



A basic guide on how to rig and tune the 'Remix' to achieve competitive performances.

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Introduction

This booklet is meant purely as a guide, the ideas and measurements recorded here, some of which are my own and some have been comments from other skippers, yet have all been tried and proven to work. Therefore, take from this guide the benefits that work for you but please remember there are many ways to achieve the same results. This guide will continually be updated in the future.

If you have any further questions, please contact me through the following email address:

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Hull Leak Prevention

Water ingress can be very frustrating, not only can it damage your radio equipment, but also the performance of your yacht severely degrades. There are a few routine checks that can be done to ensure your yacht remains at a competitive standard. Periodically you can check for watertight integrity of the mast socket, fin box and the hull. Pouring water into these areas will help to find leaks. Taping up the hole in the deck for the fin locating screw, then pouring water into the fin box from the underside of the hull, will again find leaks within the fin box area. By taping up the rudder shaft and the hull drainage hole you can pour water inside, by carefully moving the hull and water around, you can then check for watertight integrity throughout the whole boat. If leaks are found ensuring the inside of the hull is dry, your able to brush resin around the areas of concern, then once the resin is cured re-test for leaks. Prior to sailing your yacht, it is wise to check the following on the Remix. Ensure all deck fittings are properly secure. The lead ballast is securely fixed to the fin. Ensure the deck patch material is properly covering all the access hatches on the deck. This includes covering with deck patch material the top bearing of the rudder shaft, situated at the rear of the deck. This is for RC versions of this design only, An important item when achieving good watertight integrity.

WARNING - It's important to securely fix the radio pot lid after switching on your radio equipment, but I recommend not to continually over screw the pot lid, because you risk the danger of breaking the seal between the radio pot and the deck of the Remix. This obviously does not apply for hulls constructed for vane sailing.



