

# FS Instant Approach 2020 for X-Plane 11 for Windows

## Manual

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To use FS Instant Approach 2020 with X-Plane 11 you must install Sandy Barbour's excellent 'Position Aircraft' plugin. This is free.

If you already have version 1.20 or above installed on your PC, you do not need to install it again. You can check this by looking on the X-Plane Menu bar for Plugins... Position Aircraft... Control Panel, where the version number is shown. If it does appear there, it is installed and you do not need to install it. If it does not appear there, you should install it as your next step. Exit X-Plane 11 if it is running and download the Position Aircraft Plugin from http://xpluginsdk.org/position\_aircraft.htm and copy the files and folders within the downloaded zip file into the 'Plugins' folder beneath your X-Plane 11\Resources folder and then start X-Plane 11 again.

### We have placed a button in the program to do this for you automatically if the plugin is not present. See details below.

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### Introduction

## Welcome to FS Instant Approach 2020!

FS Instant Approach 2020 adds a whole new level of fun to your flights with X-Plane 11. You can put yourself "On Approach" to any runway in the world in seconds! Set yourself up 'on final' or ready to intersect final approach for a more challenging flight. For a tougher assignment, set up to fly the traffic pattern approach to any runway, beginning at the start of the 'downwind' or 'base' leg of the pattern or ready to enter the pattern by intersecting the 'downwind' leg at an angle of 45 degrees abeam the mid-point of the runway.

## System Requirements

FS Instant Approach 2020 recommends a PC well equipped to run the version of X-Plane 11 you have selected. If the PC can run X-Plane 11 at a good pace, without problems, FS Instant Approach 2020 will run fine with it. If the PC is *struggling* to run X-Plane 11, then FS Instant Approach 2020 will be unable to give its best performance.

**If you are using X-PLANE 11 -** Because X-PLANE 11 requires a high performance system, we recommend the following minimum specification:

3 GHz multi-core CPU (multiple processors preferred) 4 GB RAM DirectX 10 capable (DirectX 11 preferred) graphics with 2 GB on-board dedicated VRAM

#### Installation

For FS Instant Approach 2020 to install and to run correctly, you must be a *Computer Administrator* user and not a *Limited Account* user.

To install, simply run the installation EXE program supplied by FSInventions.

## 'Position Aircraft' Plugin

## To use FS Instant Approach 2020 with X-Plane 11 you must install Sandy Barbour's excellent 'Position Aircraft' plugin. This is free.

If you already have version 1.20 or above installed on your PC, you do not need to install it again. You can check this by looking on the X-Plane Menu bar for Plugins... Position Aircraft... Control Panel, where the version number is shown. If it *does* appear there, it is installed and you do not need to install it.

#### If it does not appear there, you should install it as your next step.

You will be told 'Position Aircraft' is missing if you launch FS Instant Approach 2020 before 'Position Aircraft' is installed into X-Plane 11.

FS Instant Approach (Demo Version)	□ ■ ¤
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5 FS Instant Approach Help	<b></b>
FS Instant Approach says "Unable to find X-Plane 11 in specified fol * Select the 'Settings' section. * Press the '' button. * Use the 'Locate X-Plane 11 Installation' dialog to find the folder X-Plane 11 is installed	
	raft\win.xpl should then
* W Close Window * Launch FS Instant Approach 2020 and press the [Flight Plan] button, enter yo	ur airport, click the
[Approach Airport] button, choose your runway etc View Manual Show Tips Discuss FS Instant Approach	Tweet FSInventions
Click for Help> < Status: Unable to find 'Position Aircraft' plugin	

Install 'Position Aircraft' as follows:

Exit X-Plane 11 if it is running.

Click on the "Click for Help" button in FSIA PRO and then click the "Automatically download" button as shown above. If for any reason you have problems with this you can download the Position Aircraft Plugin from http://xpluginsdk.org/position\_aircraft.htm and then copy the files and folders *within the downloaded zip file* into the **'Plugins'** folder beneath your **X-Plane 11\Resources** folder.

Finally, start X-Plane 11 again and check as described above to make sure it is there.

## X-PLANE 11

To configure X-Plane 11 to work with FS Instant Approach 2020:

- Close all flight simulation software.
- Run X-Plane 11. Once X-Plane 11 has loaded, get into an airplane and start the engines get it ready to fly an approach.
- Run FS Instant Approach 2020. If you have not yet done so, follow the instructions to specify where
  on your PC X-Plane 11 is installed.
- If you have not yet done so, follow the instructions at the Settings Screen of FS Instant Approach 2020 to generate runway data for use by FS Instant Approach 2020.
- "X-Plane 11" will be detected and FS Instant Approach 2020 can then create approaches for it!

