

## **In-Mast Furling**

### **The Pros and Cons of Sailing Without a Traditional Mainsail**

When my wife and I were shopping for our latest boat, our wish list included a traditional mainsail. However, the boat we ended up buying had a furling main instead. At the time we were disappointed, but all the other advantages of this particular boat lead us to say, "Okay." Now that we have sailed with the furling main for five years, I believe we would buy one again. I am not saying the furling main is superior – it is just different. There are also in-boom furling systems, but in this article I will share what I have learned about our in-mast furling versus traditional mainsails.

The first thing we noticed was that deploying our furling main was a lot easier than deploying the traditional main on our old boat. There was no sail cover to remove, no sail ties to deal with and it could all be done from the cockpit, by one person. All we had to do was release the furling line and sheet in the outhaul. And, taking down the sail (furling) was just as easy. There was also an improvement in safety as climbing up on deck in rough seas to wrestle a mainsail is not easy.

Additionally, our old boat was rigged with lazy jack lines so we had to head up directly into the wind to deploy the main. While I would not recommend this in a blow, a furled main can be deployed at almost any angle to the wind. I have even done so while going downwind in light air. With a traditional main this would not be possible because once the wind caught the sail it would be impossible to tension the halyard. But a furled main is already raised and the luff is tensioned. In fact, having some wind in the sail helps deploy it, just as it does when unfurling a jib.

Then there is the subject of reefing: With a traditional main the process can be a bit daunting: unload the sail, drop the halyard, tension the reefing line(s), re-tension the halyard, etc. The process for a furling sail is a bit simpler: unload the sail, loosen the outhaul, furl to the desired point and re-tension the outhaul. The reefing lines are basically eliminated. And there is the added advantage of being able to reef to any size sail you need/desire, as compared to a traditional main which can be reefed only to the predefined points.

What we have seen over the years

is that *we sail more with the furling main*. Because it is so easy, we will set sail at times when we would have just motored in the past. This is especially true in the islands during the summer, where we frequently find some wind in a channel but, looking ahead, there is a flat spot. It literally takes two minutes to pull out the sails and turn off the noise maker – then we get to enjoy a nice light wind sail.

An in-mast furling main has no horizontal battens – this fact had me believing the sail shape would be horrible. My experience, however, has been less dire. While the shape may not be up to racing standards, it is not all that bad and is certainly acceptable for cruising purposes. And, I have found twist and draft can be controlled successfully using the same methods used on traditional mainsails. But the lack of a Cunningham and limits on halyard tension (discussed below) preclude moving the draft forward or aft.

Probably the most common problem with a furled main is getting it stuck inside the mast. I have found there to be two possible causes – not getting a tight enough wrap when furling and/or having too much halyard tension. When the sail is wrapped too loose it makes perfect sense that things might bind because the furled sail is "bigger". But I was caught off guard by things binding when there was too much halyard tension. I am still unsure why this happens but I've found that having the halyard just tight enough to take the wrinkles out of the sail is all the system will take. Any tighter and it becomes very difficult to unfurl the sail. This may not happen with all systems but it does with mine; at least it is easy to deal with.

If the sail does get stuck the best solution I have found is to unfurl what

you can, then re-furl the sail part way. Then cleat the outhaul and pull hard on the furling line (by hand). If you need to, put the furling line on a winch and give it maybe one turn to take up an inch or two of extra line. Then repeat the process. It may take three or four iterations. The idea is to get the sail to slip inside the mast and wrap a bit tighter.

A word of caution: Be very cautious when using winches with furling gear as the winches are stronger than the gear. While it may be okay to use a winch in a strong wind where you are having problems furling by hand, it is not okay to use a winch to get something unstuck. Be sure to watch all moving parts to be sure everything is turning freely and do not use much force. This is true for both main and jib furling systems – if something binds stop and figure out why.

Of course, it is best to keep the sail from binding in the first place. The best way to do this is to make sure it wraps tightly around the furler and does not wrinkle. There are a couple keys to doing this: have some tension on the sail when furling and allow the boom to rise enough so the outhaul tension pulls evenly over the whole sail. If the boom is pulled down too far the outhaul will pull unevenly and cause wrinkles. I find that keeping a bit of wind in the sail while furling helps with both.

In conclusion, while I enjoy sailing a traditional main (I like the shape), I also appreciate the convenience of the furling main. I have also found being comfortable with either is handy as many charter boats are now equipped with furling mains.

*Mike Huston teaches sailing for San Juan Sailing in Bellingham, WA. He owns "Illumine," a Jeanneau 43 DS.*