

# LSC Deep Water Route from Garston Rocks to Slipway End

Survey carried out by Oliver Shaw on 13<sup>th</sup> April 2013.

## NOTES

Launched rubber duck at 0800, on predicted height of tide 1.1m and below the end of the slipway, 25 minutes before LW. Proceeded with considerable difficulty because of frequent grounding, even with draught of only a very few inches, as far as just beyond Print Works Waypoint, when I ran out of water altogether.

Advised by radio from club, because at an elevated position they could see the layout of the channel better than I could, headed out from Print Works waypoint towards the middle of river in order to join main channel, at **53° 20.198' N 2°53.753 W**. That entailed passing through a very narrow gut, barely more than the width of the boat, with both oars pulling actually on the sand banks either side, in very little depth.

Still very little water, and elected to anchor and await greater depth. Then, with a little more depth, proceeded to Garston Rocks, arriving a Garston Rocks 2 waypoint at 1020, if I remember correctly, in which case predicted height of tide was 3.1 m.

Then motored back to slipway by the route shown on this chart, with the waypoints given, following the inside channel. Arrived back at slipway when tide was lapping the steep part at the end.

Predicted barometric pressure was 1008 mB at 0700, rising to 1008 mB at 1000. This is 5 MB lower than standard atmospheric pressure (1013 mB). Thus using the fortuitous relationship that 1 mB pressure change gives rise to 1 cm change in height of tide, actual tide heights in open water be expected to be 5 cm higher than predicted due to the influence of barometric pressure. That correction is smaller than the precision of the tidal prediction, and the correction this far up the estuary is likely to be still smaller.

No data is to hand on the quantities of fresh water coming down, nor on the effect of this on heights of tide, but we are not aware of the actual heights at the present time being observably different from the predictions

**I did not explore the depth further away from the rocks, but there is a spoil ground not far out from there for dumping mud dredged out of the Garston Channel, so there is a shoal of varying depth offshore from the Rocks.**

**My route represents the closest safe passage to the Rocks, and there is no problem with going a little further out. Upstream of the Rocks it represents about the middle of the present channel, although note that this is between sand banks and that they may move.**

