Transits

This is the final article in this series and deals with another subject that has caused difficulty as seen at sea and been mentioned in reports.

Beloved of Yachtmaster examiners and certain writers, transits can be an ideal pilotage technique. The idea is simple in the extreme: if you can see two marks that are in line you are on an extension of that line.

Some transits are marked on charts. They may or may not be visible.

The previous two articles referred to places with such transits: Port Blanc has a back marker which is supposed to be a mill which has not been seen in living memory and the Spire of the church at Omonville is hidden behind trees. A chart of Sark shows a number of transits with Sark Mill as a back marker. Even if you can identify it (and I have never been able to) it disappears over the cliff well before it would become useful. The leading lights at the entrance to the Treguier River are brilliant and unmistakeable but even Tom Cunliffe (Shell Channel Pilot) admits that he can't find them during the day. I could go on.

Others can be crystal clear such as the two sets that mark the measured mile near Polperro, which most sailing members will have seen. A particularly picturesque one is the main channel to the Isle de Sein: the third cottage in from the end of the quay (conveniently painted white with a vertical black stripe) in line with Men Brial lighthouse.

I don't suggest going there in weather anything remotely like the above! But a fascinating place to visit in good conditions.

In summary if you are intending to use a charted transit you are not familiar with, see what supporting information you can find on how easy it is to identify.

They are however extremely accurate and not subject to unknown compass deviations or alignment problems that can apply to GPS in smaller harbours that might not have been resurveyed using GPS. The transit shown on the chart (say the church spire in line with the end of the quay) will have been keeping mariners clear of the rocks for the last 100+ years and will continue to do so but it may not be where the GPS shows it to be unless there has been a recent survey,

Transits don't have to be officially charted to be useful: as long as you can find two visible and identifiable objects on a line which is useful, they can be used.

There are two ways of checking a that a transit is correct. Making a positive identification of both objects. This is often much easier at night when the flashing characteristics of the lights will leave no doubt. The other way is to check the bearing with a handbearing compass. I suggest using both methods.

Following a transit is straightforward. Imagine a straight line from the back mark through the front mark and continuing out to sea past you - a piece of string if it makes it easier to imagine. If that imaginary line or string is to the left of you the yacht will need to go left until the marks come into line. So if you are heading towards the mark ask the helmsman to turn left (to port). If you are heading away (a back transit) you will need to turn right (to starboard). Rather than think at a time you might be tired you could simply point the way you want the yacht to go as described in the previous article on the handbearing compass. In practice when heading towards a transit the helmsman does not need anyone to con them as it rapidly becomes intuitive.

In this example (from LPt on Swedish Wikipedia) the line from the back through the front and continued out to sea is clearly to your right so that's the way to turn if you're going towards it or left (i.e. port) if you are going away from it or simply point the direction you want the helmsman to turn.

An interesting example of the use of transits is the pilotage to St Malo. The main entrance is the Chenal de la Petit Port. By day the back mark is difficult to identify so a compass bearing on Grand Jardin lighthouse will suffice. The line runs close to some rocks which are marked and visible and easy to avoid by day, but not all are lit so at night it's very different. The transit is then absolutely clear as a light (intensified when you're on the line) on the top of a hill onshore and Grand Jardin

lighthouse. This keeps you clear of the rocks until close to the lighthouse when a short change of direction (I use a bearing on a convenient East cardinal) brings you to a second transit of the same back light with a lower light (also intensified) leading to the port entrance. The two transits are under 2 degrees apart which shows how accurate they can, and in this case need to, be.