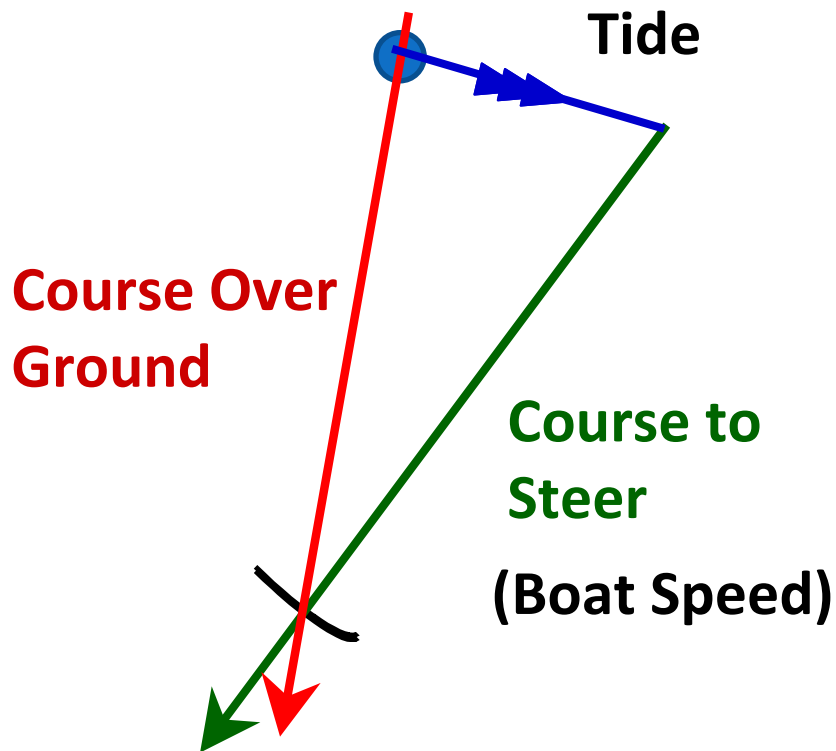
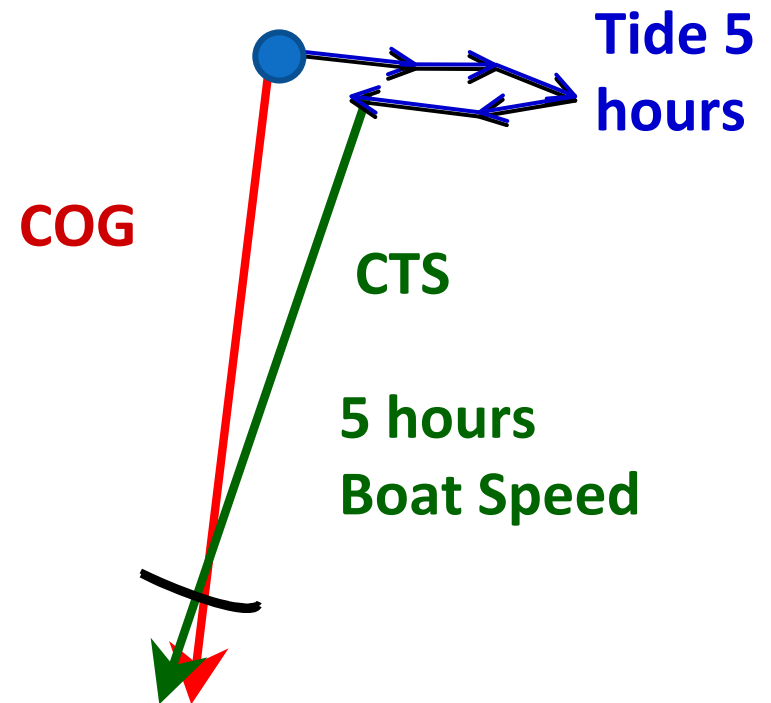


