



## Optimist Tuning Guide for the BLACKBULL

by Dragan Gasic

The new BLACKBULL represents a new direction in the philosophy underlying Olympic Sails' Optimist sails.

This sail stands out from other x-cut (horizontal cut) sails above all in *having the deepest part of the sail shifted much higher and further back* than in the renown Red, Bluelight and Blue. This design concept gives it added power and hence a greater propulsive thrust, making it the ideal sail for heavier helmsmen. Indeed, it has been designed for helmsmen weighing more than 46-48 kg. Unlike Radial sails which are, let's say, more delicate to trim, the BLACKBULL is quite easy, making it more similar to other Olympic x-cut sails.

The sail has shown itself to be very fast when close-hauled and even more so when running free, such as on a reach and running downwind. Before, "heavies" could merely struggle to hold their own, but now they have the means to *attack* even much lighter racers.

Here are some hints to trim the BLACKBULL to best effect.

### Light air

#### Outhaul

First of all, and given that the sail is very powerful, the foot must be pulled out tighter than usual. This makes it possible to open the sail out, especially in light winds. Don't be afraid about tightening the outhaul too much as the sail will always remain full, but a more open leech makes it faster. A couple of trials with the sail will show you immediately how much it may be released.

#### Sprit

This should be adjusted in such a way that when the sail lies against it, it forms a wrinkle some 50-60 cm long. This also helps to open up the after leech. On other tacks, of course, no fold will appear.

#### Boom Preventer

An extra turn or two will eliminate the tension along the mast.

#### Vang

This should not be tightened; taking in the slack is sufficient.

#### Sails ties

The distance between the mast and the sail should be adjusted as follows, from the top downwards:

throat:	-3 mm
tie 1:	-2 mm
tie 2:	-1 mm
tie 3:	-1 mm
tie 4:	-1 mm
tie 5:	-1 mm
tie 6:	-2 mm
tack:	-3 mm

### Medium air

#### Outhaul

You should sail without wrinkles in a breeze. In other than calm conditions, you might slacken off 1-2 cm but go easy.

#### Boom Preventer

You can remove one or two turns to fill the sail nearer the mast and so facilitate acceleration.

#### Sprit

Hauled in just enough to remove the wrinkle.

#### Vang

With only the slack taken off to prevent the boom lifting when running before the wind and to maintain a stable leech.

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### Sails ties

The distance between the mast and the sail should be adjusted as follows, from the top downwards:

throat:	-2 mm
tie 1:	-1 mm
tie 2:	-1 mm
tie 3:	-1 mm
tie 4:	-1 mm
tie 5:	-1 mm
tie 6:	-1 mm
tack:	-2 mm

### Heavy air

In these conditions and with such a powerful sail, we need to depower it as much as possible to avoid the problem of overpowering.

#### Foot

Hauled in as tight as possible if you're having problems keeping the boat level (flat on the water).

#### Sprit and Vang

Both hauled in tight.

#### Preventer

Hauled in to pull the boom down as much as possible. This, together with a taut foot, will assure a lean and straight exit, which is essential for steering the boat without causing weather-helm (the rudder act as a brake).

#### Sail ties

These should be adjusted as for medium air. But if the wind is really strong and you're having serious problems keeping the boat upright, I suggest you adjust the ties as for a light wind. In this way, you will have an even flatter sail.

### Rake

The rake of the mast must be tried out carefully, but initially I would advise setting it to somewhere between 280 and 283 cm. If the rake is increased, you need to take care about how much the leech is closing. Since the rear of the sail is very powerful, it will be helpful moving the bridle-ring 5-8 cm forwards towards the mast.

### Sheet

You need to "work" the sheet constantly: sheet-out 5-6 cm as soon as the pressure eases and vice versa.

### Concluding notes

in light air, it is worth trying to sail the boat at a considerable windward-heel when on an upwind tack (close-hauled) and with a slack sheet in order to ensure the boom is about 3-6 cm outboard of the leeward corner of the transom. In this way, the sail has a more open shape but remains full. In these conditions, the helm will be lighter, and less weather helm means less of a brake. In rough conditions, this is not always the best way of sailing the boat. But that's another story...

Fair winds!  
Dragan