

Rigging Instructions for the Lindsay FD

1. Stepping the mast up.

- a. With the boat on the dolly, step inside (clean or remove shoes first!), and receive the mast.
 - i. Ensure the heel of the mast is clean.
 - ii. Ensure the continuous jib sheet lays on the deck, around the mast slot.
- b. Raise the heel of the mast above the vang and centerboard lines (does not need to go above the deck level), insert in the slot, and place in the shoe.
- c. Lean the mast aft, and attach the two lowers.
- d. Lean the mast forward, free the forestay and wait for the partner to attach it.
- e. Ensure the forestay control is cleated snug in the cockpit.
- f. Release the mast. The mast is now stable held the the cleated forestay and the two lowers.
- g. Free the shrouds and trapeze, ensure not twisted, and attach them.
 - i. A pin connects the shroud end to a multiple block. That pin also holds the end loop of the wire running through the multiple block. Ensure the pin holds both the end of the shroud and the loop of the wire.
 - ii. For the trapeze, simply tie the red bungee of the continuous trapeze from the mast, to the white bungee from the boat.
 - iii. Ensure the jib sheet surrounds the shrouds.
- h. Free the other controls (spinnaker halyard and topping lift)
- i. Spinnaker halyard:
 - i. Exits at the foot of the mast on the port side.
 - ii. Run it through 3 blocks under the port gunwale, the third block is located under the traveller rail.
 - iii. Run it through the cam cleat and fairlead, in front of that block, and cut across towards the center of the cockpit.
 - iv. Run it through the block in the middle of the cockpit in front of the mainsheet swivel,
 - v. Run it through the block under the starboard gunwale, located under the traveller rail.
 - vi. Tie it to the mainsheet which is assumed to be in the spinnaker sock and exiting at its both ends.
 - vii. From the bow, pull the mainsheet out of the spinnaker sock and chute, until the spinnaker halyard line comes out.
 - viii. Untie it from the main sheet, and tie the two ends of the spinnaker halyard together.
 1. The two ends of the same line are called “halyard” and “retriever”.
- j. Topping lift:
 - i. Both ends of the topping lift come out aft from the foot of the mast

- ii. Run them along both sides of the centerboard and tie them to the two green control lines in the cockpit.
- k. Run the mainsheet through the blocks on the boom and the traveller cart. Keep the stopper knot.

2. Installing the centerboard.

- a. Use a Nimbus key (5/32 ???) to remove the 4 bolts.
- b. Remove the plate from the centerboard slot.
- c. Place the plate's pin into the axle of the centerboard
- d. Place the centerboard and plate back into the slot
- e. Tighten the bolts.
- f. Down end of the continuous centerboard line, on the starboard side of the centerboard:
 - i. Run it through the blocks on the boat and the head of the board, and finally attach its end to the becket of the block on the head of the board.
- g. Pull the centerboard up (port side of the centerboard), and then lift it by hand all the way up. The board stays there by friction.

3. Removing the top cover

- a. Open the starboard side of the cover.
- b. Reach at the base of the mast and uncleat the main halyard
- c. Pull the main halyard down all the way, and free the top of the top cover.
- d. Secure the main halyard to the trapeze gear. (Do not lose it!)
- e. Uncover the stern of the boat
- f. Open the bow and the port side of the cover, and free the mast.
- g. Roll the cover from the bow aft, up the the mast.
- h. Pass the cover under the starboard lower cable.
- i. Keep rolling the cover aft, all the way to the stern.
- j. Take the cover away from the boat.

4. Rigging the boat

- a. Spinnaker:
 - i. Attach the head of the spinnaker and lift about 4 feet up.
 - 1. The cleat for the spinnaker halyard is located in the cockpit under the port end of the traveller rail.
 - 2. Let the spinnaker hang in front and on both sides of the forestay.
 - ii. Attach both spinnaker sheets
 - 1. The port sheet must be connected to the red edge of the sail, and the starboard sheet to the green.

