KATL
Atlanta International Airport

imagine
simulation

Atlanta International Airport
For Microsoft® Flight Simulator 2004

CONTENTS

INTRODUCTION

Welcome to Imagine Simulation's KATL Atlanta International Airport scenery expansion pack for Microsoft® Flight Simulator 2004.

This product is the culmination of over sixteen hundred hours of development time by award winning designers and brings unparalleled detail and realism to your flight simulator experience. If you require the most accurate airport recreation for your virtual flight operations then you have just arrived at your perfect destination.

Please take the time to read through this airport manual because the information contained here will greatly enhance your enjoyment of this product. Thank you for purchasing Imagine Simulation's KATL.

SYSTEM REQUIREMENTS

This product has been developed and tested on a variety of PC systems and we have found that it performs best on machines with a 2.0Ghz processor or faster, at least 512Mb of RAM, an optimized and uncluttered hard drive with at least 500Mb of free space, and a 64Mb graphics card. We also recommend Microsoft® Windows XP or Vista as the PC operating system. Certain aspects of this product may cause non-XP/Vista PC's to experience scenery load freezes or system hangs.

SUPPORT AND IMAGINESIM.COM

If you require one-to-one assistance with this product then please send your enquiry by email to support@imaginesim.com. You might also have a look at our FAQ section of this manual starting on page 9, or on our website at www.imaginesim.com where you will find further information on this and other airports from our range of products.

OPTIMIZING YOUR PC

You can increase your PC's performance by ensuring that it is running at its optimum efficiency. Try some of the following suggestions –

● Before starting your simulator session make sure that you have closed as many Windows applications as possible.

● Check that you have the latest version of Microsoft's Direct X drivers installed. They can be obtained from www.microsoft.com/directx

● Make sure you have the latest set of drivers installed for your graphics card. Even if your PC is relatively new you might still need to upgrade the drivers from the manufacturer's website. Once you are sure you have the latest drivers then check you have the graphics card set up correctly and operating efficiently.

● You can further optimize your system from within the Flight Simulator environment itself. By decreasing the demands made on the CPU and graphics card you can increase simulator performance. By navigating through the Flight Simulator Options/Settings/Display tabs you will find several check-boxes and sliders that offer choices for display properties. Remember that the more items you uncheck and sliders you move towards the far left the less detail will be rendered for your simulator session.

One major factor influencing simulator performance are scenery shadows. By unchecking scenery shadows in the Display tab you can increase your performance by up to 25%. You will also notice that unchecking the autogen feature significantly enhances the frame refreshment rate (frames per second, or fps) in the densely built-up areas of the airport.

It pays to experiment with these settings to find the configuration that best suits your individual preferences.

PRODUCT FEATURES

We have created a fully specified commercial product release of KATL Atlanta International Airport. You will find right across the airport land area literally thousands of objects created with incredible accuracy and placed with the aid of pin-point satellite photography.

The airport features custom made runways, terminal buildings rendered to 5cm per pixel scale, smoothly operating jetways that dock with your aircraft's forward door with an interactive docking system to park you right on your mark, taxiways with highly realistic concrete textures, full airport taxiway and runway signage, 3D approach lighting and full ILS navigation. There are hundreds of airport vehicles and ground personnel, aircraft can be found parked at custom textured parking positions, all hangers, cargo and airport auxiliary buildings are modelled, there is even a secure perimeter fence with security checkpoints and emergency vehicle access points - all under the steady gaze of intermittently placed security cameras!

In addition to all of this, KATL looks stunning after dark with beautifully lit buildings and parking areas. Complete airport taxiway and runway lighting is also included.

ACCESSING YOUR NEW AIRPORT

You can take a look at your new airport before flying there through the Flight Simulator interface. Follow the easy steps below -

● Navigate through the World/Go to Airport tabs. On the 'Go to Airport' page look at the bottom right-hand corner for the 'Search Add-on scenery' button.

● Scroll through the 'Scenery Areas' section until you see the Imagine Simulation airport you want to go to and highlight the line of text.

● On the left side of the page in the 'Search Results' section you will see several starting positions available for the chosen airport.

● Once you have found the desired position from which you would like to start your flight just highlight it and choose 'OK'.

