

CAG8

# Pender Harbour Seaplane Base

USER GUIDE OCTOBER 2017



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# Thank you!

Orbx would like to thank you for installing **FTX AA CAG8 Pender Harbour Seaplane Base**. (Pender Harbour Seaplane Base IATA: **YPT**, ICAO: **CAG8** is also known as Pender Harbour Water Aerodrome.)

Pender Harbour, known as ‘the Venice of the North’ is a complex series of bays with over 60 kilometres of shoreline, now lined with docks and marinas. The small population centres of Madeira Park, Garden Bay, Irvine's Landing, and Kleindale are located in this area. Only the Garden Bay – Hospital Bay area is modeled in detail in this scenery.

From May through September [Kenmore Air](#) flights 410 (northbound) and 420 (southbound) stop at [John Henry's Marina](#) going to and from the Desolation Sound area and beyond. Going north, it's the first stop after clearing customs at the Seair terminal in Nanaimo. Most of the Kenmore passengers are joining or leaving pleasure boats however the restored Sundowner Inn is a short walking distance from the marina makes the stop worthy in its own right.

“John Henry’s” is one of the few remaining classic marinas in the Pacific Northwest and has the sort of character that comes with age. It has the same feel it did 50 years ago. The facilities for seaplanes at John Henry's consist of a short section of one of the marina docks marked with a red and white tie down rail. That's it. There is no wind sock, and there are no signs. It's advisable to review the charts showing the location of the seaplane dock before attempting a flight. The reserved portion of the dock is not all that obvious. There are additional challenges too, not faced by land based aircraft.

As you approach the harbour you will see a circle of small outboard boats around a fuzzy white patch, a herring ball. Where there are herring balls, there are likely seagulls and it would not be wise to fly too low directly over the boats. With the usual approach, you may encounter an AI pleasure craft, an AI sailboat or the AI Pender Harbour tour boat [SloCat](#).

Manoeuvring into the spot behind the static Kenmore DHC3 will have real life challenges. There is a large mooring buoy and a painting float that must be avoided, and the space to turn around so the pilot can step out onto the dock is limited. You may disable the DHC3 with the Control panel if you wish.





## Product requirements

This seaplane base addon is designed to work in the following simulators: **Microsoft Flight Simulator X, Lockheed Martin Prepar3D v1, Lockheed Martin Prepar3D v2, Lockheed Martin Prepar3D v3 and Martin Prepar3D v4.**

**Orbx FTX PACIFIC NORTHWEST IS REQUIRED.**

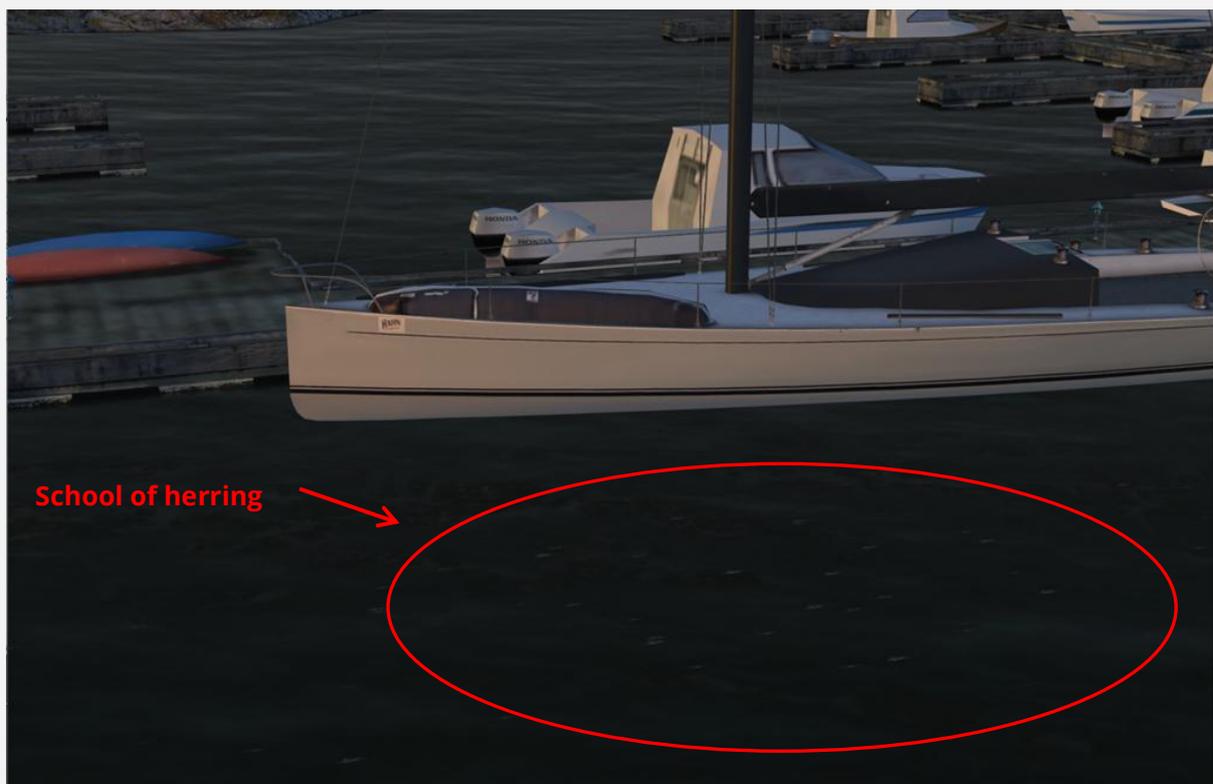
### What will you miss out on if you don't have Orbx FTX PACIFIC NORTHWEST installed?

- **Without FTX PNW installed, CAG8 WILL NOT WORK. It will be surrounded by land.**
- **Orbx ObjectFlow must be working.** If it is not, a large part of the scenery will be missing. This is a common issue and is not related to CAG8. Please visit the Orbx forums and search for the topic. Most resolutions of this issue are simple.
- Moving traffic on roads, properly aligned to the photoreal ground terrain
- Enhanced FTX Global 3D lighting system with improved FPS in urban/township streets around the airport

Please visit <https://orbxdirect.com/product/> to purchase your copy of FTX PACIFIC NORTHWEST if you haven't already done so.

## What's New in v1.10

- Merry Island with the lighthouse and helipad. The rocky islets are detailed 3D models as is the area around the lighthouse.
- Secret Cove including docks, boathouses, boats, and navigation aids in the area. Except for the off season months, there is an animated fellow standing on the dock near the Secret Cove Marina (on the left as you enter the harbour) waiting for his charter flight. If you are the pilot, note that he does not seem all that happy.
- Smuggler Cove nearby; a hidden and protected anchorage just north of the appropriately named Welcome Pass.
- Stillwater Bay including PR, the surge tower, the powerhouse and a custom effect for it. The surge tower serves as a landmark and can be seen almost as far away as Pender Harbour. Stillwater Bay is about 15 km southeast of the town of Powell River.
- Revised 'long range' light effects
- Updated pilotable Angelfish radar for P3D v4 (It's in the CAG8 Extras folder.)
- A herring school effect near the static sailboat and near the day marker in Hospital Bay. (Like the real thing, the fish can be hard to spot; they appear to rise to the surface, swim along and then dive back down deeper.)
- Minor revisions to the wake effects
- Note: there are no significant changes to the Pender Harbour area proper (other than the schools of herring).