## Demo and Registered Versions of FS Instant Approach 2020

The FS Instant Approach 2020 installation program, downloaded from a web site, always installs the *DEMO* version of FS Instant Approach 2020.

It can be unlocked to become a full version when registered with a purchased registration key.

Differences between the demo and registered versions:

Demo: Pilot can perform Instant Approaches to Chicago (KORD) or Green Bay (KGRB) only

Registered: Pilot can perform Instant Approaches at **any airport in the world!** 

In order to register FS Instant Approach 2020, you will need to enter the codes which came with your purchase of the product if you downloaded it. Download customers are sent a registration key. See the instructions within this manual below at the *Credits Page* section.

## Like FS Instant Approach 2020?

**You will love FSFlyingSchool for X-Plane 11!** Did you know that FSInventions, the creators of FS Instant Approach 2020, also publish a unique X-Plane 11 add-on that will have you flying like a Pro in no time?

Our software has won 5 consecutive *PC Pilot Magazine Classic Product Awards* and is used by thousands of real and simulator pilots worldwide.



It contains a team of artificially intelligent **talking instructors** who analyze and record over 70 different aspects of all your flights in any powered airplane, anywhere in the world.

You can download a **free demo**, watch movies and learn all about this unique product at: <u>www.FSFlyingSchool.com</u>

## **Quick Start**

#### Please read this manual if you want to get the most out of flying with FS Instant Approach 2020.

If you would prefer to do this later and want to jump right into the cockpit, here's what you should do next:

- Launch X-Plane 11.
- Create or select a flight in X-Plane 11.
- Get that plane ready to fly, either in mid-air or on the ground. Get yourself at the controls of the plane with the *engines running ready to fly*. Leave X-Plane running.
- Return to Windows Desktop (using Alt TAB or whichever method you prefer) and launch the FS Instant Approach 2020 program.
- To set up an instant approach, click the [Flight Plan] button, enter your airport, click the [Approach Airport] button, chose your runway etc and then click the [Save Approach File] button to create the approach file.
- Return to X-Plane 11 (using Alt TAB or whichever method you prefer).
- Press Ctrl Shift C to open the 'Position Aircraft' Control Panel within X-Plane.
- Press Ctrl Shift Q to *quick load* the approach file you created into the Position Aircraft plugin.
- Press Ctrl Shift P to position the aircraft ready to fly the approach you just created with FS Instant Approach.
- Enjoy your flight with FS Instant Approach 2020!
- TIP: If you want to fly an approach at a location which is a considerable distance from the aircraft's present location, you may notice that occasionally, when you press Ctrl Shift P to *position* the aircraft that it is instead positioned on the ground at the nearest runway or in an undesirable attitude. If this occurs, **simply press Ctrl Shift P again** and the aircraft will be positioned in the air ready to fly the approach.
- That's the Quick Start ... but you really should read this too...

There are several new features you will want to understand. Read more about these features in detail in this manual.

## The FS Instant Approach 2020 Interface

Under normal circumstances, you will first launch X-Plane 11, get into an airplane, get it ready to fly (engines running etc) and then launch FS Instant Approach 2020. If FS Instant Approach 2020 is correctly configured, it will successfully detect X-Plane 11. If it does not detect X-Plane 11, FS Instant Approach 2020 will display the warning "No X-Plane 11 Found" and you will not be able to press FS Instant Approach 2020's [Save Approach File] button to create an approach with X-Plane 11.

FS Instant Approach 2020's [Save Approach File] button saves a file in the correct folder within X-Plane 11, containing the starting position of the approach you have selected to fly. You can then load this file into X-Plane 11 and fly the approach.

In addition, FS Instant Approach 2020 has a number of screen pages which control different aspects of configuration and use of FS Instant Approach 2020:

- Information
- Flight Plan
- Settings
- Credits

#### Tips of the Day

A randomly selected tip is displayed when the user launches FS Instant Approach 2020. The tips can be examined one by one if the user prefers and this feature can be turned on or off as desired. The tips contain handy information about how to get the most from FS Instant Approach 2020.

#### Information Page

The Information Page has helpful information on how to fly different types of flight with FS Instant Approach 2020 and also a convenient link direct to the FS Instant Approach 2020 web site. There is also a button to launch the FS Instant Approach 2020 Manual (this document you are reading).

#### Save Approach File Button

The [Save Approach File] button, when pressed, tells FS Instant Approach 2020 to create your approach file for X-Plane 11. You will then return to X-Plane and load the file to fly the approach.

