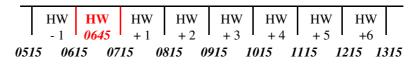
## <u>Course to Steer</u> process – you know your present position and required Ground Track. You want to find the Course to Steer to allow for the tide, and stay on the Ground Track.

- 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  $\frac{1}{2}$  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



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 <sup>o</sup> (M)
- 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.

