

# A REVIEW OF GENOA REEFING SYSTEMS

## Why reef?

It is a long time since reefing was covered in Wayfarer News. Compared with other cruising boats, the Wayfarer is very easily driven, even when well-loaded. We can see this in light winds when the Wayfarer will often keep going strongly when other so-called performance dinghies stick in the water. Of course this is helped by a generous rig of genoa, main and spinnaker. Once the wind reaches force 4, the rig can be unnecessarily powerful for cruising; we are unlikely to want to be sitting hard out or trying to plane flat out. The main and genoa will also be inappropriately large for manoeuvring safely - tacking and gybing for example. A backed genoa is notorious for causing a capsize when a sheet gets caught - and when cruising we don't have the luxury of a safety boat at hand. Similarly it goes without saying that an unnecessarily large mainsail makes gybing hazardous. With a reduced rig, a Wayfarer will still often be achieving maximum displacement speed even in force 3-4. We have seen this at Parkstone YC in races in blustery conditions. A reefed Wayfarer can often keep up to windward with an unreefed boat. Only once the windward mark is rounded will the unreefed boat storm away on a plane. So cruising is about nice, balanced handling and navigation, rather than scary stuff - and there is no doubt about it - a reefed Wayfarer becomes a different animal - still fast - but instilling the feeling of confidence and enjoyment needed to enjoy a passage.

## What's wrong with Jib furling?

I am probably typical of many people who have jib furling (as opposed to jib reefing gear) My boat is mostly raced down at Parkstone YC in Poole Harbour. However we go to cruising rallies sometimes. Although relative beginners, we have done sufficient to know that reefing gear is ESSENTIAL - and that it is not only just to put the Rally organiser's mind at rest! For several years we have used a Harken furling drum. This is very convenient when launching, landing or anchoring. The string is pulled, the genoa rolls up - being careful not to get the forestay caught. Getting rid of the jib when you don't need it is seamanlike and makes things quiet and easy. We have also used it underway to reduce the genoa when the wind gets up. Reducing the genoa has the effect of de-powering the mainsail as the slot opens up - a major advantage. But a furling jib isn't perfect for actual sailing. The sail gradually untwists at the top, thereby increasing the sail area again. I tend to compensate by not putting too much jib sheet on, thereby sort of feathering it. I like to have some jib because we are so used to 'reading' the wind direction from the jib, even if it just a scrap. So furling alone is not a serious option for cruising.

## Genoa Reefing Systems

There has been so much development in the more versatile genoa reefing systems recently that I thought it would be good to review them in this issue - I will move on to mainsail reefing in the spring edition. Genoa reefing development has been mirrored by considerable discussion on the Wayfarer forum too.

*We cover two types of genoa reefing systems - the Helyar system described by David Williams - and the Bartels system reviewed by Dave Barker.*

*Ray Scragg, Editor W7698*

## *David Williams describes his experience with the Helyar genoa reefing system during his passages around the UK.*

The ability to reef any cruising boat is very much essential, and Wayfarers are no exception to this rule. Boat performance and more importantly, the safety of the crew (and boat) can all be put at risk should you find yourself caught out with no means to shorten sail. Most cruising mains are made with two slab reefing points which give a very quick and easy way to reduce sail area but more often than not you will find the need to also reduce the foresail size in order to balance the boat again. Traditionally, this was achieved by carrying a set of foresails, but anyone who has stretched out across the foredeck with the wind howling and waves washing across will know that on the Wayfarer this is not a job for the faint-hearted! Rob Helyar's Second Generation Reefing System changes all that and with a simple pull (or release) of the drum reefing line, any size of workable sail can be set (provided the sail is not old and horribly stretched). Don't be tempted to think that your standard furling system, with only the wire up the luff of the genoa, will do the same job....it does not work!

On numerous days during Taronga's adventures around the UK, Tony and I have repeatedly put in and shaken out reefs to match the conditions. Most of the way down the North Sea we have met quite squally weather and apart from the odd time when we have 'pushed it' with too much sail up, generally we have been able sail relatively comfortably and safely. When the land only shows as a grey smudge on a murky horizon you certainly appreciate this.

