangs on the port and s/b side of the mast cap. Wire the shackles.
3. The forward lifts have a nylon (or SS) thimble spliced into their top ends. They are rove through the top spans. Their lower ends should be temporarily tied together to form a bight. When the sail is rigged on the mast these ends are passed through the two small cleats on the aft end of the coachroof.
4. The aft lift is one continuous length. It is rove through the forward lifts to form a bight, (they are secured on the boom later).

#### **Mast lift.**

5. This has one thimble spiced in at its top end. This is shackled to the tang on the forward side of the mast cap. Wire the shackle.

#### **Burgee Halyard**

6. This is measured off and rove through an eye on the mast cap and its two ends tied together with it lying on the s/b side of the mast.
7. It is eventually rove through the tack line eye, and can be used as a messenger to reeve an emergency sail halyard through the tube, or to hoist signal flags etc.

When you have completed to this stage, the mast is dressed and ready for stepping.

### **Bending on the Sails.**

(see fig 4)

1. The sail is laced to the Yard and Boom.
2. Note. The yard sling is angled towards the aft end of the yard.
3. First stretch the sail hand taut along the spar by securing the end grommets first (i.e. peak and throat); tack and clew using the method shown in the sketch as follows: -
  - a) Pass the lanyard through the grommet and middle it.
  - b) Tie a knot in the doubled lanyard in such a position that it lies just clear of the groove in the end of the spar at the bottom of the notch. (This is found by trial and error)
  - c) Pass the ends in opposite directions round the spar and through the grommet. (The knot prevents the two parts from splaying and tending to split the shoulders of the groove)
  - d) Repeat (b) and (c) above, and finish with several turns round the spar and through the grommet before tying a reef knot and tucking in the ends to finish off.
4. Note. When securing the first corner to either spa, do not pull the grommet too near the end of the spa. The end grommets should lie in line with the notch near the end of the spa when both are secured and the sail is just taut.
5. The remaining lacing is done by using a separate lacing at each grommet and not one continuous lacing as follows: -

Middle the lanyard and clovehitch it to the grommet. Pass each end round the spa in opposite directions, once, then use the ends to tie frapping turns round the lanyard between the sail and spa. This pinches the lacing tightly round the spar, yet allows the sailcloth to stand off the spar perpendicular to its face. It follows that the lacing turns round the spar should not be hauled taut until they are frapped.

6. After completing the lacing, the rubbing strips should be secured to the spars in way of the mast. The rubbing strips lie over the lacing.

### **Fitting The Battens**

1. It will be simpler to fit the battens for the first time, with the sail laid out or partially laid out, starboard side upwards.
2. After first fitting the battens, any subsequent changing of them (e.g. to replace broken ones or fit a new type), can be done with the sail rigged on the mast.
3. Battens are held to the sail by a pocket, the forward end is laced.
4. Proceed as follows with each batten in turn: -
  - (a) Slide the aft end of the batten into the pocket, ensuring that it is well home at the leech.

- (b) Ensure that each batten has a length of tufnol at its forward end, where it will lie against the mast.
- (c) Lace the forward end of the batten to the sail. Passing the lacing through the eyelets in the sail and around the batten, several times before knotting and tucking in the ends.
- (d) The forward lacing also holds the tag folded over the end of the batten. The tag takes the forward thrust of the batten and ensures that the sailcloth is held taut (but not overstretched) along the length of the batten. See fig. 5.

### **Rigging The Sail On The Mast.**

1. This is best done with the boat lying head to wind.
2. Sort out the sail bundle into topping lifts so they are not twisted and they should form bights into which the sail bundle, with spars bent on, can be laid.
3. Advance the sail bundle into the topping lifts, spreading the bights equally along its length. The boom has an eye plate at the point where each bight passes under it. Do not adjust the topping lifts at this stage beyond ensuring that they hold the sail bundle at roughly the correct height above the deck. The whole sail lies on the port side of the mast and the forward end protrudes beyond the mast.
4. Rig the boom parrel, which is in the form of a loop running round the mast and through the tack grommet on the sail. This prevents the boom from moving too far forwards when the sail is lowered.
5. Shackle the lower halyard block to the yard sling, ensuring that the halyard is lying between the port and s/b parts of the topping lift and is not twisted.
6. Shackle the yard hauling parrel block to the s/b side of the yard sling then rig the yard hauling parrel. The fall of this parrel lies inside the topping lifts and is rove through the outboard sheave of the double cheek block at the foot of the mast. (The yard hauling parrel holds the yard to the mast and 'peaks' it.
7. (a) You are now ready to hoist the sail a bit at a time to complete the other rigging. You will find it easier and quicker to haul halyard at the mast and hitch it temporarily to any cleat or strong deck fitting, but you may prefer to work from the cockpit to ensure that the complete halyard layout is satisfactory.  
(b) Hoist the sail until you have raised the top two panels. Use the yard hauling parrel to adjust the head of the sail if necessary. Belay the halyard and yard hauling parrel.
8. Rig the batten parrel on the top batten by passing the end through one eyelet aft of the mast and back through the pair to it, then tying a bowline that embraces the batten. Lead the parrel forward round the mast and hitch it to the tape loop. Note that all the parrels lie inside the falls of the halyard and yard hauling parrel. The batten parrel should be sufficiently tight so that you can just get your flat hand between it and the mast.
9. Rig the batten parrel on the next batten in the same manner as the first. (see para.8 above)
10. Hoist the sail until the next panel is fully raised and rig the next batten parrel. Continue to hoist the sail, one panel at a time and rig each batten parrel in turn.