2. Ensure the spinnaker sheets are outermost, and surround the shrouds and the jib sheet.
- iii. Attach the retriever line (aka halyard) to the middle of the sail
- iv. Gently pull the spinnaker into the sock.
 1. The block for the spinnaker retriever (aka halyard) is located in the cockpit under the starboard end of the traveller rail.
- b. Jib:
 - i. Release both shrouds cam cleats in the cockpit, and ensure enough slack on both sides.
 - ii. Release both lowers cam cleats in the cockpit, and ensure enough slack on both sides.
 - iii. Ensure the furler is loaded.
 - iv. Attach the tack of the jib to the furler stem.
 - v. Attach the head of the jib to the swivel on the halyard block.
 1. A flat screwdriver is needed.
 - vi. Lift the jib.
 1. The jib halyard messenger line exits aft of the mast, above the deck
 2. Connect the hook to the loop of the halyard line.
 3. Ensure the messenger line is not caught between the metal hook and the halyard line
 4. VERY IMPORTANT: Make sure the hook catches the loop of the layard line, and not the loop of the messenger line!!!
 - vii. Attach the jib sheet.
 - viii. Coil the jib halyard and store under the gunwale
- c. Tension the rigging
 - i. Tighten the shrouds according the the wind conditions: More rake for more wind.
 - ii. Tighten the jib, up to ~350lb in the shrouds
 - iii. Tighten the lowers up to ~10lb
- d. Roll the jig
 - i. The jib furler line is located in the cockpit under the starboard end of the traveller rail. Purple line.
 - ii. If the jib does not roll all the way, odds are that the furler was not fully loaded:
 1. Detach the jib sheet.
 2. Spin the jib until fully rolled, and reattach the jib sheet.
- e. Mainsail
 - i. Run the mainsail along the boom
 - ii. Attach the outhaul (red line) and mini reef (green line) at the clew
 - iii. Attach the head of the sail to the main halyard
 1. Ensure the 2:1 purchase loop of the halyard is not twisted!
 - iv. Leave the main sail down in the boat.

5. Launching the boat.

- a. Install the tank visiting ports. Ensure the rudder and the two paddles are in the boat.
- b. Tie a painter line to the forestay eye or around the base of the jib
- c. Wheel the boat into the water and secure on the leeward of the dock.
- d. Lower the centerboard and install the rudder.
- e. Ensure the main sheet is free
- f. Ensure the 2:1 purchase of the main halyard is not twisted.
- g. Connect the boom into the gooseneck in the mast
 - i. Boom above the continuous trapeze.
- h. Hoist the mainsail and cleat the halyard:
 - i. Pull from the block at the base of the mast on the starboard side.
 - ii. When pulling ensure the line runs _next_ to the jam cleat above the block, and not _through_ that jam cleat.
 - iii. Only when reaching all the way up, move the line into the jam cleat.
 - iv. Pull once more to ensure the jam cleat caught the line and now keeps the mainsail up.
 - v. Coil the main halyard and secure under the starboard gunwale
- i. Mainsail tack:
 - i. Tie the short line attached to the tack grommet of the mainsail around the mast.
- j. Outhaul:
 - i. Block with a sister clip attached, lying at the base of the mast.
 - ii. Attach it to the red line exiting the boom.
- k. Cunningham:
 - i. Block with a short line attached, lying at the base of the mast.
 - ii. Pass the line through the mainsail Cunningham grommet, and tie it to the gooseneck.
- l. Vang:
 - i. Lies at the base of the mast.
 - ii. Attach it to the boom, forward of (above) the horizontal bungee of the continuous trapeze.
 - iii. Snug it.
- m. Topping lift:
 - i. Attach it to the end of the spinnaker pole: Sister clips.
 1. The spinnaker pole is located on the port side of the boom.
- n. Pole launcher:
 - i. Blue line from the end of the pole
 - ii. Run it in front of the mast between the mast and the topping lift

- iii. Run it back over the drum (between the drum and the top frame above), and down along the mast
- iv. Run it through the cam cleat and fairlead.
- v. Run it through the block on the mast.
- vi. Run it through the block on the deck.
- vii. Tie a stopper knot.
 - 1. Tie the knot close to the block, not the end of the line.
- o. Remove the painter.
 - i. Ensure it does not rub against the jib
 - ii. Coil and store under the gunwale
- p. Sail away.

