

Pimp Your Oppy – A guide to setting up your Optimist for Racing

This was written with input from a wide range of parents and sailors at Papercourt Sailing Club. Hopefully, it will help as you and your sailor head out to start racing. This guide also provides some useful tips for those starting out in Oppys.

We start by giving an overview of the equipment, we then look at a list of “must do’s” and finally what is worth considering as the sailor becomes more experienced and heads into the Main fleet.

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The Basics

Equipment

It's very easy to get sucked into an arms race in the Oppy fleet but in reality the boat and rig are not that important until you have entered the main fleet. Nonetheless, it's worth ensuring your sailor's equipment should have some basic characteristics.

The Hull

It's time to stop using the plastic hire tubs and buy a fiberglass hull. You can spend anywhere from £750 second hand up to £3,000 plus for a new fibreglass hull (including the rig). Wooden boats generally require a lot of upkeep and do not retain residual values so are probably worth avoiding. To start with there is likely to be a bit of bang and crash so don't spend too much on a first boat. A benchmark design for £750-£1,250 will carry you through regatta to main fleet and in all likelihood will resell for nearly the same price in 3-5 years time. (see below under equipment for more details). As long as the underside of the hull is in decent condition and the hull is structurally sound it will do for racing. If you are spending more than about £750 on a boat, ensure it has a measurement certificate as you won't be able to compete in major events without one and you may have problems when you come to sell it.

Boats can be bought for less than £750 which are suitable for club training although are unlikely to be competitive once a sailor starts to race. It is also worth remembering that you usually get what you pay for.

Top tip

It is recommended that you slightly deflate the buoyancy bags after use to ensure that if the ambient temperature rises they don't pop. This extends the longevity of the bags. It's also advisable to wash the mainsheet pulleys at the end of each day if sailing in salt water to maintain their effectiveness.

Optimist Hulls

Hulls tend to go in and out of fashion. Any of Winner, Blueblue, Bluemagic, Zielgelmeyer, Van Wettum, Nautevalia make good sturdy boats that last. The current benchmark is the Winner. More recently some Asian made hulls (Monsoon Zou Intermarine) have evolved and won the 2009 UK Nationals. They tend to sell at a lower second hand price due to lower new price though the hulls' longevity is not yet known.

Sails

It doesn't matter too much which make of sail you use when you start out. The sails used by the front runners tend to move in fashion over time. Its easy to forget that the best sailors tend to be at the front irrespective of the make of sail they use.

The two main points to note are;

Firstly, crosscut sails are easier to use than radials for beginner racers.

Second, its worth getting a sail that suits the weight of the sailor (see below). The basic rule is flatter sails are designed for lighter sailors and fuller ones for heavier sailors.

New sails cost £275-£375 but a decent second hand sail can be bought for £75-£150. The IOCA website is a very good place to start as many top racers and sponsored sailors will sell their sails on a regular basis.

Like hulls the fashion in sail makers tends to move over time. Currently, the J Sail and North Sails are popular in the UK though Olympic, Pinnel and Bax as well as Speed Sails are also available and used by good sailors.

Most sail makers tend to make sails to suit three broad weight ranges ;

<35kg helm weight

35kg – 45kg helm weight

>45kg helm weight

The heavier the sailor the fuller the sail is the basic design difference.

As a rule the two cuts available are cross and radial cut.

Radial cut have more panels with stitching in line with the pull on the sail in a radial shape in load bearing areas meaning that the sail distorts less under load compared to a cross cut. Theoretically, this can lead to a faster sail shape but as a consequence of this design the sails tend to be more difficult to set to that optimum shape. As a result novice racers often find it easier to set a cross cut.

More recent fashion is for cross cut sails like the J-Sail and the North cross cut C Zero 5/6 though many top UK sailors still use the radial P-4 and P-5 from the North loft.

Whatever sail you have its worth getting the tuning guide from the sailmaker to make sure that you have the sail ties in the correct place, mast rake accurate and that your sailor can start thinking about how to rig the sail with you.

Information on sail types, cuts and tuning guides can be found here if you browse the websites.

Norths

<http://www.northsailsod.com/class/optimist/optimist.html>

<http://www.northsails.com/tuningguides/TuningGuides/TuningGuidesOptimist/tabid/9267/Default.aspx>

Pinnel and Bax

<http://www.pinbax.com/index.asp?selection=Tuning Guides>

Olimpic

http://www.olisails.it/en/od_optimist2.php

J Sail

<http://www.jsail.pl/cms/en/home>

Spars

Masts are pretty standard with the Optimax Blackgold or Optiparts MK3 and MK4 popular. As a rule the MK4 and the Blackgold are the stiffest with the MK3 a little more forgiving. Until you are near the front of the main fleet mast selection is not especially critical. Sprints are typically 27mm diameter though for heavy weights (>45kg) the 29mm may be an option worth considering.

Booms are an area of more choice. Most use the 40mm diameter boom with the 45mm used by the heavy weights. Very light weights can use the 32mm which is more flexible and more forgiving in gusts though only if the outhaul is in tight. Very tall/heavy sailors may use the 55mm boom which has no strop though in truth the 40mm and 45mm should suffice for most.

Foils

Foils seem pretty standard with N1 and DEM popular. A good foil bag is a must to avoid damage in transit. The most important thing is to make sure the centreboard has little lateral movement (turn the boat on it's side and put the board in - if it wiggled up and down it's too loose). To keep it tight change the rubber internal slots or add "Jap tape" inside the slot top and bottom.