11. When the whole sail is fully hoisted, the luff should be straight and parallel to the after side of the mast. Use the yard hauling parrel to peak up the sail as required.
12. The boom parrel should be checked and adjusted if necessary to ensure that it is not holding the boom too far aft or allowing it to go too far forward.
13. The batten parrels should prevent the luff from bowing forward, as well as hold the sail to the mast. If this is not satisfactory you can adjust the batten parrel by moving its aft end from the eyelets and hitching it directly and tightly to the batten closer to the aft face of the mast. If you adjust one parrel you will probably have to adjust them all.
14. A running luff-parrel is a continuous length of rope. Its top end is hitched to the tape loop on the second batten down. It then leads round the mast and down to a small block secured to the tape loop of the next batten, it then continues round the mast and down to the next small block. From there it leads direct to a deck block shackled to a deck eye. On **Venturer** and **Virgo Voyager**, the running luff parrel passes through another block before leading to the deck block.
15. With the sail fully raised, rig the tack line from the deck eye on the aft side of the mast to the boom and hitch it so that it holds the boom down at the correct height above the deck. The sail should be raised until the tack line is taut as to bend the boom.
16. The mast lift can now be adjusted. It runs from the masthead down to the port side of the sail, round the mast below the boom and boom parrel and is hitched to itself with a bowline on the port side of the sail. It should be just slack when the sail is fully raised.
17. Adjust the topping lifts at the same time. Slip the bights of the lifts under the eye plates on the undersides of the boom (remove the screws from one end of each plate and slip the bight in). The aft ends of each lift are rove through the eye plates near the end of the boom. (see fig.3)

### **The Techniques Of Using The Chinese Lug Rig.**

1. It is assumed that you are already familiar with the basic technique and terminology of sailing with an ordinary (western) rig and that you are about to use the type of Chinese Lug Rig developed in England from 1960 onwards by H.G. Haslar and J.K. McLeod and that you have rigged your boat according to their instructions. (Other variations of the Chinese rig whether 'westernised' or not, may not handle in the same way).
2. These instructions concern the handling of the rig and the technique of sailing with it. It is presumed that the rig has been correctly set up with parrels, sheets etc. fitted and adjusted as described in the pamphlet CR/20

#### **3. Functions of the Rigging.**

- (a) **Halyard**-Raises and lowers the yard and with it the sail. Letting go the halyard allows the sail to furl itself in its lifts without the need for touching any other rope.

- (b) Yard Hauling Parrel-**Holds the centre of the yard forward and close to the mast when the sail is raised; and adjusts the line of the luff. It also works against the Throat Parrel (if fitted) or Luff Parrels to 'peak up' the yard.
- (c) Yard Downhaul-**(an optional rope that may not be fitted on all sails) Can be used to start the halyard when lowering sail; gets the head of the sail down when furling sail in running conditions; bowes down the sail bundle when the sail is furled.
- (d) Downhauls-**Hold the forward ends of the batten down when the sail is reefed. Sails with narrow panels may dispense with these.
- (e) Sheet-**Controls the angle of the sail to the wind in the normal way and also controls the twist of the leach. It spans also hold down the aft ends of the battens when the sail is reefed.
- (f) Running Topping Lifts-**Allow the furled sail bundle to be lowered into a fixed crutch or possibly down onto the deck or coachroof for maintenance or repair. They are normally either in the 'raised' position or in the 'lowered' position when the sail is fully furled and resting in its crutch or gallows. Running topping lifts are not fitted unless there is a fixed crutch or gallows.
- (g) Burgee Halyard-**Is used for flying a burgee (if there is no protruding lightening conductor) or flying signal flags (not normally mast headed) and as a messenger to reeve an emergency halyard which may be required for setting sail or sending up a bosuns chair or rope ladder etc.
- (h) Running Luff Parrel-**(not fitted on every sail) Provides variable control over the luff and its overlap forward of the mast. Controls undesirable diagonal creases in the sail by correct tensioning and will 'peak up' the yard against the yardhauling parrel. It should be tensioned and adjusted before the sail is sheeted in.

#### 4. Standing Rigging

- a) **Topping Lifts and Mast Lifts-**Collect the furled portion of the sail when reefed and except when they are slack under the full sail, to hold the boom and furled bundle at the correct height.
- b) **Tack Line-**Holds the boom down when the sail is fully hoisted. The halyard should never be hoisted so taut that the tack line bends the boom and when the sail is eased out for fair wind sailing, it may be necessary to ease the halyard and reduce tension on the tack line.
- c) **Batten Parrels-**Hold the batten close to the mast when on s/b tack, they go slack when on port tack when the battens are pressed against the mast. They can be rigged to restrict the forward movement of the luff as well and thus dispense with luff parrels.
- d) **Boom Parrels-**Controls the fore and aft position of the boom and prevents it moving too far forward when the sail is reefed or furled. Can sometimes be dispensed with if control is provided by a luff parrel.

5. All standing rigging may require adjustment from time to time to take up or allow for stretch in the rope or sailcloth. The set and general appearance of the sail is largely controlled by the various parrels and small adjustments in their length or tension, can have a marked effect on such things as undesirable creases in the sail, straight luff, ease of hoisting and lowering sail.
6. Tallow can be used with advantage on the parrels to reduce chafe and 'lubricate' the ropes. It should be applied on a warm day when the tallow is slightly soft and rubbed well into the rope. It should not be used on parts of rope that come to hand or pass round winches as it reduced the grip. It can slightly stain sailcloth.

### **Sail Handling**

7. **Note first the Universal Rule: -**

### **The Halyard Works against All The Other Hauling Ropes.**

i.e. If the halyard is to be hauled in to raise sail, all other ropes must previously, or simultaneously be eased out or let go. Conversely to lower or reduce sail it is only necessary to ease the halyard; all other ropes will then go slack and can be hauled in either simultaneously or subsequently.

### **To Set Full Sail.**

8. First let go of the sheets, downhauls and hauling parrels from their cleats and clear them to run freely.
9. Hinged gallows should be lowered. The sail bundle is now free to swing to the wind which should be brought forward of the beam.
10. Hoist the sail with the halyard until the boom rises slightly out of its lifts and the tack line goes taut. Running topping lifts may have to be eased slightly to slacken them, and then belayed again.
11. Do not hoist further than this or you will bend the boom and make the sail unnecessarily flat. It is desirable for the sail when set and drawing to have a slight 'scalloped' shape between the battens i.e. to have a little curvature between each batten, in vertical section, but not too much.
12. Having belayed the halyard to its cleat, set up the yard hauling parrel to hold the yard in its designed position.
13. The running luff parrel should be tensioned to remove undesirable creases and then belayed.
14. During this sort of exercise the sheets should have run freely out and remain slack so that the sail will 'weathercock', that is lie with its luff pointing straight into the wind with the sail swinging gently from side to side. The sail will not flog and can easily be left weathercocking whilst you hoist the second sail, stow rope tails and complete your preparations for getting under way.

