

North America

Pacific Northwest Spring Demo

USER GUIDE SEPTEMBER 2016

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Thank you!

Orbx would like to thank you for trying out this free demo of FTX NA BLUE USA Canada Pacific Northwest (we'll call it FTX PNW for short).

FTX PNW has taken 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 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 Flight Simulator X/Prepar3D. It's a bush flyer's paradise and for good reason, with spectacular geographical features unlike anywhere else on Earth.

The full retail 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).

Demo Limitations

This demo is restricted to the Olympic Peninsula, and will only display the Spring season no matter what time of year you select. The following pages will provide more detail of the actual coverage area.

The good news is that apart from it being springtime all year round, there is no other limitations - you are free to use and enjoy this demo area for as long as you want without any obligation to Orbx to purchase the retail version at all. We feel that the demo may just convince you to purchase the whole PNW region though :)

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 add-on 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/forum/forum/80-ftx-compatibility-forum/> 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.

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.

FLIGHTSIMSTORE - 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 if their resolution is 10m or lower and their scenery library position is of lower priority than FTX PNW.

Quick Installation Guide

Installing Orbx FTX PNW DEMO 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 DEMO 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 DEMO 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.

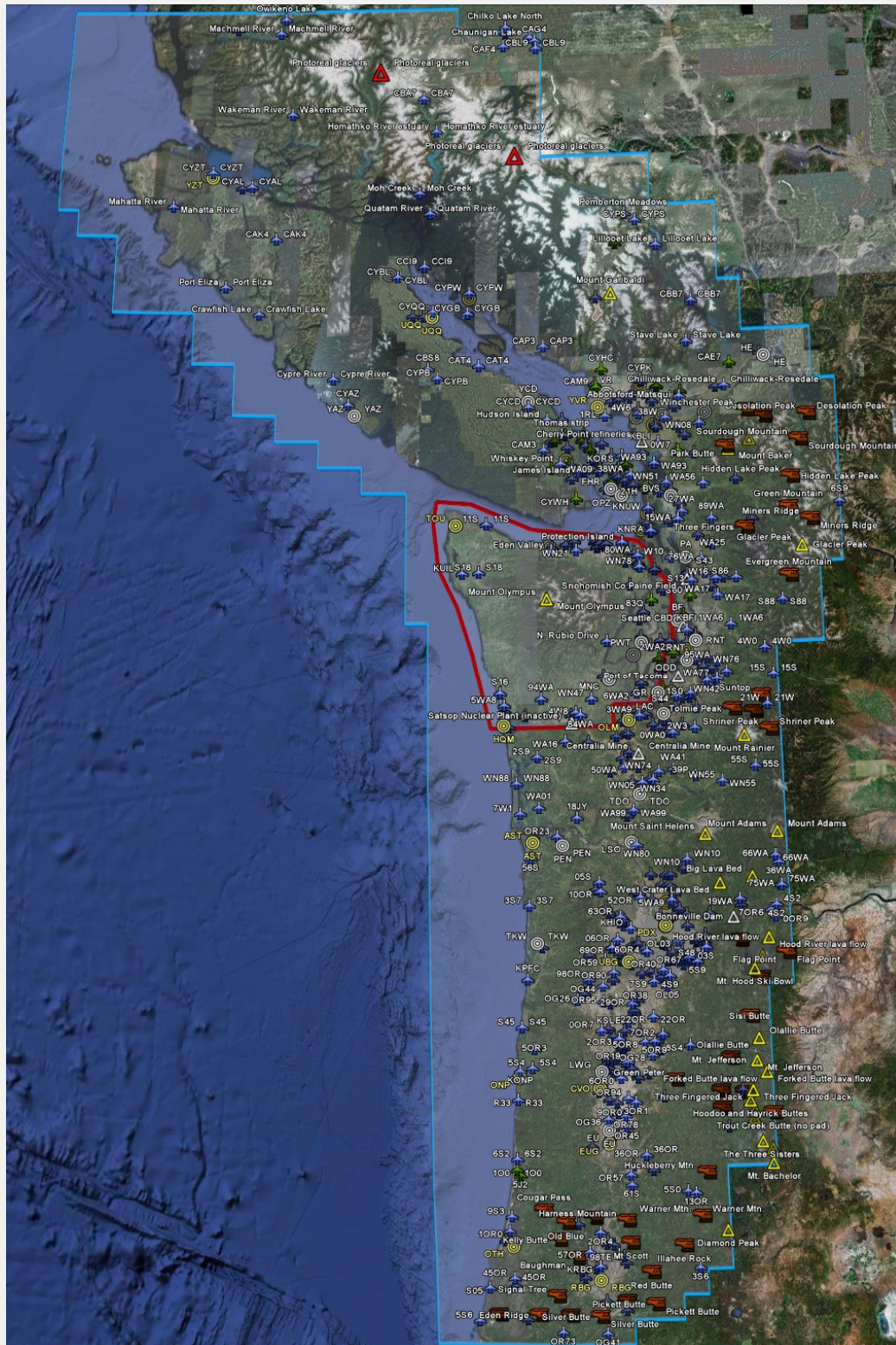
To uninstall the demo, please use the uninstall function in FTX Central.

