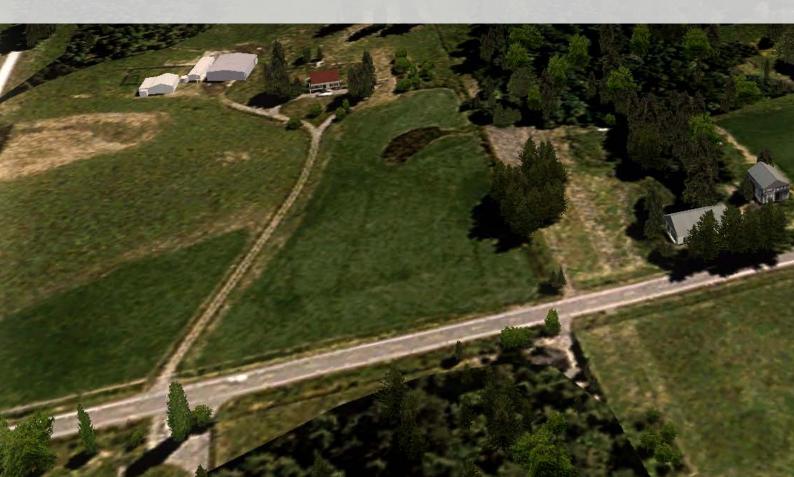


North America Pacific Northwest

USER GUIDE SEPTEMBER 2016





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Thank you!

Orbx would like to thank you for purchasing FTX NA BLUE USA Canada Pacific Northwest (FTX PNW).

FTX PNW took over fourteen months to produce, and is the culmination of nearly five years of research and development beginning with the FS2004 VOZ projects, through to the debut scenery series for FSX/P3D from Orbx called FTX Australia. Much of the technology developed for the Australian Orbx series was further refined and enhanced for the FTX PNW region, making it our showcase product.

The Beautiful Pacific Northwest

We chose to begin our North American series of regions in the Pacific Northwest simply because it offers some of the most diverse and beautiful areas in the entire planet to explore in FSX/P3D. It's a bush flyer's paradise and for good reason, with spectacular geographical features unlike anywhere else on Earth.

This product covers about 156,000 square miles of western North America comprised of large parts of Oregon, Washington, and British Columbia. It reaches from north of Vancouver Island to southern Oregon and inland to just east of the crest of the Cascade Mountains. Major cities in the region are Vancouver (BC), Seattle (WA), and Portland (OR). The following pages will provide more detail of the actual coverage area.

Geography

Dominated by the towering volcanoes and sharp ridges of the Cascade Ranges and Coast Mountains the Pacific Northwest of North America also features large metropolitan areas, flat valley bottoms with extensive farmland, hundreds of coastal islands of all sizes, and endless forested mountains with a long history of forestry operations. More than 450 airfields, from large international airports to tiny airstrips, are spread throughout the region, each of which have been enhanced over the default with corrections to runway position, elevations and many additional buildings and objects placed by hand.

Climate

This region is the home of the temperate rainforests of North America along its rain soaked outer coast. At the same time the wide range of elevations (sea level to >13,000ft) and the rain shadow effect of mountain ridges running parallel to the coast strongly influence the local climate and its seasonal variations.



Product requirements

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

Compatibility notes

Please visit http://orbxsystems.com/forums/index.php?board=118.0 for the latest compatibility information between FTX PNW and third party addons.

FLIGHT1 - ULTIMATE TERRAIN X (UTX)

FTX PNW uses a new form of FSX 'Exclude-All' to hide UTX from under the FTX PNW scenery. This means that the transition from UTX to PNW should be seamless as you cross the boundaries.

However, the UTX night lighting cannot be excluded using the FTX 'Exclude-All', so we will prepare some instructions on the FTX Support forums link shown above. For now, disable the UTX night lights when in PNW.

FSADDON - VANCOUVER+

Orbx and FSAddon have signed a cooperative agreement whereby a special version of Vancouver+ called Vancouver+ for FTX will be released soon after FTX PNW is released. FSAddon are kind enough to offer discounts to encourage people to purchase this excellent addon by Holger Sandmann and Jon Patch, which enhances the greater Vancouver area quite substantially. Jon Patch has been a part of the Orbx beta team to ensure compatibility. For more information visit http://forums.fsaddon.eu/viewforum.php?f=15

If the Vancouver+ for FTX product update is not yet released when you read this, we recommend you disable your current installed version of V+, since it will conflict with FTX PNW. We envisage that the enhanced FTX- compatible version should be available soon, if not already.