### **To Set A Reefed Sail.**

15. It is of course perfectly possible to get under way with reefed sails if the strength of the wind makes this advisable.
16. Proceed as in paras. 8 & 9 above, hoist the sail with the halyard but stop when the desired number of full panels are raised . The topping lift will remain taut holding the reefed portion of the sail. Now proceed as in paras. 12-14 above.

### **To Get Underway.**

17. Check that the sheets are free to run and are not snarled round anything and leave them slack. Allow the boat's head to fall off the wind on the desired tack and slip the moorings. The mainsail sheet should remain in say the close reaching position. Then haul in the sheets and start sailing, coming closer to the wind if required.

### **Wind Aft Of The Beam.**

18. It is desirable and easier for sail handling to be carried out with the wind forward of the beam but it is possible though more difficult, to raise and lower the sail with the wind aft of the beam.
19. When handling the sail with the wind aft of the beam, whether raising, lowering, or adjusting the sheeting great care must be taken to ensure that the sail does not get into the CRITICAL POSITION, where the leach lies forward of the mast i.e. beyond the squared off position. If the sail does get forward of the mast, do not haul in the sail as this will produce a very unfair stress on the battens. Instead you should bring the wind abeam, or forward of the beam, before hauling in the sheet.
20. When raising the sail aft of the beam, therefore, the sheet should not be let fly, but should be eased out in stages as the sail is raised. When lowering the sail, the sheet should be taken in to prevent the sail moving round into the critical position as it is lowered.
21. If getting under way downwind it is better to raise only the minimum sail necessary to give steerage way, or make ground over the tide. E.g. two or three panels. When clear you can round up and hoist more sail and then bear away and gybe.

### **Sheeting.**

22. Sheeting to the best advantage is of prime importance and requires study. It is easy to sail tolerably with the rig, but rather difficult to get the best out of it, since the Chinese sail does not give away many obvious indications of incorrect sheeting.
23. Ideal sheeting angles will vary with different types of hull, different wind strengths and different conditions of sea and can only be found by experience. A burgee or windsock at the masthead will assist your judgement and with

experience you will learn to sail by the 'feel' of your boat and will know whether she is sailing at her optimum for the prevailing conditions.

- 24. Twist-**Twist is the extent to which the yard and top of the sail falls off more than the boom and bottom of the sail. A certain amount of twist is acceptable when close hauled, but ideally there should be less and less twist as the sheet is eased and the wind comes abaft the beam, to the dead run when there should be as little twist as possible.

#### **Close Hauled**

25. The boom of a Chinese sail should not be hauled as close to amidships as that of a Bermudan sail. The relatively flat Chinese sail appears to achieve maximum drive with minimum leeway when it is eased out more than a Bermudan sail. As a guide, the yard should be almost in line with the burgee when viewed from the deck. The boat is unlikely to sail as close to the wind as with a good Bermudan rig. Steer far enough off the wind to keep the boat sailing; if you pinch the boat or sheet in too hard you will only increase leeway and reduce forward drive. Experience and experimenting will of course, affect your performance.
26. A good hull will probably point about 50 degrees away from the true wind and will tack through 100 degrees. Under similar conditions a good sloop rig would perhaps tack through 90 degrees. Wind strength and sea conditions will of course affect your performance.
- 27. Tacking-**Chinese rigged boats, particularly if using a single sail, are commonly rather slow to pick up headway after the sail is drawing on the new tack. In other respects the rig is exceptionally handy when beating to windward, it is only necessary to put the helm down and turn positively through the wind. The sails will quietly swing across without flogging.
- 28.** If the boat has a tendency to miss stays (i.e. to fail to get through the wind when trying to tack) you should try one or more of the following actions: -
- a) Sail fuller and faster (without adjusting sheets) just before tacking, to increase the boats momentum to get through the wind.
  - b) Although putting full helm on will tend to turn the boat sharply it also acts as a brake. Experiment with the timing and degree of helm that you progressively apply.

29. **Asymmetry-**With the sail always lying on the same side of the mast there may be slight differences between port and starboard tack. You may feel that the boat sails better on one tack than the other, but there should be little difference in performance, unless you miss stays as described above. Remember that the boom will lie further to port from the boats centre-line when on the s/b tack than when on the port tack because of the way the sail is held and rigged. The angle to the wind is the same.

#### **Reaching**

30. this is sailing with the true wind more or less abeam. The sheets should be eased right off of course. In light airs it may be found that the best sheeting position will be when the burgee appears from the deck to be pointing about 10 degrees

broader than the yard, but as the wind freshens the sheets may be eased so that the whole sail lies at a finer angle to the wind and produces a powerful drive with less heeling effect. (A conventional sloop rig is commonly slower and more pressing in these conditions.

### **Broadreaching and Running.**

31. The sheets should be eased right off until the sail is square to the centreline of the boat.
32. The squared off position of the sails when running is the furthest forward that you should let the sail lie. They must not go beyond this. (see para. 19) There is some advantage therefore in making a stopper knot in the sheet to prevent them from going further than this when under full sail. When reefed the sheets should be checked before the stopper knot is effective.
33. As the sail is progressively squared off from the close hauled position to the running position, the tack line will get progressively tighter and the halyard should be eased off a bit to prevent the boom from being excessively bent and the sail from being too flat.
34. **Gybing-**With fur or more panels set and in corresponding wind strengths, it is possible to gybe without hauling the sheets in. To do this, steer a long way 'by the lee' until the sail gybes. (This calls for a certain amount of sea room) The resultant gybe will be extremely gentle because the wind will be almost abeam on the new gybe and the sail will therefore be almost weathercocking by the time it has swung across the sheets and taut again.
35. It is however not advisable to use this method when: -
  - a) in a narrow channel
  - b) if the slack sheets will sweep over obstructions in which they might catch (inc. peoples heads)
  - c) if you are close reefed in strong winds, in which case it is possible for the furled portion of the sail to lift during the gybe when the sheets are slack and for the battens, lifts and sheet spans to get snarled up.