If you choose to purchase the full Pacific Northwest Region, please make sure that this demo is uninstalled before installing the region.



Demo Scenery Coverage Area

The diagram below shows the extent of the full FTX Pacific Northwest region, with the demo area (The Olympic Peninsula) outlined in red. The demo area offers a good representation of the PNW terrain.

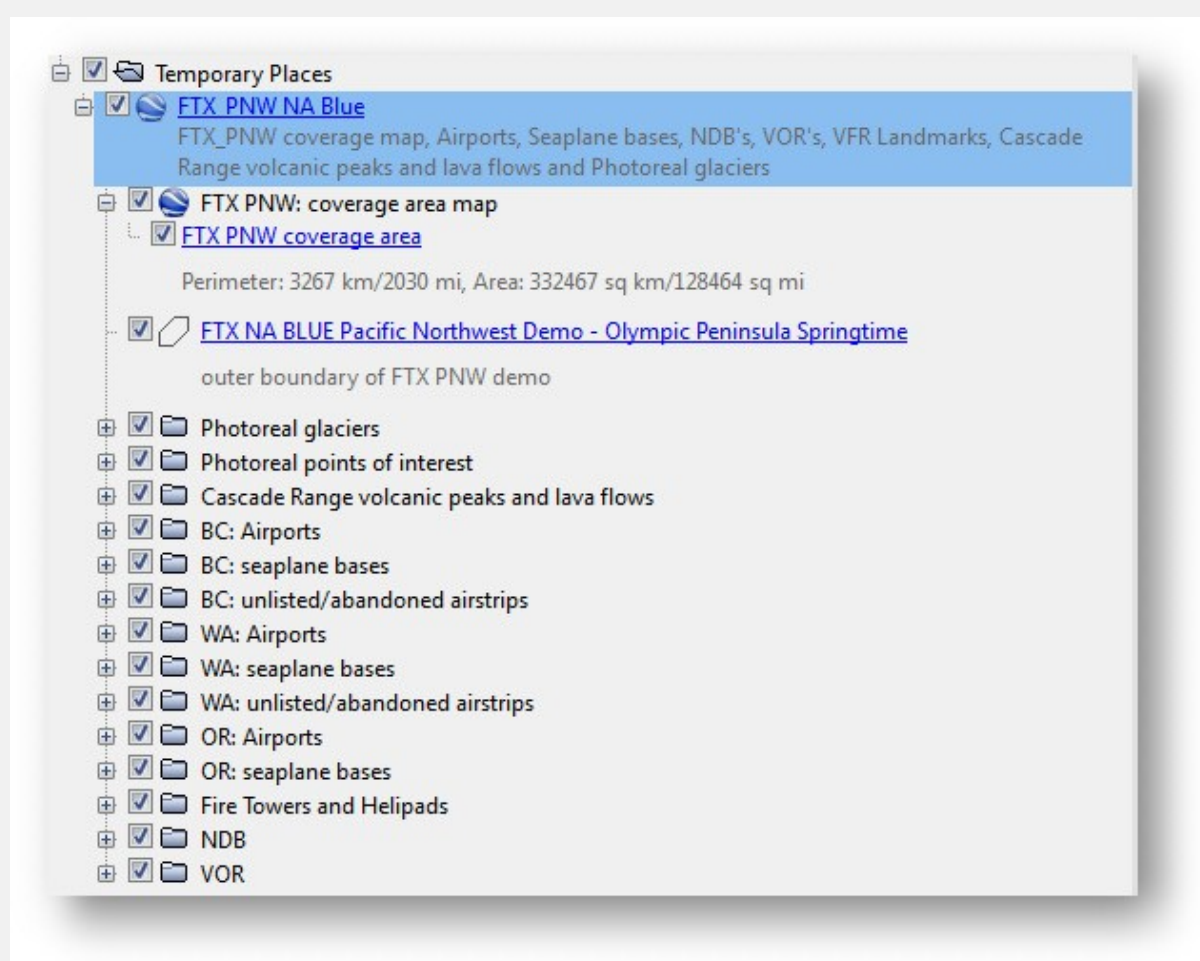


KMZ Coverage and Features Map in Google Earth

You can view the demo coverage and features map interactively in Google Earth by loading the FTX PNW Coverage and Features Map - DEMO version.kmz which you'll find in your ORBX\User Documents folder in your FSX root folder, and also in the demo ZIP file.