6. Grounding the boat.

- a. Roll the jib.
- b. Tie the painter to the forestay eye, or jib base.
- c. Come to the leeward of the dock and drop the mainsail.
 - i. Secure the main halyard to the trapeze gear
- d. Remove the rudder.
 - i. Store it all in the boat, tiller under the traveler.
- e. Lift the centerboard.
 - i. Pull the line as far up as it goes, and then
 - ii. Grab the board by hand to lift it all the way up.
- f. Get the dolly under the boat and wheel on shore.
 - i. Make sure the lines are in the boat and not dragged through the sand !!!

7. Unrigging the boat.

- a. Remove the mainsail:
 - i. Untie the Cunningham from the gooseneck, and drop in the cockpit
 - ii. Untie the tack and leave the line on the sail.
 - iii. Detach the outhaul sister clips and drop in the cockpit
 - 1. Secure the red line to the boom to ensure its end is not lost inside the boom
 - iv. Detach the vang and drop in the cockpit
 - v. Free the pole launcher
 - vi. Free the topping lift and tie to the trapeze gear
 - vii. Drop the boom and pole in the cockpit
 - viii. Free the clew of the mainsail.
 - ix. Remove the mainsail from the boom
 - x. Roll, bag and store the mainsail.
- b. Remove the jib:

- i. Unroll the jib all the way.
- ii. Release all 6 jib, shrouds and lowers cleats
- iii. Unhook the jib halyard, and drop the hook
- iv. Drop the jib
- v. Detach the jib sheet
- vi. Detach the head of the jib (flat screwdriver!) from the halyard swivel.
 - 1. Connect the end of the jib messenger line to that swivel.
 - 2. Snag the halyard with a knot.
- vii. Remove the jib tack from the furler steam.
- viii. Roll, bag and store the jib.
- c. Remove the spinnaker
 - i. Untie the two sheets and tie them together in front of the forestay.
 - ii. Gently extract the sail from the sock.
 - iii. Untie the middle and the head from the sail, and tie them together.
 - iv. Flake, bag and store the spinnaker.
- d. Open the visiting ports to allow the tanks to dry inside.

8. Top cover on

- a. Put the rolled cover in the cockpit close the the stern
- b. Unroll forward up to the mast
 - i. Ensure the clean side of the canvass down, towards the boat
- c. Pass the cover under the starboard lower cable, on to the foredeck
- d. Unroll all the way up to the bow.
- e. Attach the main halyard to the red line on top of the cover.
- f. Close the cover around the mast and all the port side.
- g. Close the cover over the bow.
- h. Run the cover over the stern
- i. On the starboard side, reach to main halyard jam cleat at the foot of the mast, and lift the cover up a bit.
- j. Close the starboard side of the cover.

9. Removing the centerboard.

- a. Untie the centerboard down line at the becket
- b. Remove that line from all the blocks on the centerboard
- c. Use a 5/32 (TBD) Nimbus key to remove the 4 bolts.
- d. Lift the centerboard together with its plate
- e. Remove the plate form the centerboard.
- f. Bag the centerboard in its case
- g. Reinstall the plate, and tighten the 4 bolts

10. Taking the mast down.

- a. Remove the mainsheet from the boom
- b. Tie the mainsheet to the retriever in the chute.
- c. Gently pull the retriever out of the sock, and allow the mainsheet in the sock, in its place
- d. Tie one end of the mainsheet to the furler stem, and the other end to the traveller rail.
- e. Pull the retriever line out of all the blocks under the gunwales, and tie snug to the spin halyard (its other end)
 - i. Ensure this line is along the mast, and next to it inside the slot in the deck.
- f. Untie the two topping lift controls in the cockpit, and tie them both to the topping lift along the mast
- g. Untie the continuous trapeze bungees, and secure the trapeze gear along the mast (use the extra spin line)
- h. Detach the shrouds and secure along the mast (use the extra spin line)
 - i. Step in the boat (OK if the boat is on the dolly)
- j. Lean the mast back and detach the lowers
- k. Have the partner detach the forestay
- l. Secure the forestay along the mast (use the extra spin line)
- m. Ensure the mast is now free and can be safely removed.
- n. Lift the mast above the vang gear.
- o. Slide back out of the slot in the deck
- p. Pass it to the partner.