

## FARR 740 SPORT

### IMPORTANT POINTS RELATING TO THE RIGGING, TUNING AND PERFORMANCE OF THE FARR 740 SPORT LIFT KEEL TRAILERABLE YACHT.

The FARR 740 Sport was designed as a high performance 'go fast' one design, trailerable yacht, capable of winning line honours against similar sized boats and also able to be highly competitive under J.O.G. rating.

The 'Sport' principle has resulted in a design fully equipped with current race yacht standards including a fractional twin spreader rig with running backstays, large cockpit and complete sheeting adjustment.

With the high level of competition in trailer yachting events and J.O.G. events it is essential that the FARR 740 Sport like any other yacht must be well prepared. The following comments are aimed at helping you get the best out of your FARR 740 Sport and enjoying it to the maximum.

### EQUIPMENT AND BOAT PREPARATION

The following points are important:

1. When attaching stays to chainplates:-
  - Lower stays - inside hole
  - Upper stays - forward hole
  - Intermediate stays - aft hole
2. Tape all stays together at the bottom otherwise it is easy to bend the rigging screws when lifting the mast.
3. Drop weight of keel onto trailer when the boat is being trailed or stored.
4. Lock keel down whilst sailing.
5. When lowering keel put three turns on winch.
6. Unlock keel before winching keel up.
7. Check and service keel lifting gear regularly.

### CORRECT SETTING UP OF MAST AND STANDING RIGGING.

This exercise is quite simple and once done needs only periodic checking. Firstly the mast must be centred (set vertical athwartships) from side to side by measuring with the main halyard to the side stay chainplates. When mast is centred the correct fore and aft rake is obtained by the following procedure:-

1. Attach measuring tape to a slug slide and attach slide to the main halyard.
2. Pull the slide up the mast to 'I' which is  $24' 10\frac{1}{2}"$  7.560m from deck level (where base of tabernacle meets the deck). Cleat off halyard to hold tape at this point.
3. Take tape to aft edge of the aft deck on the centreline and this should measure approximately  $30' 1\frac{1}{2}"$  9.160m.
4. When measuring pull both running backstays on firmly and let all tension off permanent backstay.
5. Adjust forestay tension until correct rake measurement is achieved.

We have found that the mast should be set up quite straight athwartships so that the rig is kept on centreline when sailing and this means more precise mainsail leech control. Any mast movement not specifically under the sail trimmers control (eg tip fall off) means uncontrollable changes in sail shape.

We start by setting up the upper stays quite firm and the lower stays quite tight and tighten the intermediate stays enough to get mast straight. The mast should be dead straight to the hounds with enough tension on the upper shrouds to prevent the leeward one going slack (when sailing in 15 knot breeze).

## RIGGING

The mast stays and halyards can all be left in operating positions once the mast is set up.

As stated before it is important to tape the three sidestays together just above the chainplate to prevent bending the turnbuckles.

Two people can comfortably lift the mast with one pulling the forestay from the foredeck and the other lifting the mast from a position on top of the pop-top. Make sure the sliding hatch is shut or you may lose your footing in the middle of the lifting operation.

You will find that by easing off the running backstays and permanent backstay the forestay can be easily attached to the forestay fittings. (Tape clip into forestay toggle pin to prevent it catching on things). Pull on backstay and the rigging of the mast is complete.

## SAIL TRIM

In light air and lumpy water we set the rig up for maximum power. The genoa leads are set for an even luff break with the sail leech about three inches off the spreaders. Don't pull the halyard up too tight and generate as much power in the genoa without losing pointing ability. In these conditions no back stay should be used and the traveller should be pulled approximately 150mm (6 inches) to windward of centreline and mainsheet should not be pulled on too hard.

Light  
Air

The headsail inventory on the FARR 740 Sport comprises three sails:- As a guide we have found that in flat water the No.1. Genoa can be carried in winds up to 15 knots apparent. This sail is reasonably full and together with the main at maximum fullness is quite effective in light lumpy conditions. As we approached the top of the wind range the mainsail is flattened and the running backstays tightened to keep the genoa flat. Over 15 knots apparent we change to the No.2. genoa which is used up to 20 knots apparent with the mainsail quite flat at this point.

