

Ideas and Comments on Offshore Mainsails

For use in a *Blue Water Sailing* Magazine Article
By: Bob Pattison Neil Pryde Sails August 4, 1997

This particular customer has her sights set on global cruising, hence the need for a sail that will last a minimum of 20,000 miles. Our top-of-the-line cruising sail, the [Cruise Plus](#), is what this customer will want to have. In addition to this, she has asked for 3 reefs and full battens as options. As to the former, we would prefer to see the sail built with 2 deep reefs and then build an additional storm trysail. A deep third reef in the mainsail mimics in size of a storm trysail, but doesn't have the ease of handling that the small trysail does. In addition the trysail is also designed and built with one thing in mind: withstanding the punishment of gale force winds when you are forced to heave too, our find yourself clawing to weather in bad weather. As too the latter, there are a variety of systems on the market that add varying degrees of benefits at varying degrees of cost. We currently have been quite happy with the *Sail Power System*, as the battens can be "luff loaded" and don't require any bulky, costly and heavy leech hardware. They come in a variety of guises and styles that will fit most boats. The other system is the [Strong System](#) that includes an integrated track as part of their kit. This system seems to go up and down easier than most and also has the added benefit of having a small "stack height". Generally, we review with the customer the different available systems, keeping in mind, the sailing they will do, the current rig setup and their budget. This way we can then get a package together that really suits their needs.

Our standard Cruise Plus mainsail comes complete with many of the features that any blue-water sailor should look for. This include:

- All stainless hardware, both external rings and pressed rings.
- Hand sewn luff and foot attachments. (long lasting and quiet)
- The sail will be cross-cut in panel orientation and any shape deformation over the years will be smooth and even because of the wide span panels, resulting in a sail that will be free from distortion wrinkles and miss-matched bias "bumps" that sometime accompany a radial cut Dacron sail in this size range. The fabric of choice is the Challenge High Modulus that has a tight weave, medium firm finish and very good fill strength.
- 3 Rows of '3-step' stitching in extra heavy (V-138) U.V. thread. We use blue so that you may better see any chafe or broken stitches further on down the road.
- Top full length batten and the remaining battens quite long (25% of E) and parallel to the foot. (of course this would not be the case in an all full batten configuration) This makes the sail easier to handle when reefing or lowering and will significantly reduce the amount of sharp, hard flogging the leech of the sail does throughout its life, thus increasing the life expectancy of the sail.

- The other item of importance that will add to the life of this sail is the addition of a two-ply overlay on both the head and clew of the sail. These overlays will taper into the body of the sail and each will be 25% of the leech in length. With the addition of radial reinforcing patches the primary load corners of the sail have been rendered bomb proof. The radial patches offer the strongest (because of thread line orientation) and lightest patch type available and the two-ply overlay extends and disperses the high loads evenly well into the body of the sail. This feature eliminates bias distortion in these areas which at some future date could be responsible for batten creases along the inner tips of the battens and also decreases the likelihood of the sail "blowing" out of shape.

As for additional options there are two that we would discuss. We have a Offshore option called [Tradewinds Specifications](#), that was developed for the charter boat industry in Hawaii. The additional construction techniques that we employ with this option make for hardest wearing, toughest sails in the marketplace today. Some of the highlights are: double luff, leech and foot tapes, special slides with extra re-enforced attachment points, and spectra load tapes and leechlines.

Also, many people consider SeamKote treatment. This is a liquid plastic coating that is applied to all stitching on the sail after it is completed. The coating enhances both the U.V. properties and the chafe resistance of the thread. There is no doubt that it does both well. It can discolor with age and air pollution and one should be aware of this as the long term aesthetics of the sail could be reduced.

Pricing with some comments about the particular sail:

<i>Sail</i>	<i>Options</i>	<i>Comments</i>	<i>Retail Price</i>
	Tradewinds Specification	As outlined above for any of the sails below:	\$161.00
	Seamkote	Treatment for any of the sails below:	\$148.00
<i>Full batten mainsai in 9.3 Challenge.</i>	3 reefs and full battens,	Includes battens, but not the hardware system	\$3030.00
<i>Standard Cruiseplus mainsail in 9.3 oz.</i>	3 reefs	Comes with one full batten and extended lower battens, two-ply head and clew.	\$2700.00
<i>Battenless Mainsail in 9.3 s oz.</i>	3 Reefs	This is common arrangement for boats that have a high degree of weather helm and for those that are willing to sacrifices some area and performance for the end of batten cost, new and in repair. (the number one repair item)	\$2300.00
<i>Roller Furling Mainsail 9.3 oz.</i>		An in-mast furling mainsail, with a roller furling block and small U.V. cover at the clew. We ALWAYS include a pressed ring above the clew block as a safety device.	\$1950.00