BENDERMENDER

So, in spite of all the well meaning advice and your best efforts, you've done the deed anyway. As I said earlier, if the mast is kinked, it is pretty much terminal. However, if it is only curved there may yet be hope.

If you are serious about rescuing the situation, take your time. I can't recall how many times I've seen a bunch of guys, mid regatta, levering a bent mast between a couple of trees, usually accompanied by the following***..."it's nearly there.... just a bit more....Ohh S###!!!".*** This is not the best way to fix a mast. A pressure point (like a tree) can collapse the side wall of the mast, even with a cloth pad.....and that's game over.

The following is a technique that I have used to straighten quite large bends successfully on a number of occasions. However, there can be no guarantee that it will always work, and the bend characteristics of the straightened stick are unlikely to be identical to the original extrusion.

The first step is to use a straight edge or string line along the mast track to determine the start and end of the bend. Mark these points on the mast. If the bend extends through the hounds, remove them, as pressure applied to them during the process could kink the mast.

Get a straight, clear grained timber board 12mm thick, 75mm wide and at least a metre long. The timber has to be as bendy as the mast and not likely to break. You will need two solid points that will be the anchor point and the bending point (like the trees mentioned above), but horizontal is better. I use the end of the house and a sawhorse.

Tie the board to the mast so that the mid point of the board is positioned at the start of the mast bend. If the board is flexible enough it will spread the load and prevent a pressure point which could kink the mast. If it is too stiff it will create pressure points at each end.

Place the mast base under the anchor point and the centre of the board on the bending point with the mast bend uppermost. Measure the height of the end of the mast off the ground.

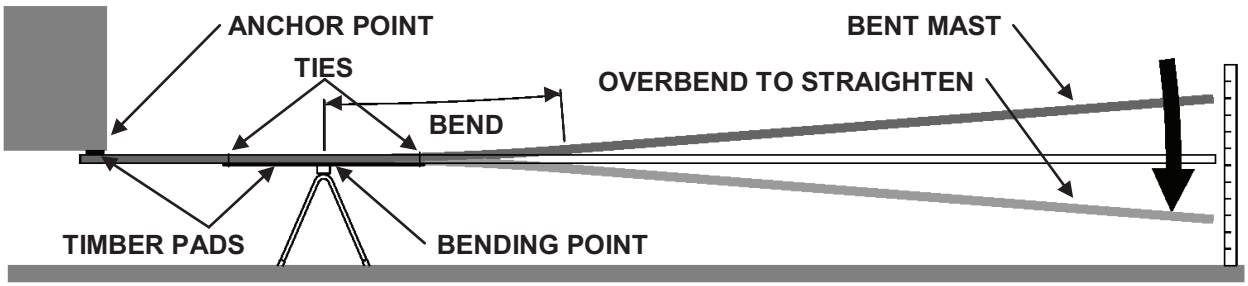
Now push down gradually on the end of the mast until it is bent below horizontal by about 30cm. Hold it there for about 10 seconds, then let the mast up and measure the height of the mast end off the ground again. If it hasn't changed, repeat the process but push down a little further until the measurement changes (don't get too carried away now, 50mm extra at a time will do). Once the mast starts to respond, you will have a better idea of how much pressure is required, and you can develop a feel for when the mast gives. Don't bounce it up and down, use your body weight and steady pressure.

Now use a straight edge, string line or a good eye to check if the first section of the bend is now correctly aligned. If so, reposition the board and mast so that it is at the new start of the bend and repeat the process. Once the bend is pretty much removed, work carefully back along the mast until it is all looking pretty true.

Warning!!!...resist the urge to hurry and bend too far in one go. Protect the mast at the anchor and bend points as dents aren't removable. Take special care when bending near the hound rivet holes as this is a weak point and the mast can crack there.

Straightening the mast sideways is not too difficult, but if it has also bent backwards you may not have much success straightening it because of the greater rigidity and the sail track.

There are certainly other methods for straightening a mast that people swear by, including bending it over a tyre....choose the one that works for you. By all means accept help if offered, but don't be rushed...it's your money after all that will have to pay for a replacement.



For more on PT mast issues, visit the APTCIA website and look under - Help and Advice / Sailing a Paper Tiger
http://www.papertigercatamaran.org/