## Additional Scenery Features

- John Henry's Marina, the Sundowner Inn and many nearby buildings
- Over 300 docks and marinas modeled with reasonably accurate footprints
- Roughly 20 square km of photoreal scenery (12 sq. Km land coverage)
- Three hundred or more static pleasure craft moored at the various docks
  - Note: FSX does not do a good job in displaying this number of boats and docks. Therefore the FSX version of CAG8 has only the boats and docks on the north side of the main harbour.
- A high resolution AI model of the pleasure craft *Angelfish*
- A high resolution AI model of the [Pender Harbour tour boat Slocat](#).
- An AI racing sailboat
- A static model of a Kenmore Air DHC3 at the seaplane dock daytime May through Sept.
- Custom, wake, wave, sound and navigation light effects
- Accurate marine navigation aids
- PeopleFlow; all but a couple of people will be gone during the off season

## Optional

This scenery is also intended to work with the **PNW AI ferry system** available here:

<https://larobinson22.wordpress.com/>

A discussion of this project is here: <http://www.orbxsystems.com/forum/topic/85273-na-ai-ferries-and-terminals-for-southern-bc-and-puget-sound/>

The PNW ferry system will add ferry terminals at Horseshoe Bay, Langdale, Earls Cove, Saltery Bay and Powell River and you will see a number of different BC ferries going to and from these terminals. You will also see a tug pulling a log boom to and from Stillwater Bay.

Please note that the ferry system is not an Orbx project and is not supported by Orbx Simulation Systems. There is no installer and installation is complex for less experienced users.

## Extras

A pilotable version of the static pleasure craft Angelfish is included in the Extras folder. See the instructions therein. This user vehicle is supplied 'as is'.



## Quick Installation Guide

Installing Orbx FTX CAG8 is all managed by our FTX Central application. This app is responsible for many aspects in maintaining your Orbx installation. Please visit the support forums to learn more.

Once you have added CAG8 to your account, you can have FTX Central download and install it for you. The appropriate scenery library entries will also be managed by FTX Central.

You may also manually download CAG8 and then have FTX Central manage the installation for you once downloaded.

**An internet connection is required for FTX Central to validate your license.**

Once CAG8 is installed, chose CAG8. Set the starting location to 'Active Runway' to start your flight from the middle of the harbour, or choose 'W (water)' to start your flight at the seaplane dock. -You are now ready to fly!

*Please note that the above all refers to FTX Central 3. Earlier versions of FTX Central are no longer supported but will still function as before. The integration of FTX Central with your OrbxDirect account is only available with FTX Central version 3 and above.*



## Scenery Coverage Area



New scenery areas in CAG81.10



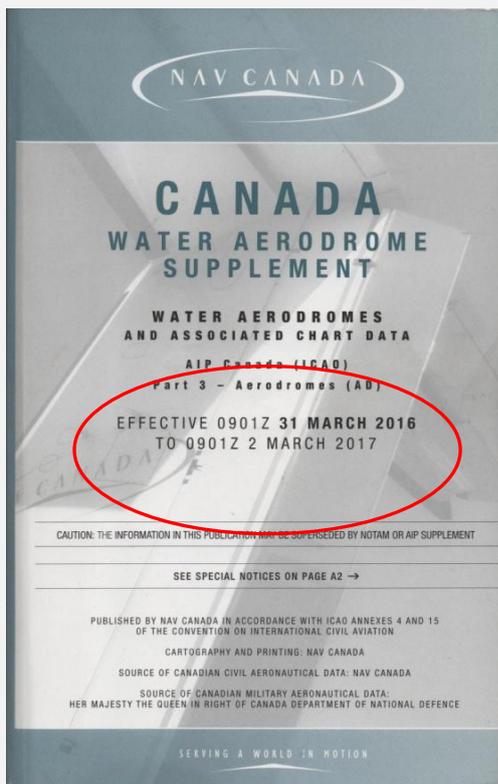
# Airport Information and Charts

Excerpt from the *Canada Water Aerodrome Supplement* from [Nav Canada](#). Note: Nav Canada is responsible for the civil air navigation system in Canada.

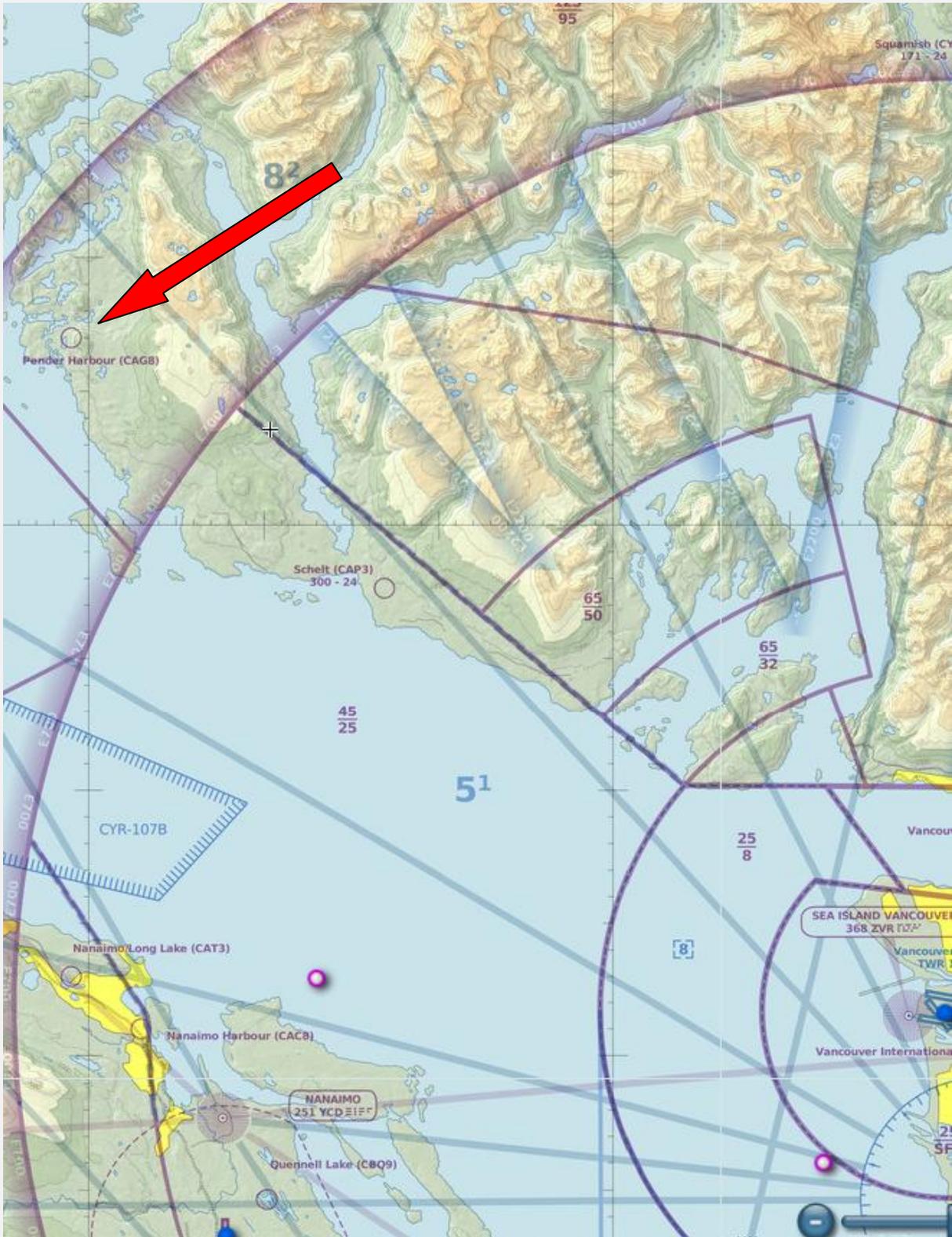
AERODROME/FACILITY DIRECTORY B153

**PENDER HARBOUR BC** CAG8

REF	N49 37 W124 01 Adj 17°E (2016) UTC-8(7) Elev 00' A5004	
OPR	Pender Harbour Authority 604-883-2234 Reg	
PF	B-1,2 C-3,4,5	
FLT PLN	NOTAM FILE CYCD	
FIC	Kamloops 866-WXBRIEF (Toll free within Canada) or 866-541-4101 (Toll free within Canada & USA)	
SERVICES	<b>i.e. pickup and drop off only, no extended term parking</b>	
S	7	
A/D DATA	01 May to 30 Sep dock avbl 16-23Z	
COMM		
ATF	tfc 123.2 2NM 1500 ASL	
CAUTION	Extv boat tfc May thru Sep.	

