

Estimated Position Process

1. Plot your initial fix and CHECK it. Add the START time and Log reading
2. Find your True boat Heading:
Compass Course +/- Deviation = Magnetic Course +/- Variation = True Course
Then apply leeway if present to the True Heading, in the direction of the wind
3. Find your distance run from the final log reading minus the initial log reading, OR the Boat Speed for one hour.
4. Draw water track (1 arrow) from fix using the True Heading and distance run. This is the Dead Reckoning Position (with no effect of tide)
5. Determine tide set and drift for the hour of the passage:
Look up Tide Diamond or Tide Atlas for direction and speed of tide for the hour of the passage +/- High Water – springs or neaps?
You may need to interpolate the tide speed if between Springs and Neaps – see ‘Tidal Streams’.

1. Write down time of High Water for Standard Port (Victoria on RYA charts), add the DST hour if necessary. Find Range – Springs or neaps?
2. Add and subtract 30 mins to give start and finish of HW Hour.
3. Step forward or back till the passage time ENDS to find time of passage relative to HW

HW	HW	HW	HW	HW	HW	HW	HW	
-1	0645	+1	+2	+3	+4	+5	+6	
0515	0615	0715	0815	0915	1015	1115	1215	1315

6. Plot tide vector from the DR position to the Estimated Position EP (3 arrows)
7. Speed Over Ground SOG = Distance from initial Fix to EP
8. Course Over Ground = Bearing from Fix to EP (° T)

