

**Axe Yacht Club**

**RYA Yachtmaster Shorebased Course**

**Chartwork Practice Examples 2 – Solutions**

**Question 1**

0720 Position -

46°05.376'N / 005°53.677'W



**Question 2**

Compass course to cross TSS is:

T	V	M	D	C
185	+6W	191	-3E	188

**Question 3**

22 July Victoria

HW 0847UT / 0947DST 5.0m; LW 0228UT / 0328DST 1.4m

Tidal Streams Proforma

Tidal Diamond	Tidal Hour	Set (°T)	Spring Rate (knots)	Neap Rate (knots)	Range of Tide (m)	Interpolated or Extrapolated Rate (S) in knots	Duration in minutes (T)	Drift to use = S x (T/60) in nautical miles
<del>K</del>	<del>-4</del>	<del>221</del>	<del>2.0</del>	<del>1.1</del>	<del>4.4</del>	<del>1.0</del>	<del>20</del>	<del>1.0 x (20/60) = 0.6nm</del>
G	-4	170	0.5	0.3	3.6	0.4	30	0.2nm
J	-3	119	3.3	1.7	3.6	2.5	30	1.25nm

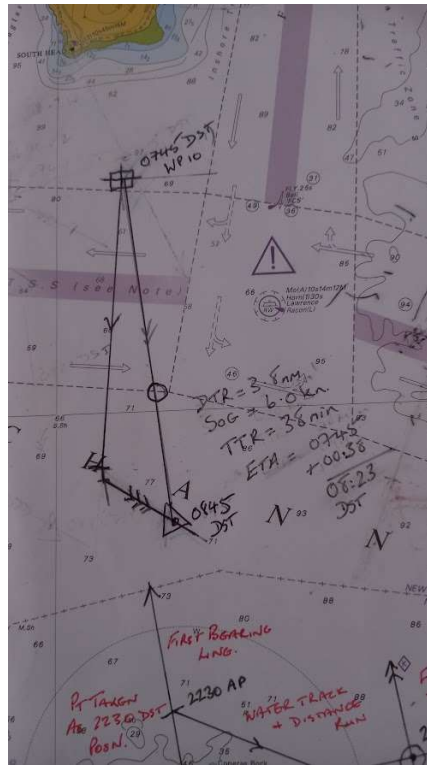
0845 DST Predicted EP = 45° 58.2'N / 005° 47.3'W

**Question 4**

Exit position: 46° 00.3N / 005° 47.6'W.5W

Exit Time: SOG = 6kn, DTR = 3.8nm, TTR = (3.8/6.0)x60 = 38mins.

ETA = 0823DST



Question 5 – See last two sheets.

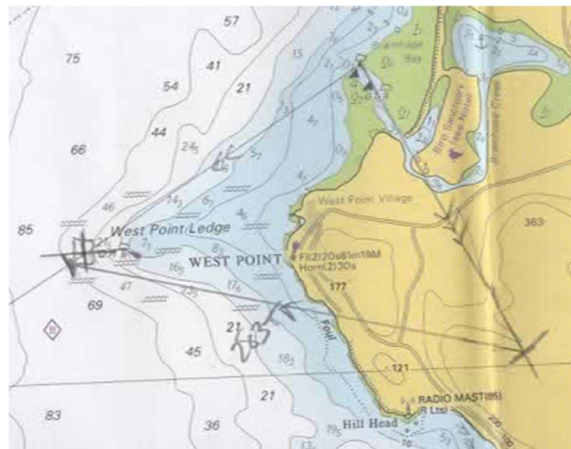
Question 6a

April 16 – Victoria HW 1219UT / 1319DST 5.2m; LW 0607UT / 0707 DST 1.0m

Range = 4.2m

0949 to 1049 = HW-3.  $\langle \rangle B$  HW-3  $154^\circ$   $3.9Sp/2.0Np \Rightarrow$  Int for range 4.2m = 3.4kn

Course from plot = 283T



T	V	M	D	C
283	+6W	289		
	<i>L'way</i> +5	294	+5W	299

**Compass course to steer = 299C**

**Question 6b**

Distance to run to W'pt = 3.6nm

Speed over the ground (from plot) = 3.8 knots

Time to run =  $(3.6 \div 3.8) \times 60 = 57$ mins

**ETA = 1047DST**

# Question 5

16 April

## Secondary Ports Tidal Heights

Process to mark up the tidal curve.

Secondary Port = Branhope Creek

Standard Port = Victoria

Date = 16 APRIL

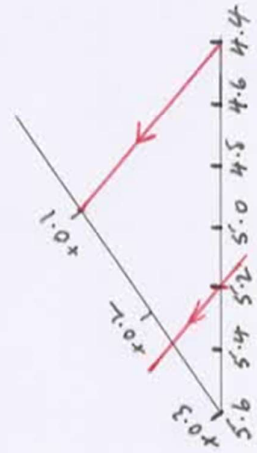
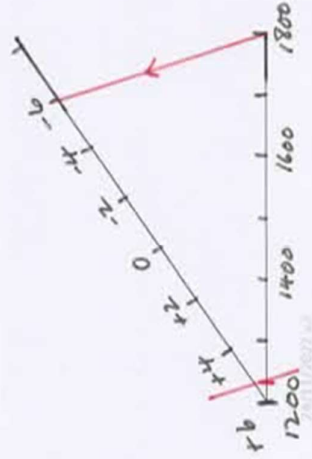
Standard Port	HW Time	12:19 UT	HW Height	5.2 m	LW Time	06:07 UT	LW Height	1.0 m	Range	4.2 m
Difference		+00:05		10.2				0.0		
Secondary Port		12:24 UT		5.4 m				1.0 m		
Secondary Port corrected for DST if required		13:24 DST								Springs Midway Neaps

Fill in the unshaded boxes and then use the values in the secondary port boxes to mark up the Standard Port Tidal Curve.

High Water Time Difference

High Water Height Difference

Low Water Height Difference



Do by eye.

VICTORIA - Mean Spring and Neap curves

Bramhope Creek  
 16 Apr. 7  
 Height of tide required =  $(1.8 + 1.0) - 0.7 = 2.1m$   
 HoT of 2.1m at 0904 DST

