

Dear Mirror Sailors,

The following text and pictures briefly describes fitting an asymmetric spinnaker to a Mirror and how it handled on the water.

A suitable length of a bowsprit and diameter of spinnaker pole were determined so the spinnaker would have a good minimum clearance from the jib. The text was with a simple fixed pole 2.0 metres long 38 mm diameter with a 2.0 mm wall thickness that extends 900 mm from the bow.



Photos by Andrew Chapman

A stainless steel strap with a pin through the spinnaker pole holds the pole to the mast and it is tied off with the gaff and jib halyards to secure it. It is tied down to the bow using small saddles to prevent lateral movement and the jib/tow ring fixtures. The end of the pole has a small block for the tack line.



Photo by Andrew Chapman

The spinnaker is lifted using the existing spinnaker halyard and cleat and the tack is pulled out using a line to the existing topping lift cleat. The spinnaker was sheeted to dead eyes 300 mm behind the sidestays but would be more conveniently located and would probably give a better sheeting angle if placed next to the side stays.

The asymmetrical spinnaker is a more efficient sail and larger, by about 50%, than the standard double luff spinnaker so there is a lot more power in the sail.

Mark Rimington and Sam Haines of Ullman Sails Melbourne at 77 Beach Road Sandringham were given the controlling dimensions to design and make the sail. They are 2.0 metres along the foot 3.2 metres along the leech and the straight line length of 3.6 metres from the tack to the top of the halyard.

ULLMAN SAILS ABOUT THE DESIGN OF THE SPINNAKER

When asked to design a small asymmetric spinnaker to be retrofitted to an existing class Ullman Sails Melbourne looked at our extensive work with skiffs from cherubs, International 14s to 18' skiffs and came up with a simple to use asymmetric for the training and getting used to the controls, as now it is more than likely when you step up to the next class it will have a asymmetric spinnaker.

The sail is designed and cut using the latest computer aided technology, and constructed in our sail loft in Sandringham Melbourne. We look fwd to working with mirror sailors as they better there skills with the retrofitted asymmetric spinnaker.

Sam Haines
Ullman Sails Melbourne
p +61 3 9597 0857
f +61 3 9521 9785
m +61 403 294 228

On the water the following pictures show the results.





Photos by Derek Espy



Photo by Derek Espy

The spinnaker was easy to raise, lower and control, jibing was simple and the boat remained very stable and controllable. The additional loads on the boat from the spinnaker did not cause any damage to the mast step, bow, sheeting points or halyard block.

When testing a variety of people used the spinnaker. A 12 year old boy who had never used a spinnaker found it easy to use and a 10 year old girl who found the double luff spinnaker difficult to use found the asymmetric easy. A husband and wife took out their 3 year old daughter and sailed using the spinnaker without any difficulties.

The Mirror was not modified in any way but a modification being considered is to fill the hand hole in the keel and make sure it is streamlined as the extra speed with the spinnaker is likely to cause it to generate a lot of turbulence and drag preventing the boat from reaching its optimum speed.

Importantly the asymmetric spinnaker makes the boat go a lot faster.

The trials of the asymmetric spinnaker at Inverloch over a holiday long weekend generated a lot of interest within the South Gippsland Yacht Club and tourists visiting the area.

Ullman Sails Melbourne were conscious of costs and decided to forgo the design costs to retail the small boat spinnaker for 375.00 AUD. I think that is good value for money.

Regards

Andrew Chapman
2 Beach Avenue
Inverloch 3996
Victoria, Australia
Ph: +61 3 56741266
Fax: +61 3 56743732
Mob: 0438567412
andrewandmarion@bigpond.com