Tide Planning – Course to Steer

Course to Steer - 1 hour

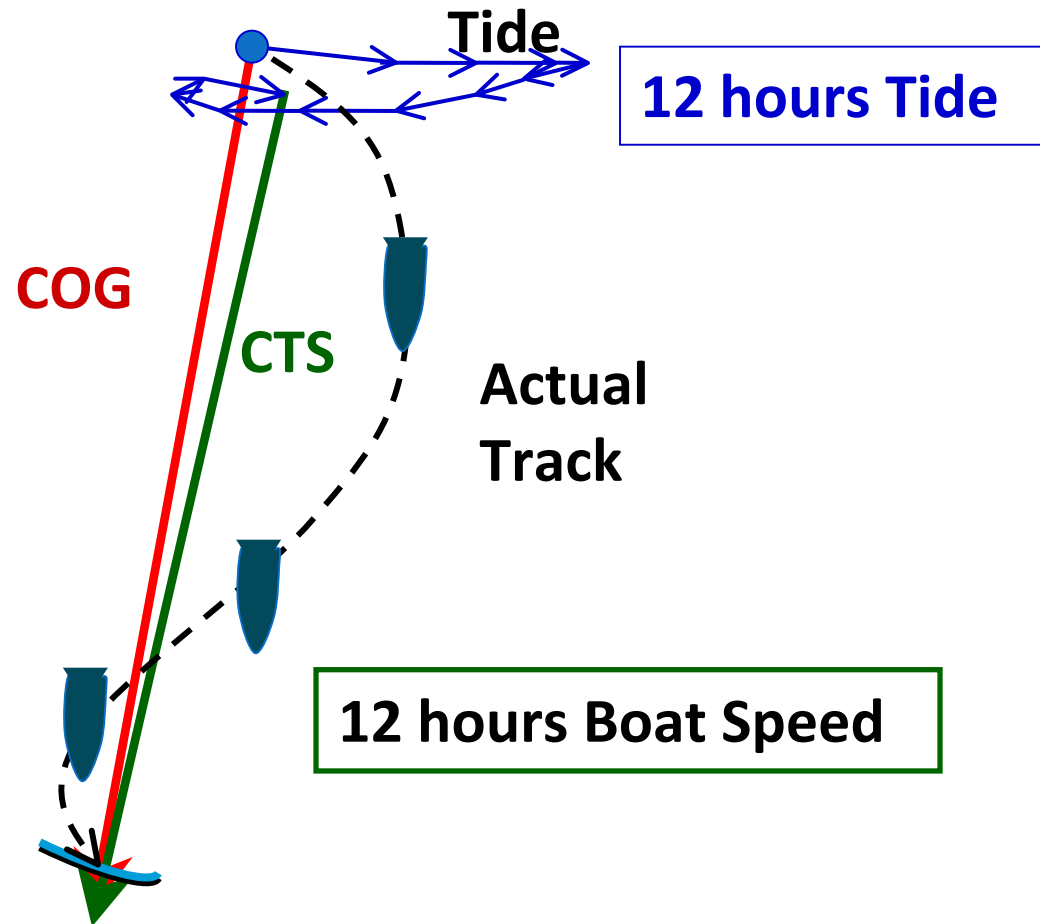


Course to Steer - 5 hours



Tide Planning

Course to Steer - 12 hours



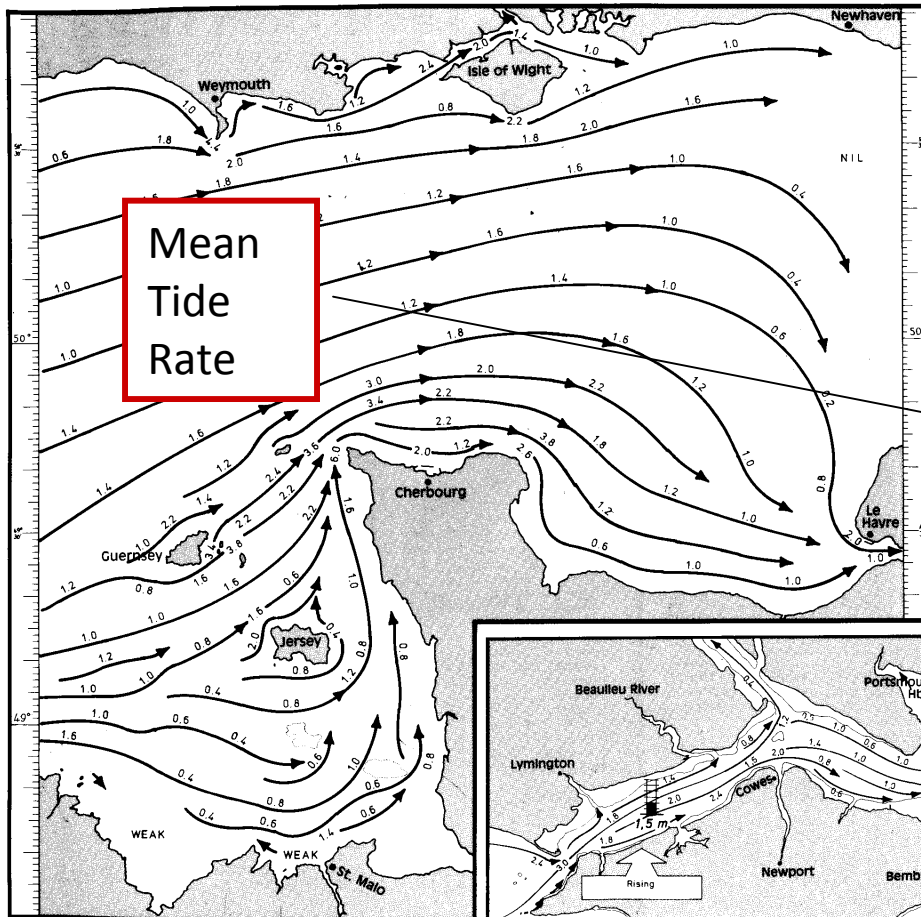
Tidal Atlas

Tidal Stream Rates

2 hours before
HW Cherbourg

-2

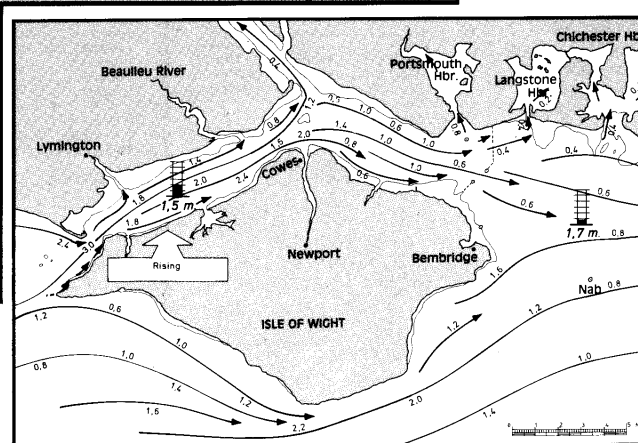
Time (to be inserted)