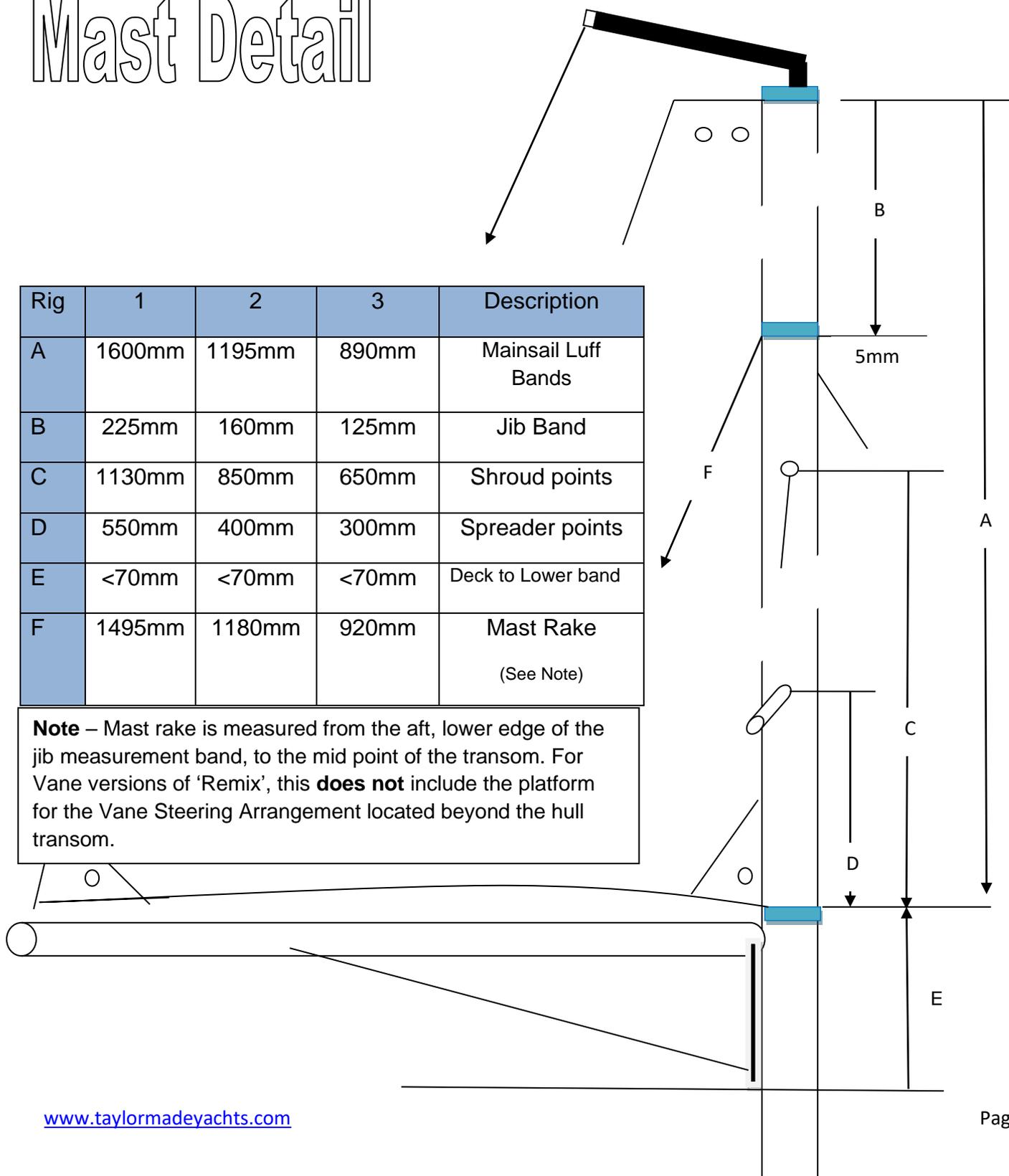
Use of IOM Rigs on a 36R

A lot of skippers these days have IOM Class rigs spare within their home. The prototype Remix was tested using IOM style rigs successfully and now is scene to be a cheap alternative when club racing these yachts. Should you wish to order a hull from us please make sure you stipulate which type of rigs you intend to use. (IOM or 36R) This information is important, so we know where to locate the deck fittings required.

Mast Detail

Rig	1	2	3	Description
A	1600mm	1195mm	890mm	Mainsail Luff Bands
B	225mm	160mm	125mm	Jib Band
C	1130mm	850mm	650mm	Shroud points
D	550mm	400mm	300mm	Spreader points
E	<70mm	<70mm	<70mm	Deck to Lower band
F	1495mm	1180mm	920mm	Mast Rake (See Note)

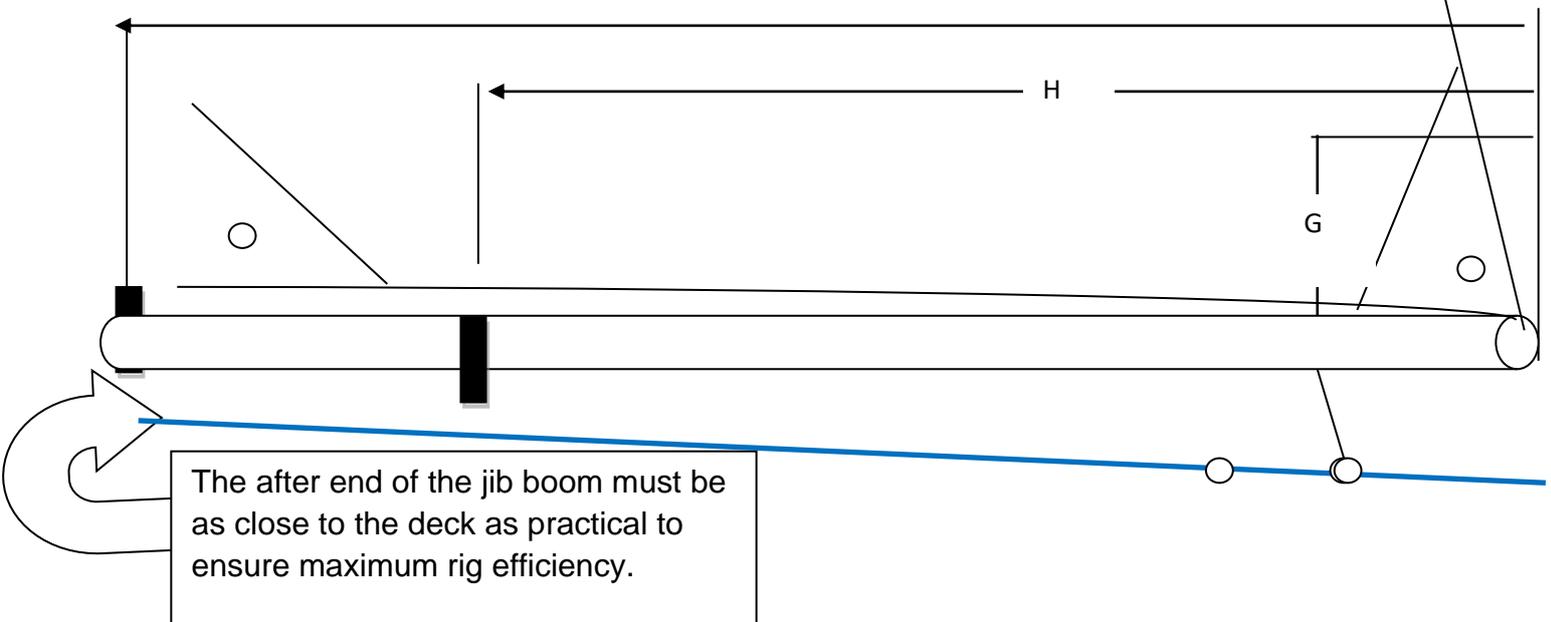
Note – Mast rake is measured from the aft, lower edge of the jib measurement band, to the mid point of the transom. For Vane versions of 'Remix', this **does not** include the platform for the Vane Steering Arrangement located beyond the hull transom.