● You might also choose to access the airport from the familiar 'Go to Airport' front page by typing the airport ICAO code into the 'AirportID' box or it's full name into the 'Airport Name' box.

Because of the incredible amount of detail and 3D objects at Imagine Simulation airports you may find that the scenery takes longer to load than default Flight Simulator airports. The length of time varies widely according to differing PC system configurations. Further information about loading times can be found in the FAQ section of this manual starting on page 8.

AIRPORT INFORMATION (extracts from Wikipedia)

Hartsfield-Jackson Atlanta International is located seven miles (11 km) south of Atlanta, Georgia, United States. It is the world's busiest airport by passenger traffic as well as landings and take-offs. Additionally, Delta Air Lines operates the world's largest airline hub from the airport. The airport has 180 gates. Delta Air Lines flew 56% of passengers from the airport in 2007. Hartsfield held its ranking as the world's busiest airport in 2007 by accommodating 89.3 million passengers and 994,346 flights. Many of these flights are domestic flights from within the United States where Atlanta serves as a major transfer point for flights to and from smaller cities throughout the Southern United States. In the first half of 2007 Atlanta's airport had one of the fastest rates of international passenger growth in the US with international traffic jumping 12.5 percent over the first six months of the previous year.
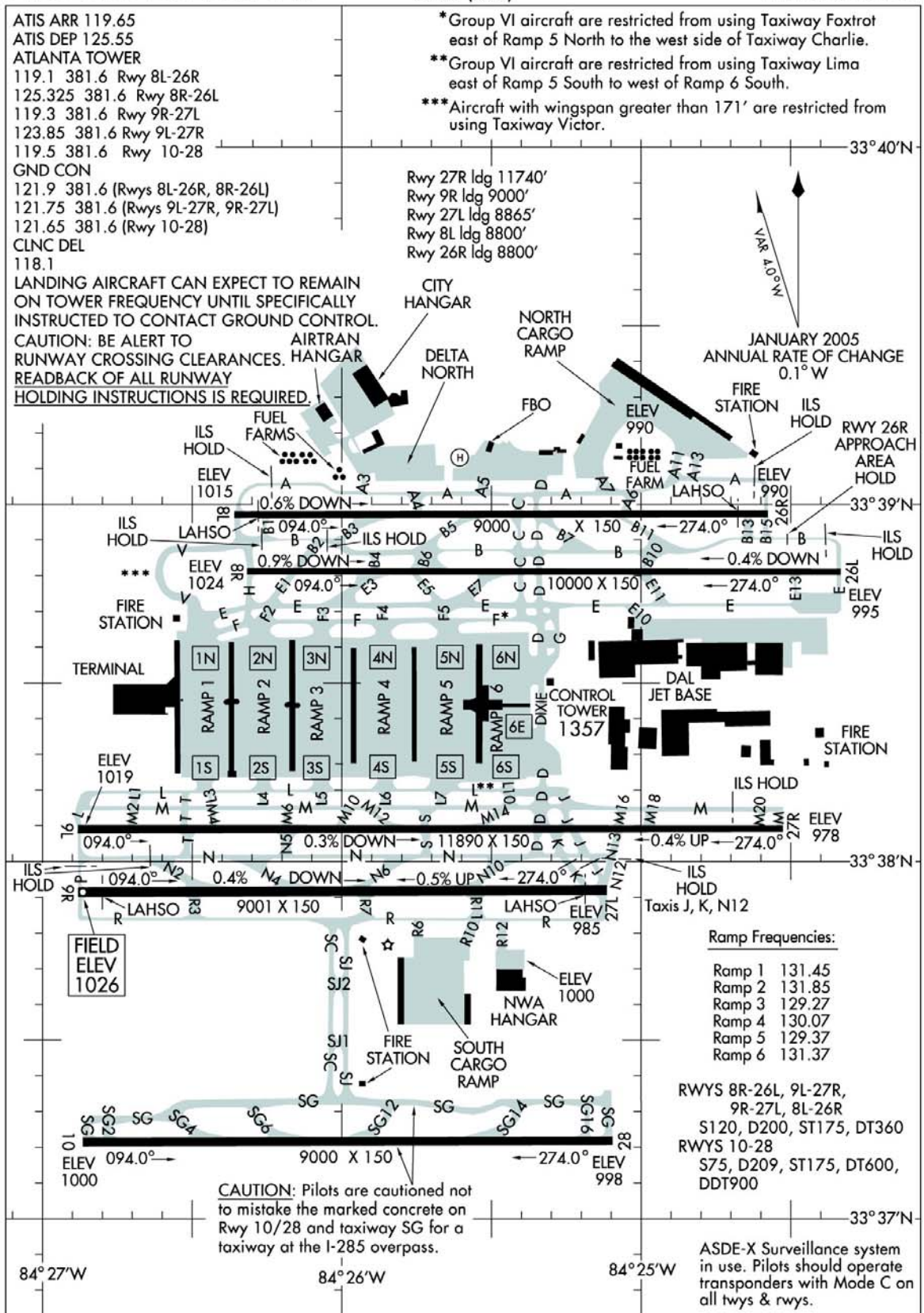The Atlanta airport has more nonstop flights and destinations than any airline hub in the world. It serves 243 nonstop destinations, including 72 international destinations in 45 countries. Hartsfield-Jackson is one of only a few airports that can perform triple simultaneous landings.