The next step is to reef the No.2. genoa which is carried up to 25 knots apparent. Before reefing the main we change to the No.3. and in most conditions we have found this better than carrying the No.2. with a reef in the main. We have not had the opportunity to compare keeping the reefed No.2. and reefing the main with changing to the No.3. and keeping mainsail full size but we feel that in pointing conditions the No.3. and full main would be better and in driving conditions the reefed No.2. and reefed main could be better.

If there is a big lumpy sea we feel that the No.3. should not be oversheeted and mainsheet should be eased a little to obtain maximum boat speed through the seas. It is important to get the boat moving in these conditions so that the boat can be easily feathered in to the gusts and maximum control over and through the seas can be obtained. Traveller should be well down in these conditions.

#### CREW

For serious racing four people are necessary. The weight of the crew is not critical although in heavy breezes every ounce on the windward rail is an advantage and we have found that five in heavy conditions is advantageous for on the wind sailing. The crew should be kept as close together as possible with the foremost crew still aft of the cabin. The skipper should be aft of the traveller with the mainsheet hand immediately forward of him so he can work the traveller and mainsheet. The other two crew should be as far out to windward and as close as possible together next to the mainsheet hand. In some conditions we have found it desirable to carry one crew behind the skipper. This is particularly so if any extra ballast is being carried for rating purposes. For reaching we move the crew aft and try to keep the boat as flat as possible. In running conditions in light weather we move crew weight well forward to keep the stern out of the water. In fresh conditions we move well aft. When setting spinnakers in fresh conditions remember to counter the forward hands weight when he is on the foredeck.

## SAILING DOWNWIND

When reaching it is very important to sheet the sail as far outboard as possible, to achieve this we clip the block with a snap shackle to the outboard sheeting position for the respective headsails and run a spare sheet. In most conditions the spinnaker halyard should be eased about 8 inches. The back-stays should be eased off in lighter conditions and pulled on just tight as the breeze freshens. When carrying spinnaker on a tight run in fresh conditions we get the crew as far to windward and aft as possible, have one man working the mainsheet and the other on the spinnaker sheet.

The helmsman should be steering the boat down in the puffs and up in the lulls and the crew should be co-ordinating with him. Good team work in these conditions can have remarkable results.

When running the spinnaker should be trimmed square to the wind with the clews of the sail level. Keep the pole as far aft as possible, in heavy winds the halyard should be pulled right up and the sheets should be pulled hard down with the barberhaulers. When steering downwind the goal is to maintain the speed necessary to catch the waves. As on the reaches work down in the puffs and up in the lulls.

From a self righting point of view the keel is obviously most effective in the full down position and we recommend it be kept in this position. However, in light breezes running it can be pulled up for improved performance. The FARR 740 Sport surfs very easily and every effort should be made to catch each wave.

## TACKING

We find it easier to have one person tack the headsail. This leaves the other two crew free to concentrate on getting their weight across at the right time.

In conditions heavy enough to have everybody on the rail one person should prepare the headsail sheet and just prior to the helmsman dropping the helm he moves into the cockpit with one hand on the old sheet and one on the new which has only two turns on the winch.

He also has to make sure that the old sheet is ready to run free. As soon as the jib starts to luff the jib man throws off the old sheet and trims the new one with arms length pull, which can normally trim all but the last two inches, for the final trim he sits on the high side of the cockpit and braces his feet on the leeward side of the cockpit and uses his legs and lower back to pull. If the headsail needs to be trimmed any further the winch can be used giving the boat a little time to accelerate before being brought hard on the wind. Most of the time the winch is only used to make fine adjustments. We don't cross sheets because we have found it too messy. We sometimes bring the tail of the jib up to the windward winch if conditions require constant trimming on a long leg.

### SPINNAKER SETS

We set from the main hatch and set up the sheets and halyard on the right side before the start if possible. We clip the snap shackles together in a way which enables you to only snap one on to the lifelines before attaching to the sail and also enable you to progressively attach each one to the sail without needing three hands ie. attach sheet snap shackles to head of halyard snap shackle. For spinnaker launching we suggest that the bag (turtle) be clipped on two saddles across the companionway so spinnaker can be put back into the bag when it is dropped.