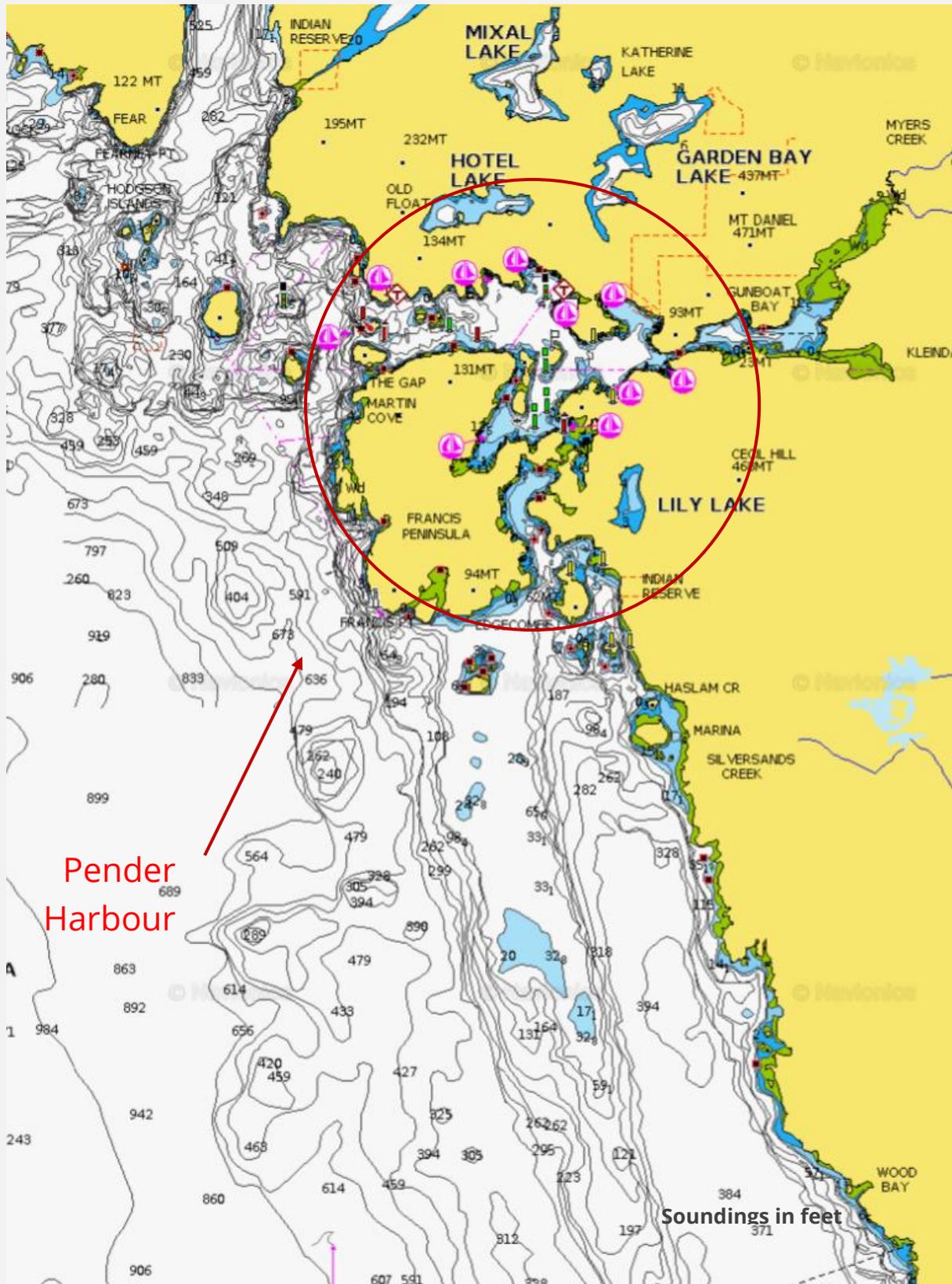


Note: Avgas is not available at John Henry's Marina. The gas dock supplies marine fuels only.

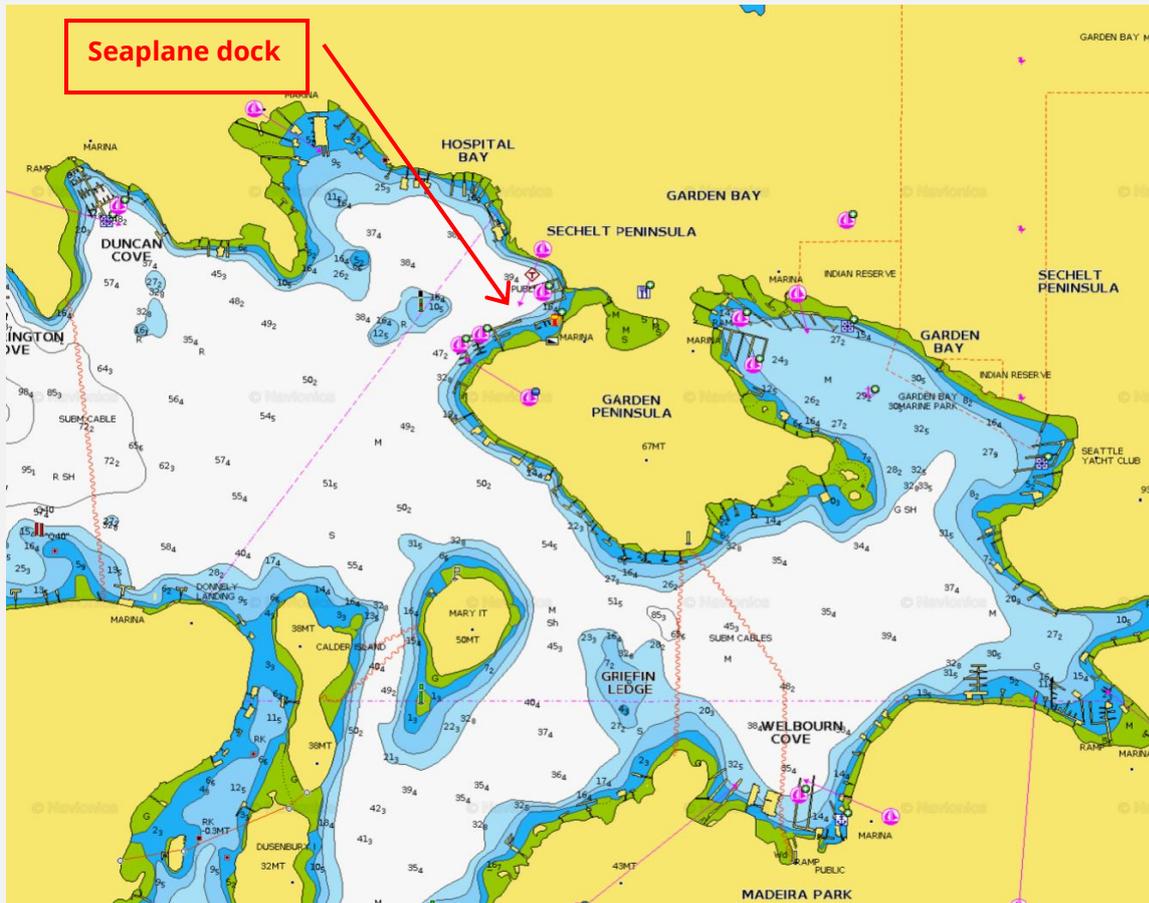
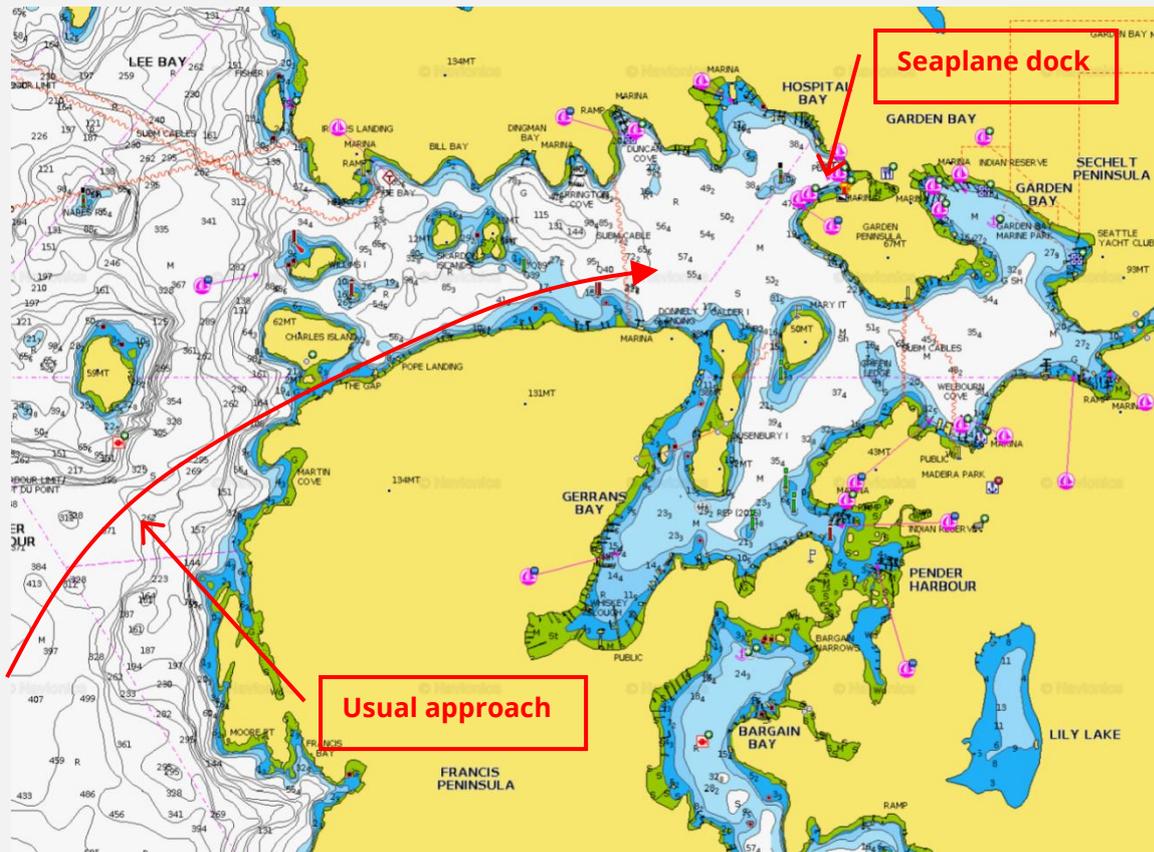


