



KLGA New York LaGuardia Airport. FSX

# KLGA New York LaGuardia Airport

For Microsoft® Flight Simulator FSX

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## **INTRODUCTION**

Welcome to Imagine Simulation's KLGA LaGuardia Airport scenery expansion pack for Microsoft® Flight Simulator FSX.

This product is the culmination of nearly 2,000 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 KLGA.

## **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 3.5Ghz (or equivalent) processor or faster, at least 8Gb of RAM, an optimized and uncluttered hard drive with at least 1Gb of free space, and a minimum 2048Mb (or equivalent) graphics card. We also recommend Microsoft® Windows as the PC operating system. Certain aspects of this product may cause a non-Windows computer to experience scenery load freezes or system hangs.

## **SUPPORT AND IMAGINESIM.COM**

If you require assistance with this product then please send your enquiry to [support@imagesim.com](mailto:support@imagesim.com) or post at our facebook page. You might also have a look at our FAQ section of this manual starting on page 8, or on our website at [www.imagesim.com](http://www.imagesim.com) where you will find further information on this and other airports from our range of products.

## **PRODUCT FEATURES**

We have created a fully specified commercial product release of KLGA LaGuardia 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, high resolution buildings, 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, 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 KLGA 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.

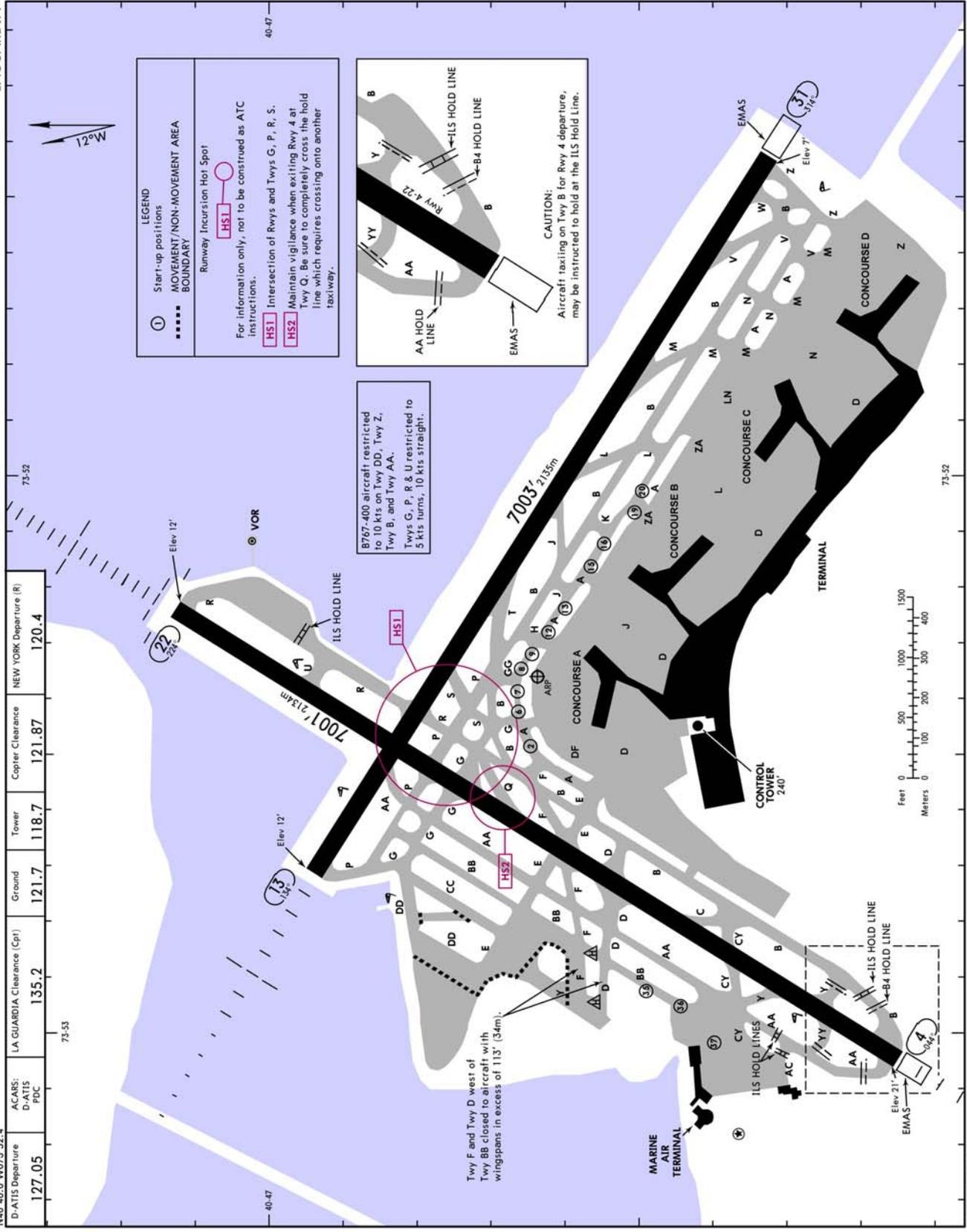
Because of the incredible amount of detail and 3D objects at Imagine Simulation airports you may find that the scenery takes longer to load than default Flight Simulator airports. The length of time varies widely according to differing PC system configurations. Further information about loading times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

