

This document supports a complete article on the building, by GMT Composites of Bristol, Rhode Island, of a mast for the sailing vessel *Morgan's Cloud*. It should be read in conjunction with the article, available at:

[http://www.morganscloud.com/gear\\_failures\\_fixes/gfmast.htm](http://www.morganscloud.com/gear_failures_fixes/gfmast.htm)

To learn more about *Morgan's Cloud* and her owners, Phyllis Nickel and John Harries, go to:

[www.morganscloud.com](http://www.morganscloud.com)

**From:** John Harries & Phyllis Nickel [pj@morganscloud.com]  
**Sent:** Sunday, January 15, 2006 6:05 PM  
**To:** Chuck Poindexter (chuck@soundrigging.com)  
**Subject:** Developments

**Attachments:** \_MG\_0052\_detail.jpg; \_MG\_0024.jpg; \_MG\_0030.jpg; \_MG\_0035.jpg;  
\_MG\_0047.jpg; \_MG\_0050.jpg; \_MG\_0052.jpg

Dear Chuck,

I hope you had a good holiday season.

Some issues in relation to "Morgan's Cloud's" GMT supplied mast have come to light that I feel you should be aware of:

1). After a day with a laser survey machine Jay and I have determined that:

- The mast tube is twisted 8 degrees +/- 1 degree, in 60'7" length.
- All four spreaders are grossly out of alignment. I have a table of offsets but I think that the attached photos say it all. The difference between the tips of the lowers is 11-1/2" +/- 1/2".

2). While researching the best way to strengthen the storm trysail track I interviewed one of the US's most experienced high tech composite boat builders who also has experience building carbon masts for America's Cup boats. He is not a competitor of GMT's and has no axe to grind. He stated that (square brackets are my own thoughts, not those of the composite boat builder):

- It is ALWAYS poor practice to thread into carbon due to the fundamental qualities of the material.
- David's testing is flawed and does not apply to the trysail track since GMT testing was of a single load to failure. The problem with threading carbon is repeated sharp loads, exactly the case with the trysail track. In this case failure WILL happen at a small fraction of theoretical single load strength after a few thousand cycles.
- In his opinion your empirical methodology in determining that the track was safe was flawed because the statistical sample is vanishingly small:
  1. There are a very small number of carbon masts with storm trysail tracks. Most carbon masts are on race boats. [Many of the tracks that are on carbon fiber masts may have backer plates.]
  2. A tiny number of boats that have storm trysails have ever used them. [I have only used one once in survival conditions in 100,000 miles of sailing, but that one time it saved my butt.]
  3. It is unlikely that even if a boat had used a trysail that the storm was of the severity of one we might be subjected to in the high latitudes.
  4. [In recent years, since carbon masts have been available, heaving-to under trysail as a survival tactic has fallen out of favor. Most people now run off using a drogue. It

is quite possible that not one single boat has ever tested a trysail in survival conditions attached to a carbon mast without reinforcement.]

In light of the above Phyllis and I feel that you let us down badly in your professional capacity, particularly since our lives could easily depend on repairs made under the guidance of your report.

It is not our intent to pursue the matter further and I certainly don't wish to debate the above points with you. However, we felt that you should be made aware.

Should you wish to issue an amendment to your report, we would feel that it would go a long way to making these errors right, as would a refund of some or all of your fee.

These errors in your report will cost Phyllis and I a lot of money, particularly since you took it upon yourself, without being instructed to do so, to include estimates in your report. Obviously the amount you allowed for realigning one spreader will not be near enough to sort out all 4. My fear is that if you don't at least state that the estimates were based on false assumptions, David will use them to refuse to pay Jay for much, or even most, of his time, which would be grossly unfair.

Regards  
John

John Harries & Phyllis Nickel  
[www.morganscloud.com](http://www.morganscloud.com)

From: Chuck [soundr@snet.net]  
Sent: Wednesday, January 18, 2006 3:00 PM  
To: david@gmtcomposites.com  
Cc: Jay Maloney; John Harries  
Subject: RE: most recent email w/ photos

David,

I was not shocked John readdressed the storm try track issue and after reviewing the photos of the spreader alignments/ section twist I agree there are additional corrections to be made. I defend my original finding due to the fact I could not possibly have detected the extent of the misalignment/twist with the mast in the boat under rig tension.

The threading of carbon is a sensitive area, and your very life can depend on a storm trysail track. This was an area which I struggled with in my initial assessment and I acknowledge I did not give it due scrutiny. I have been in contact with Ted Van Dusen, Mike Feldman, and Alan Massey to gain more knowledge in this area and I will make comment on that area of my report shortly. I too was initially informed that John was going to install a backing system on his own. I know you tested the 5mm fasteners in .17"

wall carbon- can you verify the wall thickness of the section area where the try track is installed on MC?

John has based his appeal on an interview with one "carbon expert" [name deleted here] and the fact that because heaving to under storm try has not been a common practice in recent years this fastening method has not been completely proven to be reliable in the field.

I will do my best to reasonably address the issues at hand. If you would like to make comment on other issues feel free.

I have been completely upfront and forthright with all parties involved. I have shared copies of all correspondence and will continue to do so.

I will make another attempt to assist everyone in determining a fair solution, however if it gets back to what I consider to be unreasonable finger pointing contest I will provide all parties with a full refund and respectfully excuse myself from the mix.

Respectfully,

Chuck Poindexter