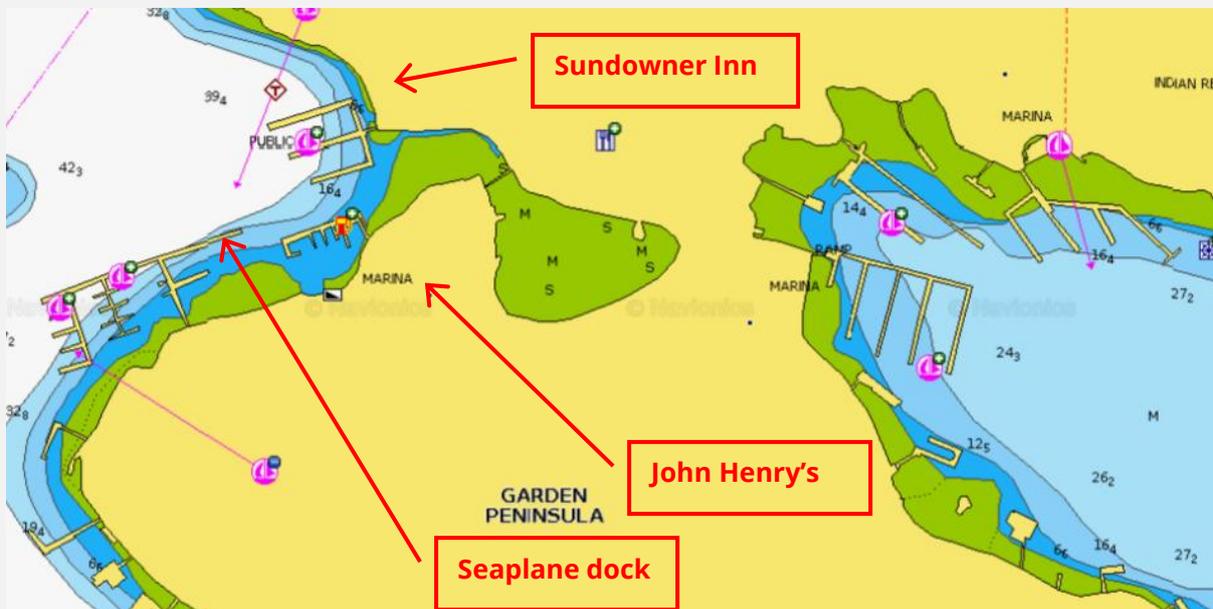
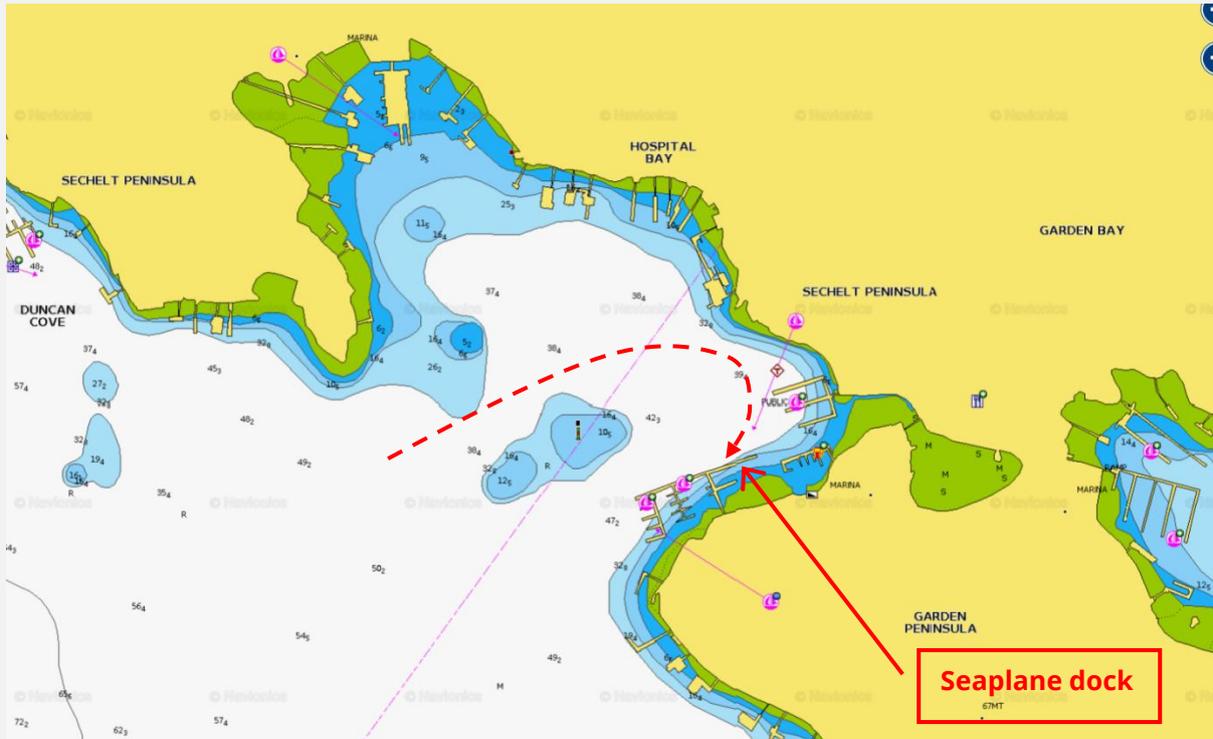
Source: <https://skyvector.com/airport/CAG8/Pender-Harbour-Seaplane-Base>

Canadian Marine Charts from Navionics web app:



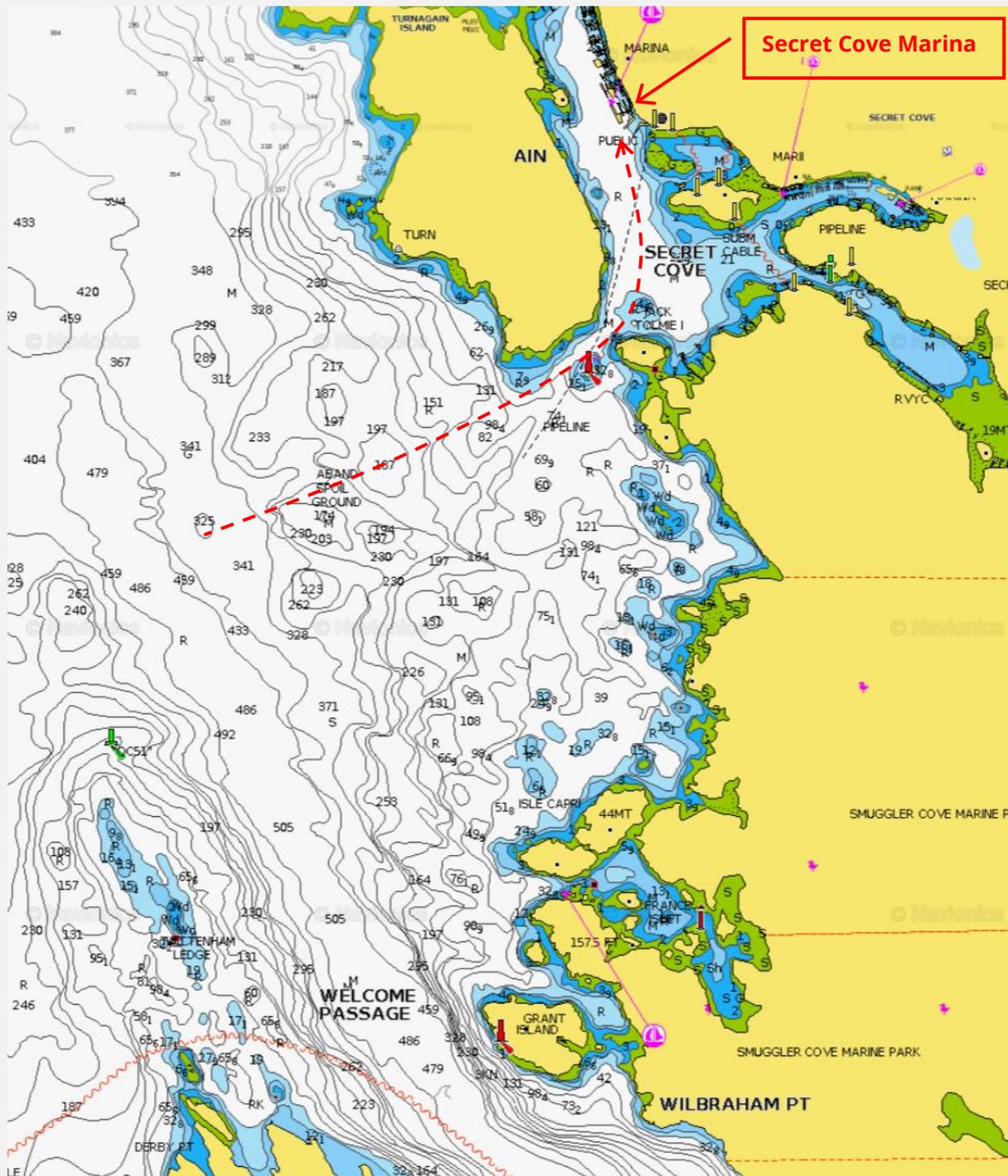
Source: [Navionics](#)





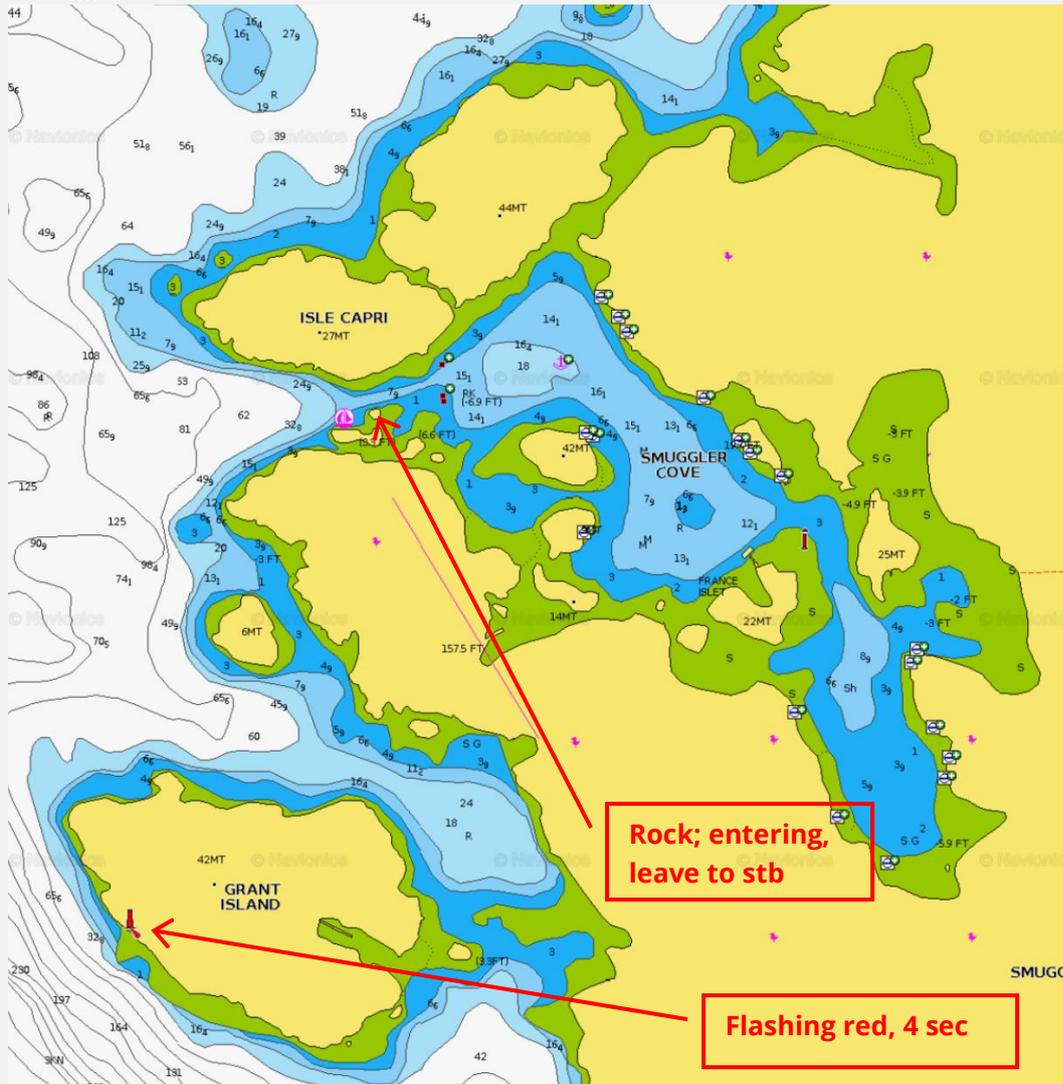
Source: [Navionics](#)

