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Thank you!

Orbx would like to thank you for purchasing FTX AU YSTW Tamworth Airport. This scenery has a long history, and was the first ever project which a fledgling Orbx team began developing for FS2004 back in 2006. Here’s an excerpt from the Tamworth Freeware user manual from August 2007:

'Thank you for downloading Orbx Tamworth Freeware Release 1.0 – we hope you have many hours of pleasure flying into this regional Australian airport.

This scenery was designed by a talented group of flight simulation developers hand-picked by Orbx Simulation Systems. Most of the development team had previously contributed to the very successful Vista Australis (VOZ) Freeware project (vistaoz.org).

The Tamworth project was intended to be a “proof of concept” demonstration to see what level of detail could be achieved for a regional Australian airport using data sourced from local knowledge, aerial and ground level photography and off-the-shelf tools including the FS2004 SDK.

The scenery took some nine months to complete from inception to its current state. We should point out that in this freeware version, the airport is not yet fully complete, with many features which were planned not included as yet.

At some point in the future, Orbx may choose to fully develop this airport into a commercial package both for private, military and commercial use.'

We have to acknowledge the original YSTW team who worked very hard to develop many of the pioneering techniques which form the basis of what Orbx does today.

This FSX and P3D version of Tamworth has been developed from scratch, and the only thing used from the original FS9 project are the photos Orbx staff took around the airport back in 2007. Everything else including the new digital aerial imagery is completely new from the ground up, and represents an insight into how much more can be achieved using the FSX or P3D simulation engine versus FS9.

This scenery includes not only the airport scenery within the fence perimeter itself (at a world-first 7cm and also 15cm/pixel resolution), but a large photoreal area and most of the key VFR navigation waypoints contained in over 200 square kilometres of photoreal terrain using 60cm aerial photography. This airport scenery has the largest photoreal coverage of any project Orbx has released to date.
TextureFlow and PeopleFlow

This version of YSTW Tamworth adds the two publically released beta TextureFlow patches and also introduces PeopleFlow animated airside and landside ground staff and passengers, as well as updating this User Guide and the Aerodrome Charts.

Tamworth History

Tamworth is a beautiful, vibrant and prosperous regional city in the state of New South Wales (NSW), Australia and is situated approximately 500km north of Sydney and 600km south of Brisbane. The city covers 184 sq km and is home to nearly 40,000 people.

When explorer John Oxley passed through in 1818, he declared "It would be impossible to find a finer or more luxuriant country... no place can afford more advantages to the industrious settler".

Settlement followed soon after in 1834, The Australian Agricultural Company took up 313,298 acres on the western side of the Peel River with 6,000 sheep. Other settlers gradually built up a town on the eastern side of the river. Tamworth was named after Sir Robert Peels Electorate of Tamworth in Staffordshire England, and was declared a town in 1850. The discovery of gold at Hanging Rock in 1851 brought even more settlers to the area.

In 1876, Tamworth became a Borough with its first Mayor, Philip Gidley King, who was Superintendent of the AA Company’s Peel River Land & Mineral Company which had its headquarters at Goonoo Goonoo Station.

P.G. King built a small town residence which is now part of "Calala Cottage Museum" in Denison Street. The museum now houses a great deal of Tamworth’s proud history.

The railway came to Tamworth in 1878, gas was introduced in 1881 and the town became the first in the Southern Hemisphere to have electric street lighting in 1888. Water supplies were firstly from wells on the Peel River. Later, Dungowan Dam was built (1957) followed by Chaffey Dam (1979). Over the years droughts and floods have affected the Peel Valley, but the resilience of the regions population has always overcome these adversities.
The Tamworth Power Station Museum tells the story of the City’s role in the development of electric street lighting, from early days of oil lamps in 1876 and gas lamps in 1882 through to the installation of the first electric lights on November, 1888. It has one of the largest collections of early 20th century electrical appliances on display.

Proclaimed a city in 1946, Tamworth was built on the wealth of agriculture. Today, among its many facets, Tamworth and region boasts a thriving industrial area, a regional training hospital, an excellent Conservatorium of Music, and a flight training college located at the very busy airport. In January, Tamworth annually stages the world renowned Country Music Festival, one of the largest of its kind in the world.