FLIGHT1 - GROUND ENVIRONMENT X (GEX)

GEX is a default FSX texture replacement product and their textures won't appear inside FTX PNW since we use custom landclass textures which are called from within the ORBX folders only. This means you will see GEX outside the FTX PNW boundaries, and our textures as soon as you cross over into PNW. There is nothing to do when flying inside FTX PNW. However, you may want to use FTX Central to switch to the 'Default' region when flying outside PNW with GEX in different parts of North America.



REAL ENVIRONMENT XTREME (REX)

FTX PNW is 100% compatible with REX and you don't need to do anything special to use REX whilst flying over PNW. In fact, most of the Orbx developers and beta testers use REX, and it's an Orbx recommended addon.

THIRD PARTY TERRAIN MESH

Third-party add-on terrain mesh files are compatible as long as they don't provide a higher resolution than 10m and their scenery library position is of lower priority than FTX PNW.

Quick Installation Guide

Installing Orbx FTX PNW 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 purchased PNW it will be added to your account and 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 PNW and then have FTX Central manage the installation for you once downloaded.

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

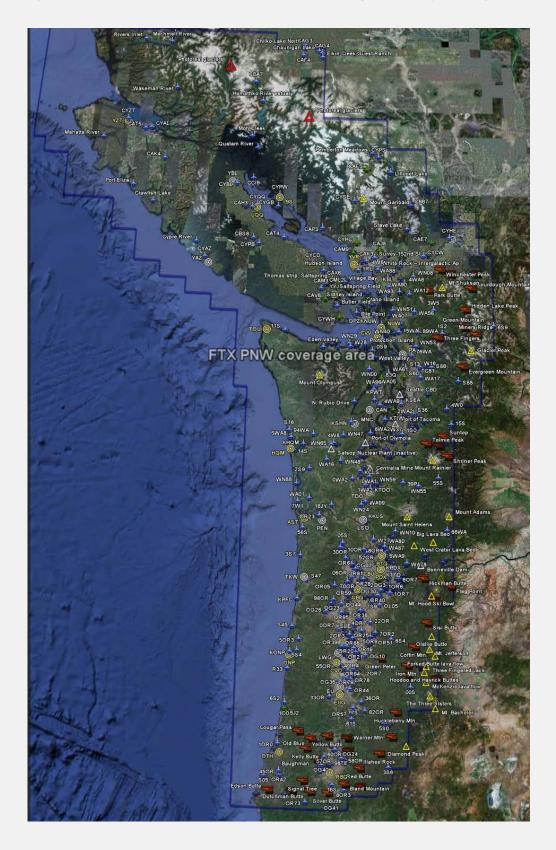
Please note that the above all refers to FTX Central 3. Earlier versions of FTX Central are no longer supported but will still function as before. The integration of FTX Central with your OrbxDirect account is only available with FTX Central version 3 and above.





Scenery Coverage Area

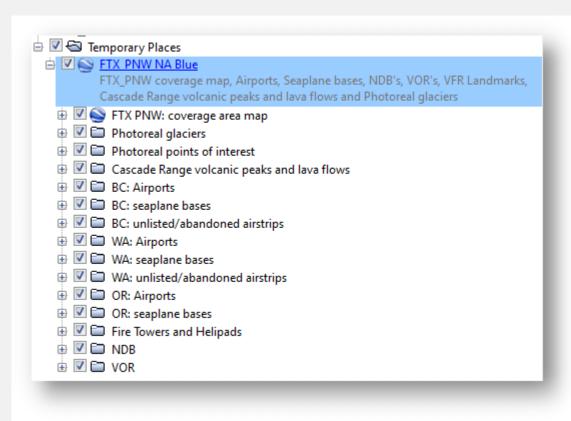
The diagram below shows the extent of the FTX NA BLUE region scenery coverage area.





You can view the coverage and features map interactively in Google Earth by loading the FTX PNW Coverage and Features Map.kmz which you'll find in your ORBX\User Documents folder in your FSX/P3D root folder.

Once loaded into Google Earth, you can select all or some of the features included in the scenery, and the corresponding icons will appear inside the map boundary. You can click on each item on the map for a popup balloon which provides details for that airport or POI.