## Flight Plan Page

#### **On Approach Feature**

FS Instant Approach 2020 gives you the opportunity to instantly practice approaches and landings at any runway in the world!

You have several types of approach to choose from:

- -- On Final You will start your approach lined up with the runway
- -- Intersect Final You will begin flying a course that will intersect your final approach
- -- Downwind You will begin at the start of the Downwind leg of the traffic pattern
- -- Base You will begin just before the start of the Base leg of the traffic pattern
- -- Enter You will begin flying a course that will intersect Downwind leg at 45 degrees

FS Instant Approach 2020 offers many different ways to set up these approaches using the following controls:

- ICAO Code

Enter the code of the airport at which you wish to practice a landing, for example, KGRB (Green Bay) or KORD (Chicago). The registered version of the program allows any airport in the world, for example, EGLL (London Heathrow) or KLAX (Los Angeles).

- Approach Airport
   Press this button to find the runway in the FS Instant Approach 2020 runway data and set it as your approach airport.
- Approach Random Airport

Press this button to select a random runway - anywhere in the world - and set it as your approach airport. Note that the runway information is displayed when the button is pressed. You may wish to press again for a different runway if the runway randomly selected is unsuitable for your aircraft (for example - it is too short for your airliner!).

Start

This box is turned on so that FS Instant Approach 2020 will create a file to put you on approach to your chosen runway when you press FS Instant Approach 2020's [Save Approach File] button.

Nautical Miles out from runway

This is the length of the 'on final' leg of your approach.

Use these two boxes to enter the distance you want to start from and the runway that you wish to land at.

Note that the *length* of the 'on final' leg is *ignored* if you choose to fly an approach starting you on the 'Downwind' or 'Base' leg of the traffic pattern or if you chose to 'Enter' the pattern.

Flying at

Choose the speed at which you would like to start the approach.

Intersect from

Check this box if you wish to start your approach from a path that *intersects* your final approach path at an angle. The *default* is 45 degrees, but you can set this to any angle you wish. You will then be able to select it from *left* or *right* and to choose the *length* of the intersecting path. **Note** that if this option is chosen, your altitude remains that computed by FS Instant Approach 2020 for a *straight in approach* at the distance given in 'Nautical Miles out from runway'.

Left

Choose this option if you wish to start your approach from a path that intersects your final approach path, from the left, at an angle you choose. You will also want to choose the *length* of the intersecting path. When you return to X-Plane 11 to fly, you will notice that the runway is to your left.

Right

Choose this option if you wish to start your approach from a path that intersects your final approach path, from the right, at an angle you choose. You will also want to choose the *length* of the intersecting path. When you return to X-Plane 11 to fly, you will notice that the runway is to your right.

Nautical miles back

If you have chosen to *intersect* your final approach leg, this is where you specify the distance back from that intersection that you will start the flight. Note that this distance is *in addition* to the distance you start your *final* approach leg from the runway.

You can either specify the distance in nautical miles or choose the "AUTO" option in which case you will start approximately 1 *minute* back from the intersection point based on your initial speed. Downwind

Check this box if you wish to begin your approach at the start of the 'Downwind' leg of the traffic pattern at that runway. This means that you will start with your airplane abeam the far end of the runway you have chosen to land at, facing in the opposite direction, at 1000 feet AAL (above airfield level) and at a distance based on your speed. (Several of these settings can be changed if you wish - see below). You will then be able to select it for a *left* or *right* traffic pattern and to choose the *length* of the 'Base' leg of the traffic pattern.

Base

Check this box if you wish to begin your approach just a little before the start of the 'Base' leg of the traffic pattern at that runway. You are not placed at the very start of the Base leg as that would require an *immediate* descending turn and this is a less useful point to start the simulation from. In order to give you a little time to get ready for the turn, you will start with your airplane abeam the *start* of the runway you have chosen to land at, facing in the opposite direction, at 1000 feet AAL (above airfield level) and at a distance based on your speed. (Several of these settings can be changed if you wish - see below). You will then be able to select it for a *left* or *right* traffic pattern and to choose the *length* of the 'Base' leg of the traffic pattern.

Enter

Check this box if you wish to begin your approach on a course that will intersect the 'Downwind' leg of the traffic pattern at an angle of 45 degrees. You are placed with the same distance to fly as was chosen for the Base leg before you reach the Downwind leg abeam the mid-point of the runway. You will be at at 1000 feet AAL (above airfield level) and at a distance based on your speed. (Several of these settings can be changed if you wish - see below). You will then be able to select it for a *left* or *right* traffic pattern and to choose the *length* of the 'Base' leg of the traffic pattern. Left

Choose this option if you wish to begin your approach at the start of the 'Downwind' or 'Base' leg of the *Left* Traffic pattern at that runway or 'Enter' the pattern by intersecting 'Downwind' at 45 degrees. When you return to X-Plane 11 to fly, you will notice that the runway is to your left.

