

Is my compass accurate?

If it isn't, how do you know and what should you do?

With the intermediate and advanced powerboat courses becoming more popular, we are often asked about the accuracy of the steering compass. Here is some sound advice to consider when using a compass on a small high speed boat.

The degree of accuracy required when navigating a small craft at speed is the same as for a cruising yacht travelling at a more leisurely pace. However, the faster you are going the quicker things can go wrong! It can be argued that asking the helm to steer a course of 083° magnetic would be OK, but consider the constraints of the steering compass – most only have 5° graduations. If it did have 1° graduations, at speed the helm would forever be correcting his course and possibly be paying less attention to keeping a good lookout.



In theory we should be aiming to steer as accurately as possible. However, in practice at speed, maintaining a course of +/- 2° is good.

Compasses on small fast craft are notorious for being less accurate than desired. The main cause of this is the increasing amount of electronic and other gadgetry being squeezed on to a small console, resulting in the poor old compass suffering from deviation. In addition, various other personal items often get placed near to the compass, compounding the problem. One instructor I know always attaches his handheld VHF radio to the grab handle on the port side of the RIB, whilst his colleague places his radio on the starboard side. Confused? Well if you're not then the compass sure is!

Many training centres have their compasses swung on a regular basis. Others rely on deviation cards. Most just accept that the compass is possibly out and use a hand bearing

compass as confirmation of just that. Here are a few tips for overcoming the inevitable compass deviation on a small fast craft:

- Buy the best quality steering compass that funds will allow.
- If it's a good quality instrument, consider having it swung professionally.
- If possible, keep all electronic and other kit away from the compass.
- Once you are happy that all permanent kit is in place, test the accuracy of the compass in relation to a hand bearing compass strategically placed in another part of the boat, far from external influences. Try this in lots of directions and, if there is significant deviation, consider creating a deviation card.
- Compare the steering compass to the one on the GPS which, if fitted to the console, is probably contributing to the deviation anyway!
- When undertaking a passage, confirm regularly that the course

New Powerboat Instructor Handbook

The new edition of the RYA Powerboat Handbook is nearing completion and will be out in the summer.

This is a total re-write of the previous version published in 1997. It covers student learning styles, methods of instruction, how to give effective feedback and specific guidance on teaching the different elements of the powerboat syllabus.

Included with the book will be a CD containing many useful resources and additional background material not included in the text of the book.

Written by Clive Grant and Colin Ridley, it contains top tips for new instructors as well as useful reminders for more experienced instructors and trainers.

- being steered by the helm is the one required. This can be checked by using the hand bearing compass from a safe place on the boat.
- Resist the temptation to place random kit near to the steering compass as this may induce an unexpected error not calculated for in your passage plan.

Unfortunately, in small fast craft, there is no perfect solution to this difficult problem. However, by being aware of the situation, applying the advice above and continually assessing the accuracy, you will reduce the impact of this error.