In any of these cases it is advisable to get the sheets in, at least partially, before gybing as with a sloop rig.

36. Alternately, when running close reefed in gale conditions, the sail can be lowered fully, a controlled gybe made with taut sheets, then the sail reset on the new gybe.

### **General Sheeting Advice.**

37. On most points of sailing, with two masted rig, the foresail will be more effective if it is eased out more than the mainsail. (but not when squared off already).
38. When you have gained some experience you may wish to experiment with different methods of rigging the sheets in an attempt to reduce the twist in the sail.

- The Chinese have a vast variety of different sheeting systems. The aim should be to produce slightly more 'pull' on the top battens than on the lower battens, but keep a straight leach. (Too much pull on a batten, in relating to its neighbours, will kink the leach). The sail is bound to twist progressively more as it is reefed because the 'pull' on the reefed bundle will be more than the set portion.
39. Be prepared to experiment with the sheeting angle of the sails on all points of sailing and in different conditions. Small variations can sometimes make a big difference to your speed, close windedness etc., but beware constant fiddling which is not necessary and will almost certainly be detrimental to your performance.

### **Reefing.**

40. One of the greatest advantages of the Chinese rig is the speed and ease with which it can be reefed without having to handle the sail itself. In an emergency the whole sail will automatically furl itself by simply letting go the halyard.
41. To reef the sail: -
- a) Ease off the halyard until one panel, or more, is furled (i.e. one or more battens have lowered on top of the boom) depending on how much you wish to shorten sail.
  - b) As you ease off the halyard, all the other ropes will go slack, except the topping lifts and mast lift which will take the weight of the sail. The slackening sheets will allow the sail to fall progressively off the wind until, possibly, it weathercocks. This is advantageous, except in a flowing wind when the sail could move round in a 'critical position' forward of the mast. In any case the sheet should be hauled in as you lower the sail to keep it no further than 'squared off'.
  - c) Lower as much of the sail as you wish, in one operation, but do not stop with a panel half furled. Belay the halyard when you have lowered sail.
  - e) Set the yard hauling parrel to hold the yard to the mast and peak up the sail. If this action slackens the luff excessively, you should ease the yard hauling parrel, take up a bit on the halyard, then haul in the yard hauling parrel again, but make sure the tension on the downhaul is not bending that batten.
  - f) Haul in the sheet and get the boat sailing again. The sheet span systems will hold the aft end of the reefed battens down, but the top one may lift a bit; this does not matter.
  - g) Stow all rope tails.

03044

Shark Runt  
Span Barge behind

CORRIERE, COROMANDEL AND NAVIGATOR

CHINESE RIG - RIGGING DETAILS

	NO OFF	LENGTH	SIZE	BLOCKS
- Sail halyard 30m	1	99'	6mm plat	3HGH 3IGH
- Barge halyard 15m	1	49'	6mm plat	
Top Spars	2	12.5'	6mm 3 strand	4 hard eyes
- Aft Lift 9.5	1	31'	6mm 3 strand	
- Fore Lift 7.5	2	24'	6mm 3 strand	2 hard eyes
Mast Lift	1	25'	6mm 3 strand	1 eye splice
- Running Luff Parrel 8	1	27'	6mm 3 strand	2 x 1mm
- Yard Hauling Parrel 10	1	32'	6mm 3 strand	1MH 1 soft eye 12" plastic tubing
Batten Parrels	5	5'	6mm 3 strand	
Boom Parrels	1	5'	6mm 3 strand	
Tack Line	1	3'		
Sheet Span		6'	6mm 3 strand	2 3 DF Doubles
- Sheet 29	1	95'	6mm Plat	1 3 MH 4J EGH

1-24

96

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15

15.1

VIRGO VOYAGER AND VENTURER CHINESE RIG

	LENGTH	NO	BLOCKS ETC	ROPE
Top Spans	15 ft	2	4 x 6mm Th	6mm 3 st
Fore Lifts	35 ft	2	2 x 6mm Th	do do
Mast Lift	30 ft	1	Spliced eye	do do
Aft Lift	35 ft	1		do do
Running Luff Parrel	35 ft	1	3 - 1 MH	do do
Yard Hauling Parrel	35 ft	1	1 - 1 MH (Sling)	do do
Batten Parrel	5 ft	6		do do
Boom Parrel	6 ft	1		do do
Sheet Spans	7 ft	3	1 - 4 MH Double	do do
Tack Line	6 ft	1		do do
Sail Halyard	120 ft	1	1 - 3D-BK 1 - 3 BHK	8 mm Braided
Main Sheet	110 ft	1	1 - 4J MH1 1 - 3 MH	8 mm Braided



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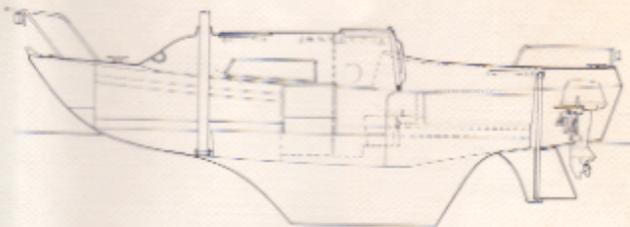


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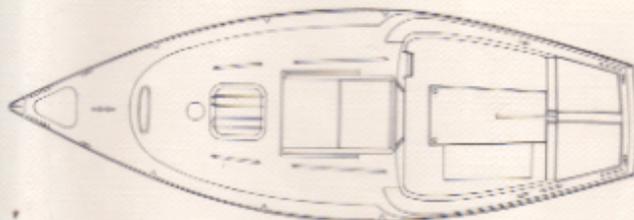
## COROMANDEL CENTRE LINE SECTION