Right

Choose this option if you wish to begin your approach at the start of the 'Downwind' or 'Base' leg of the *Right* Traffic pattern at that runway or 'Enter' the pattern by intersecting 'Downwind' at 45 degrees. When you return to X-Plane 11 to fly, you will notice that the runway is to your right. Nautical miles Base

If you have chosen to fly 'Downwind' or 'Base' leg, this is where you specify the lateral distance from the runway at which you will start the flight.

If you have chosen 'Enter' (pattern) then this will be the length of the Base leg, which also determines your starting distance from the point at which you enter the Downwind leg at 45 degrees abeam the runway mid-point.

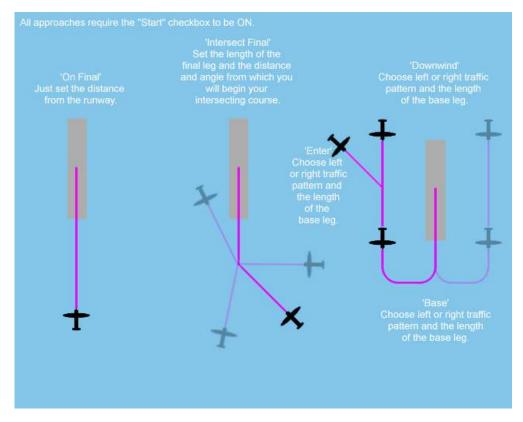
You can either specify the distance in nautical miles or choose the "AUTO" option in which case you will start approximately 1 *minute of flying* from the runway based on your initial speed.

- Altitude

It is essential to note that this setting *is not required*. If you wish, you can set the altitude (in feet) above MSL or AAL (Above Airfield Level) at which the airplane begins the approach, but this is optional. If this is not chosen, altitude for the approach is computed automatically.

#### Show Approach Types Available

Press this button to display a pop-up diagram of the 4 types of approaches available and instructions on how to quickly set them up!



ICAO Codes start with

If you wish to restrict randomly chosen airports so that they begin with a preferred letter or letters, you can enter the letters here. For example, enter "K" if you want codes that start with "K" such as KLAX (Los Angeles Intl) and KJFK (Kennedy Intl), or "EG" for airports such as EGLL (Heathrow) and EGLC (London City).

Runway Elevation

Random airports can also be filtered by elevation. Check this box if you want to specify the minimum or maximum elevation *in feet* of the airports to include in random selection. Note - if you want no minimum then leave the selection blank - do not set it to "0000" as that will exclude runways which are below mean sea level. Likewise, if you want no upper limit, leave *that* selection blank.

- Runway Length

Random runways can also be filtered by length. Check this box if you want to specify the minimum or maximum length *in feet* of the runways to include in random selection.

Note - if you want no minimum then leave the selection blank. Likewise, if you want no upper limit, leave *that* selection blank. *This is a great way to practice short field approaches... or to make sure there is enough room to land that big airliner!* 

Runway Types

You can filter randomly chosen *runways* so that they must have an Instrument Landing System (ILS), or they must *not* have ILS, or you can include all runways without regard to ILS being present.

- Runway Surface

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Random runways can also be filtered by the type of surface. This can be left blank or you can select a particular surface type of you wish.

How about landing on dirt today?! Grass tomorrow? Scenarios

An approach with FS Instant Approach has *a lot* of options. Wouldn't it be great to be able to set up interesting approaches, often with random aspects, and *save them*? Now you can!

Each situation you create at the Flight Plan screen of FS Instant Approach can now be saved as a 'Scenario', and loaded whenever you want to fly the same sort of approaches again.

You can now build a whole collection of exciting approach scenarios to use whenever you wish! For reference - all scenario files are *plain text files* and are stored in a folder called

Scenarios which is within your FS Instant Approach folder.

You can call your scenario files anything you like so long as it is a valid Windows file name. We suggest you use highly descriptive names to describe the way you have configured the approaches, such as:

"Intersecting a downwind pattern at Corona" "Concrete runways in United Kingdom" "Short grass strips" "High altitude ILS"

#### Settings Page

This page displays miscellaneous information about FS Instant Approach 2020's connection to X-Plane 11, and provides a means to tell FS Instant Approach 2020 where X-Plane 11's folders are.

If you have not yet done so, you need to specify where X-Plane 11 is on your PC at this screen.