Airport Background

Tamworth is a major regional gateway airport in central NSW with over 100,000 aircraft movements per year. It is the home for several flight schools, maintenance service companies, an aero club, a museum, a CASA office, an Australian Defence Force training facility and has a passenger terminal serviced by several regional airlines including QantasLink.

Tamworth has parallel runways 12/30. The other runways are 36/18 and 24/06. There is an ILS approach for Runway 30R. Other non-precision approaches are served by DME, VOR and NDB, with a GPS approach also being available. We have included excerpts from some Airservices Australia charts in this user guide.

New Tamworth Tower

The new Tamworth control tower was constructed from 1995-1997 and is 22.5 metres high. Its central location between the airport’s parallel runways, and the peripheral cabin console offer air traffic controllers a full, unrestricted view over all parts of the airport movement area and surrounding airspace.

It replaces the old tower which had been in use since 1954 and had reached the end of its useful life, built at a cost of $5.1 million.

Following the construction of the new runway at Tamworth and the continuing increase in aircraft movements, it became apparent to Airservices that a new, appropriately located, tower was required to enhance safety and meet operational requirements.

With aircraft movements at Tamworth now exceeding 100,000 per year, the new tower has the capacity to cater for Tamworth’s growing importance as a major provincial aviation centre.

The new tower’s construction represents a major boost to Tamworth’s economy and allows Airservices to effectively manage the increasing volumes of traffic in the Tamworth area. Australian ADF pilots begin their flying careers training at Tamworth with Basic Flight Training Skills run by the BAE Systems Flight Training Academy.

The Australian Defence Force Basic Flying Training School (ADF BFTS)

The Australian Defence Force Basic Flying Training School (ADF BFTS) is an Air Force unit located in the BAE Systems facility at Tamworth Airport. ADF BFTS is headed by a wing commander who
is also an active pilot and instructor. It comprises military-qualified flying instructors, and military and civilian support staff.

The ADF BFTS mission is to:

- Conduct basic flying training for Navy, Army, and Air Force
- Conduct flight screening to enhance student pilot selection
- Enhance the skills of new qualified flying instructors for operational flying training in other Navy, Army, and Air Force units.

ADF BFTS operates jointly with BAE Systems, which is under contract to the Australian Government to provide the ADF with pilot training facilities, staff, and other resources. Successful students leave ADF BFTS after about 30 weeks and commence advanced pilot training. Navy and Air Force graduates go to No. 2 Flying Training School at RAAF Base Pearce, Western Australia. Army graduates go to the School of Army Aviation at Oakey, Queensland.

There is no RAAF Base at Tamworth, and therefore some support services are provided remotely from RAAF Bases Williamtown and Richmond, and Singleton Army Base.

**Westpac Helicopter Rescue Service**

The concept of a service based in the New England and North West of NSW regions first surfaced in approximately 1994. Marketing Officer Barry Walton and operational staff identified it as a means by which the Service could better serve all the regions for which it is responsible.

Following strong community support expressed at a Board meeting held in Tamworth in December 1997, the then local state member for Tamworth, Tony Windsor was asked to become Chairman of a local Advisory Committee. Another Advisory Committee member, Max Cathcart was commissioned to prepare a feasibility study to determine whether there was a demonstrated requirement for a helicopter to be based in the New England / North West region.

In March 1999, Health Minister Craig Knowles announced a review of Aeromedical Services in NSW. The review agreed that viable regional services could be established in NSW and Tamworth was one of those sites.

A farming accident near Walcha in mid 1999 focused wide attention on the need for an aeromedical helicopter to service the New England - North West regions of NSW. Raised awareness and community support led to the formation of the new service.

The New England and North West Service was launched at a ceremony at BAE Systems hangar at Tamworth Airport on Friday 25th August 2000 with widespread support from the people of the region. A suitable aircraft, a Bell 407 was sourced in the USA in March 2000 and brought to Australia for its EMS fit out, prior to it being commissioned into service.