## AIRPORT INFORMATION (extracts from Wikipedia)

On July 27, 2015, Governor Andrew Cuomo, joined by Vice President of the United States Joe Biden, announced a \$4 billion plan that would rebuild the terminals as one contiguous building with terminal bridges connecting buildings. Airport officials and planners had concluded that the airport essentially had to be torn down and rebuilt.

Under the plan, a single unified terminal building is to be constructed in stages, with a people mover, retail space and a new hotel. Some 2 miles (3.2 km) of additional taxiways will be built. A people mover will connect the new terminal sections, the Grand Central Parkway will be reconfigured, and AirTrain LaGuardia, previously announced, will connect the airport to the Mets – Willets Point subway station and the Mets – Willets Point LIRR station. A proposed high speed ferry will service the Marine Air Terminal, a national historic landmark, which will remain intact. The new airport will be eco-friendly and contain accommodations such as a hotel and a business/conference center. The entire airport will move 600 feet (180 m) closer to the Grand Central Parkway.

In late March 2016, the comprehensive plans for the redevelopment were approved unanimously. Construction of the project's first half will start in 2016, with completion scheduled for 2021.



**LEGEND**

- Start-up positions
- MOVEMENT/NON-MOVEMENT AREA BOUNDARY
- Runway Incursion Hot Spot
- For information only, not to be construed as ATC instructions.
- HS1 Intersection of Rwys and Twys G, P, R, S.
- HS2 Maintain vigilance when exiting Rwy 4 at Twy Q. Be sure to completely cross the hold line which requires crossing onto another taxiway.