### Secret Cove, Smugglers Cove and Welcome Pass

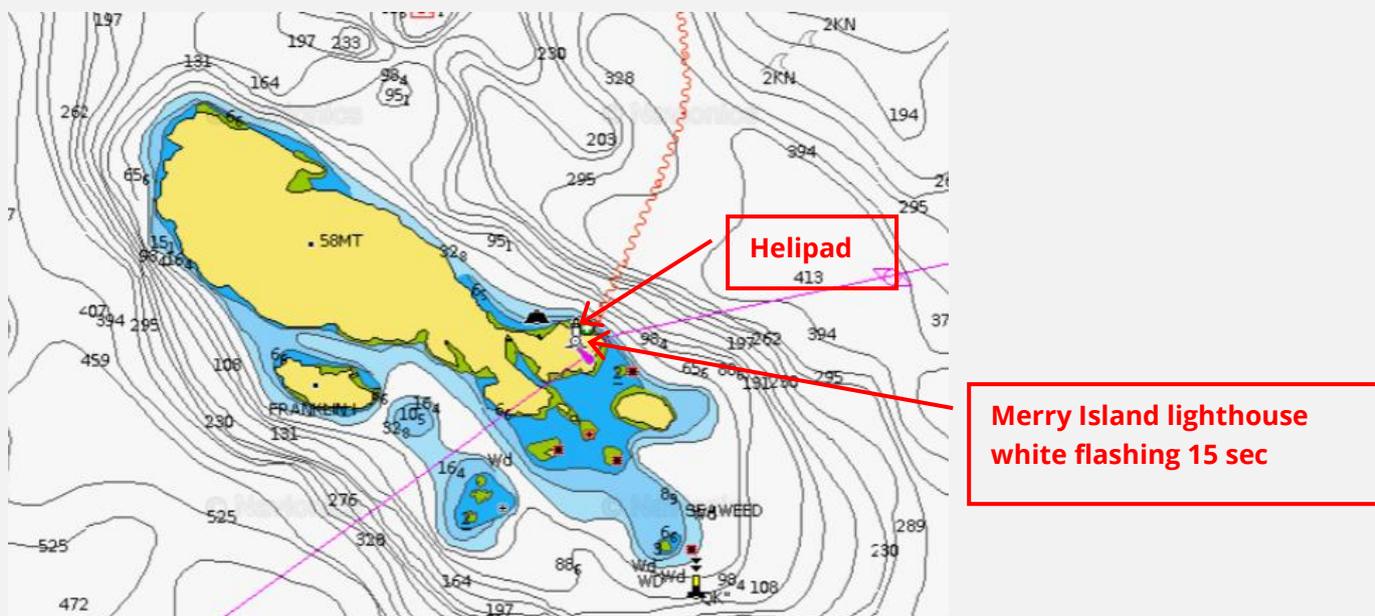


Source: [Navionics](#)