IOM Jib Boom

Rig	1	2	3	Description
G	82mm	82mm	50mm	Jib Pivot Point
H	350mm	300mm	300mm	Jib Sheet Fitting
I	390mm	360mm	350mm	Leach Line fitting

I



Jib Setting Continued

In light winds using (No 1 rig) we do not require as much tension to keep the rig set, so the jib pivot point can be reduced to 82mm aft of the leading edge of the boom. This also allows the leading edge of the sail closer to the deck of the boat which aids rig efficiency.

Also, we rarely have constant wind throughout the beat, so we need a rig that can adapt to the changing wind conditions. Having a shorter distance also allows the rig more flexibility when we encounter slight increases in wind strength. The clew of the jib boom will rise slightly and induce extra curvature in the leach and thus spill excess air. You will also see the mast bend slightly and see the curvature in the leach of the mainsail also increase and again spill excess air towards the top of the sail. Due to the same happening to both sails the rig keeps its overall balance better.

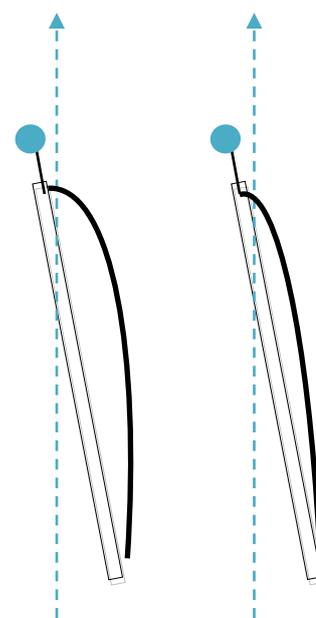
No2 and 3 rigs are usually sailed in much more constant wind conditions. Even when using the No3 rig, I like to induce extra twist if the sail becomes overpowered.

Jib Foot

It's important to have the right flow setting on the foot of the jib. In the light airs there should be a large amount of flow set in the sail.

(Appendix A)

In the stronger / gustier wind conditions the flow should be reduced so, the jib sail is flatter. (Appendix B)