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 a particular airport or POI.

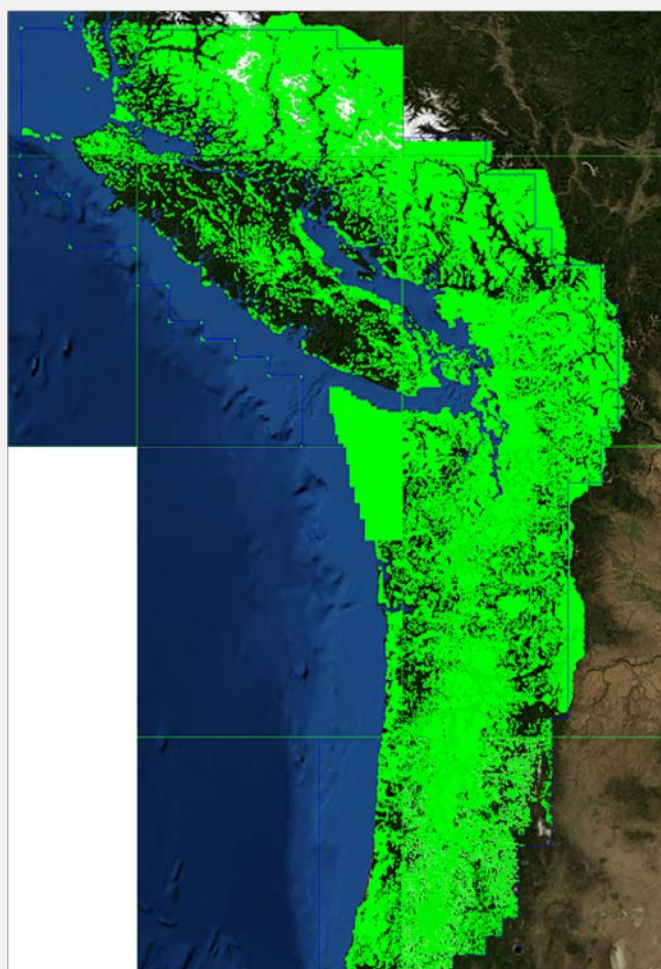
This is a useful tool to begin to explore the features and points of interest included in this FTX PNW Demo, and also the extended features available in the full retail version.



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 add-on 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 photo-real 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 kilometre 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

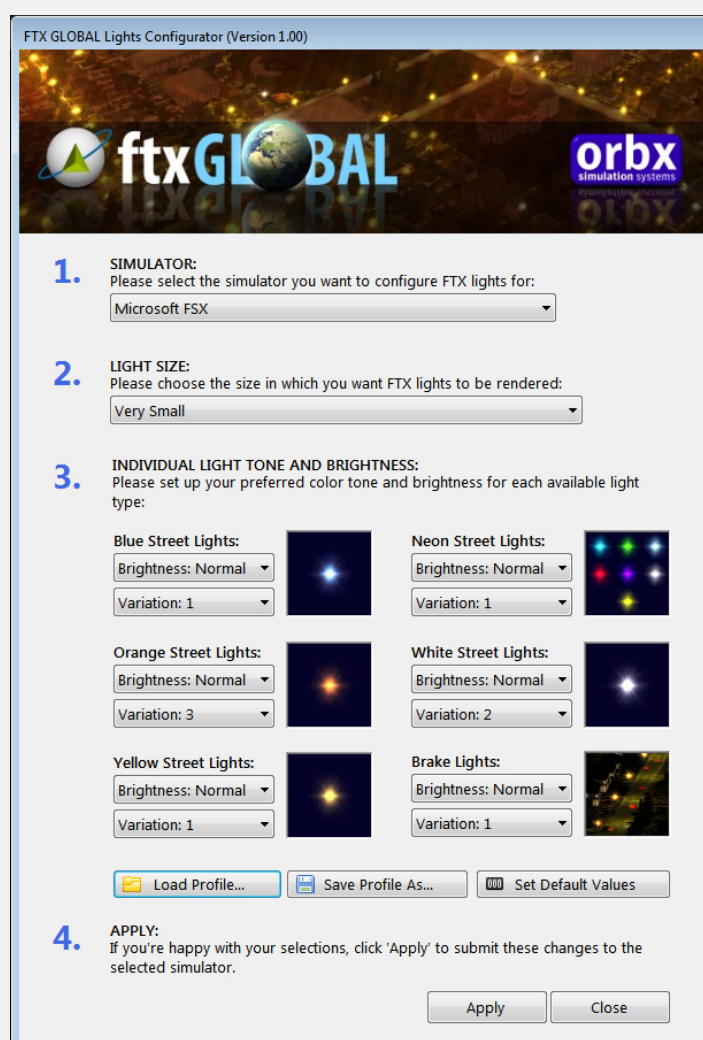
Firstly, dragging all your sliders to the right, even with current hardware, will probably result in poor visuals, low frame rates, and potentially crashes. We suggest that you begin your exploration of Tasmania using the settings suggested below. Then, if you find performance to be acceptable, experiment with moving certain sliders to the right, although we recommend you only move one slider at a time to objectively gauge its effect. The table below lists the minimum recommended settings required in FSX/P3D to enjoy FTX the way Orbx designed it. These settings run well on most PCs and take particular advantage of the custom mesh and photoreal imagery used in the scenery area.

