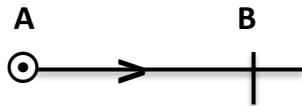


## PLOTTING DEAD RECKONING (DR) & ESTIMATED POSITION (EP)

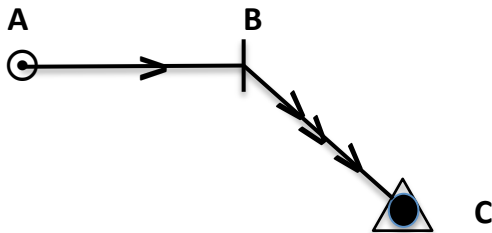
### Dead Reckoning




1. Plot Position. Mark Chart with  $\odot$
2. Plot Course Steered A to B
3. Mark off Distance Run (Speed) along A-B. B is your position according to Dead Reckoning (DR)

### Estimated Position


4. Establish Tidal Vector for time of plot.
5. Plot the Tidal Vector from B



6. End of Tidal Vector C is Estimated Position (EP) 
7. Course Over Ground (COG) is A to C (degrees T)
8. Speed Over Ground (SOG) is A to C (knots)

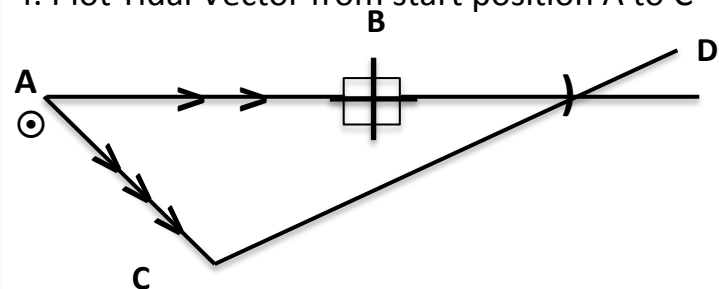
## PLOTTING COURSE TO STEER (CTS)

1. Plot Position A – mark Chart with  $\odot$

2. Plot Waypoint WPT B 

3. Establish Tidal Vector for time of plot.

4. Plot Tidal Vector from start position A to C



5. Measure Boat Speed from C and “arc off” to intercept (COG) A to B either before or after Waypoint.

DO NOT DRAW LINE FROM C TO WPT!

6. Course To Steer (CTS) is C to D in degrees T.