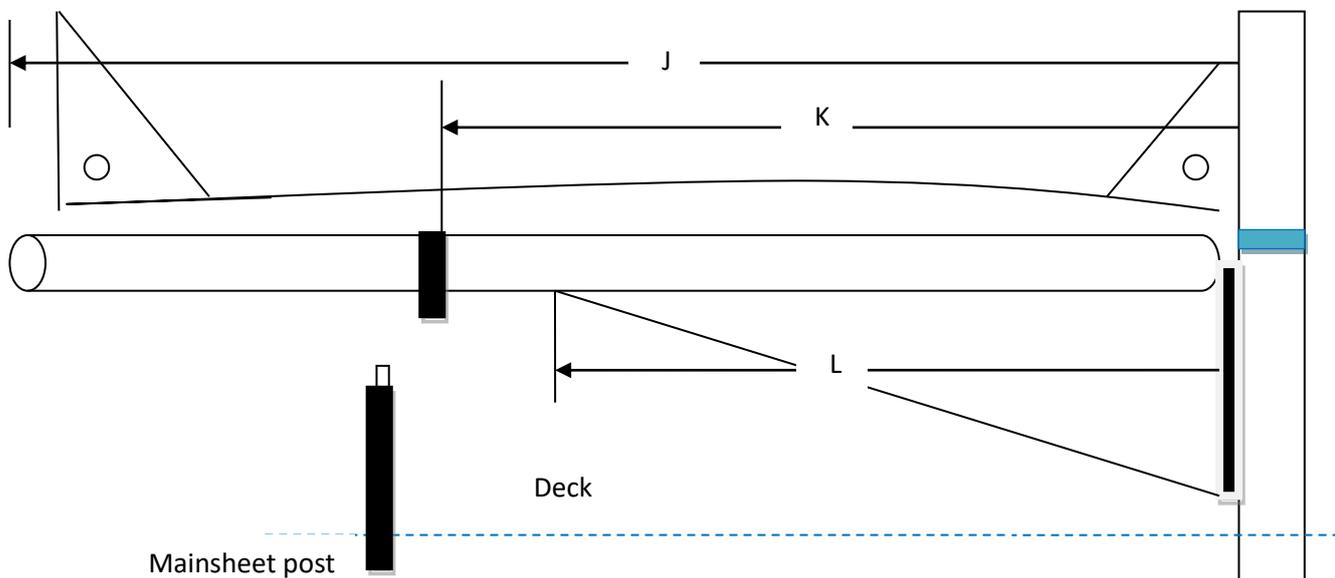


Appendix:

(A)

(B)

Main Boom



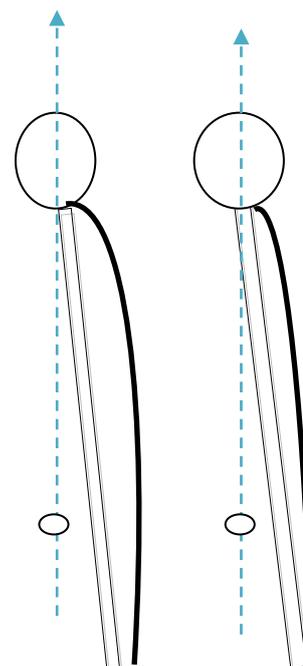
Rig	1	2	3	Description
J	360mm	355mm	350mm	Length of boom
K	225mm	205mm	225mm	Main boom sheeting
L	180mm	180mm	180mm	Kicking strap location

Mainsail Foot

It's important to have the right flow setting on the foot of the mainsail. In the light airs there should be a large amount of flow set in the sail.

(Appendix C)

In the stronger / gustier wind conditions the flow should be reduced so, the mainsail is flatter. (Appendix D)



Appendix:

(C)

(D)