Setting	Value	Why?
Global Texture Resolution	Very High	Enables maximum display quality of object textures
Level of detail radius	Large	Influences sharpness of textures with increasing distance
Mesh Complexity	100	Better terrain definition (= interpolation between adjacent grid elevation points)
Mesh Resolution	5m	5m terrain mesh resolution is the slider setting that all Orbx regions and airports are designed for. That being said, using either 10m or 2m are also unlikely to lead to any major display issues unless you look very closely. Since the slider setting governs the horizontal spacing of mesh grid points this value primarily affects the steepness of slopes adjacent to flattened areas at airports or lakes and rivers. If objects are placed on or next to such slopes they can shift a bit.
Texture Resolution	7cm	Enables maximum display quality of vector textures meaning roads, freeways, railroads, and shorelines
Scenery Complexity	Extremely Dense	Lower settings mean fewer custom objects are displayed
Autogen Density	Normal	Regulates the overall density of autogen buildings and trees
Aircraft AI Traffic	15-20%	An all-round reasonable setting.
Road Vehicles	15-20%	Good road traffic density; higher settings cost performance!

The 3D Lighting System

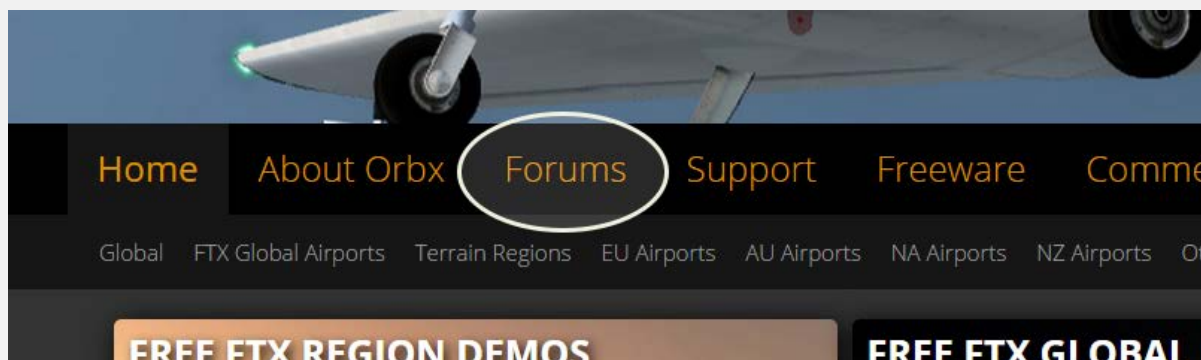
FTX uses a 3D night lighting system developed by Orbx and exclusive to our products. This system creates multi-colored lighting for all roads in urban areas as well as on major highway interchanges. The same lighting system is also implemented as autogen objects in the landclass textures themselves, so you will find cities, towns, and rural areas depicted very accurately during your dawn/dusk and night flights.

To provide you with the most flexibility, we decided to create an optional control utility, called the "FTX Global Lights Configurator", which is available from our Freeware page -- <https://www.fullterrain.com/freeware> -- and will allow you to adjust the size, coloring, and brightness of the light points via several different presets. Its interface looks like the screenshot below. Note that you can save different profiles and also use different settings for P3D and FSX/P3D.



Product Technical Support

Orbx has a very simple support policy: no question unanswered. That means, should you have any questions about PNW Demo or its use, please feel free to register on the forums at fullterrain.com and then log a support question in the FTX Freeware 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 fullterrain.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.

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 fullterrain.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 Orbx Team



The FTX PNW Demo 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, lcllookup.bgl mods and overall landclass texture architecture.

Martin Lott

Custom landclass, internal SDK documentation, GA airfields

Martin Lott, Landclass Developer

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

Eugene Krikunov

Custom autogen textures; night lighting system on ground

Additional Orbx Developers

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

Specialist Roles

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

Beta Testing Team

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.

End User License Agreement (EULA)

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

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