



Navigating using Radar

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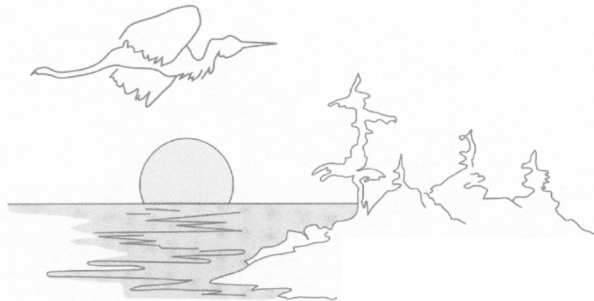
Acknowledgements:

If a picture is worth a thousand words then I owe Peter Matthews volumes of thanks for his outstanding efforts in producing the excellent graphics which clarify to perfection, the explanations within these pages. It was not a simple task and Peter was very patient with my mumbles and fumbles throughout the production of this work. Peter has a most interesting web site which demonstrates his flair for beautiful and fascinating art and graphics [dogandcat.ca/illustration.htm]. Thanks Peter!

Special thanks also to Dan Spurr of Practical Sailor magazine for the use of the photograph of the JVC radar antenna.

Finally, my thanks to Terry Lang, Doug Hay and Cavan Ford, all of the North Bay Power and Sail Squadron, for encouraging me to make this work available to all Safety Minded boaters, wherever they might be - fair winds to all!

DMW



Background

Navigation purists got quite a shock in the mid 1980s when the Global Positioning System [GPS] burst upon the navigation scene. For those who could afford it, this new “black box” could tell a navigator where she or he was to within – gasp – 300 metres, most of the time, and usually much better than that!

As GPS became more popular, and much more within the economic grasp of the average recreational boater, its accuracy increased even more and the necessity of knowledge of Celestial Navigation to the Blue Water sailor suddenly diminished. Of course the purists rightly pointed out that a sextant requires no batteries, but the “newbies” countered that celestial navigation could now be considered “the back-up”, and perhaps for emergency use only?

By the mid 1990s the Canadian Power and Sail Squadrons [CPS] National Training Committee had witnessed some enlivened discussions over where the rapidly emerging “Electronic Navigation” should or could fit into the CPS's excellent suite of enlightening courses for the recreational boater. In the CPS hierarchy of “grades” the penultimate level of achievement was the Navigator certificate, preceded by the Junior Navigator. Both were excellent and demanding courses about Celestial Navigation and the completion of them resulted in the CPS Members being able to head offshore with confidence that they would be able to achieve landfall at their intended destination. These two courses were subsequently merged into the Celestial Navigation [CN] course of today and upgraded to better meet the needs of the more technical savvy of today's deep sea navigators.

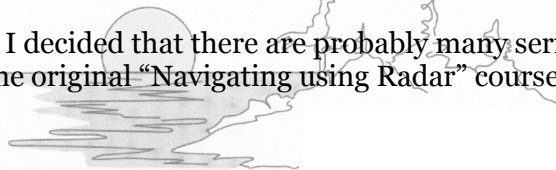
At the time it was thought that a course made up of separate parts covering specific electronic “disciplines” should be written to form an Electronic Navigation [EN] grade. The final certificate level of Navigator could then include some credits from each of the EN and CN fields, a primary capability plus knowledge of a “back up” method of finding one's location for the well rounded CPS member.

To this end, the then embryonic “Navigating with GPS” course was to be upgraded and three new courses would be developed, “Navigating using Radar”, “Chartplotters”, and “Depthsounders”. If there was a demand for a course about Integrated Systems [computer based navigation] that would be considered.

These course “modules” would be written to the same general level of information and detail as the existing JN and N courses meaning that an individual completing the last grade, whatever the final nomenclature would be, would be truly competent to navigate worldwide. Although these principles were not “written in stone” work would be started on developing the courses to meet the increasing thirst for illuminating information on the fascinating and increasingly available electronic devices for the recreational boater. The emergence of a new suite of “grades” would be resolved in due course.

Where “Navigating with GPS” and “Depthsounders” were relatively easy subjects, “Navigating using Radar” and “Chartplotters” delved deeper into more technical areas and both were brand new subjects for CPS courses. Development of both the latter courses started in 1995. “Navigating using Radar” was finally completed in autumn of 2004 having been reviewed “ad naseum” by members of the National Training Committee. Unfortunately it was suddenly decided that the course was “too advanced for the 'average' boater” and was consigned to the round file to be replaced with a “less challenging” version, the writers of which had a copy of this course to guide them through the complexities of Radar.

After almost four years I decided that there are probably many serious boaters who just might get some real pleasure out of the original “Navigating using Radar” course – here it is - enjoy!



DMW