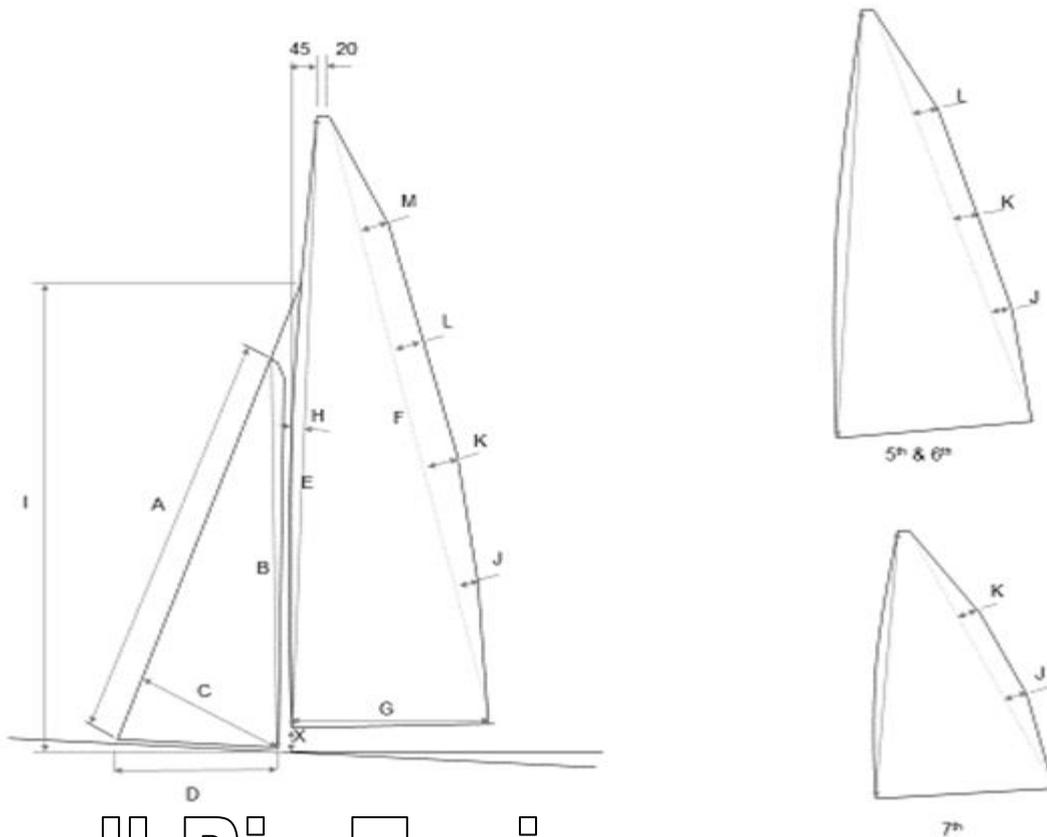
Use of a 36R Sail-plan

Should skippers wish to use appropriately made class rigs on the Remix design for championship competitions, the following sail-plan is recommended, kindly provided by Mr Martin Dovey.

Again, please specify when ordering a Remix that you wish to use class rigs. This is important information for the location of the deck fittings.

Sail Measurement Table. (Figures in mm).

RIG	DIMENSION													
	I	A	B	C	D	E	F	G	H	J	K	L	M	X
A+	1540	1350	1300	365	378	1930	1955	394	20	35	40	40	40	50
1	1461	1219	1170	364	378	1745	1785	394	18	38	51	51	51	50
2	1321	1123	1092	368	378	1565	1610	394	18	38	51	51	51	50
3	1184	1021	986	366	378	1385	1440	394	18	38	51	51	51	50
4	1039	914	869	361	378	1218	1270	394	15	38	51	51	51	50
5	899	806	749	356	378	1040	1105	394	13	51	51	51		50
6	752	701	625	343	378	871	945	394	10	35	51	51		50
7	610	597	500	328	378	693	790	394	8	38	38			50



Overall Rig Tuning

In light winds we do not require as much tension to keep the No 1 rig set, so reducing the amount of tension to the rig allows the sails to react quicker to any small fluctuations in the wind. As the wind speed increases, the tension in the rig becomes more important. It is essential for good performance to have a large amount of rig tension when the wind speed is at the top end of each rig. Also, we rarely have a constant wind throughout the beat, so we need a rig that can adapt to the changing wind conditions.

The clew of the jib boom will rise slightly and induce extra curvature in the leach and thus spill excess air. You will also see the mast bend slightly and observe the curvature in the leach of the mainsail increase, again this spills excess air towards the top of the sail, this action makes the rig keep its overall balance. This can be easily seen when on the beat, but it is just as important on the run where we may experience stronger gusts from behind the rig. On the running leg of the course, gusts of wind will try to push the boat over from the top of the mast into a nosedive. If there is some flexibility, again excess air can be seen leaving the top of the rig, thus moving the leverage on the hull further down the mast, this will minimise the chances of nose diving.

No2 and 3 rigs are usually sailed in much more constant wind conditions. Even when using the No3 rig, I like to induce extra twist in the sails, just in case the rig becomes overpowered. In general terms when adjusting the slot between the jib and the mast, I use the 3-finger rule. This equates to a slot distance on average of 55 - 60mm which seems to work.



