



The Role of Training in the use of Electronic Navigation

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Electronic navigation in its various forms is the single most positive development since man first put to sea!

Who made that bold statement?

There are some parallels between the evolution of man and that of navigation.....

Sometimes several steps forward also involve a step backwards.

**We've been on quite a journey
when it comes to navigation**



The common thread across all of these tools was that they all required the navigator to have an underpinning knowledge of basic navigation.

All required the ability to plot a fix on a chart and to make decisions based on that fix.

The Game changers – Chart Plotters and ENC's

For the first time ever a novice boater could go to sea without having an understanding of the fundamental principles of navigation!

Or so they think.....

However, it is not without it's challenges.....



- Price Waterhouse Coopers
- HMS Nottingham
- Cork Clipper
- Vestas

Some unintended consequences of chart plotters and ENC's

- Complacency
- Believability
- An assumption there is no need to learn to navigate
- Lack of awareness of potential errors and failure points – inaccuracy for example
- Over reliance
- No secondary means of position fixing
- Confusion with layering on vector charts

Who is being caught out?

- New boaters – don't know any better and don't learn to navigate
- Existing boaters – do know better and do know how to navigate but become 'lazy'
- Professional navigators – being complacent

After opening the program it takes 5 clicks through various menu selections to reach a point where you have sight of this warning:

“All charts and maps are for reference purpose only.”

After turning the unit on and navigating through 4 layers of menus to the End User Licence Agreement:

Point 12 of the EULA states.....

12. SAFETY WARNINGS

Marine and lakes Products are designed to provide ancillary aid to navigation by facilitating the use of authorized government charts, not to replace such charts. Only official government charts and notices to mariners contain all information needed for safe navigation. The user is responsible for the prudent use of Products. Any track generated by electronic charts, autorouting software or similar tools are basic suggestions for route planning only and must not be used for direct navigation.

Navionics encourages hikers, bikers and skiers to comply with all applicable rules, including speed limits, and recommends them safe, prudent and vigilant behaviors. The user participating in road traffic and/or in any other environment (such as mountain) is responsible for the prudent use of Products and shall act in such a way as not to harm or endanger or hinder or create inconvenience to any other person.

In the event you make it past the End User Licence Agreement you are greeted with these warnings:

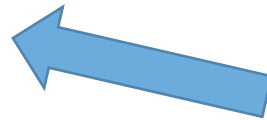
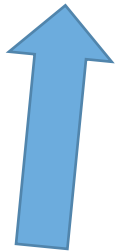
Warning and Acknowledgements

WARNINGS: The electronic chart is an aid to navigation designed to facilitate the use of authorized government charts, not to replace them. Only official government charts and notices to mariners contain all information needed for the safety of navigation, and as always, the captain is responsible for their prudent use.

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A UKHO chart converted to RASTER format clearly shows the sector light extending several miles from its source out into the approaches to Dartmouth.



The role of training in electronic navigation

- Provide an underpinning understanding of navigation
- Provide an understanding of electronic navigational resources and their application in an appropriate context
- Ensure an awareness of the shortcomings and pitfalls associated with electronic navigation
- Ensure a detailed understanding of both the need and methods of secondary means of position fixing

Training providers, electronic navigation equipment manufacturers and anyone with an interest in the safety and well being of boaters has a responsibility to ensure those going to sea are encouraged to use sound navigational practice at all times.

Questions?