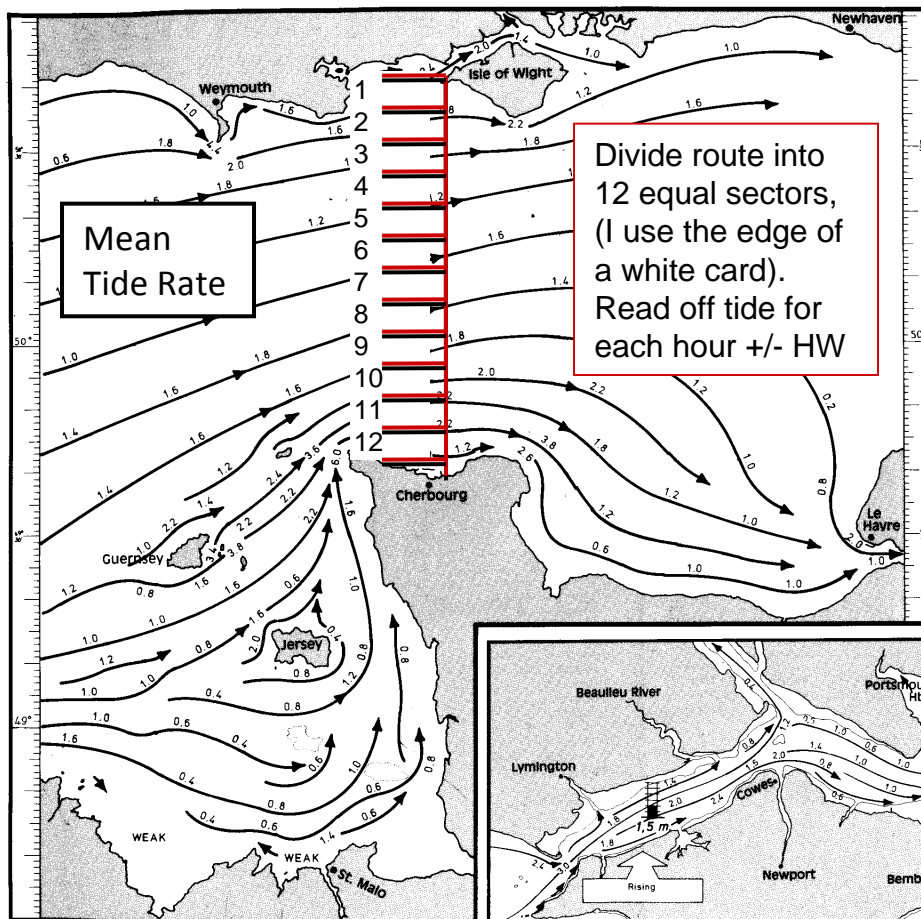
Stream Rate Conversion Table

Mean Rate Figure from Chart	Pencil-in height of HW Cherbourg Read from column below pencil mark											
	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8	
0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3
0.4	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6
0.6	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9
0.8	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2
1.0	0.6	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.5
1.2	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.9
1.4	0.8	0.9	1.1	1.2	1.3	1.4	1.5	1.7	1.8	1.9	2.0	2.2
1.6	0.9	1.1	1.2	1.4	1.5	1.6	1.8	1.9	2.1	2.2	2.3	2.5
1.8	1.0	1.2	1.4	1.5	1.7	1.8	2.0	2.1	2.3	2.5	2.6	2.8
2.0	1.2	1.3	1.5	1.7	1.9	2.0	2.2	2.4	2.6	2.7	2.9	3.1
2.2	1.3	1.5	1.7	1.9	2.1	2.2	2.4	2.6	2.8	3.0	3.2	3.4
2.4	1.4	1.6	1.8	2.0	2.2	2.5	2.7	2.9	3.1	3.3	3.5	3.7
2.6	1.5	1.8	2.0	2.2	2.4	2.7	2.9	3.1	3.3	3.6	3.8	4.0
2.8	1.6	1.9	2.1	2.4	2.6	2.9	3.1	3.3	3.6	3.8	4.1	4.3
3.0	1.8	2.0	2.3	2.5	2.8	3.1	3.3	3.6	3.9	4.1	4.4	4.6
3.2	1.9	2.2	2.4	2.7	2.9	3.2	3.5	3.8	4.1	4.4	4.7	4.9
3.4	2.0	2.3	2.5	2.8	3.1	3.4	3.7	4.0	4.3	4.6	4.9	5.3
3.6	2.1	2.4	2.6	2.9	3.2	3.5	3.8	4.1	4.4	4.7	5.0	5.6