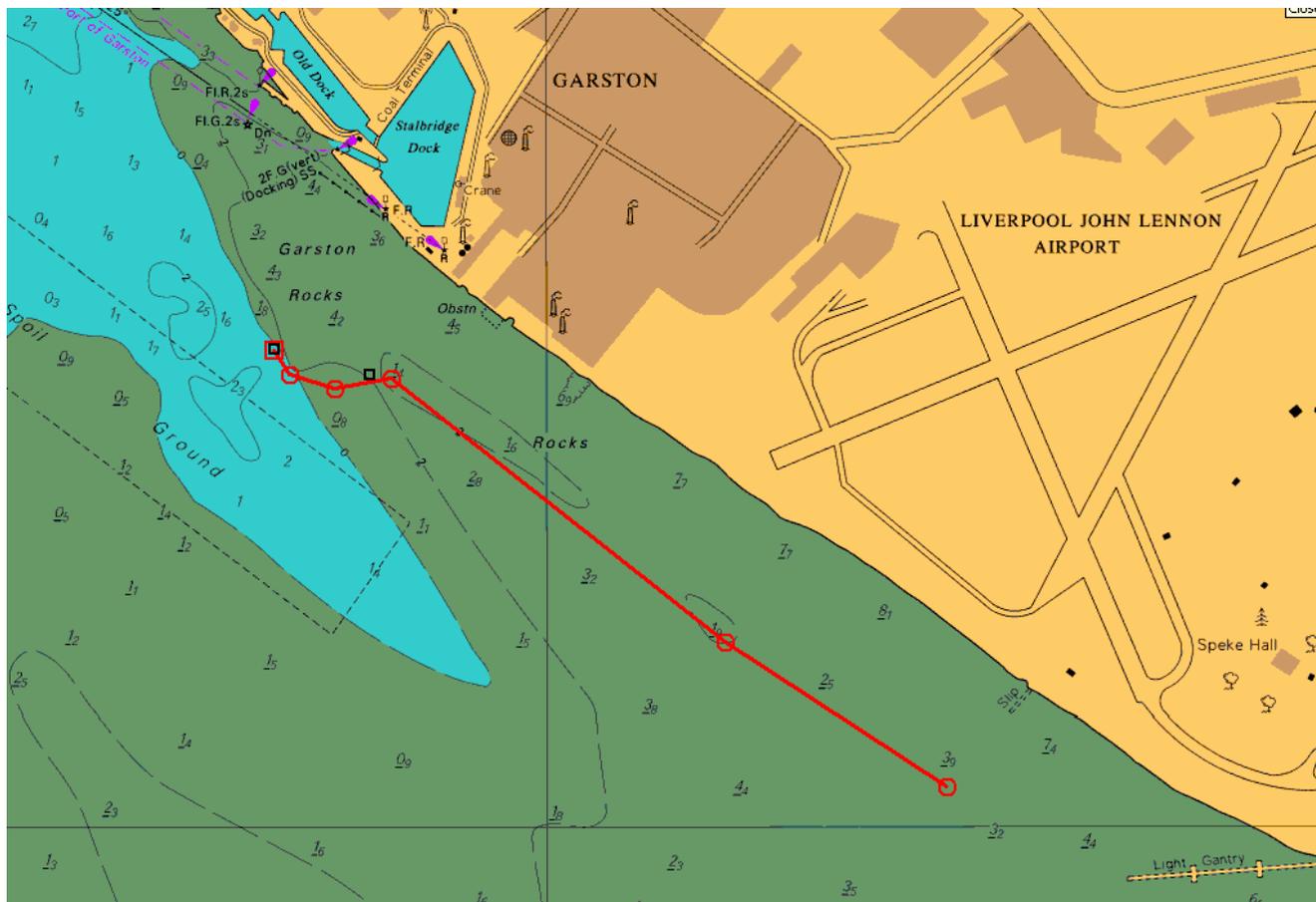
## **DISCLAIMER**

- 1. Please note that although rocks don't move, or at least not significantly - movement of tectonic plates notwithstanding - sandbanks most certainly do. For practical purposes in the context of navigation of small boats the position of Garston Rocks may be considered as fixed, but the channel through the sandbanks is as at the date and time of survey, and is liable to future change.**
- 2. This document has been prepared in good faith, but neither the author nor Liverpool Sailing Club will accept any responsibility for vessels getting into difficulty as a result of using it. Use your own prudence, as mariners in charge of your vessels.**



## Return Track.

**If you have enough water to get onto the slip at all, you have enough water to follow this route.**



### Waypoints, in order from seaward:

<u>Garston Rocks 2</u>	53° 20.604' N	2°54.574' W	
<u>Garston Rocks 4</u>	53° 20.572' N	2°54.541' W	
<u>Garston Rocks 6</u>	53° 20.555' N	2°54.446' W	(Used only for the second route)
<u>Garston Rocks 8</u>	53° 20.568' N	2°54.329' W	(Used only for the second route)
<u>Print Works</u>	53° 20.235' N	2°53.628' W	
<u>(Print Works Outer</u>	53° 20.198' N	2°53.753' W)	(Used only for the first route)
<u>Slipway End</u>	53° 20.052' N	2°53.163' W	

## **Transits.**

These are a very useful pilotage tool, particularly if one is not using GPS. In this respect this document is a work in progress, and I will try to identify appropriate transits to add to the document later.

Meanwhile I do have the first of them. If needing to cut through the sand bank between the inshore channel and the main channel further out, the print works provides a useful transit.

If the end wall on the upriver side is either not open or only just open, while the end wall of the bay just to the left of it is open, this leads through the gap.

I will try to upload a photo of this, once I have sorted out the technical difficulty of the computer not recognizing my phone camera.

If anyone else has good transits, please let me know, so that I can add them to the document.

## **EL Cheapo GPS**

Members may be interested in low cost methods of acquiring a GPS capability.

1. A basic handheld GPS set with no chartplotter, possibly even second-hand. They can be very cheap on eBay. Key in your waypoints in advance, and set up a route; the GPS will then give you course and distance to each successive waypoint in turn.

2. Smartphone users who already have a GPS facility in the phone (which is many of them, if not most of them) can buy an excellent chartplotter app from Navionics, at (I think, from memory, from when I bought my one) under £30. A waterproof case, such as those from [www.overboard.com](http://www.overboard.com), at (I think) under £15 completes the kit; again I am quoting the price from memory, from when I bought my one. I use this system as a backup, if I want GPS when I don't have the main set with me.