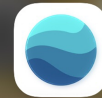


ADVANCED PASSAGE PLANNING FOR BC WATERS



PredictWind



PredictCurrent



Windy



Boating



iNavX



Aqua Map



WEEK 4: PAPER CHARTS AND ELECTRONIC INTEGRATION

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QUESTIONS FROM
LAST WEEKS
SESSION?

Have
questions?
Ask.



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TONIGHTS SESSION



- Paper & Electronic Integration
- Refresh of the Stages
- Putting it together for some challenging waters



PAPER – ELECTRONIC INTEGRATION

INTEGRATING PAPER & ELECTRONIC



- Three 'general' options:
 - **1. Electronic Primary** - paper transfer of electronic data to paper in an emergency situation (backup)
 - **2. Basic Paper Plan** - Transfer to Electronic
 - **3. Full Detailed Paper Plan** - Instrument Execution

ELECTRONIC 'PRIMARY'



- **STEP 1:**
 - Plan your trip on electronic tool (Garmin Boating, Aqua Map, Orca, etc)
 - Transfer data to your Daily Planning Sheet
 - Share your electronic plan with your chart plotter
- **STEP 2:**
 - Execute your trip on chart plotter, transfer data to your actual log sheet while underway.
- **STEP 3:**
 - IF loose electronics use sheet to move data to paper charts in your waterproof case (should be in cockpit with the charts for the day)

ELECTRONIC 'PRIMARY'

- **NOTE:** If you have your electronic navigation instruments set for 'Magnetic' then you can use your deviation card for 'Compass' headings on your planning/log sheets.
- Moving from Magnetic to True if necessary for transfer to paper can be done with the compass rose on the chart when needed



LATITUDE SAILING

LATITUDE ATTITUDE
COMPASS DEVIATION CARD
Calculated June 28, 2024

Magnetic	Compass	Magnetic	Compass
0° / 360°	358°	180°	178°
10°	11°	190°	182°
20°	21°	200°	192°
30°	29°	210°	205°
40°	36°	220°	218°
50°	45°	230°	230°
60°	54°	240°	242°
70°	65°	250°	255°
80°	74°	260°	268°
90°	83°	270°	281°
100°	92°	280°	290°
110°	103°	290°	298°
120°	112°	300°	309°
130°	122°	310°	317°
140°	134°	320°	325°
150°	145°	330°	332°
160°	158°	340°	342°
170°	168°	350°	350°

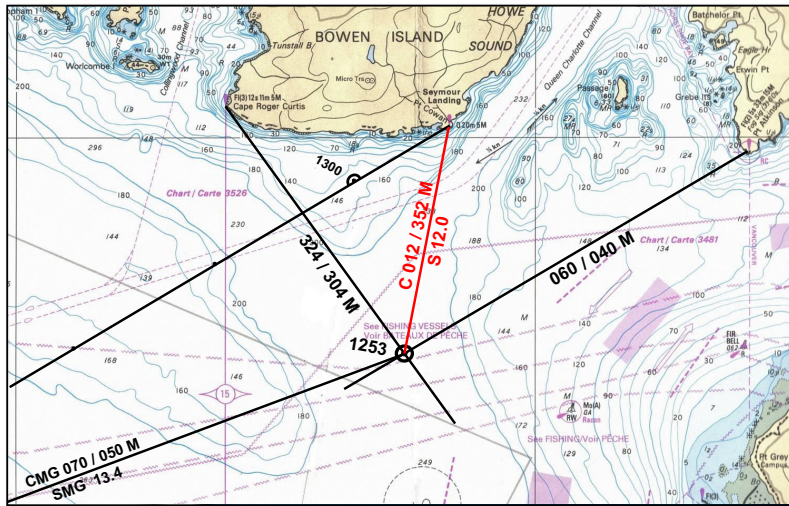


BASIC PAPER PLAN

- Use your plotter and determine your:
 - Travel Line
 - Heading (True)
 - Variation
 - Distance
 - Time (based on estimated speed)
- Transfer notations when moving from one chart to the next or when changing scale for detailed passages



FULL DETAILED PAPER PLAN



CANBOAT TRAINING



Basic Navigation and Boat Handling

This course is available in physical classrooms, virtual classrooms, and online. It focuses on improving your knowledge, ... [Read more](#)

Suggested Prerequisite

Pleasure Craft Operator Card (PCOC)

[Table of Contents \(PDF\)](#)

Find a class



Seamanship and Coastal Navigation (B4)

This course expands your boat-handling and navigation skills. It provides the knowledge, skills, and confidence required ... [Read more](#)

Suggested Prerequisite

Basic Navigation and Boat Handling

[Table of Contents \(PDF\)](#)

Find a class

<https://www.canboat.ca/course-calendar/>

NAUTICED TRAINING



\$39 US

COASTAL NAVIGATION COURSE



Learn to navigate a sailboat or powerboat inland and in near coastal waters. Coastal Navigation is essential for boating in unfamiliar waters, whether sailing or powerboating locally or taking a charter vacation. The Coastal Navigation Course is a comprehensive online course that covers everything you need to navigate the inland and near coastal waters safely and efficiently.