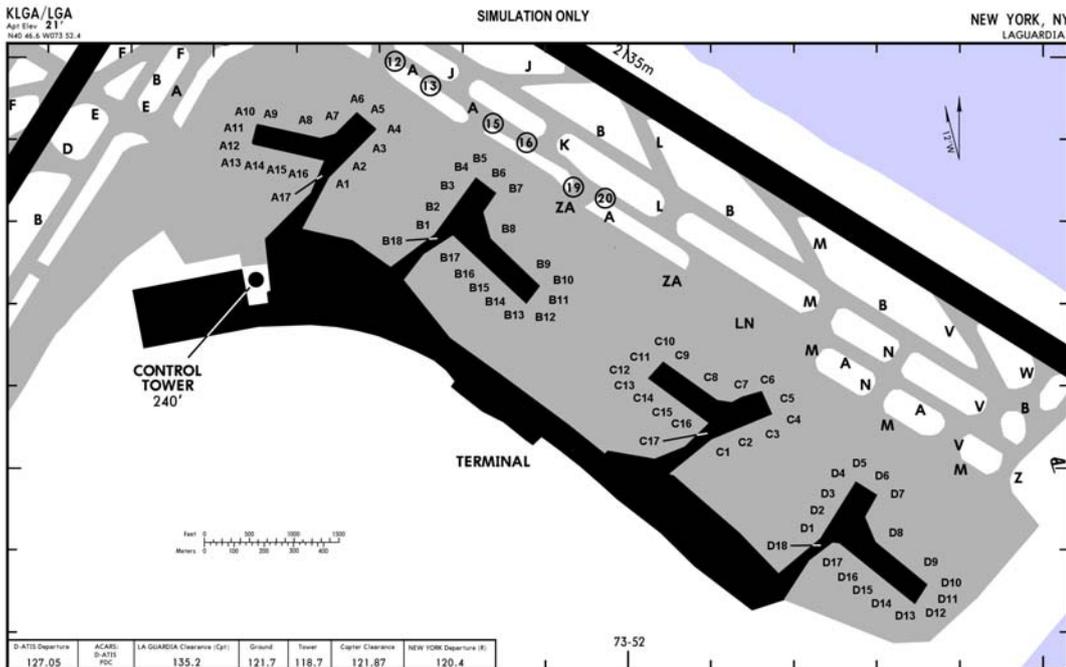
**CAUTION:**  
Aircraft taxiing on Twy B for Rwy 4 departure, may be instructed to hold at the ILS Hold Line.

AA HOLD LINE  
B4 HOLD LINE  
ILS HOLD LINE

B767-400 aircraft restricted to 10 kts on Twy DD, Twy Z, Twy B, and Twy AA.  
Twys G, P, R & U restricted to 5 kts turns, 10 kts straight.

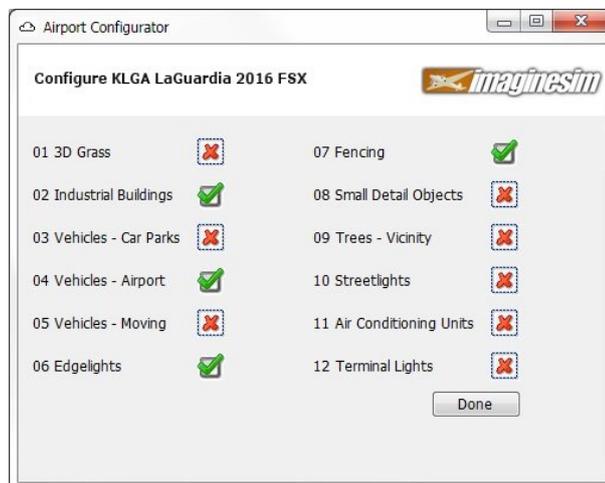
Twy F and Twy D west of Twy BB closed to aircraft with wingspans in excess of 113' (34m).





## PERFORMANCE Installer Options

LaGuardia Airport has four large terminals in a row and a considerable number of spaces for parked aircraft. This arrangement in association with the surrounding built environment makes enormous demands of your computer's graphics system. You can manage demand to an extent with our configuration tool. The tool will popup during the initial airport installation and can be accessed at any time via your Windows Start menu. The more categories you choose the greater the impact on flightsim's performance.



## Ultra High Definition Textures

This airport uses very high resolution (UltraHD) textures that bring you incredibly realistic looking buildings and ground images. By default FSX will only display these textures at its standard 1024x1024 resolution. If you have a good quality graphics card and want to take advantage of our higher resolution textures then it's a simple process. Navigate to the FSX.cfg file at C:\Users\\AppData\Roaming\Microsoft\FSX and change the maximum texture size from the default TEXTURE\_MAX\_LOAD=1024 to TEXTURE\_MAX\_LOAD=2048. As always, make a backup of the file before changing it. The next time you start FSX you'll really notice the detail at KLG/LaGuardia 2016.

## Performance Optimization

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](http://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.

## Suggested Settings

These are settings we found during testing that gave the best all-round experience, a balance between flight performance and scenery.