Two pilots and two aircrew men plus six volunteer rescue crewmen are based in Tamworth as well as two full- time marketing staff.

_Footnote: We have recently been told that the Bell 407 used at YSTW has crashed recently. However our Orbx scenery is still using the 407 model. We will endeavor to update to the correct helicopter type in a future service pack._
Product requirements

This scenery airport 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.

Orbx FTX Australia is also required for full functionality.

What will you miss out on if you don’t have Orbx FTX Australia installed?

- Blending of the airport photoreal into the surrounding terrain
- 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
- Orbx's modified houses and trees which match Australian houses and trees

Please visit https://orbxdirect.com/product/au to purchase your copy of FTX Australia if you haven't already done so.
Quick Installation Guide

Installing Orbx FTX YSTW 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 YSTW 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 YSTW 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 image below shows the extent of the YSTW region scenery coverage area.
Airport Information and Charts

The following pages include excepts of the ASA charts which can be downloaded in PDF format from their website at http://www.airservicesaustralia.com/publications/current/dap/AeroProcChartsTOC.htm#T

Please visit the ASA website to ensure you are using the most current charts.
DME or GPS ARRIVAL PROCEDURES
TAMWORTH, NSW (YSTW) Page 1

26 AUG 2010

DME USING TW DME
GPS REFERENCE WAYPOINT TW VOR

TW VOR/DME 116.0

TW NDB 341

NO CIRCLING BEYOND 4NM NE
OF RWY 12L/30R.

AD ELEV 1334

SECTOR A

TW VOR or NDB

VOR or NDB

MISSED APPROACH:
TRACK 300°.
CLIMB TO 4200FT.

CIRCLING MINIMA
A,B: 2120-2.4
C: 2500-4.0
D: 2500-5.0

10 NM MSA 5000

NM FM VOR
16.7 15 13 11 10 9 8 7 6 5 4 3 2.6 2 1.4

ALT (3° APCH PATH)
7000 6460 5820 5190 4870 4550 4230 3910 3600 3280 2960 2640 2500 2320 2120

SECTOR B

TW VOR or NDB

VOR or NDB

MISSED APPROACH:
TRACK 300°.
CLIMB TO 4200FT.

CIRCLING MINIMA
A,B: 2620-2.4
C: 2620-4.0
D: 2620-5.0

NM FM VOR
8.3 8 7 6 5 4 3 2 1 0.3

ALT (3.49° APCH PATH)
5600 5490 5110 4740 4370 4000 3630 3260 2890 2620

SECTOR C

TW VOR or NDB

VOR or NDB

MISSED APPROACH:
TRACK 120°.
CLIMB TO 5600FT.

CIRCLING MINIMA
A,B: 2100-2.4
C: 2500-4.0
D: 2500-5.0

NM FM VOR
6.6 6 5 4 3 2 1.3 0

ALT (3° APCH PATH)
4200 4000 3680 3370 3050 2730 2500 2100

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The YSTW Control Panel

The YSTW 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.

Quick Reference Simulator Settings

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

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

Orbx has a very simple support policy: no question unanswered. That means, should you have any questions about YSTW 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 YSTW. Provided you adhere to the forum terms of use and have a legitimate copy of YSTW, 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 YSTW 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 YSTW Team

Lead Developer
- **John Ross**: Modeling and object placement
- **John Venema**: Ground photoreal terrain, object placement, night lighting, autogen

Additional Orbx Developers
- **Orbx Team**: Orbxlibs objects
- **Tim Harris**: Autogen annotation
- **Graham Ecclestone**: APX, AI Traffic
- **Holger Sandmann**: Roads/traffic adjustments, flattens

Specialist Roles
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- **Ed Correia**: Production Management
- **Ben McClintock**: FTX Central and website

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- **CT4 Airtrainer AI Models**: Mike Cronin (used with his kind permission)
- **Original FS9 YSTW Team**: Rob Nieuwenhoven, Timothy Mayhew, Lou Frost, Shaun Snyman, Jarrad Marshall, Maurice King, Tony Arnold and John Venema
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For the most recent version of the EULA, see orbxdirect.com/eula.

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