## Chart Plotters are Handy, but...

My wife and I recently returned from a cruise to Barkley Sound. While we were there one of the things we all fear most happened – we hit a rock. Not a direct hit fortunately, we took some paint off the keel and scared ourselves but the boat is okay. At the time we hit we were being very careful as we were passing a rocky area. We had checked the paper chart in the morning to see what areas would need our full attention and this was one of them. The chart plotter showed we had 30 feet of water at the time. So, how did we hit?

As we approached the rocky area we had zoomed in to ½ mile on the plotter to get a better view. We could clearly see the exposed rock to our port and the area we were heading over showed 30 ft. After the hit we zoomed in to ¼ mile and right next to the 30 it now showed a 3 ft. sounding. I checked the Canadian paper chart and it showed 1 meter (3 ft.) also.

That afternoon, after we were anchored, I used the chart plotter to check several other shallow areas and found the same issue was present; unless I was zoomed in to the ¼ mile scale, the chart plotter was not showing me all the soundings and at ½ Mile, the ones it was showing were not the shallowest depth. So, we changed our procedure for the rest of the trip and, for that matter, from now on; when we got to a shallow area, we verified what the plotter showed with the paper

chart before entering the area. At times, we had to slow the boat or even stop in order to have time for the verification, but it was worth it. And, yes, we should have been doing a better job of this to start with; we didn't and paid the price.

Chart plotters can do some amazing things and are worthwhile, but they have to be used correctly and should not become the sole source of navigational information. I use the plotter mostly to show my course over ground vector and to verify I am where I think I am. If available on the unit, having tide and current information is handy, but be sure the time zone is correctly set or these will be off. Other features like AIS and radar overlays are also very useful. But all this information and the jumping from screen to screen take time and attention, which can be distracting and dangerous.

I cannot emphasize enough the correct mental approach to your electronic navigation aids is that they are just that... AIDS. For example, if you are engrossed in overlaying the chart page with a radar picture and the current drifts you significantly sideways, it could put a rock between you and your waypoint. And a chart plotter will not tell you when there is a log in your path, so always maintain your situational awareness.

So here are some suggestions around the use of chart plotters:

- As indicated earlier, use paper charts to verify what you are seeing on the plotter and to get a full view of the data and area.
- Become very familiar with your plotter when anchored or at the dock. This way it will be less distracting when you really need these functions and lots of things are happening.
- If you can, have a second person on watch with you and either give them the wheel or ask them to watch for logs and traffic while you are looking at the plotter. In the fog, while we are watching the radar, AIS and navigating from the plotter, we find having a second person on watch is a must; there is simply too much to watch for one person to do it well.
- When working with the plotter, train yourself to look up frequently, it is very easy to become engrossed and forget to look around. It might help to set a rule or pattern for yourself; for example, after pressing any two buttons, look up and scan for boats and logs.
- Zoom in and out frequently when in shallow waters; in order to get all the data available and, if needed, out to see where you need to steer next.

If you are in open, calm waters with good visibility, these ideas might be excessive but as conditions worsen and traffic increases they become more important and/or necessary.



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