08045

AIRPORT DIAGRAM

ATIS ARR 119.65
ATIS DEP 125.55
ATLANTA TOWER
119.1 381.6 Rwy 8L-26R
125.325 381.6 Rwy 8R-26L
119.3 381.6 Rwy 9R-27L
123.85 381.6 Rwy 9L-27R
119.5 381.6 Rwy 10-28
GND CON
121.9 381.6 (Rwys 8L-26R, 8R-26L)
121.75 381.6 (Rwys 9L-27R, 9R-27L)
121.65 381.6 (Rwy 10-28)
CLNC DEL
118.1
LANDING AIRCRAFT CAN EXPECT TO REMAIN
ON TOWER FREQUENCY UNTIL SPECIFICALLY
INSTRUCTED TO CONTACT GROUND CONTROL.
CAUTION: BE ALERT TO
RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY
HOLDING INSTRUCTIONS IS REQUIRED.

*Group VI aircraft are restricted from using Taxiway Foxtrot
east of Ramp 5 North to the west side of Taxiway Charlie.

**Group VI aircraft are restricted from using Taxiway Lima
east of Ramp 5 South to west of Ramp 6 South.

***Aircraft with wingspan greater than 171' are restricted from
using Taxiway Victor.

Rwy 27R ldg 11740'
Rwy 9R ldg 9000'
Rwy 27L ldg 8865'
Rwy 8L ldg 8800'
Rwy 26R ldg 8800'

33°40'N

VAR 4.0°W

JANUARY 2005
ANNUAL RATE OF CHANGE
0.1° W

SE-4, 08 MAY 2008 to 05 JUN 2008

CITY HANGAR
AIRTRAN HANGAR
DELTA NORTH
NORTH CARGO RAMP
FBO
FUEL FARMS
FUEL FARM
FIRE STATION
ELEV 990
ILS HOLD
RWY 26R APPROACH AREA HOLD

ILS HOLD
ELEV 1015
0.6% DOWN
LAHSO
ELEV 990
33°39'N

ILS HOLD
LAHSO
ELEV 1024
0.9% DOWN
094.0°
9000
X 150
274.0°
ILS HOLD
ILS HOLD
0.4% DOWN

FIRE STATION
ELEV 1024
094.0°
10000 X 150
274.0°
ELEV 26L
ELEV 995

***

TERMINAL
ELEV 1019

1N 2N 3N 4N 5N 6N
RAMP 1 RAMP 2 RAMP 3 RAMP 4 RAMP 5 RAMP 6
1S 2S 3S 4S 5S 6S
6E
DIXIE
CONTROL TOWER 1357
DAL JET BASE
FIRE STATION

094.0°
0.3% DOWN
11890 X 150
0.4% UP
274.0°
ELEV 978
ILS HOLD
33°38'N

LAHSO
094.0°
0.4% DOWN
0.5% UP
274.0°
ILS HOLD
ELEV 985
Taxis J, K, N12

ILS HOLD
LAHSO
9001 X 150
LAHSO
ELEV 985

FIELD ELEV 1026

SC
SJ2
SJ1
SC
SJ
FIRE STATION
SOUTH CARGO RAMP
NWA HANGAR
ELEV 1000

SG
SG2 SG4 SG6 SG12 SG14 SG16
10
094.0°
9000 X 150
274.0°
28
ELEV 1000
ELEV 998

33°37'N

Ramp Frequencies:

Ramp 1 131.45
Ramp 2 131.85
Ramp 3 129.27
Ramp 4 130.07
Ramp 5 129.37
Ramp 6 131.37

RWYS 8R-26L, 9L-27R,
9R-27L, 8L-26R
S120, D200, ST175, DT360
RWYS 10-28
S75, D209, ST175, DT600,
DDT900

CAUTION: Pilots are cautioned not
to mistake the marked concrete on
Rwy 10/28 and taxiway SG for a
taxiway at the I-285 overpass.

ASDE-X Surveillance system
in use. Pilots should operate
transponders with Mode C on
all twys & rwys.

84°27'W
84°26'W
84°25'W

AIRPORT DIAGRAM
08045

PARKING YOUR AIRCRAFT

There are several ways of parking your airliner at the terminal gate ranging from pure guesswork (not recommended) to the tried-and-trusted switch to 'Top Down View'. By navigating through the Views/View Options tabs and checking 'Top Down' from the left hand list, choose a value of 1040ft from the drop-down menu located in the 'Altitude (AGL)' box. This will give you a good perspective to get your front wheels stopped as near as possible to the 'T' junction of the yellow line and horizontal stop bar. If you are parking a large widebody airliner then you might have to select a slightly higher altitude to fit the aircraft in the view area.

Alternatively, you might try utilizing the docking mechanisms included with this expansion pack. At KATL it's a relatively simple and easy to understand analogue system. Using these docking mechanisms correctly will get you parked right on the mark every time, ready for the jetway to swing in and dock with your forward portside door. The procedure is explained on the following page.

OVERVIEW

Gates at ATL use 'Delta Park' which utilizes fixed neon tubes for steering guidance and a 'traffic light' controlled by the marshaller for distance guidance.

Lateral steering guidance is ONLY accurate as seen from the left seat.

Following the lateral guidance will place your aircraft approximately 2-3 feet left on the yellow painted line on the ramp. This is acceptable as your aircraft will remain within mainline aircraft footprints.

PROCEDURE

Taxi into the gate when the green traffic light is flashing or permanently illuminated.

Use the centerline lights (neon tubes) for lateral guidance. Red and green will be aligned when your aircraft is steering in the correct direction. If the red and green lights are out of alignment, steer in the direction of the green tube until the tubes align.

Follow the traffic light as your aircraft taxis into the gate.
GREEN – Continue forward at a safe speed.
YELLOW – Slow and prepare to stop.
YELLOW/RED – Optional stop short and set parking brake.
RED – Stop and set parking brake. Do not proceed past this point.

Steer LEFT

Proceed STRAIGHT AHEAD

Steer RIGHT
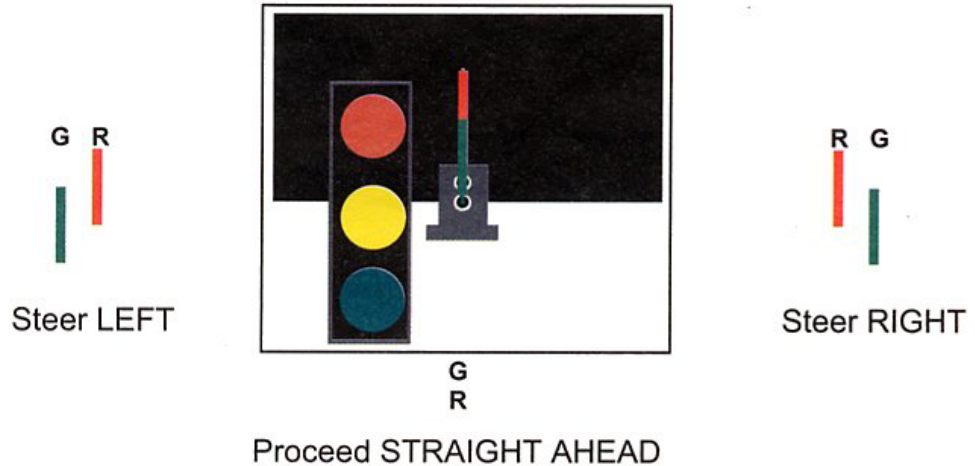
ANIMATED JETWAYS

An extra feature at KATL Atlanta International Airport is the inclusion of animated jetways (moveable bridges that dock with the aircraft passenger doors). Once you have successfully parked your aircraft at the right spot on the terminal ramp you have the option of watching the jetway swing smoothly into position.

