



Want to Get More from Your Boating?



Exploring harbours we haven't been to before, or even finding a new anchorage in your favourite harbour, can be one of the best things to do when afloat – relaxing and challenging in equal measure. With this in mind, **Paul Glatzel** discusses the importance of understanding buoyage ...

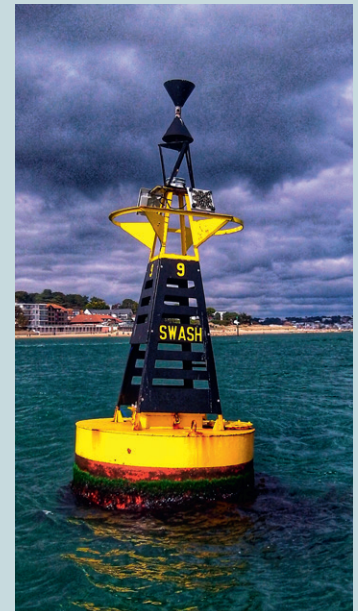
In our first session of this winter series of articles we looked at the basics of charts, chartplotters and tides. Developing on from this, we are now going to focus on the subject of buoyage, and then pull all of our chart, tide and buoyage knowledge together to identify what we need to do to get from A to B. Having this capability gives us the skills to be able to explore new places and navigate harbours and estuaries.

The wonderfully colourful floating objects we see around our ports, harbours and estuaries are known as 'buoyage'. To those who understand how to interpret these floating and fixed objects, they

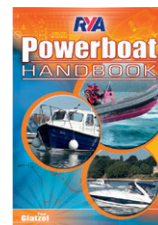
provide a route map into harbours helping you to navigate the safer bits of water and stay clear of the hazards. It's all too easy to assume that staying between 'the reds and the greens' is 'safe', whereas being outside them is 'unsafe' – this is overly simplistic. To be able to navigate safely you need to have access to a chart of the area and be capable of determining what the tide will be doing when you are there. A compass is key too, as it helps you to make sense of what are known as 'cardinals'. So let's look at each of the buoys we see afloat.

So we now have a reasonable understanding of buoyage and how

Lateral marks/buoys: These are the red and green buoys that mark the sides of a channel as we proceed into a port or harbour. The red squarish ones are 'port lateral marks' (or 'cans'), and as we go into harbour they are on our left, whereas the green ones are more triangular (or 'cone' shaped) and are starboard lateral marks on our right. A good rule of thumb is that the bigger the buoys, the bigger the vessels they are seeking to guide. Very large reds and greens tend to be aimed at large commercial shipping, and smaller floating buoys at leisure craft, while red and green posts with shaped topmarks are found in smaller channels and coloured posts without topmarks in smaller channels still. Don't forget, though, that it may be perfectly OK to be



outside a channel – check the tide and the chart, and don't assume that being in a channel is fine as it still depends on what the chart indicates when combined with tide. Check and check again.

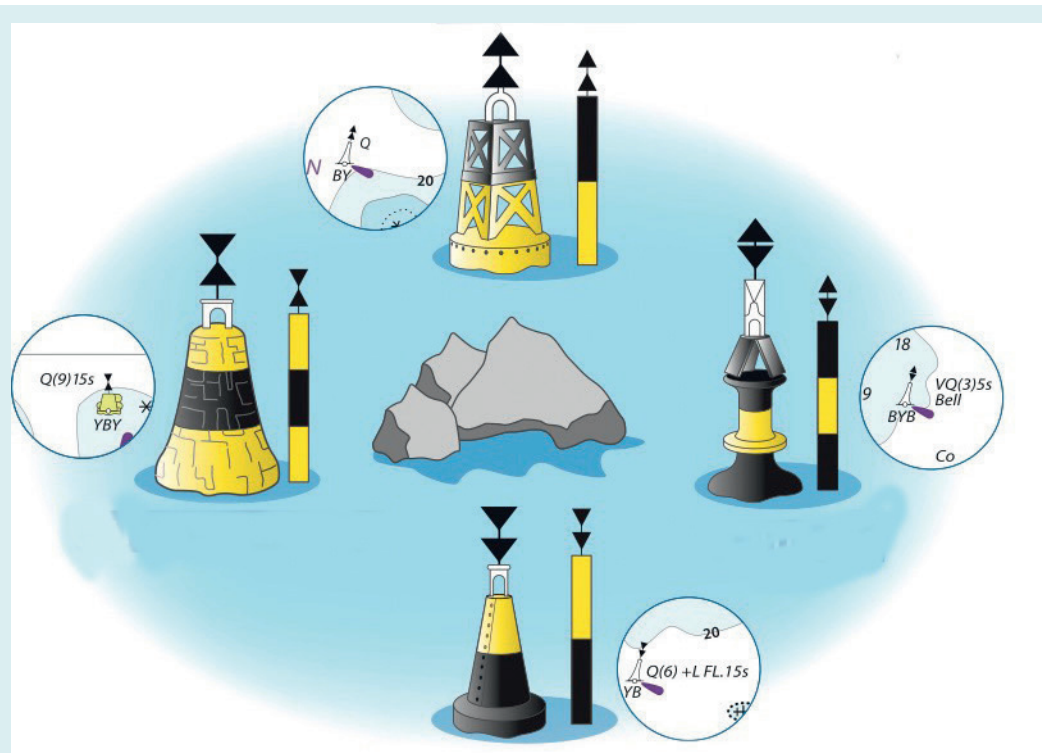


it is used. We also know from our last article that a chart (whether paper or electronic) allows us to interpret what we have around us in the area we will be boating, and with tidal information we can predict what level of water we have and whether we can safely head where we want to go.