## SAIL PLAN



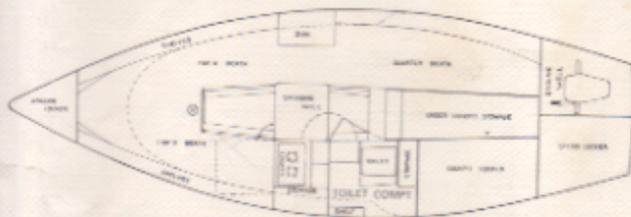
## COROMANDEL DECK LAYOUT



## MAIN DIMENSIONS

Length overall	20 ft 9 in	6.33 m
Waterline	18 ft 3 in	
Maximum beam	7 ft 2 in	
Draft (fin)	3 ft 0 in	
Draft (bilge)	2 ft 2 in	
Displacement laden	2,000 lbs (908 kg)	
Cabin headroom	4 ft 9 in (1.447m)	
Engine	Outboard up to 7.5 hp in well	
Sail Area	Inboard up to 12 hp 196 sq ft (18.3m <sup>2</sup> )	

## COROMANDEL INTERIOR LAYOUT



## SPECIFICATION (Standard)

Hull and deck	Moulded in GRP in Lloyds approved factory.
Deck Lay Up	2250g/m <sup>2</sup> CSM + wood/Balsa wood and foam reinforcing in part.
Hull Lay Up	3150g/m <sup>2</sup> CSM + 810g/m <sup>2</sup> roving reinforcing in part.
Bilge Keel	Cast iron 870lb (395kg) in fin keel. Bilge keel 419lb (190kg) in each keel. Circular section anodised alloy.
Mast	Three strand and plaited synthetic.
Running Rigging	Halliard lance cleat, wind hauling parrel and running luff parrel lance cleats. Two forward lift cleats. Halliard box. Boom support. Mainsheet ballard, two aft deck cleats. Alloy mooring cleat on foredeck, anchor well. Fairleads. Bow roller and plate, engine well.
Fittings	Selected varnished marine grade hardwood.
Exterior Timber	Hardwood cappings and marine grade plywood to BS1088 or similar. All varnished.
Interior Timber	Hull Red, Yellow, Oxford Blue, Sapphire Blue, Brown, Green, White. Deck Cream, White, Grey.

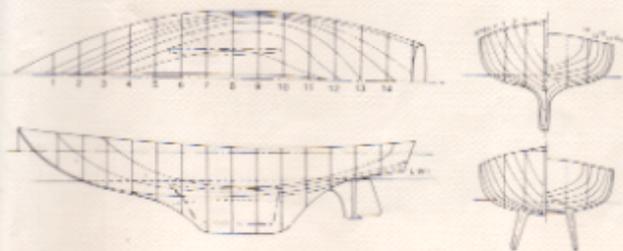
Newbridge Boats Limited reserve the right to alter the standard specification without notice to that of equivalent specification.

### STRONG CONSTRUCTION

'COROMANDEL' is built of tough G.R.P. to 'BBNF' 'Lloyds' and 'I.C.O.M.J.A.' standards and in order to ensure a safe strong boat we mould all the GRP ourselves and fit all the high quality fittings in our own factory making the stainless steel, wood, rigging, trimming etc parts ourselves to ensure quality and value. The hull and deck are both riveted and bonded together for extra strength and throughout only top quality marine grade materials are used.

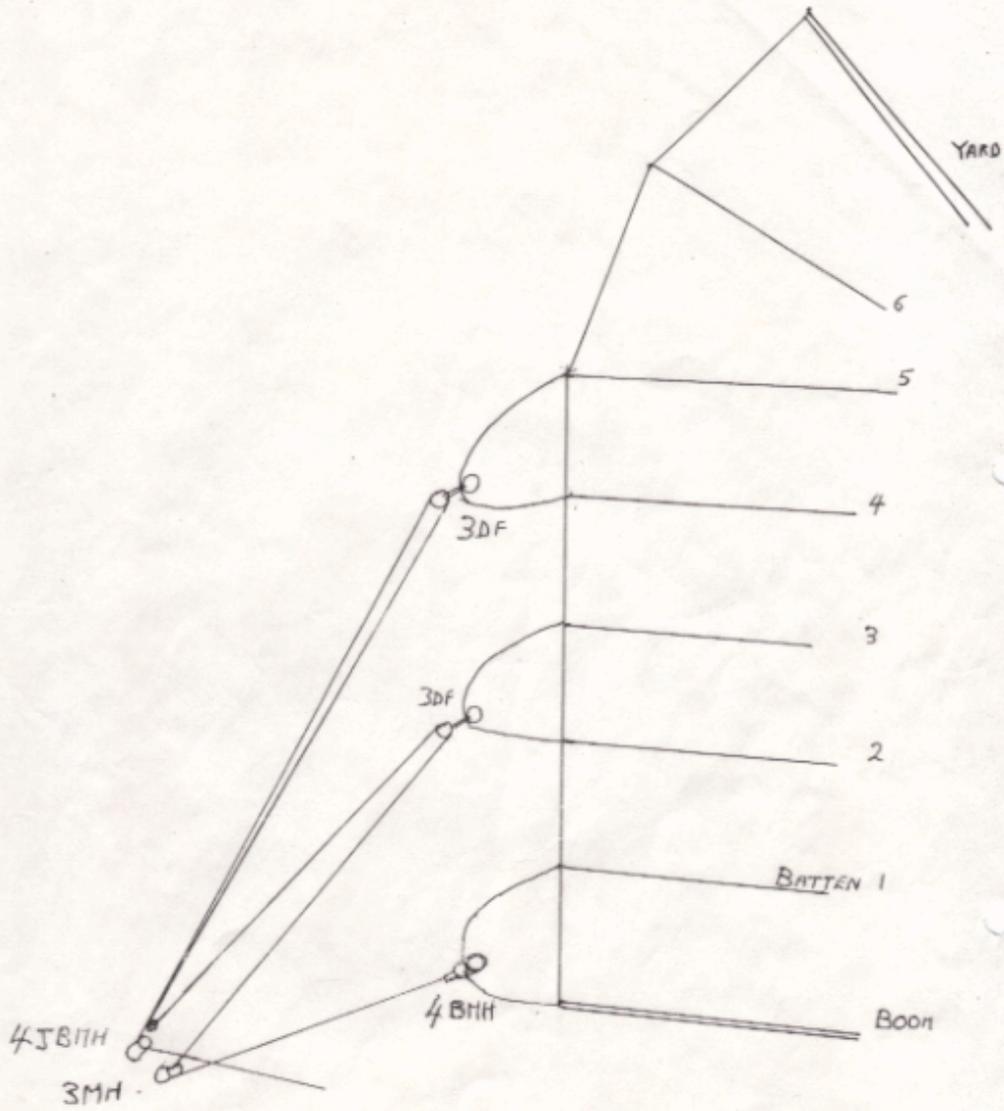
AVAILABLE IN KIT FORM IN OUR  
'KITCRAFT' PACKAGES  
DETAILED SPECIFICATION ON SEPARATE SHEET