First, access your aircraft's radio section. To get the jetway docked with your forward portside door you simply have to tune 111.00 into the NAV2 radio. When you want the jetway to detach itself from your aircraft simply tune the NAV2 radio to any frequency other than 111.00 and it will smoothly retract to it's parked position.

At this time the jetway animation process is unable to determine which type of aircraft you are operating, so specific gates have been designed for specific types of airliners. For example, from the list below you can see that Gate B7 has been set up for aircraft such as Boeing 737, 727, MD80 or similar sized airliners. The jetway at Gate T2 is specifically designed for Boeing 767 and similar sized aircraft, and so on.

We are hoping to further refine the animated jetway process for future Imagine Simulation airport expansion packs so that the whole mechanism becomes automatic and the jetway 'recognizes' the aircraft it needs to dock with. We will make a free upgrade available for this KATL International airport once we have the new jetway technology ready. Check our website www.imaginesim.com periodically for news and updates of this feature.

Alternatively, we highly recommend the excellent AES (Airport Enhancement Services) utility available from www.aerosoft.com. This clever add-on replaces the imaginesim jetway system and positions an active jetway at every parking ramp. It also features interactive service vehicles and a pushback facility. Check with Aerosoft for the latest compatibility information.

Docking guidance and animated jetway positions

Aircraft type Boeing 737, 727, MD80 and similar
Gates T11, A9, A27, A30, B7, B14, B26, C8, C11 and D17.

Aircraft type Airbus A320, Boeing 757 and similar
Gates A4, B33, D4 and E18.

Aircraft type Boeing 767 and similar
Gates T2, E29 and E32. 747/A380 aircraft use E1 and E8.

The animated jetways have been tested with the default Flight Simulator aircraft as well as a variety of freeware and commercially available aircraft. We have attempted to configure the jetways with as many of these aircraft in mind as possible, but with so many different and diverse models available it is inevitable that some aircraft forward doors will not exactly match the docked jetway position.

FREQUENTLY ASKED QUESTIONS (FAQ's)

Q. What is this software all about?
A. This software has been created as an expansion pack (add-on) for use with Microsoft® Flight Simulator 2004, and as such you must have a version of the Flight Simulator product previously installed on your PC.

Q. Is there a trial or demo version I can look at before I decide if I want to buy it?
A. Yes. There is a trial version in the 'Airports' section available at our website www.imaginesim.com. The demo has several objects impeding the runway and some of the main buildings disappear intermittently.

Q. How can I purchase it?
A. By credit card. You must first download the software file from the 'Airports' section of our website at www.imaginesim.com or via SimMarket at www.simmarket.com. Once you have the file on your hard drive double-click it and the easy to follow install process will guide you through.

Q. Can I get it on DVD or CD instead?
A. Yes. If you make your purchase through SimMarket there is an option during the process where you can specify you require your product delivered on CD.

Q. How do I install it into Flight Simulator?
A. Once you have finished the purchasing process during which you will have downloaded the entire package, there will be an executable (EXE) file that will need to be activated. The installation process is automatic when you double-click the EXE file and will install the airport (after verification of your unique registration key issued to you at purchase) into your main Flight Simulator program.

See the "readme.htm" file that comes with your download for full installation instructions.

Q. What if I want to uninstall it later?
A. Click your 'Start' button on the bottom left corner of your Windows desktop. From there choose the option 'All Programs' and go to the Imagine Simulation section. Then onto the relevant airport section and choose the 'Uninstall' option. The process is automatic and once finished the entire airport will have been removed from Flight Simulator.

See the "readme.htm" file that comes with your download for full un-installation instructions.

Q. I have started Flight Simulator. What now?
A. You can take a look at your new airport before flying there through the Flight Simulator interface. Follow the easy steps below -

● Navigate through the World/Go to Airport tabs. On the 'Go to Airport' page

Page and look at the bottom right-hand corner for the 'Search Add-on scenery' button.