... we can use our pilotage plan in conjunction with our chart and chartplotter, adopting what I would refer to as a 'robust multilayered approach' to navigation.

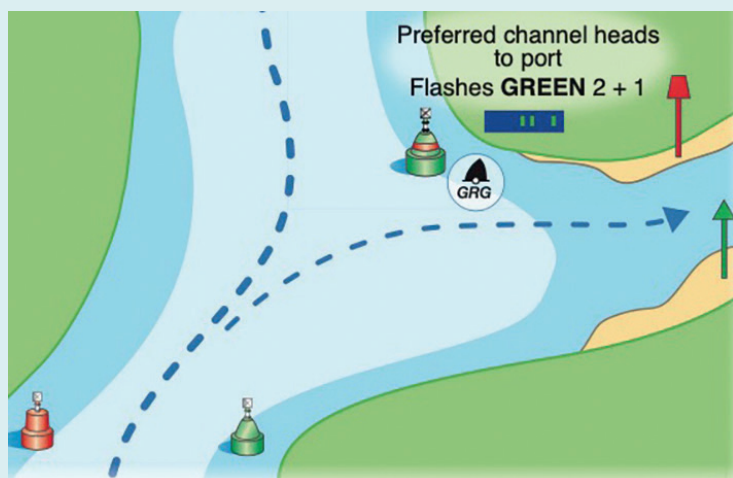
So let's just crack on into that harbour, reading the chart as we go ...

We all know that while heading into the unknown without a plan can be exhilarating, the risks are increased and things can go wrong. This is the same with us on our boat, and while in some situations we will get away with that approach, we as skippers have a legal obligation to keep people safe and to plan what we are doing when we head out. In practice, what this means is that before we head out, we need to look at our charts, know the tides, check the weather and put together a plan to get from A to B. What form this plan takes isn't defined, so it may be that if we are going a short distance to a location that we regularly head to, reviewing the weather and tides and telling those on board what we are doing will suffice. On other occasions, and especially if entering areas we are less familiar with, or if travelling greater distances, documenting our plan makes total sense. Doing so also helps us to distil the huge amount of information we find on charts into a simpler form. If close to shore, in a harbour or in an estuary, we call



Cardinal marks: Named after the cardinal points of a compass – north, east, south and west – these buoys or posts show us where clear water is. A north cardinal mark shows us that safe water is north of the mark. Be careful, though, as you still need to be sure there's enough water for your boat whichever side you choose to pass. You will see that with each of the cardinals, the topmark triangles point in different directions according to which one it is. The triangles also point to where the black colour is on the buoy – a further indication of which one you are looking at in case you can't see the topmarks. Cardinals have many uses and at their most simple are placed around shallower areas, while they can also be used to join channels, highlight turns in channels or even provide a guide to vessels when lining up to enter a harbour. The chart is your friend here and shows you how the cardinals are being used. A compass is key too, as to pass to the north of a north cardinal, for example, you need a compass so you know which way to head.

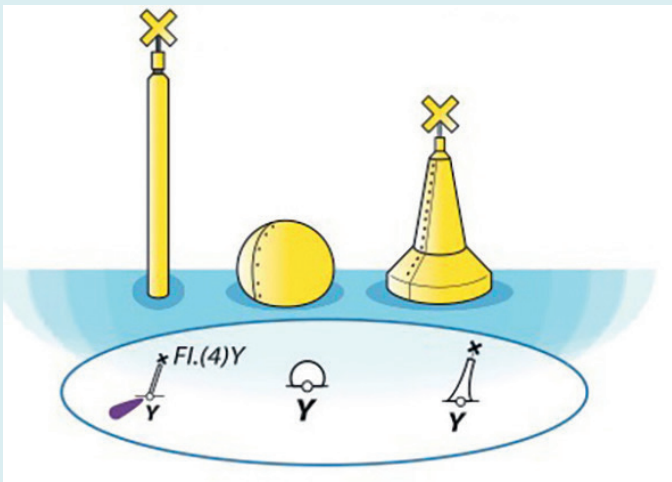
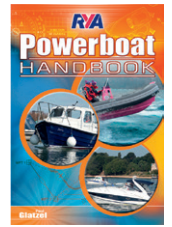
Preferred channel marks: These are another way of joining channels and are found in some locations. Imagine a situation where a channel splits as you come into harbour. At that point you would need a green buoy to mark the right-hand side of the channel to the left and a red one for the channel to the right. Rather than two buoys, the buoys are combined into one and the dominant colour and shape shows you which is the main (or 'preferred') channel of the two. If it's mainly green and cone shaped, the main channel heads to the left.