Estimated time: 10 hours

Rating is **4.80** (based on **3314** reviews).

[Get Details »](#)

<https://latitudesailing.online/NauticEd-Coastal-Nav>



\$25 US

ELECTRONIC NAVIGATION COURSE



The Electronic Navigation online course is essential learning for modern-day sailors and powerboaters. Learn how to navigate using GPS, chart plotters - as well as technologies like AIS, MARPA, and Weather GRIBs. Look like a champ rather than a chimp with the world's most up-to-date electronic navigation course.

Estimated Time: 5 hours

Rating is **4.89** (based on **2820** reviews).

[Get Details »](#)

<https://latitudesailing.online/NauticEd-Electronic-Nav>

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REFRESH OF THE STAGES

PRELIMINARY PLANNING STEPS

- 1. Determine Rough Route (Day or Multi-Day)
 - Navigation planning tool
 - Consider travel distance you want and consideration for overnight locations

Date	From	To
THURS, July 23	Nanaimo (Townsite Marina)	Dodd Narrows
	Dodd Narrows	Salt Spring Island
FRI, July 24	Salt Spring Island	Brentwood Bay Marina
SAT, July 25	Brentwood Bay Marina	

PRELIMINARY PLANNING STEPS



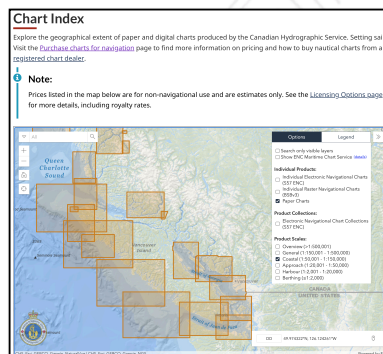
- 2. Identify key route planning factors:
 - Distance: Navigation Planning Tool of Choice
 - Fuel Needs: Navigation Planning Tool of Choice
 - Time: Navigation Planning Tool of Choice
 - Sunrise/Sunset, Twilight: www.TimeAndDate.com
 - Tides & Currents: Ports & Passes, Predict Current App, Garmin Boating App, Canadian Tide and Current Tables
 - Note reference stations, adjustments

Distance	Time (@5.0 KN)	Naut Twilight	Sunrise	Sunset	Naut Twilight	Slack - High - Low
5.8 NM	1h 8m	0404	0536			Nanaimo Low Tide 0805 (4.3'); High Tide 1616 (12.7') Dodd Narrows 1327 Slack Flood (6.2 KN) to Ebb (3.1 KN)
27.5 NM	5h 26m			2104	2234	Ganges Harbour Fulford Low +03 (+0'); High -01 (+0') High Tide 2121 (10.8'); Low Tide 0246 (8.5'); High Tide 0619 (9.2')
23.2 NM	4h 35m	0406	0537	2101	2230	Brentwood Bay Fulford Low +04 (+0.3'); High +04 (+0.3') Low Tide 0821 (2.4'); High Tide 1734 (10.4') Low Tide 2129 (9.3'); High Tide 2358 (10.2')
		0410	0539	2100	2228	Brentwood Bay Fulford Low +04 (+0.3'); High +04 (+0.3') Low Tide 0904 (2.0'); High Tide 1807 (10.7') Low Tide 2059 (9.3'); High Tide 0055 (10.0')

PRELIMINARY PLANNING STEPS



- 3. Identify Charts Needed: Chart Index, Coastal, Approach, Harbour
 - Ensure Updated



Charts Needed		
Coastal	Approach	Harbour
3463	3443	3447 3458 3475
3463 3462	3443 3442	3477 3473 3478
3462	3442 3441	3478 3479
3462	3441	