Aim to have a straight mast with some back bend observed in the top third of the rig.

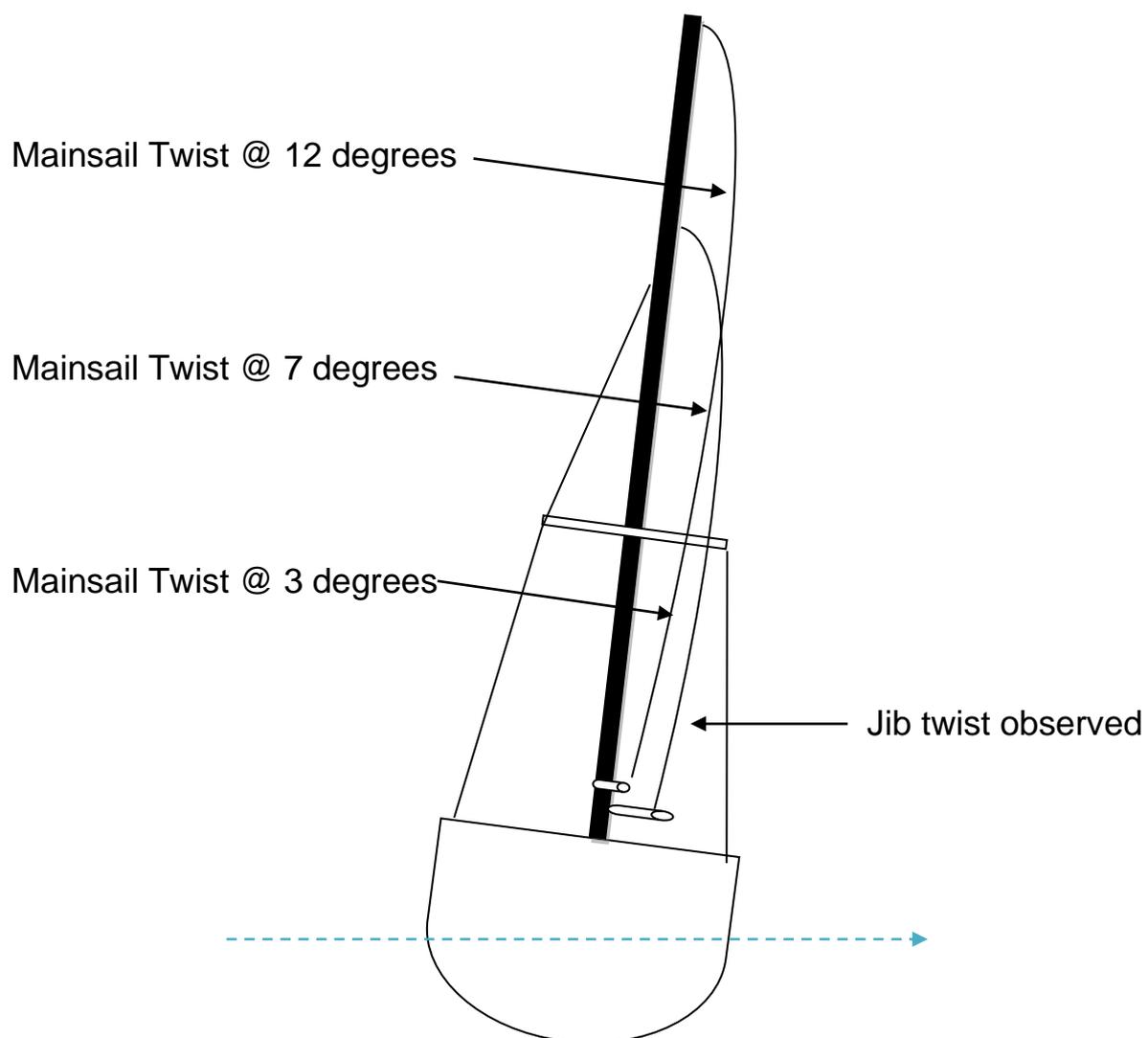


Initial '3 – Finger Rule' when setting the jib slot.