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Special marks: These are the other really common buoys you see. They can be any shape and size and are always yellow. They may have a cross as a topmark. They can be used for lots of things – to mark jet ski or waterski areas, as yacht racing marks, to mark pipe outfalls, wrecks and swimming areas, and so on.

this a 'pilotage plan'. As you can see from the image, the pilotage plan is a sketch of the key things we see when transiting the area; as we proceed we can 'tick off' the objects as we pass them, confirming we are on track.

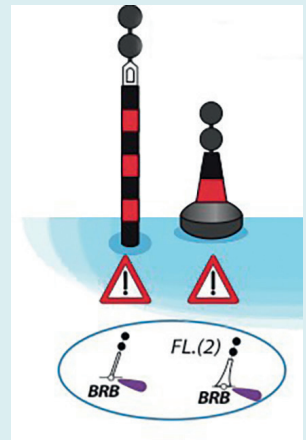
As we enter the area, we can use our pilotage plan in conjunction with our chart and chartplotter, adopting what I would refer to as a 'robust multilayered approach' to navigation. If we plan on entering the area again, all we need to do

As we enter the area, we can use our pilotage plan in conjunction with our chart and chartplotter

is check our previous plan to see what has changed and look at the current weather and tide.

In this article, we've enhanced our knowledge of charts and tides by adding to it an appreciation of buoyage. A pilotage plan simply brings this knowledge into one place and uses it to plan safe and effective routes between places. Over the winter months, why not create some pilotage plans? Use an app like Navionics and create plans that you can practise executing when you get back out. Doing this in places you know leads neatly into doing it for less familiar locations. ■

Have fun planning and an enjoyable and safe time afloat!

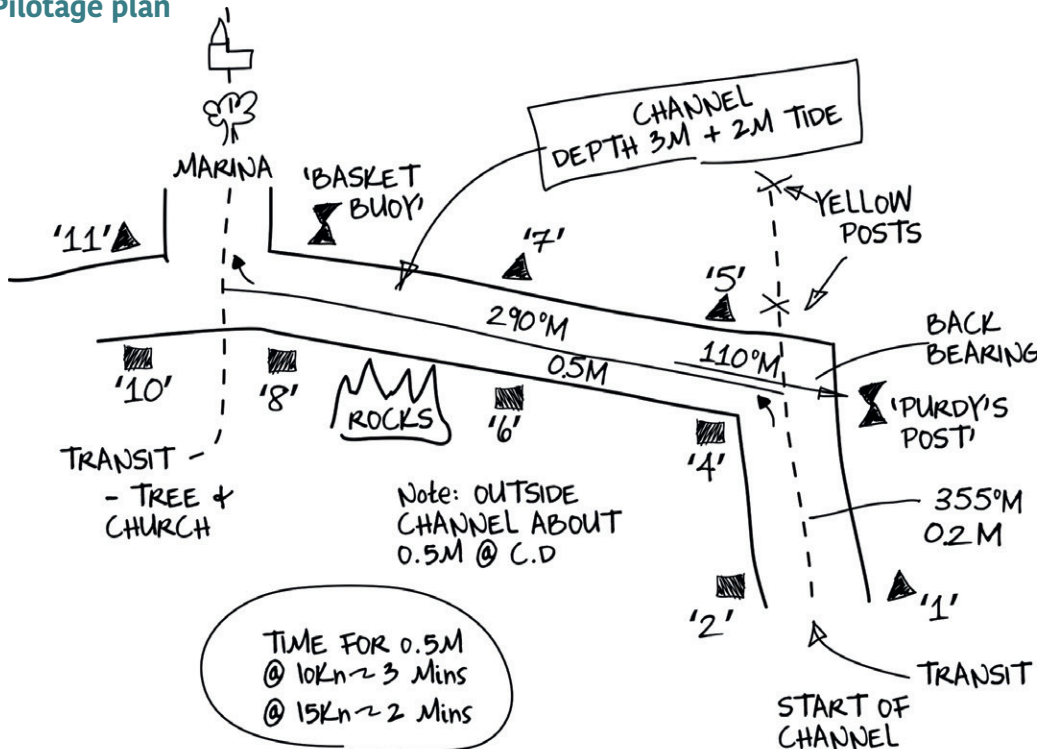


Isolated danger marks: These are not too common, but it's important to understand that they indicate an area to stay clear of immediately beneath them. They are often placed over wrecks or shallow areas where all around is clear water.



Check out PBRTV where Paul Glatzel and Tom Montgomery-Swan discuss all aspects of getting afloat from choosing a boat to navigating in rougher conditions. Coming Soon: more video training sessions!

Pilotage plan



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