**Tip.** Our favourite setup - AI aircraft slider at 50%, no ground scenery shadows and set flightsim's autogen and road traffic sliders to zero, you'll get excellent results. We've been enjoying the airport through hundreds of hours of testing with all options in the KLGa config tool enabled and get great performance, even with ordinary computers.

## 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 FSX, 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](http://www.imaginesim.com). The demo has several objects impeding movement around the airport area.

### ***Q. How can I purchase it?***

A. By credit card or PayPal. You must first download the software file from the 'Airports' section of our website at [www.imaginesim.com](http://www.imaginesim.com) or purchase at The Flightsim Store at [www.flightsimstore.com](http://www.flightsimstore.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. No. Sorry, this facility is not available at this time.

### ***Q. How do I install it into Flight Simulator?***

A. Once you have finished the purchasing process 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 an online verification 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 and look at the bottom right-hand corner for the 'Search Add-on scenery' button.
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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.

***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. Performance optimizing suggestions can be found on page 6 of this manual.

***Q. Where are the parked aircraft?***

A. We no longer provide our own low resolution aircraft at the airport ramps.

***Q. Do the jetways move and dock with my aircraft?***

A. The jetways provided with the airport are non-functioning and remain motionless. If you want your jetways to dock with your aircraft then we recommend the excellent SODE module (details at our website) or the AES product from Aerosoft.

***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 a short while 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.

***Q. Do airports developed by Imagine Simulation work with other versions of Microsoft® Flight Simulator or Lockheed Martin Prepar3D?***

A. This particular airport expansion pack has been developed for use with Flight Simulator FSX only. A Prepar3D version is available from our website [www.imaginesim.com](http://www.imaginesim.com)

***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. It may be further compounded when using additional third party programs that access DLL files contained in the FS MODULES folder.

We will continue to look into these issues and will release news of updates and patches as and when they become available.

***Q. I have seen in the 'Scenery' folder some files that have the extension ZZZ. I didn't change these. What are they?***

A. At some of our airports 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. Will this airport work with my other scenery add-ons?***

A. If you are concerned that this airport will cause problems with your FS scenery setup then please try the demo version before purchasing to make sure all works well. If you purchase this airport and later find that things start to go wrong with it after installing other scenery add-ons then try moving it to the top of the scenery order list so it is displayed on top of other add-on areas. You can access the scenery order list via the Flights\End Flight\Settings\Scenery Library drop down menu, then select the airport and move it to the top of the list using the 'Move Up' button. The next time you start FS it will position itself at the top of the scenery list display order.

***Q. I'm getting error messages when I try an install.***

A. If you experience an error during the installation process you may have administrative rights limitations with your operating system. Try right clicking the installer EXE and choose the "Run as" or "Run as Administrator" option from the popup menu.

***Q. I can see some thin dark lines forming some kind of grid at the edges of the airport. What's causing this?***

A. These are the demarcation lines between the square tiles used to create the ground texturing. Normally these should not be seen but you can minimize the anomaly by experimenting with anisotropic filtering within flightsim's display settings.

***Q. I'm holding at the runway but I'm not getting any clearance to take-off?***

A. If flightsim is reluctant to give you the go-ahead to enter the runway move forward and stop a little closer to the runway.

## CREDITS

Project Producer - Fran Lewin  
Development Team - Anthony Cacciatore, Gábor Kovács, Cal Lewin, Garry Lewin, and Irmi Schwarz.  
Test Team - Siggie Herrmann, Jake Martin, Murray McConnell, Phillip Roberts and Quek Min Yang.  
Extra Special Thanks - The fsdeveloper community ([www.fsdeveloper.com](http://www.fsdeveloper.com)), Media Relations Port Authority NY & NJ and LaGuardia Airport Public Relations Dept.

## COPYRIGHT

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## 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](mailto:sales@imaginesim.com) and help us to fight the threat of piracy, or we will all end up the losers.

Please be aware that all airport files are uniquely watermarked at the point of purchase. Any misuse of these files can be traced back to source and offenders will be prosecuted.