We prefer to carry the spinnaker pole on the main boom so the boomtopping lift and downhaul can be permanently attached. As you approach the mark the forward hand sets the pole after placing the guy in the parrots beak - as he does this the topping lift is pulled up to a premarked position and when the pole is attached to the mast the downhaul is pulled on tight. Once you are abeam of the mark and bearing off one crew stands up and pulls the halyard while the other crew member makes sure the spinnaker is thrown clear of the hatchway. The skipper pulls the guy in quickly whilst the forward hand ensures the pole does not come aft.

The most common mistake is not to pull the guy around a little before the halyard goes up which causes the kite to twist and hang up under the headsail when it is eased. Keep the headsail sheeted until the spinnaker is pulled around.

## SPINNAKER TAKEDOWN

Before takedown make sure you are all ready for the next leg of the course. This will probably be an on the wind leg - halyards up, cunningham on, outhaul on. When approximately two boat lengths from the mark we let the halyard go making sure it is free to run. This lets the spinnaker blow away from the boat and not drag against the headsail. At the same time ease the after guy right off. Someone already has the other sheet and begins gathering the sail into the hatchway the moment the other guy is released. When done properly the sail should stay clear of the headsail leads and sheets so the headsail can be trimmed as soon as the mark is rounded. For close racing the headsail sheet should be running over the top of the pole in front of the topping lift so that when the topping lift is let off and the outboard end drops you can immediately tack even with the spinnaker pole still on the mast.

## JYBING

When jybing 'end-for-end' the pole. The most important things to remember are to square the pole as you bear off and to ease the old sheet slightly as soon as the inboard end of the pole is taken off the mast. As the bow swings through the wind the new guy should come to the forward hand and be attached to the pole pushed out and attached to the mast in one quick motion.

While the forward hand is jybing the pole one crew looks after the main grabbing all the sheet in one handful and throwing the boom over as the pole is attached to the mast. The other crew attend to the guy and sheet with easing the new/old sheet and trimming the new sheet. The skipper looks after the runners.

In fresh conditions we have found it easier to jybe the spinnaker first and jybe the main as soon as the parrots beak is on the mast. This allows the forward hand to come aft and help with the completion of the jybe and also get the weight out of the bow during the jybe. It is essential that the new sheet is not over eased and also that the whole operation is carried out as quickly as possible to avoid the spinnaker twisting around the forestay. In fresh conditions it may pay to keep the headsail up to avoid the twisting

### KEEL

If the boat is to be used in open water conditions, as a boat of this type will tend to be, it is essential that the keel should be in its down position and locked at all times. The practice of raising keels when sailing down wind whilst being acceptable when racing in reasonable conditions with an experienced crew is not a concept that should be encouraged in family sailing or with less experienced crews; and is done at the owners risk.

### RUNNERS

The runners are a simple but very necessary part of the in-line spreader rig. Don't get confused by them and be prepared to use them a lot because they allow tremendous control of the mast and sail shape. The runner system comprise an 8:1

purchase with a fine adjustment and a course adjustment.

#### Tacking:

When tacking we recommend that the course adjustment be cleated and only the fine adjustment be worked by the skipper ie. when going into the tack the skipper let go cleat and pull on new runner as he goes through the tack. This takes a little getting used to but we have found it can be done quite efficiently. It is important to mark both course and fine adjustments so you know where you are pulling it on to each time. On the wind in a good breeze we have found that the runners should be pulled on hard.

When bearing off make sure the course adjustment is eased so the main can be eased.

#### Downwind:

The windward runner and the permanent backstay can be eased off when running downwind in light to moderate winds to enable the mast to lean forward a reasonable amount. In fresher breezes don't ease them off too far as they are all that is holding the mast up.

#### Jybing:

When jybing it is just as important to let go the old runner as it is to get on the new one because it is critical that the mainsail be allowed to ease right out when you come out of a jybe. Before jybing we pull in as much of the new runner as possible so there is only three or four feet to pull in as the main goes across. In light to moderate conditions we have found the skipper can comfortably handle the runners but in fresh conditions it is desirable to have another crew concentrating only on getting the new runner in.

Remember there is a permanent backstay holding the rig up so concentrating on a tidy jybe rather than only on the runners is important. We suggest some practice in moderate conditions is the best so you are prepared for the fresh weather jybing.