Beaton Sails - Comet Tuning Guide

- Centerboard -pin to back of mast - 19 3/4"
- Mast Rake (Top of mast to top of transom ) - 21' 10"
- Stay Tension - 200+ Lbs.
- Jib Leads - Light Air 70"/Heavy Air 71" - 12" off center-line of boat
- Foot of Jib should be right down on the deck.

After setting your Comet up with these measurements, you are ready to go sailing. After hoisting sails, my first step is to determine how much mast bend to use. The way I control my mast is to use blocks at the deck level. Of course if you have a mast bender this is a little easier. I put reference marks on the deck to help me keep track of just where my mast is.

The first step is to determine your neutral position and mark it. The neutral position is the spot where the mast ends up under stay tension and with your blocks out or your "bender loose. Since your Beaton Comet Mainsail has been designed with a fair amount of luff curve it is necessary to sail with some mast bend at all times.

In light air, block your mast forward 7/8 of an inch from your neutral position. This is called prebend. This will do several good things. First it smooths out the shape of the mainsail, flattening the front of it and freeing up the leech. The other benefit is it softens your forestay, making your jib a little fuller, giving you some added power and a wider "groove" to help you keep your Comet moving. Rich Warren goes so far as to ease his mast rake a little to make his jib even a little bit fuller! As the breeze picks up and you and your crew have moved to the windward side of the boat, it's time to take some of your prebend out.

About 1/2" of prebend usually gives me the shape I'm looking for. Rich would pull his mast rake back up to his original spot at this point. Now I start to use my vang to promote mast bend. With mast bend restricted at deck level, the bend moves up, flattening the upper part of the mainsail, while keeping the lower part full. As the wind builds and the boat becomes overpowered, it is time to promote mast bend again instead of restricting it. I vang my main until we're under control again, being sure to back off on the vang in the lulls. Blocks have been removed from in front of the mast allowing it to go within 3/4" of the front of the partner. To keep your forestay from sagging too much, and hurting your pointing ability in these conditions, you must do one of two things. If you have a traveler, drop the car far enough to balance the helm and trim down hard. If you have a split mainsheet you must tighten your shrouds to help straighten your forestay.
The Comet is a boat which responds to proper tuning techniques. Using the methods described in this guide should help move you up in the fleet.