PRELIMINARY PLANNING STEPS



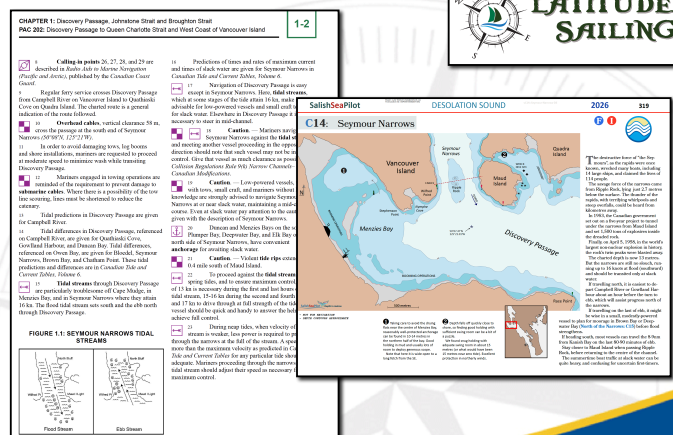
- 4. Determine Overnight locations, resources, and preliminary provisioning plan, dining options, etc
 - Local Guide Books
 - Online Resources

Stay	Resources						
	Fuel	Water	Garbage	Pump Out	Groceries	Dining	Laundry
AT DOCK - Salt Spring Marina - CONFIRMED	X	X	X	Ganges Coast Guard Dock	X	X	
AT DOCK - Brentwood Bay Marina - CONFIRMED							
AT DOCK - Brentwood Bay Marina - CONFIRMED	X	X	X		X	X	

PRELIMINARY PLANNING STEPS



- 5. Identify any recommendations or concerns for transiting in the area
 - Sailing Directions
 - Local Guides (Waggoner, Salish Sea Pilot, Dreamspeaker Guides, etc)



- [illegible]

- [illegible]

DAILY PLANNING STEPS



LATITUDE SAILING DAILY PLANNING SHEET

START LOCATION: Maple Bay END LOCATION: Silver Bay

DATE: March 29/26 PURPOSE: Training ON BOARD: Cyle + Mike

CHARTS NEEDED: COASTAL 3402, 3463 APPROACH 3442, 3443 HARBOUR 3478, 3478, 3475

NAUTICAL TWILIGHT: 05:48 SUNRISE: 06:57 SUNSET: 19:41 NAUTICAL TWILIGHT: 20:51

WEATHER FORECAST: _____ WIND: _____ WAVES: _____

MAX FLOOD: _____ TIME: _____ DIRECTION: _____ MAX EBB: _____ TIME: _____ DIRECTION: _____

Time	Elapsed Time	Position Latitude/Longitude	Speed	Distance	T	V	M	D	C	Special Considerations
00:00	00:00	48° 48.1' N 123° 36.2' W	✓ 5	1.4	038°	15.2	0223	+0.35	023°	3462
1 00:17	00:17	48° 49.2' N 123° 34.2' W	✓ 5	3.1	357°	15.3	34125	+1.15	345°	3462
2 00:37	00:34	48° 52.3' N 123° 33.0' W	✓ 5	2.0	329°	15.4	333.1	+6°	314°	3463
3 00:24	01:18	48° 54.1' N 123° 31.5' W	✓ 5	4.2	356°	15.7	340.1	+2°	342	3463
4 00:50	02:08	48° 58.5' N 123° 37.0' W	✓ 5	1.5	013	15.7	357.1	-3°	359°	3463
5 00:18	02:26	49° 59.2' N 123° 34.4' W	✓ 5	0.8	037°	15.7	21.1	42°	023°	3463
6 00:10	02:36	49° 03.3' N 123° 35.7' W	✓ 1.5	1.19	037	12.4	24.1	—	024	3473

DISTANCE: _____ NM DURATION: _____ MAXIMUM FUEL CONSUMED (2.6 L/Hour): _____

ON THE DAY OF TRAVEL

- Check marine forecast
- Forecast, Weather Buoy/ Land Stations, Synopsis



Strait of Georgia - south of Nanaimo

Forecast Weather Conditions Ice Conditions Warnings Synopsis

Winds
Issued 04:00 PM PDT 30 March 2026
Tonight and Tuesday
Wind light becoming northwest 5 to 15 knots this evening then becoming light late Tuesday morning. Wind becoming southeast 5 to 15 Tuesday evening.