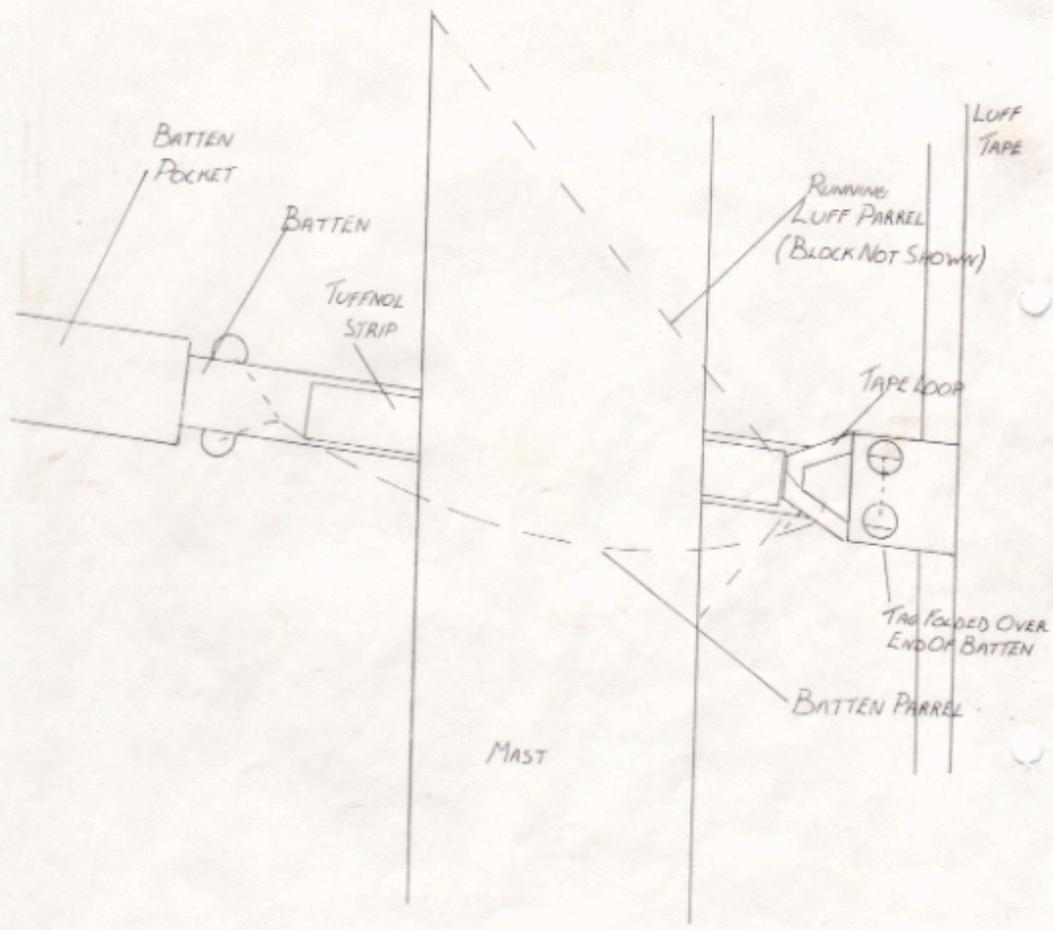
## LINE DRAWINGS



N.B. Bilge Keels are now of modern asymmetric design.

VIRCO + VENTURER SHEETING  
ARRANGEMENT (6 BATTENS)



