<u>Course to Steer</u> process – you know your present position and required Ground Track. You want to find the Course to Steer to allow for the tide, and stay on the Ground Track.

1. Plot the initial fix and check it. Add the START time.
2. Estimate boat speed through the water
3. Draw ground track (2 arrows) from fix *beyond* your destination D.
4. Estimate approx time of passage = distance to destination / speed
5. Determine tide set and drift for each hour of the passage – normally one hour, but could be ½ hour or > 1 hour.

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

Look up Tide diamond or Tide Atlas for direction and speed of tide – springs or neaps?

Plot tide vector from the FIX to point T (3 arrows)

6. Set dividers for boat distance travelled, based on boat speed S, from end of tidal stream plot to cross the ground track at X. *(**NEVER** join the tide to the destination!)*
7. Use plotter to find bearing T to X of **Course to Steer (° T) -** 1 arrow
8. Apply variation (°M) to find Magnetic Course º (M)
9. Speed Over Ground SOG = Distance from Fix to X

   Time to D = <u>Distance FIX to D</u> x 60 minutes (for 1 hour passage)

   SOG
10. Estimate effect of leeway if necessary – steer into the wind.