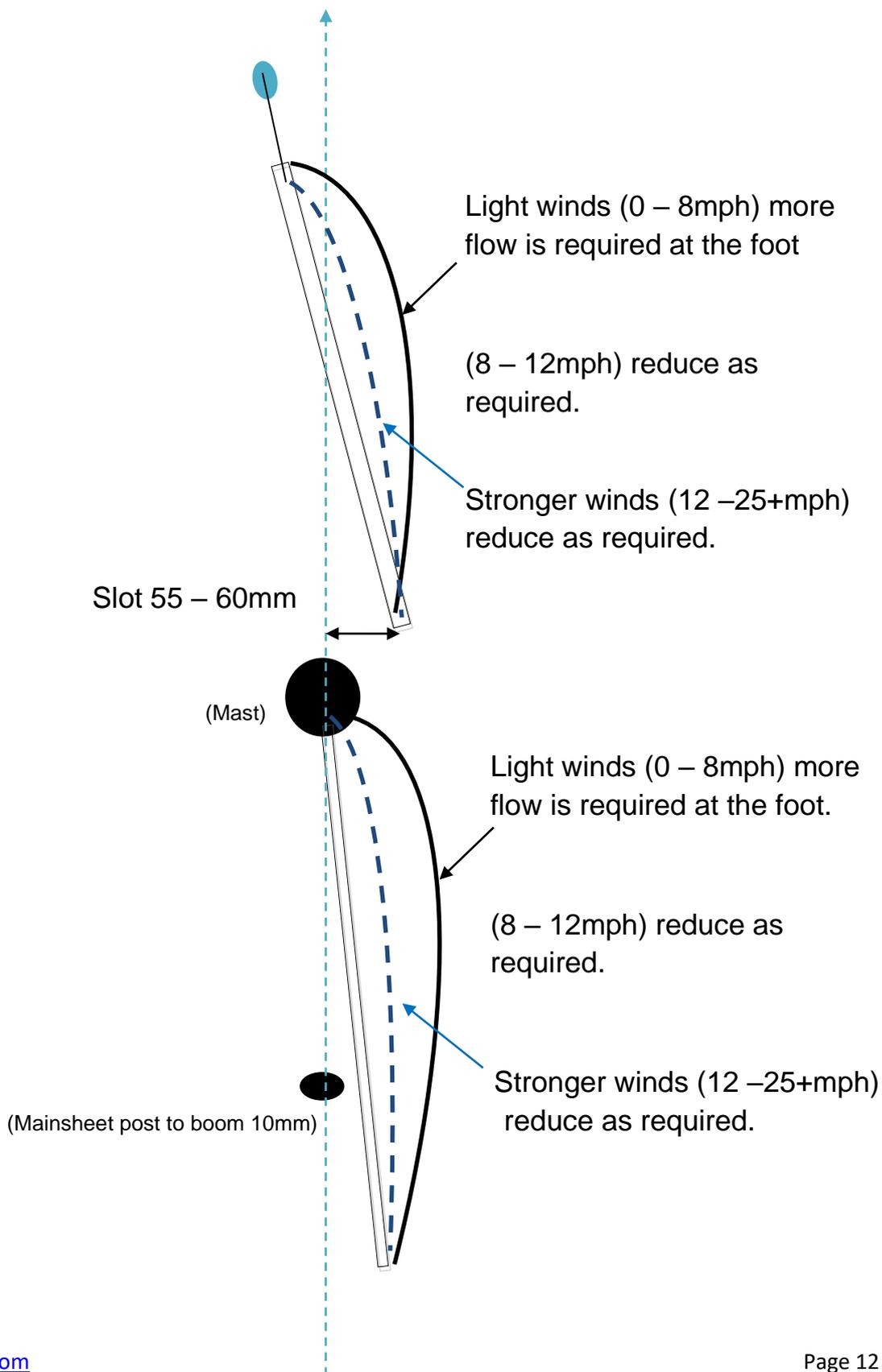
Sail Twist

For the mainsail of an "A" rig, it seems that about 3mm of movement on the kicking strap does the trick, giving about 12 degrees of twist at the top batten and 7 degrees at the middle batten. Easing the mainsail clew by 2mm is equivalent to about a one-third turn off the kicker, an astonishingly small adjustment that gives a correspondingly huge change in twist.

