



# Skip Novak

Relying solely on electronic charts when you're sailing in remote areas is a mug's game. Keep your paper up to date and 'navigate'

**R**ecently I had to upgrade my electronic charts for Tierra del Fuego and Antarctica for this season. It is all so simple, compared with messing around getting paper charts corrected and then painfully paying a fortune for the ones that are out of date, worn beyond recognition or beyond correcting.

However, no matter how laborious it all seems, it is still necessary and we should not be fooled by the realities of navigating electronically anywhere outside well-charted waters that are proven.

The grounding of *Team Vestas Wind* on a reef in the Indian Ocean on Leg 2 of the Volvo Ocean Race earlier this year has been analysed in great detail and in spectacular fashion reopened the subjects of scale, resolution and chart data. But I venture to say most of us are as usual staring into the chart plotters, lessons learnt or not.

In Europe you can bring a boat alongside the jetty in utter confidence in full electronic mode – maybe. Further afield, while world cruising, it is best simply to adhere to straightforward protocols regarding the use of both paper and electronic charts rather than to expect ultimate reliability electronically when there clearly is none.

Certainly in high latitudes – and also in remote tropical areas – suspicion should be a mindset when using electronic charts. Ask yourself: how comprehensive is the hydrographic survey in the first place? Are you 100 per cent sure that the chart datum agrees with your GPS?

Those two questions alone, as they both introduce uncertainties, should put any navigator worth his salt on tenterhooks. By that I mean the feeling we always had inshore prior to GPS when continuous checks and

cross checks of range and bearing were automatic. It was called 'navigating'.

Electronic charts are definitely a useful convenience when passagemaking on small scale and sailing well offshore along coastlines. This is safe enough and it negates the need for any physical plotting, although purists will still put a mark on a paper chart at least daily or watch per watch. At the minimum it is prudent at least to record the GPS position in your logbook hourly.

As we approach the coast and have visual contact with the shore, the level of vigilance must give way to increased due diligence. Start bringing out the larger-scale paper charts. Start plotting positions. Start watching the depth sounder. And, most important of all, when you make contact with the land, get off your butt and go outside and observe.

Pre GPS, at this point we used to take running fixes over the compass on points of land to get our distance off. If you have radar, fire it up and this will give you the same as long as there is adequate elevation.

Now I suggest you do an experiment. When really close inshore, turn off the GPS and chart plotter and rely on the depth sounder, radar if you have one and visual observation. After dropping anchor in your cove, turn the GPS back on. Often, if it is to be believed, you will be surprised to find you have no need of the dinghy – as you are a mile inland!

Of course ships and even yachts, subject to flag state requirements, are now allowed to go completely paperless, provided they have two separate electronic systems (power supplies included). But remember, ships travel known routes without deviation and certainly never go off soundings. On yachts we can never or should never claim this luxury while cruising the 'far side of the world'.

Keep the paper on board and keep your pencils sharpened at the chart table – that is if you have a chart table at all, which also seems to have gone by the board and out of fashion in yacht design.

But that is another subject again.

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