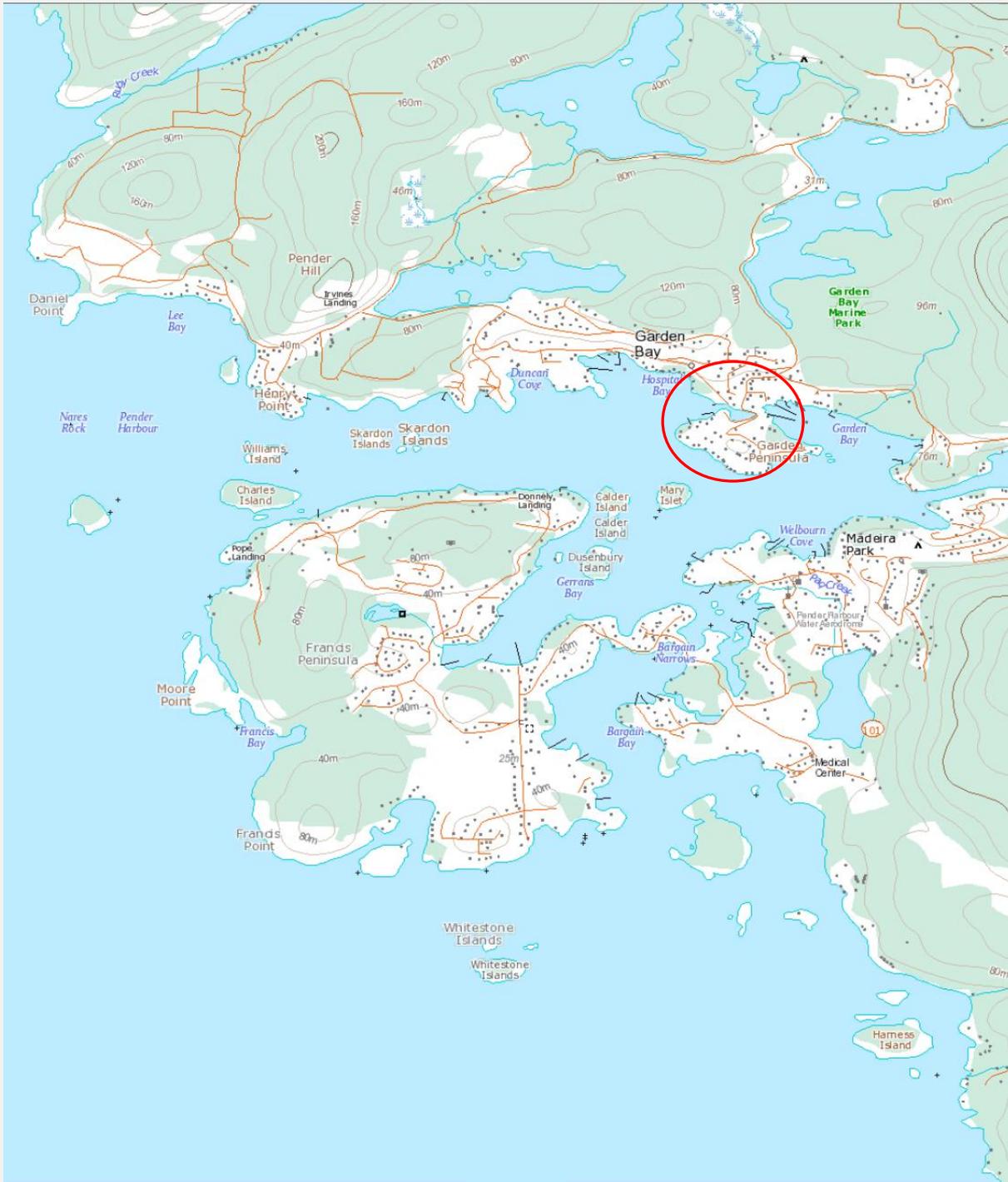
### Smugglers Cove detail



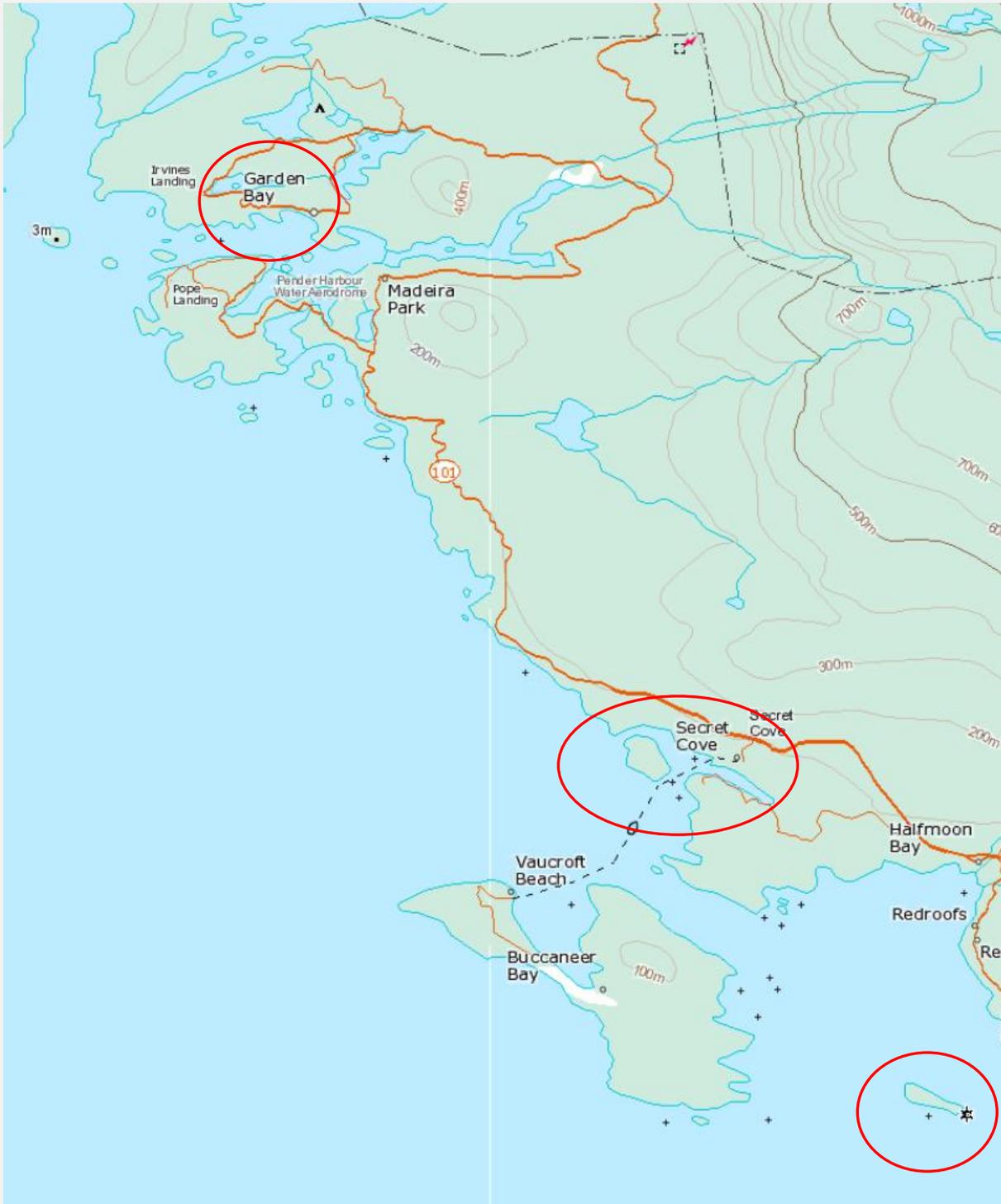
### Merry Island



## Canadian Topographic Map



Source: National Topographic System (NTS) © Department of Natural Resources Canada.



Source: National Topographic System (NTS) © Department of Natural Resources Canada.

# The CAG8 Control Panel

The CAG8 Control Panel can be accessed from the main FTX Central interface by clicking the Configure button.

The Control Panel will enable you to disable or enable certain scenery features of the airport to allow it to perform in accordance with the PC hardware you have. By default, all scenery options are enabled by the installer. If you have a high end PC, enable all the CP options. For low to mid-range PCs it is recommended to try disabling some settings.

## **About the autogen footprint option:**

Many of the autogen houses around the shores of Pender Harbour are on steep slopes. This makes the light roofs on the photoreal ground texture underneath the autogen very obvious.

If your setup will allow you to set your autogen buildings slider all the way to the right you can toggle the footprint option which will to some extent disguise the lack of true foundations for autogen. Note: the 'pop free autogen' feature of Prepar3D will cause some of the dense housing not to show. See [here](#) for more.



# Quick Reference Simulator Settings

The table below lists in a handy reference the minimum recommended settings required in your simulator to enjoy CAG8 the way Orbx designed it. These settings will run well on most PCs and take particular advantage of the custom mesh and photoreal imagery used in the scenery area.

If you use the settings below you will be guaranteed the highest fidelity experience and the best balanced performance.

Setting	Value	Why?
Level of detail radius	Large	Reduces blurring of textures.
Global texture resolution	Max	Displays photoreal textures best.
Mesh complexity	100	Better terrain definition.
Mesh resolution	5m	5 m is required for CAG8.
Texture resolution	7 cm	Sharpest roads and freeways.
Scenery complexity	Extremely Dense	How Orbx designed FTX CAG8.
Autogen density	Normal**	Best FPS vs detail.
GA AI traffic	16-50%	Optional
Road vehicle traffic	16% or lower	No need to set higher for FTX.
Leisure Boats	1-16%	Keep leisure boats below 16% to avoid excessive numbers of leisure boats.
Ships and Ferries	26% or above	In order to see the custom AI boats, set to greater than 25%

\*\* If your system is capable, set the autogen density sliders full right to see all of the autogen houses and trees.

Note: if the mesh slider is not set at the Orbx standard of 5 meters the 3D model of Pender Harbour will not properly fit the terrain.

# Troubleshooting / Additional Info

## **Naming convention**

The name *Pender Harbour Seaplane Base* is used for this scenery instead of Pender Harbour Water Aerodrome because the seaplane facilities are very limited, consisting only of a marked section of one marina dock at John Henry's.

## **I don't see anything – ObjectFlow and insertion points**

The focal point of CAG8 is based on one large model. There are two variants, one with snow on the ground and one without. The models are swapped out at the right times using Orbx ObjectFlow technology, which is installed with the Orbx Libraries. Use FTX Central 3 or above to make sure you have the latest version. If your ObjectFlow is not working, the models will not appear. Please visit the Orbx forums and search for ObjectFlow.

Improper placement of the Insertion Point for Orbx scenery will also result in the scenery not being visible. Be sure to use FTX Central to check your insertion point. See the Forum for further information about setting the insertion point correctly.

## **In P3D v3.4, some of the autogen houses are missing even with my autogen sliders full right**

This is a result of the 'pop free autogen' setting in the Prepar3D.cfg. By default, pop free autogen is turned on. If you have a powerful system, as an option try this setting in the [SCENERY] section of the Prepar3D.cfg: AUTOGEN\_BATCH\_LOD=1 The default is 2; it's another way of controlling autogen density. Warning; this has the potential of doubling the amount of autogen displayed. If you are not familiar with editing the .cfg, don't try this!

Explanation: the pop free autogen feature in P3D is intended to solve the issue of autogen popping into view along the flight path. If the sim is not able to display all the autogen based on your settings, it shows only the autogen that it can without having the autogen pop into view as you approach.

## **CAG8 looks funny in P3D with 'clouds cast shadows on ground' enabled**

In P3D, if you choose to have clouds cast shadows on the ground, you have to enable 'receive shadows' for buildings because the ground surface around John Henry's is part of the large 3D model.

## **In P3D v3.4 the south shores of Pender Harbour are sometimes milky white**

As of April 2017 this is a known issue related to the shaders and will be fixed in the next version of P3D.

## **The AI boats are not working**

Make sure your ships and ferries slider is set to greater than 25%. Please see this [document](#) if that does not solve the issue.

### **I don't see any animated people**

Make sure 'advanced animations' are enabled in the sim. (FSX)

### **My frame rates are terrible**

Try disabling features via the Control Panel. There is a lot of custom detail and a lot of autogen packed into a small place. CAG8 is intended to continue to look good as systems and scenery evolves.

### **What I see in FSX or FSX - SE does not look as good as the screenshots**

FSX simply does not do as good a job with the high resolution textures used in CAG8 as does P3D. You might consider migrating to P3D v3.x or above.

### **In FSX or FSX-SE, I don't see any docks or marinas on the south side of the harbour**

FSX is not able to handle the 300 plus docks and marinas and the boats associated with them. For FSX and FSX-SE, only the boats and docks on the north side of the harbour are included.

### **In FSX, sometimes things disappear when behind railings or other transparencies**

In FSX DX9 mode, some transparencies may disappear, or what's behind them will disappear.