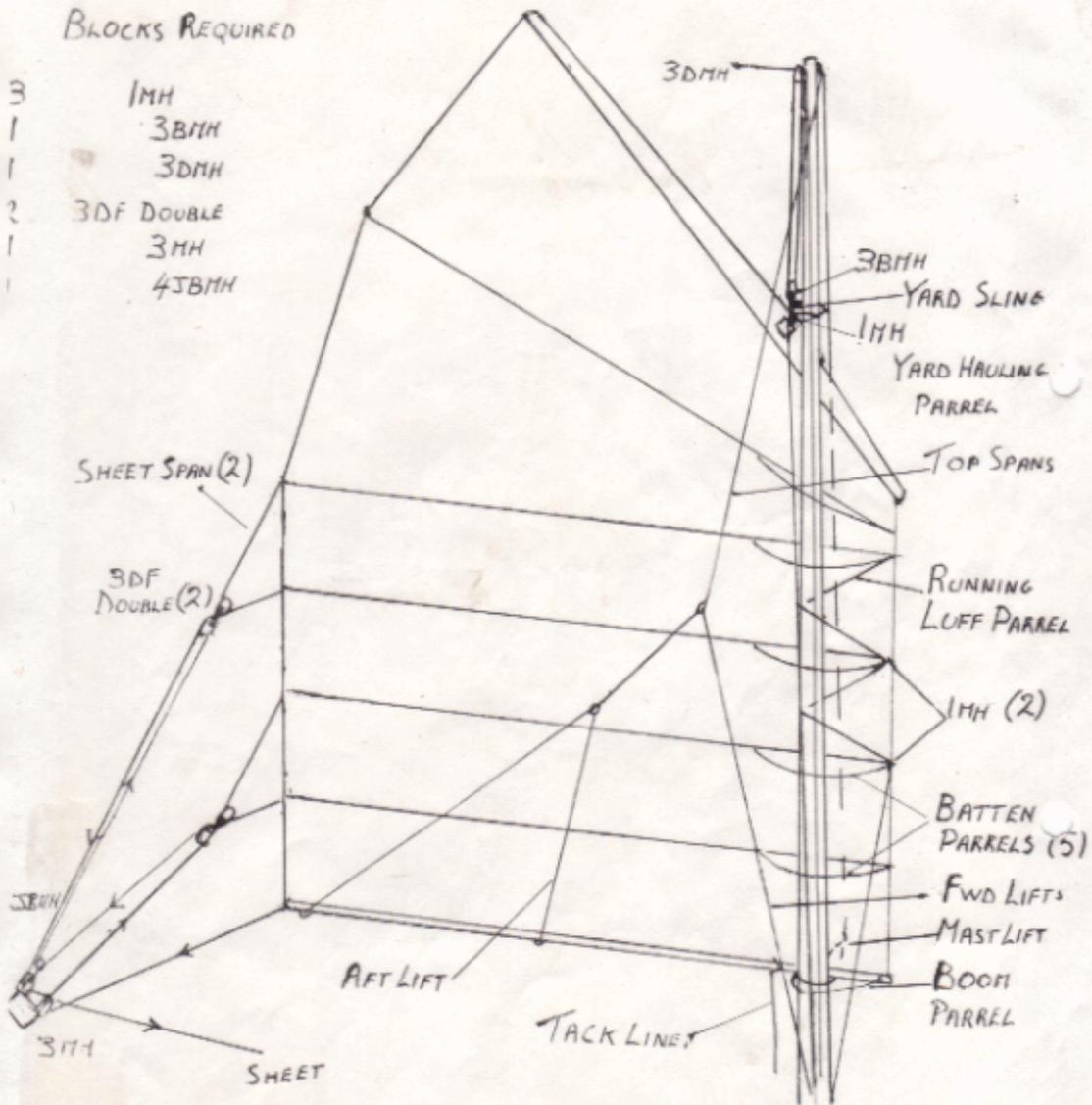


RIGGING THE SAIL

# CHINESE SAIL

## BLOCKS REQUIRED

3	1MH
1	3B1H
1	3DMH
2	3DF DOUBLE
1	3MH
1	4JB1H

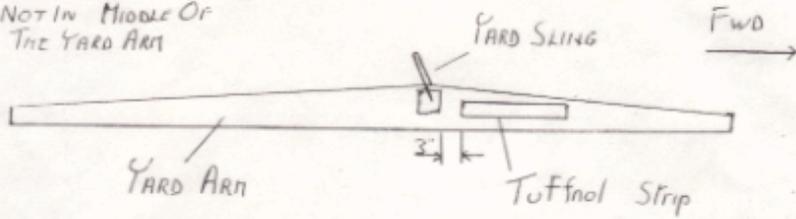


VIRGO + VENTUREA REQUIRE DIFFERENT SHEET LAYOUT + EXTRA BLOCK ON RUNNING LUFF PARREL

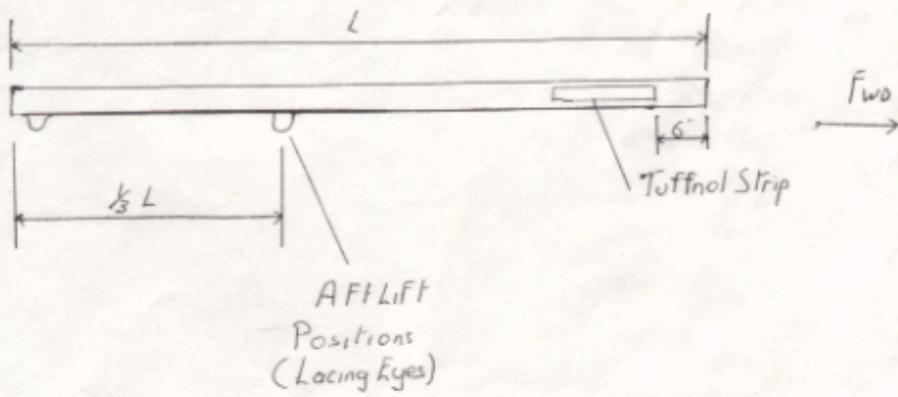
CORRIBEE + COPOMANDEA HAS 3DMH + SHEET CLEAT INSTEAD OF 4JB1H.

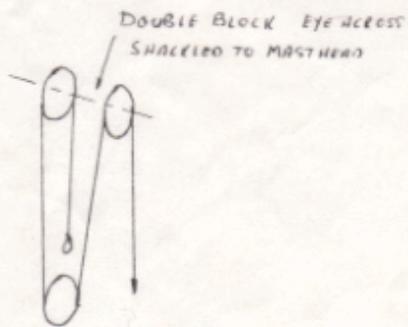
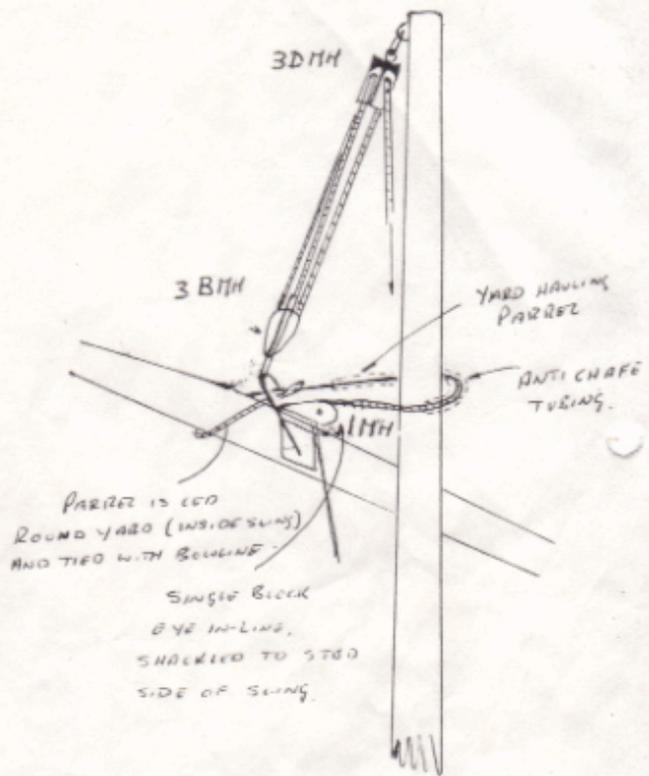
### YARD SLING POSITION