Taronga has been fitted for the past five years with the original Helyar



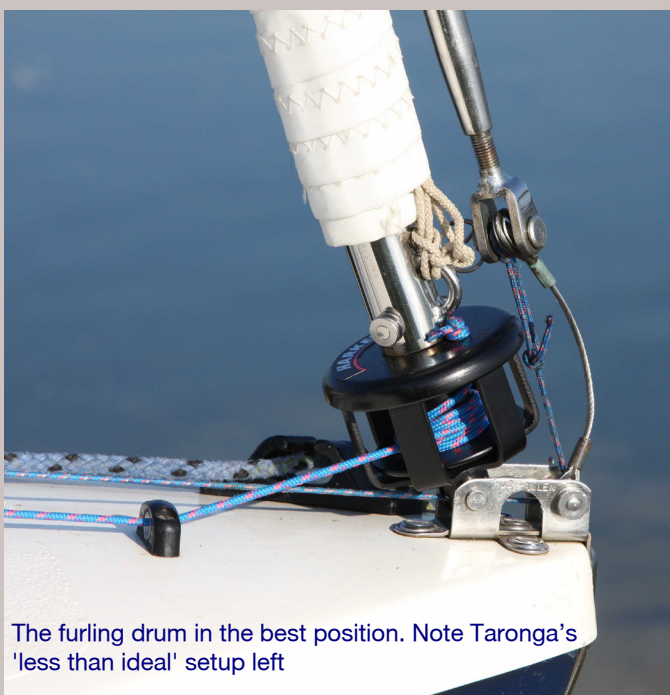
Taronga planing at night in a Force 6. The ability to reef easily and efficiently was never more important! Storm jib ready on the foredeck should it be needed. David Williams

reefing system which has proved itself again and again. Some might have noticed that I have the luff tensioning below the drum thereby raising the foot of the genoa. I adopted this system initially when cruising with lots of children to keep as much clutter out of the cockpit as possible and also to improve forward vision but as Rob points out, apart from the obvious loss of drive efficiency, a small amount of twist in the tackle below the drum will have a detrimental effect on the set of a reefed sail above. If I can find the time I must try and change it back to the highfield lever with the drum fixed again to the stemhead fitting.

We do still carry a spare jib and storm jib, the latter of which is lashed to the foredeck, complete with attached sheets, ready for quick deployment by way of the spinnaker halyard, should the genoa and reefing system fail. The jib I have modified with the addition of a few mast slot sliders and can now double up as a trysail, but to date, thankfully, has seen no action! I have also added a third slab reef to the main which we have used surprisingly often. I know a few people have asked why this is necessary and I guess it is the combination of a quite often lumpy sea and diminishing hiking strength during long, long days (not to mention the wind!) that make the resulting 'handkerchief' sail so useful.

As with all things, do practise with whatever system you have, be it slab or roller on the main, roller reefing or sail changing on the headsail. The chances are that if you haven't, when it does come down to the real thing a line will be wrongly threaded, a cleat for the thin reefing line too worn to hold the power of the sail etc etc ..... and things will go from bad to worse. As a guide, a slick reefing of the main should take around 15 to 20 seconds, allowing extra to tidy up the sail with reefing bungees should conditions allow.....and if you own a foresail reefing system the crew has it done before the helm has finished asking for it! When you come to the real thing, reef early. Don't wait and see. It is far easier to shake out a reef than struggle to put one in in a rapidly rising wind.

As a final note....the second generation reefing system is quite an improvement on the first with the flexible furling spar being far more torsionally rigid, resulting in a better set of sail at all sizes. It is not,



The furling drum in the best position. Note Taronga's 'less than ideal' setup left



however, a straight swap between the two, as the spar on the later model fits inside the luff of the genoa rather than externally straddling the luff wire and sail. Don't throw away your old sail though, as it is simply a matter of adding a new luff tube, which most sail makers should be more than happy to do. Perhaps I should put my money where my mouth is and get in there first!

**Safe sailing! David Williams 'Taronga' W9735**

**Below: The Helyar reefing spar inside the luff of the genoa**