3.8	2.2	2.5	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.9
4.0	2.3	2.6	2.8	3.1	3.4	3.7	4.0	4.3	4.6	4.9	5.2	6.2
4.2	2.5	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	6.5
4.4	2.6	2.8	3.1	3.4	3.7	4.0	4.3	4.6	4.9	5.2	5.5	6.8
4.6	2.7	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	7.1
4.8	2.8	3.1	3.4	3.7	4.0	4.3	4.6	4.9	5.2	5.5	5.8	7.4
5.0	2.9	3.2	3.5	3.8	4.1	4.4	4.7	5.0	5.3	5.6	5.9	7.7
5.2	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0	8.0
5.4	3.2	3.5	3.8	4.1	4.4	4.7	5.0	5.3	5.6	5.9	6.2	8.3
5.6	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0	6.3	8.6
5.8	3.4	3.7	4.0	4.3	4.6	4.9	5.2	5.5	5.8	6.1	6.4	9.0
6.0	3.5	3.8	4.1	4.4	4.7	5.0	5.3	5.6	5.9	6.2	6.5	9.3
6.2	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0	6.3	6.6	9.6
6.4	3.8	4.1	4.4	4.7	5.0	5.3	5.6	5.9	6.2	6.5	6.8	9.9
6.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.0	6.3	6.6	6.9	10.2
6.8	4.0	4.3	4.6	4.9	5.2	5.5	5.8	6.1	6.4	6.7	7.0	10.5
7.0	4.1	4.4	4.7	5.0	5.3	5.6	5.9	6.2	6.5	6.8	7.1	10.8

Actual Tide Rate
for HW Height
Cherbourg



Tidal Atlas



Tidal Stream Rates

2 hours before
HW Cherbourg

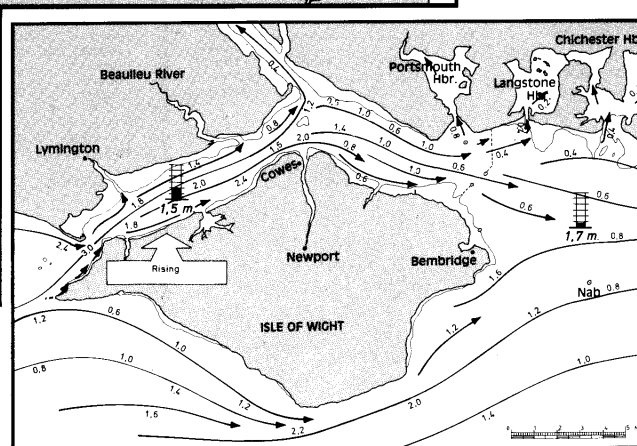
-2

Time (to be inserted)