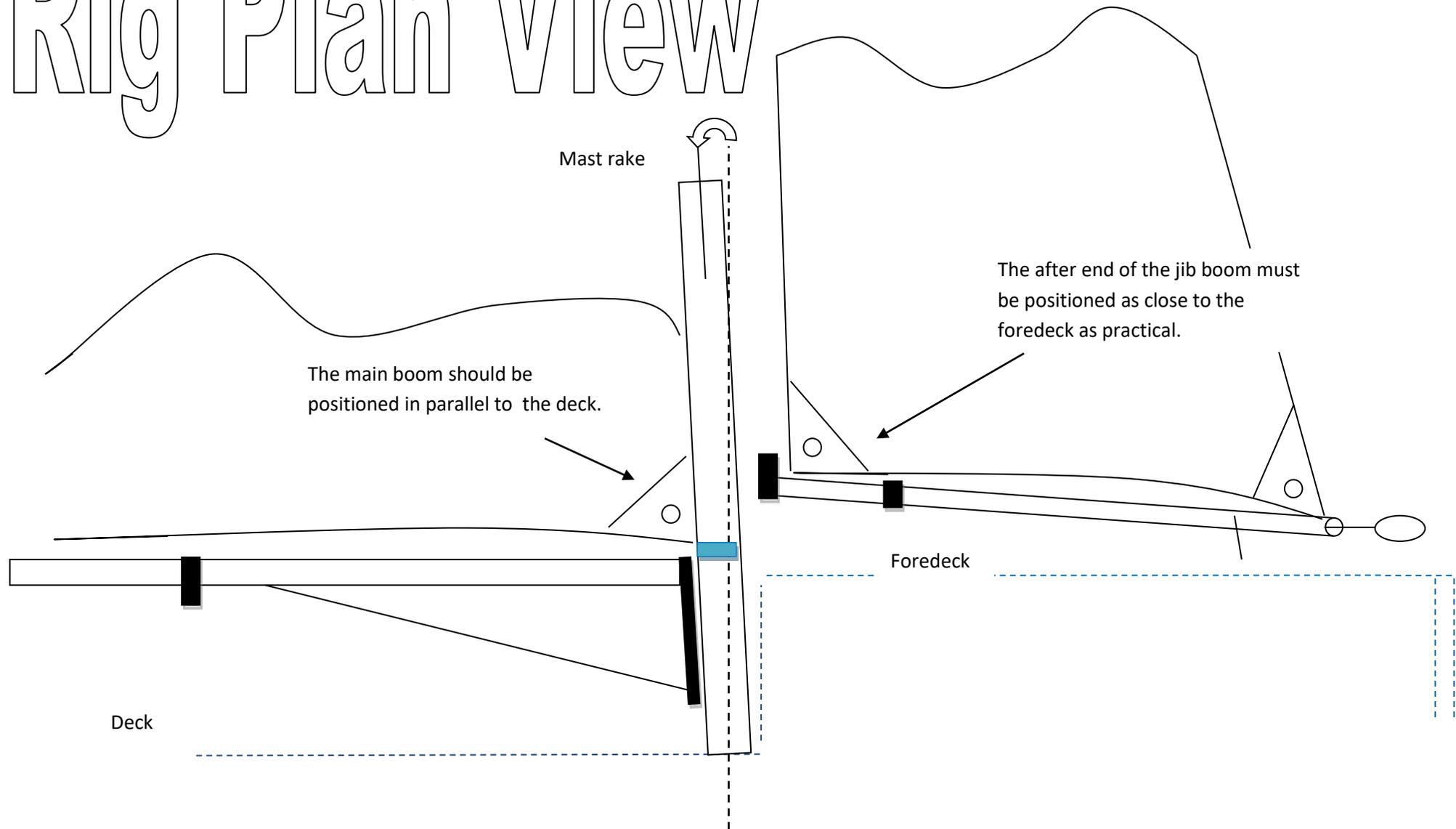
For the jib, a lift of about 2mm on the leach line gives approximately 15 degrees twist at the upper batten, and 7 degrees at the lower batten.



Sail Twist Continued



Rig Plan View



The observations seen when setting the rig are extremely helpful.



Ensure you ease the kicking strap to allow curvature within the mainsail.

Jib curvature opens once the wind gusts. This is controlled by the leachline.

Open jib slot.