YARD SLING  
NOT IN MIDDLE OF  
THE YARD ARM

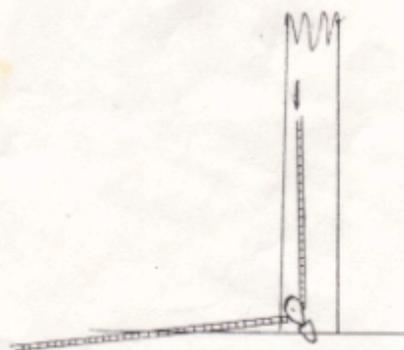


### Boom

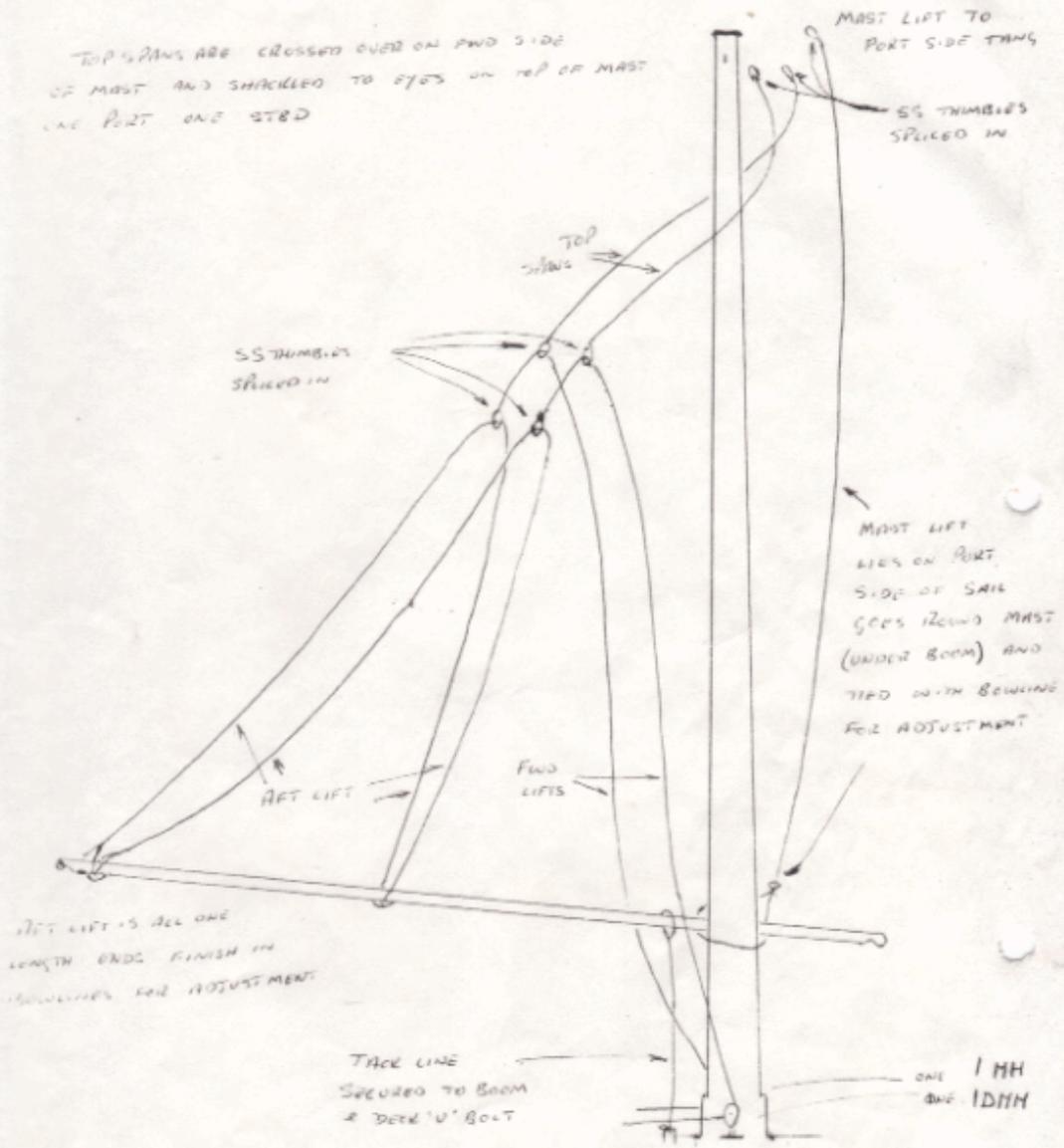




SINGLE BLOCK WITH BECKET EYE ACROSS SHACKLED TO YARD SLING



TOP SPANS ARE CROSSED OVER ON FWD SIDE  
OF MAST AND SHACKLED TO EYES ON TOP OF MAST  
ONE PORT ONE STBD



ART LIFT'S ALL ONE  
LENGTH ENDS FINISH IN  
SHEEVES FOR ADJUSTMENT

TOPPING LIFTS MAST LIFT AND TACK LINE

# COROMANDEL DECK PLAN