Stream Rate Conversion Table

Mean Rate Figure from Chart	Pencil-in height of HW Cherbourg Read from column below pencil mark															
	4.8	5.0	5.2	5.4	5.6	5.8	6.0	6.2	6.4	6.6	6.8					
0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
0.4	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
0.6	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
0.8	0.5	0.5	0.6	0.7	0.7	0.8	0.8	0.9	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.2
1.0	0.6	0.7	0.8	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.5	1.5	1.5	1.5	1.5
1.2	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.7	1.9	1.9	1.9	1.9
1.4	0.8	0.9	1.1	1.2	1.3	1.4	1.6	1.7	1.8	1.9	2.0	2.2	2.2	2.2	2.2	2.2
1.6	0.9	1.1	1.2	1.4	1.5	1.6	1.8	1.9	2.1	2.2	2.3	2.5	2.5	2.5	2.5	2.5
1.8	1.0	1.2	1.4	1.5	1.7	1.8	2.0	2.1	2.3	2.5	2.6	2.8	2.8	2.8	2.8	2.8
2.0	1.2	1.3	1.5	1.7	1.9	2.0	2.2	2.4	2.6	2.7	2.9	3.1	3.1	3.1	3.1	3.1
2.2	1.3	1.5	1.7	1.9	2.1	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.4	3.4	3.4	3.4
2.4																
2.6																
2.8																
3.0																
3.2																
3.4																
3.6																
3.8																
4.0																
4.2	2.5	2.8	3.2	3.6	3.9	4.3	4.7	5.0	5.4	5.8	6.1	6.5	6.8	7.1	7.4	7.7
4.4	2.6	3.0	3.3	3.7	4.1	4.5	4.9	5.3	5.6	6.0	6.4	6.8	7.1	7.4	7.7	8.0
4.6	2.7	3.1	3.5	3.9	4.3	4.7	5.1	5.5	5.9	6.3	6.7	7.1	7.4	7.7	8.0	8.3
4.8	2.8	3.2	3.6	4.1	4.5	4.9	5.3	5.7	6.2	6.6	7.0	7.4	7.7	8.0	8.3	8.6
5.0	2.9	3.4	3.8	4.2	4.7	5.1	5.5	6.0	6.4	6.9	7.3	7.7	8.0	8.3	8.6	8.9
5.2	3.0	3.5	4.0	4.4	4.9	5.3	5.8	6.2	6.7	7.1	7.6	8.0	8.3	8.6	8.9	9.2
5.4	3.2	3.6	4.1	4.6	5.0	5.5	6.0	6.5	6.9	7.4	7.9	8.3	8.6	8.9	9.2	9.5
5.6	3.3	3.8	4.3	4.7	5.2	5.7	6.2	6.7	7.2	7.7	8.2	8.6	8.9	9.2	9.5	9.8
5.8	3.4	3.9	4.4	4.9	5.4	5.9	6.4	6.9	7.4	7.9	8.4	8.9	9.2	9.5	9.8	10.1
6.0	3.5	4.0	4.6	5.1	5.6	6.1	6.7	7.2	7.7	8.2	8.7	9.2	9.5	9.8	10.1	10.4
6.2	3.6	4.2	4.7	5.3	5.8	6.3	6.9	7.4	8.0	8.5	9.0	9.6	10.1	10.4	10.7	11.0
6.4	3.8	4.3	4.9	5.4	6.0	6.5	7.1	7.7	8.2	8.8	9.3	9.9	10.4	10.7	11.0	11.3
6.6	3.9	4.4	5.0	5.6	6.2	6.7	7.3	7.9	8.5	9.0	9.6	10.2	10.7	11.0	11.3	11.6
6.8	4.0	4.6	5.2	5.8	6.4	6.9	7.5	8.1	8.7	9.3	9.9	10.5	11.0	11.3	11.6	11.9
7.0	4.1	4.7	5.3	5.9	6.6	7.2	7.8	8.4	9.0	9.6	10.2	10.8	11.3	11.6	11.9	12.2

**Actual Tide Rate
For HW Height
Cherbourg**



Net Tide for 12 hours

Assume Tide is East or West going, add up E and W going and find the net tide for the 12 hour passage, then use that for the Course to Steer plot. Recalculate after 6 hours, 9 hours, then every hour to ensure you arrive up tide of Cherbourg

Hour	Time	HW +/-	West going NM	East going NM
1		+3	2	
2		+4	3	
3		+5	3	
4		+6	2	
5		-6	1	
6		-5		1
7		-4		2
8		-3		3
9		-2		2
10		-1		1
11		HW		0
12		+1		1
		Total	11	10
		Net tide set	1 NM West	
		Course to Steer	178 ° T	
		Co (M)	181 ° M	
		Co (C)		