Some basic pimping for Regatta fleet racing

To start with there are some basic items that are required to ensure that your sailor can satisfy the class rules;

(For most items there are detailed does and don'ts on the IOCA website under FAQs - especially notes on safety and outfit of an optimist, painter and mainsheet quick release)

<http://www.optimistsailing.org.uk/new/home.htm>

Their link is also excellent with pictures

<http://www.wWSC.org.uk/optimist/opyy%20pdf/Oppy%20Safety%20Tips.pdf>

Items you need

- 1) A tow rope. It must be 8m long with a loop in place see IOCA link above. Ensure that this is tied around the mast step so that the full load is taken by mast step itself if towing is needed. The 8m is measured from the front of the hull when it is tied on, so you'll need to buy a longer rope, say 8.5m. The measurers are very strict at the Nationals and have been known to reject boats where the painter is just 10cm too short.
- 2) A method of fixing the mast in the boat. By far the most effective is a mast clamp (optiparts) though you can tie the mast in. Note these ties should not stop the mast from rotating. When fitting a mast clamp, ensure it is placed under the mast thwart as high as possible to stop the mast jumping out of the cup at its base.
- 3) Two bailers tied in with rope or ideally elastic.
- 4) A praddle which must be tied in and then tucked away eg put under the buoyancy bag straps.
- 5) Elastic to tie in the centreboard to the bottom of the mast at the mast step (this prevents losing the board in capsize and also holds the board up on a run by pulling the top of the board forward when it's raised). Also there should be an elastic loop to hold the centreboard down.
- 6) A valid buoyancy test. This can be carried out by a measurer or a club official.
- 7) You must have a snap shackle or other quick release where the mainsheet blocks attach to the boom. This is an important safety feature and the IOCA website above has detailed documentation on what is needed.

The following items are not mandatory but are recommended.

Ensure all the eyelets on the sail have sail ties that keep the sail an even distance from the mast (approximate 5-10mm from the mast or boom). Use 1-3mm rope on the sail ties aside from the tack, head and clew where 2-3mm non stretch rope is recommended.

Mast rake. Set the mast so that when the sprit is in normal position the boom is horizontal. The mast rake from the top of the mast to the top of the transom should be approximately 110.5 inches to 111 inches. Check sail tuning guide above for more precise measurement.

Other rigging. Ensure that the cleats and rope that hold the kicker and sprit respectively are sound and hold the rope in place. Slippage in the cleat can be a common problem that makes life hard for a young sailor. Expect to need to replace the kicker rope from time to time.

Moving into the main fleet

Once in the main fleet the measurement requirements are somewhat more strict. You must have a valid measurement certificate for all the sails, rig, foils, boat. In particular you must ensure the sail ties are set so that the sail is no further than 10mm from the mast or boom.

Hull - You may wish to invest in a newer boat at this stage. The boat is probably less important than the sails and foils though a boat upgrade can often allow a change to improve these items.

Sails - As long as hull and foils are in decent condition the sail is the most important item on the boat. Many sailors will own an older training sail and a newer one on a second boom for racing. This can prolong the life of the racing sail. It's important at this stage to get the tuning guide and measure the length of sail ties accurately as well as the mast rake. The tuning guide will also give the sailor advice on the optimum way to set the sprit and the outhaul in different wind conditions.

Boat preparation - there are a few changes that can help optimise the performance of the rig.

Ensure the mast sleeve is tight in the mast gate ... Over time this plastic sleeve can wear down. The fit should be very snug sideways; if it's loose the mast does not sit vertical when there is pressure on the rig. There should be some limited fore and aft movement at mast gate - this is normal and allows the rig to move forwards offwind - however the rig should not move sideways at all.

The boom should fit really tight around the mast so the boom moves with the mast - the mast will rotate as the mainsheet is let out.

Many sailors get a longer rope for the kicker that drapes over the boom and back down so that it's easier to pull on when windy as you pull down on the boom as you exert pressure in the kicking strap.

Mainsheet purchase. Given the long time spent on the water many sailors use a 4:1 mainsheet rather than 3:1 to reduce the physical effort needed to work the main sail. This may also be helpful for smaller regatta sailors as well.

Ensure that the loop at the front of the boom that sets the boom height is set to make the luff tight with no twists but slightly loose with 2-3 twists.

Some sailors also spray the mast and boom with McLube to ensure that the sail rotates easily around the spars.

We hope this guide has been helpful welcome any feedback or thoughts.

Where to buy your boat bits and get professional advice

Guildford Marine - We are very lucky to have a local chandlers that is well stocked with Oppy bits and can also help with work on foils and hull damage as well as clothes.

<http://www.guildfordmarine.co.uk/>

IBI Sailing - Charles is always available at the oppy main events and also runs a comprehensive mail order business.

<http://www.ibisailing.co.uk/>

Other useful links (this is an excellent rigging guide with pictures)

<http://www.ostriamarine.com/laser/pdf/boat-manuals/Vapor%20Optimist%20Rigging%20Manual.pdf>

Second hand sources

PSC notice board or website

http://www.papercourt-sc.org.uk/for_sale/index.php

IOCA website –

<http://www.empowered-sourcing.co.uk/classifieds/index.asp?portal=60.4722864&tag=optimist&nframe=true&context=GBR%20Optimist%20Interactive%20Advertisi>

Apolloduck

<http://www.apolloduck.co.uk/>

Other club websites in the area – all these have active Oppy fleets:-

Wraysbury SC
www.wlsc.org.uk

Chipstead SC
www.chipsteadsc.org.uk

Weir Wood SC
www.wWSC.org.uk

Bewl Valley SC
www.bewlvalleysc.co.uk

Burghfield SC
www.burghfieldsailing.org

Hayling Island SC
www.hisc.co.uk