You do not need to "generate runway data" unless FS Instant Approach 2020 cannot find it and displays this message...

FS Instant	Approach 2020	×
<u>^</u>	FS Instant Approach 2020 runway data file is missing! File: C:\Users\user\Desktop\X-Plane 11\FSFSRWXP.TXT Please generate the runway data at the Settings Screen	
	ОК	

In order to generate the runway data for FS Instant Approach 2020, simply press the appropriate button at the **Settings Page of FS Instant Approach 2020**.

The process will launch an external program in a separate window and will take a few minutes. **Please do not interrupt it.** 

You only need to perform this operation once, unless you update your X-Plane 11 runway data, in which case you should run it again.

#### **Credits Page**

This is where we acknowledge those behind the FS Instant Approach 2020 concept and the help we have received from the dedicated team of enthusiasts who have made FS Instant Approach 2020 what it is today and will be tomorrow.

This product **always** functions as a DEMO *until it is registered.* If you like it and would like to own the full version, you will need to purchase the registration codes and **you** can then register the product. **Everyone** starts with the **DEMO**.

The registration section of this page allows users with a registration key for FS Instant Approach 2020 to register the program and enjoy the benefits.

The codes sent by our vendors can be in a variety of formats which are up to the individual vendor.

The key point is that you will have been sent data that contains 4 sets of numbers.

The picture below illustrates typical data (this is an example - you must use the data you were sent).

The data you were sent could, for example, look like this:

(73562254) (73562254) (73562254) (CA8C-7186-5AD6-ACA1-3700) or this 73562254, 73562254, 73562254, CA8C-7186-5AD6-ACA1-3700

and you can see how the codes are *separated*.

Just **copy** and **paste** the individual pieces into the **Credits Page** of FS Instant Approach 2020 and then press the **Register Program** button. We do NOT recommend that you *type* the codes as the slightest mistake means it will not work.

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ons legistratio Field Field2	n Details 1: 73562254	
ons Field Field Field	n Details 1: [73562254 2: [73562254	

(This is an example - you must use the data you were sent).

Once your program is registered you will no longer be in DEMO mode.

You *do not* need to be connected to the internet when you enter your codes.

#### **IMPORTANT REGISTRATION TIP!**

If the registration codes are rejected - the two most common reasons are:

1. The codes have not been entered correctly. **Always** use **COPY** and **PASTE** unless you are typing from a label inside a boxed version.

2. The user is entering the codes into *the wrong product!* Your codes will work **only** with FS Instant Approach 2020 for X-Plane 11. They are not for any other product!

## Troubleshooting

#### **FSInventions Forum**

Check the FSInventions Forum: [www.FSInventions.Com/Forum.Asp] Whatever difficulty you may experience, others may be able to help, and its a great place to meet others who are using the same products as you!

#### **Run as Administrator**

Windows security has become tighter in recent versions and in order for FS Instant Approach 2020 to function correctly it is necessary that:

- The same user installed X-PLANE 11 and FS Instant Approach 2020.
- That same user is running X-PLANE 11 and FS Instant Approach 2020.

- That user is an *administrator* on that PC.

Even if you are the only person who uses the PC and you are its "administrator" of Windows security...

...you should always launch FS Instant Approach 2020 as an administrator or Windows may prevent operations such as saving your own data to your PC.

To do this just right click on the icon which launches FS Instant Approach 2020 and choose "Run as Administrator" - you can also indicate that this is a permanent choice in the "Properties" of the icon - accessed by a right click - in the "Advanced" button on the "Shortcut" tab.

#### Positioning Aircraft for an Approach

If you want to fly an approach at a location which is a considerable distance from the aircraft's present location, you may notice that occasionally, when you press Ctrl Shift P to *position* the aircraft ready to fly the approach you just created with FS Instant Approach, the aircraft is instead positioned on the ground at the nearest runway or in an undesirable attitude. If this occurs, **simply press Ctrl Shift P again** and the aircraft will be positioned in the air ready to fly the approach.

You will also notice that retractable gear will be up - for technical reasons we had to choose up or down and in almost all cases 'up' is a better place to start to avoid flying with the gear down too fast or on a long approach. In addition for technical reasons the autopilot has to be set (note *set* - not *engaged*) and we've put values into it which mirror the aircraft's current heading, altitude and speed.

#### END-USER LICENSE AGREEMENT

This End-User License Agreement ("EULA") is a binding legal agreement between yourself and FSInventions; when you click to "agree" when installing this software, you indicate your approval of these terms and conditions, at which point this EULA becomes a legally binding agreement between yourself and FSInventions.

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