● Scroll through the 'Scenery Areas' section until you see the Imagine Simulation airport you want to go to and highlight the line of text.

● On the left side of the page in the 'Search Results' section you will see several starting positions available for the chosen airport.

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Because of the incredible amount of detail and 3D objects at Imagine Simulation airports you may find that the scenery takes longer to load than default Flight Simulator airports. The length of time varies widely according to differing PC system configurations. Further information about loading times can be found in the FAQ section of this manual on page 11.

Q. I am at the airport and want to have a good look around. What's the best way?
A. Simply press 'Y' and get into 'slew' mode. Then use the arrow keys, numeric keypad or joystick to investigate the airport thoroughly.

Q. Flight Simulator seems quite sluggish when slewing around the airport. What's happening?
A. The 2D and 3D objects at the airports have been optimized for viewing from approach angles and from ground level, as you would see the airport in real-life from a commercial jet. You will get reduced frame rate refreshing if certain parts of the airport are viewed during 'slew mode' from a low height while the view angle is pointing down. This is unavoidable due to the increased field of vision and the unnatural amount of items in view which the Flight Simulator display engine must try to create. Go back down to ground level and the frames will be refreshed at much higher rates, just as you need them to be during taxi.

Q. It's quite jerky when near the terminal buildings or other built-up areas. Why is this and what can I do to make everything run a little smoother?
A. You can optimize your system from within the Flight Simulator environment. By decreasing the demands made on the CPU and graphics card you can increase simulator performance. By navigating through the Flight Simulator Options/Settings/Display tabs you will find several check-boxes and sliders that offer choices for display properties. Remember that the more items you uncheck and sliders you move towards the far left the less detail will be rendered for your simulator session.

One major factor influencing simulator performance are scenery

shadows. By unchecking scenery shadows in the Display tab you can increase your performance by up to 25%. You will also notice that unchecking the autogen feature significantly enhances the frame refreshment rate (frames per second, or fps) in the densely built-up areas of the airport.

It pays to experiment with these settings to find the configuration that best suits your individual preferences. Further performance optimizing suggestions can be found on page 2 of this manual.

Q. OK, I am at the gate and want to see the animated jetway docking with my aircraft. It looks fine from one of the cockpit views but when I go to the exterior views nothing happens. Why?
A. We have limited for performance reasons the viewing range of the animation process to 500 feet. If you can't see the jetway moving when looking with an exterior view then you might have the viewing distance set too far away, so to ensure you are comfortably in range to see the animation try a setting of 400 feet.

Q. I am watching the jetway but it's going crazy, jumping between positions almost faster than the eye can see. What's this?
A. We have experienced during testing that some add-on aircraft cause this effect and seem to interfere with the jetway animation. We will endeavour to refine the jetway animation process with each new airport expansion pack release, but for now these anomalies are beyond our control and we offer our apologies if it happens with your favourite aircraft.

Q. The ground vehicles and airport staff are not really my kind of thing and I would rather not have them there. Is there a way of getting rid of them?
A. If you are at all familiar with the Windows 'My Computer' or 'Explorer' features then customizing your airport couldn't be easier. Just navigate to the Imagine Simulation folder found in the main 'Flight Simulator/Scenery' folder, locate the airport that you would like to alter and navigate into its 'Scenery' folder. Here you will see listed in plain language all the files that are associated with the airport with filename extensions of BGL. If, for example, you don't want to see the cargo vehicles at the airport the next time you start Flight Simulator then simply move the 'vehicles_ground_01.bgl' file to a location outside of the current folder. Alternatively, if you would rather keep all the files in the same folder then you could just rename the BGL portion of the file to something else and Flight Simulator will ignore it next time you start.

But some words of caution - Imagine Simulation cannot be held responsible for loss or damage that may result from moving or renaming any files from the original installed locations. You manipulate these files at your own risk.

Q. I have seen in the 'Scenery' folder some files that have the extension ZZZ. I didn't change these. What are they?
A. These files are installed 'sleeping'. They contain large amounts of objects that might cause average or low specification PC systems to

operate sluggishly when used with Flight Simulator. However, if you have a new and up to the minute super machine then rename the ZZZ extension to BGL and the next time you start Flight Simulator there will be extra detail to see at your airport.