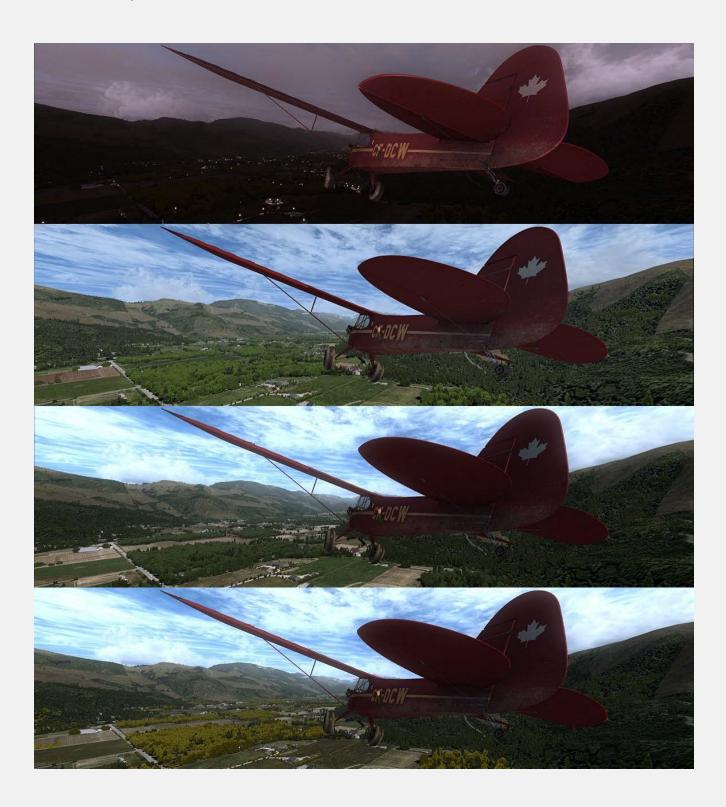




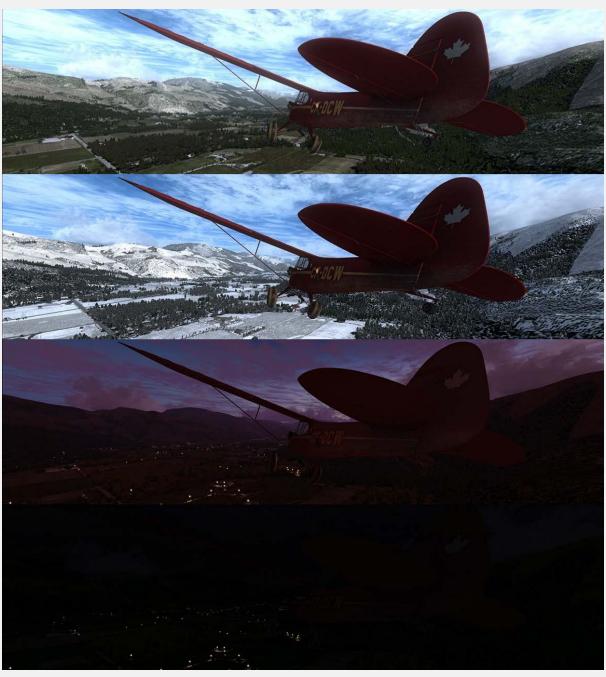


Seasonal Variations and Lighting

With FTX, we don't just do an area once, we do it eight times, with unique texture coloring across five seasons and distinct unique FTX lighting which comes into its own at dawn, dusk and night. Here's an example of one scene across these variations.







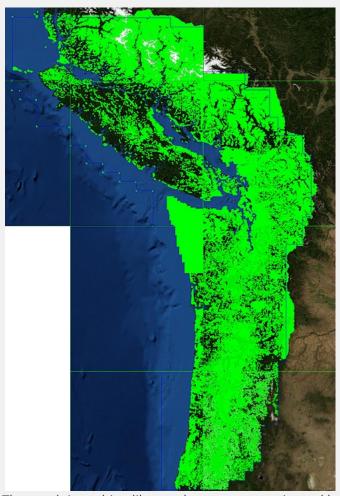
Very few scenery products go to this level of depth in a small area, let alone 156,000 square miles. We are confident you will be absolutely thrilled with the diversity and depth of FTX PNW across all seasons and times of day.



What is Custom Landclass?

Landclass are special files which reside in the scenery layer "pie", and their role is to tell FSX/P3D what type of ground texture to place in any given square kilometer cell. In other words, landclass files tell the simulator to place a field here, a township there, forest here, and a railway yard there, and so on. As far as we are aware, FTX is the first flight simulation product to feature totally hand-crafted landclass on such a large scale. Many global or country-specific addon landclass products for FSX/P3D are created using various data sources and compiled using automated scripts and then manually rectified for obvious errors.