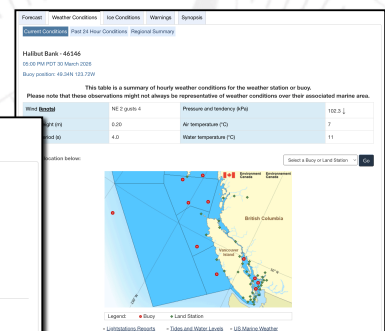
Extended Forecast
Issued 04:00 PM PDT 30 March 2026
Wednesday
Wind southeast 5 to 15 knots increasing to southeast 20 to 30 in the morning then diminishing to southwest 15 late in the day.
Thursday
Wind northwest 10 to 20 knots diminishing to light.
Friday
Wind southeast 10 to 20 knots.

Strait of Georgia - south of Nanaimo

Forecast Weather Conditions Ice Conditions Warnings Synopsis

Technical Marine Synopsis
Issued 4:00 PM PDT 30 March 2026
Tonight and Tuesday
At 4:00 p.m. PDT today ridge located on a line northeast-southwest over Queen Charlotte Sound.
By 9:30 p.m. PDT tonight weakening ridge located on a line northeast-southwest over northern Vancouver Island.
At 4:00 a.m. PDT Tuesday frontal system located over western British Columbia.
By 4:00 p.m. PDT Tuesday frontal system located near Haida Gwaii.

Marine Weather Statement
Issued 3:59 PM PDT 30 March 2026
An approaching frontal system will bring gale force southerly winds to Bowen this evening. The front will approach Haida Gwaii on Tuesday morning with gale force southerly winds spreading across the Northern system and Explorer.





	Monday, Mar 30								Tuesday, Mar 31							
Local time	02h	05h	08h	11h	14h	17h	20h	23h	02h	05h	08h	11h	14h	17h	20h	23h
Wind direction																
Wind speed (kts)	15	12	11	9	5	3	3	5	5	6	6	5	3	7	6	6
Wind gusts (max kts)	23	17	15	10	5	3	3	5	8	8	8	5	3	8	10	10
Cloud cover																
Precipitation (mm/2h)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Air temperature (°C)	10/17	10/18	10/19	10/20	10/20	10/18	10/16	10/14	10/12	10/10	10/09	10/08	10/07	10/04	10/03	10/01
Air pressure (hPa)	↗	↗	↘	↘	↘	↗	↘	↘	↗	↗	↗	↘	↘	↗	↘	↘
Tide type (m)		05:19		11:29		16:49		23:00		05:44		12:02		17:49		23:44
Tide height (m) ⓘ	3.1	4.4	3.6	2.5	3	3.7	2.7	1.7	2.8	4.4	3.8	2.1	2.5	3.8	3.3	1.9

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LATITUDE
SAILING

- [illegible]

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LATITUDE
SAILING



LATITUDE ATTITUDE

TRIP LOG #: 2026-06

DATE: Apr 30, 2026 **PURPOSE:** Slacker horse Kalbaron

ENGINE HOURS START: 1469.99 **END:** 1472.32

FRESH H₂O 1: START 98 **FRESH H₂O 2: START** 98
 (Starboard - Bow) (Port)

FINISH 98 L **FINISH** 98 L

START LOCATION: Silver Bay Oregon **END LOCATION:** Townrite

ON BOARD: Lyle, Ned

FUEL START (EST): 35L **END (EST):** 39.52L

BLACK H₂O: START 2 **PROPANE: START** Full

FINISH 2 L **FINISH** Full

WEATHER FORECAST:

DEPARTURE: **ENROUTE CHANGE:**

Time	Position Latitude/Longitude	Position Method	Speed	Distance	T	V	M	D	C	Sail Power/MS	Comments/Conditions
0910	49° 09.7671 N 123° 41.600' W	GPS	2.4				021	+1°	022	P	Depart Silver Bay.
1000	49° 0.310' N 123° 42.983' W	GPS	3.8	2.23			348	-	348	S	1 st buoy MADE
1050	49° 11.0011 N 123° 41.391' W	GPS	1.6	4.51			247	+10°	257	S	Heads to & Tack
1145	49° 10.75' N 123° 43.391' W	GPS	5.3	6.41			281	+9°	290°	MS	MS MAIN
1200	49° 12.350' N 123° 50.32' W	GPS	6.1	10.67			241	+10°	251	P	MAIN IN
1350	Townrite.										

TOTAL: 16.9 NM

HOURS UNDER MOTOR: 2:20
2.33

FUEL USED (2.35 L/Hour): 5.48 L





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LATITUDE
SAILING

ADVANCED PASSAGE PLANNING FOR BC WATERS



PredictWind



PredictCurrent



Windy



Boating



iNavX



Aqua Map



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