Q. When I'm on approach, about 12 to 15 miles out, my whole Flight Simulator freezes. It only happens at this and other large airports. What's happening?
A. With airports created by Imagine Simulation and other major developers there are literally thousands of objects that Flight Simulator has to load and get ready to display once you get in range. If Flight Simulator freezes it's a temporary condition that may take 20 seconds or more before continuing depending on system specifications. It's a 'trade-off' that we continually monitor during development and we hope to strike a good balance.

Q. Will my Artificial Intelligent (AI) aircraft still land, park and take-off from the right places with this airport?
A. Yes. New AI airport mapping is installed along with the other airport files and the process is automatic. This map by default will leave spaces for the parked aircraft that come with this expansion pack. Should you choose to remove these parked aircraft you will find an alternative AI file with full parking slots available in an alternative set of files available from the airport pages of our website. Look for the AI/AFCAD download link.

Please make sure you are familiar with the various systems within Flight Simulator that need altering before attempting these switches. If in doubt, leave things as they are.

Q. Do airports developed by Imagine Simulation work with earlier versions of Microsoft® Flight Simulator?
A. This particular airport expansion pack has been developed for use with Flight Simulator 2004 only.

Q. I cannot even load the scenery. My system hangs and eventually I get an 'out of memory' or 'not enough memory' error report.
A. This is a most tricky situation which has caused problems with only a handful of customers in the past. Latest research seems to suggest that it is a Windows OS issue and not strictly an FS issue and it rather depends on which operating system you use. So far we have only ever heard of memory errors from customers using Windows 98, 2000 or ME. It may be further compounded when using additional third party programs that access DLL files contained in the FS MODULES folder.

The code contained within this file has been optimized for 32 bit applications and some Windows 98/2000/ME OS setups may experience difficulty managing these codes.

We will continue to look into these issues and will release news of updates and patches as and when they become available. Until such a time **we strongly recommend that this product should only be used on systems that use Windows® XP or Vista as the operating system (OS)**. Support concerning these issues cannot be given to customers who use a non-XP/Vista OS.

Q. I have an add-on AI aircraft package installed and the parked aircraft that came with the airport are parked in their ramps. How do I remove them?

A. Have a look in the scenery folder – FS\Imagine Simulation\KATL Atlanta\Scenery. You will see files that begin "parked_aircraft…..", just move them out of this Scenery folder (or delete them but make a backup) and the next time you start FS the parked aircraft will be gone.

In addition, see the readme file that came with this airport download for an explanation of how to alter AI parameters so that KATL Atlanta International works optimally with your AI package.

Q. Will there be more airport expansion packs available from Imagine Simulation in the future?

A. Yes. We are currently running at an approximate production rate of a new airport every 1200 hours (2 to 3 months). We will be developing more airports for the USA and other major world centres.

Q. I can't see the airport vehicles, jetways, and a whole load of other stuff?

A. Make sure you have your scenery complexity setting set to maximum. The slider contained in the Options-Settings-Display-Scenery Complexity tab should be set all the way to the right.

CREDITS

Project Producer -	Cal Lewin
Project Manager -	Fran Coates
Development Team -	Cal Lewin, Rose McKenna, Tony Piasecki, James Rioch, Wolfgang Schwarz.
Manual -	Fran Coates

COPYRIGHT

SOFTWARE PIRACY

The spectre of software piracy (otherwise known as theft and a criminal activity) has started to seriously affect our industry. Many dedicated programmers spending thousands of hours each year creating great and progressive Flight Simulator add-ons are finding their efforts being undermined by the activities of these individuals. In many cases talented designers and companies have been forced to leave the industry altogether.

Pirates think that the simple act of passing on files of copyrighted material to friends or colleagues is an innocuous enough thing to do, but combine that with the activities of criminals who illegally copy material for profitable gain and we have a serious haemorrhaging of resources away from the developers.

Owning copied software is also an offence, so it's not only the perpetrators of copying the software at source who are risking prosecution.

If you are offered our products by any other means other than those officially endorsed by Imagine Simulation then please contact us at sales@imaginesim.com and help us to fight the threat of piracy, or we will all end up the losers.