Not so with FTX. The diagram below gives you an idea of the custom landclass which was shipped with FTX PNW. Every single square mile in the green highlighted areas was hand placed by expert landclass developers, using a combination of many sources, including street maps, aerial photos, and topography charts to name a few.



The result is nothing like you have ever experienced before, with an almost photoreal feel to all areas which have been edited, but with the added benefit of faster loading times, full five seasons' support and hand- placed custom autogen and library objects in every single kilometer of the region.

Eventually, like FTX Australia, entire countries will be covered completely with the FTX custom landclass, and photoreal scenery products consuming thousands of GBs of your hard drives will be a thing of the past.



Quick Reference Simulator Settings

The table below lists in a handy reference the minimum recommended settings required in your simulator to enjoy PNW 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.

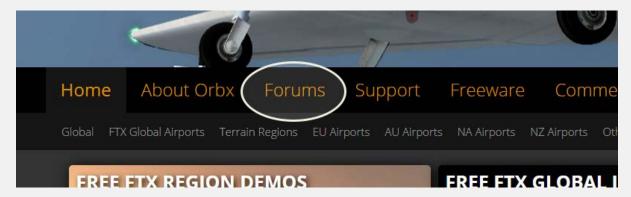
Setting	Value	Why?
Level of detail radius	Large	Reduces blurring of textures.
Global texture resolution	Max	Displays photoreal textures best.
Mesh complexity	100	Better terrain definition.
Mesh resolution	5m	5 m is required for PNW
Texture resolution	7 cm	Sharpest roads and freeways.
Scenery complexity	Extremely Dense	How Orbx designed FTX PNW.
Autogen density	Normal	Best FPS vs detail.
GA Al traffic	16-50%	Recommended for this scenery.
Road vehicle traffic	16%	No need to set higher for FTX.





Product Technical Support

Orbx has a very simple support policy: no question unanswered. That means, should you have any questions about PNW or its use, please feel free to register on the forums at 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.

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 PNW. Provided you adhere to the forum terms of use and have a legitimate copy of PNW, 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).
- Include your ORDER NUMBER from your PNW purchase in your post or forum signature section.
- 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 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 PNW Team

Lead Developers

- Holger Sandmann: Lead developer including all geospatial data, vector roads, rivers, coastlines and railways, photoreal mountains and POIs, seasonal boundaries, landclass meshing tiles, 10m elevation mesh, vertical obstructions, terrain.cfg mods and some autogen annotation
- **Dr Matt Tomkins**: Lead texture artist including all landclass ground textures, some vegetation textures, Iclookup.bgl mods and overall landclass texture architecture
- Martin Lott: Custom hand-crafted landclass covering nearly the entire region, photoreal POIs including open cut mines
- **Tim Harris** All autogen annotation, night lighting and object placement, photoreal POIs development, KPAE object modelling
- Neil Hill: Enhancement and correction of all FTX PNW airports and airfields, modelling of custom housing library for airports

Additional Orbx Developers

- Orbx Team: Orbxlibs objects
- **Bill Womack**: Custom autogen tree textures
- **Hugh Johnston**: Modeling of fire towers and helipads
- Ian Routley: Modeling of custom windsock libraries
- John Venema: Seattle downtown photoreal and night lighting
- Ron Tape: FTX Central1 and supporting applications coder

Specialist Roles

- John Venema: Business management
- Ed Correia: Production Management
- Ben McClintock: FTX Central and website

Beta Testing Team

John Lovell, John Dow, Frank Schnibben, Rob Newman, Friedi Gulder, Wolter van der Spoel, Craig Hanley, Rob Abernathy, Terry Freitas, Edward Boyte and Phil Manhart Wolter van der Spoel, David Voogd, 'Tailspin', 'Turnip', Heiko Glatthorn, Eberhard Haberkorn, Andreas Hegi, Ryan Mason, Patrick Scharnowski, John Dow, Ross Casey, Dr John Hockings, Paul Baumanis, Ian Routley, Hugh Johnston, Lance Karsten, John Ross, Ron Tape, Bill Womack and John Venema.

Further Acknowledgements

The FSBreak Team, Cody Bergland, Tim Fuchs, Steven Sherwin, Chris Palmer and Jon Patch



End User License Agreement (EULA)

For the most recent version of the EULA, see orbxdirect.com/eula.

END-USER LICENSE AGREEMENT (EULA) for Orbx Simulation Systems Full Terrain Experience (FTX) Scenery Addon for Microsoft Flight Simulator X and Lockheed Martin Prepar3D.IMPORTANT

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