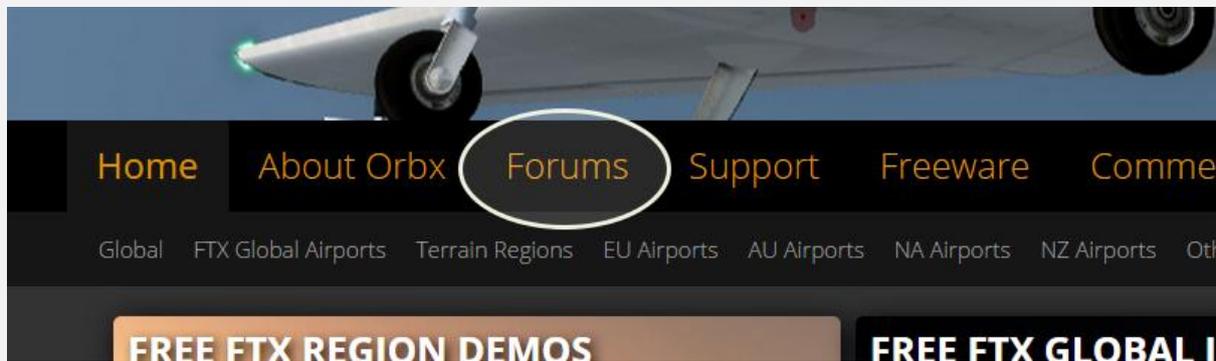
Using FSX in DX10 preview mode with Steve's DX10 Fixer (required) should largely solve this problem. Under 'Legacy' in the DX10 Fixer, tick 'V2 Transparency Logic'

FSX does not deal with transparent textures behind other transparent textures as well as P3D. If a better solution is found, it will be included in a service pack.



# Product Technical Support

Orbx has a very simple support policy: no question unanswered. That means, should you have any questions about CAG8 or its use, please feel free to register on the forums at [orbxdirect.com](http://orbxdirect.com) and then log a support question in the FTX Payware Support Forum section. Orbx FTX experts will be available to review your support questions and you will usually get a reply on the forums within 12 hours, often much sooner than that.



To visit our support forums, click on the “Forums” button shown on the homepage of [orbxdirect.com](http://orbxdirect.com).

## Please do NOT email support requests

Orbx provides world-class support on our forums, and it’s the only way in which you can receive support for CAG8. Provided you adhere to the forum terms of use you will always be offered our support at no cost as we work toward a resolution to your problem each time.

## Use the forum search function

Before you post a question, please try searching for the answer first, using the forum’s built in search function located on the forum menu bar.

## What to include in your support requests

If at all possible, this is what we’d like to see provided for each request you log:

- A separate post on the FTX support forums for each issue (don’t tag new issue reports onto existing threads).
- A screenshot to highlight what you are talking about.
- A descriptive post title which clearly states what the issue is.
- Detailed comments in your post about what you are reporting on.

The Orbx support team is always on standby to assist you with any problems you may have, or will comment on your issue reports. Please remember, our priority is fixing any urgent issues first, and addressing bug reports second. Clearly though, any “show stopper” bugs will be given top priority though.

# FTX Community Forums

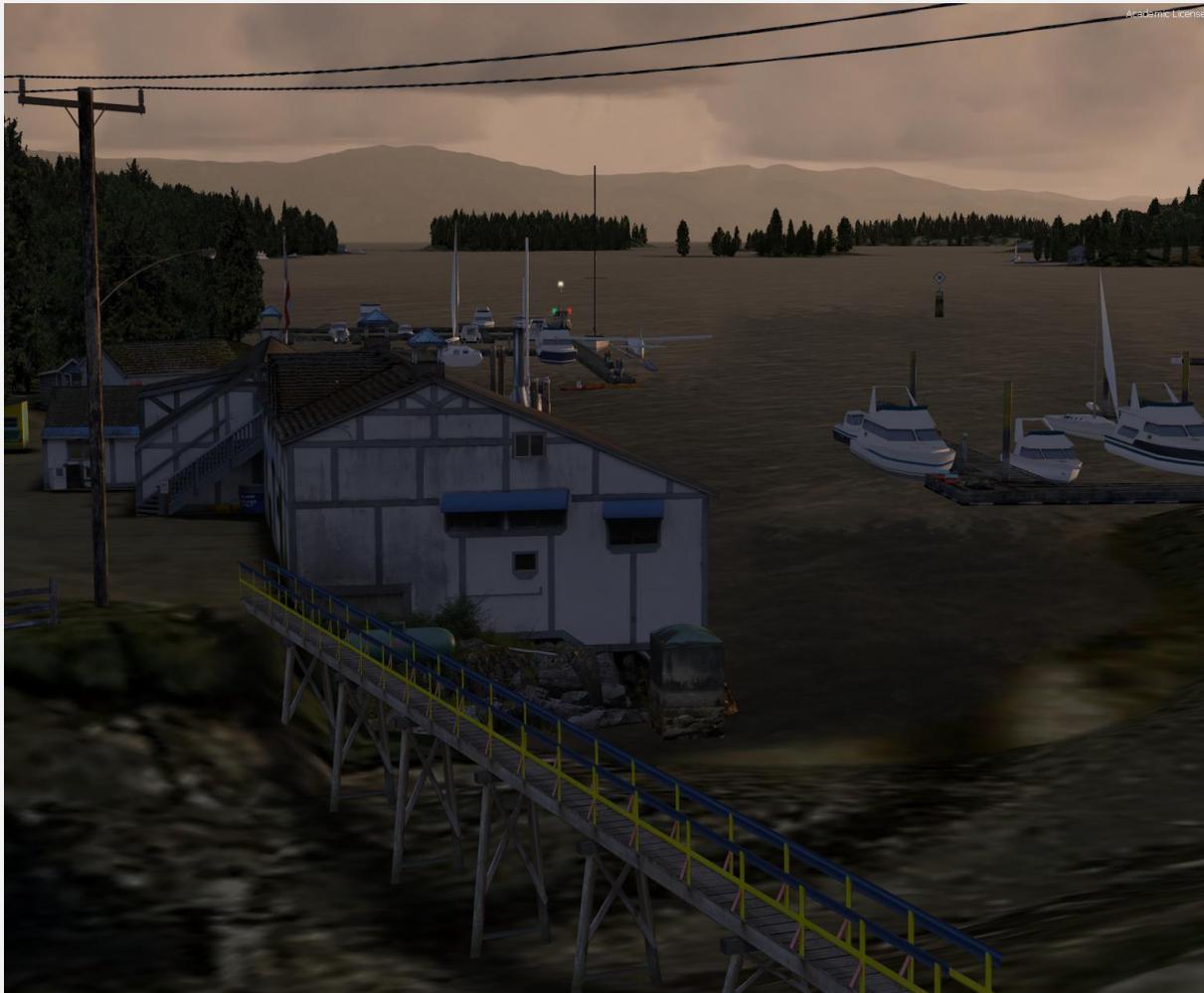
FTX already has quite a thriving and active user community on the forums, with over 63,000 members as of September 2016. To visit the forums, just point your web browser to [orbxdirect.com](http://orbxdirect.com) and from the front page click the “Forums” menu item.

You don’t need a user account to view other people’s posts and information posted by Orbx staff, but if you’d like to join in on the discussion there, simply create an account. It’s instant and no validation email is required. We like to keep things simple☺.

We hope to see you there soon!

## Thanks for reading!

You’ve stuck with us through all these pages of information, and we appreciate you taking the time to read the user guide. We hope it gave you some tips and insights. See you on the forums!



# The FTX CAG8 Team

## Lead Developer

- **Larry Robinson:** 3D modelling, including AI boats and custom effects, texturing, ground imagery, ground poly, POI scenery objects, modelling, extras, and user guide.

## Additional Orbx Developers

- **Orbx Team:** Orbxlibs objects
- **Holger Sandmann:** shorelines, orthoimages, custom scaled meshes

## Specialist Roles

- **John Venema:** Business management
- **Ed Correia:** Production Management
- **Ben McClintock:** FTX Central and OrbxDirect website
- **Photography:** Larry Robinson

## Beta Testing Team

**Rob Abernathy, John Venema, Friedi Gulder**

## Further Acknowledgements

- **Mark Brezer:** Mark, owner of SloCat Harbour Tours kindly supplied the high resolution photos of the tour boat that are used for the AI model.
- **August Sandberg:** Angelfish engine sound <https://www.freesound.org/>
- **Kusum Jain:** for help with my stay at the Sundowner Inn.
- **Bob May:** for his kind permission to convert the Premier Aircraft Design DHC3 for use as a static model. <http://premaircraft.com/>
- **Kenmore Air:** for once again getting me to and from Pender Harbour and beyond. Recreating my 20 year experience of 'flying north' is what these seaplane bases are all about.

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