FSInstructor V4.10

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FS Instructor is a tool suite used for plane preparation, monitoring and interaction between pilots and the instructor.

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1 What's new?

Version	Date	Modification		
V4.10	February 2020	Beware: add-ons Simconnect like DoDOSIM have to be redeployed in V4.10 version due to a SimConnect upgrade		
		New		
		- Add P3D V4.5 support		
		- FMS PAGE supports PROSIM A320		
		- Add a feature to find Radio Com frequencies		
		- COMPLITER page is accessible without Sim Connection allowing to stop the entire		
		cockpit when Prepar3D is stopped		
		Fix		
		 you can't set FREEZE and EXIT features to be open in a dedicated window (SETTINGS> MENU PAGE) 		
		 If you kill P3D/FSX, you could have a FSUIPC ERROR 		
		 During Soft Launcher validation test, an error "Hello" appeared 		
V4.09	August			
	2018	- POSITION PAGE Change the speed selection look		
		- Add ILS interception		
		- MAP PAGE		
		- PLOT is reset after an aircraft Move		
		- Add BEARING/DISTANCE of Point on the map		
		- APPROACH GRAPH REPORT		
		- PDF creation shows a progress bar during build - After a MOVE, change the window "LINEREZZE"		
		- PROSIM: change the trim calculation		
Fix		Fix		
		- APPROACH GRAPH REPORT		
		- FIX: Error in the report name		
V4.08	May 2018	New		
		- New refuel engine		
		- RFID badge integration		
		- and art page shows now the current available engines only		
		Fix		
		- Temperature could be stuck to 40°C		
		- On EHAM TAMPA and KAIH add-on sceneries (bad runways) – please		
		rebuild your database		
		- Approach graph supports negative ground altitude - If mode FORCE FULLSCREEN/ON TOP, when clicking on METAR, you don't		
		see the window and it stuck the interface		
		- when you created a new situation, if the name contained forbidden characters (as "/" "*") P3D didn't record this situation		
V4.07	Februarv	New		
	2018	- Add your own elements on the map (vectors, texts)		
		- PROSIM 737 V2 support		
		- Google Earth Pro support		
		Fix		

		-	Google earth tracking issue
-			Reports are now stored in OUTPUT directory
-			Virtual keyboard is not visible by default
		-	REPORT: spoilers appear only for JET aircraft
V4.06	December	New	
	2017	-	Several WideClient connections shared on different FS Instructor instances
			(for PRO version only) on the same Windows session.
		Fix	
		-	Generated files are no longer stored in My Documents. Now they are
			created in your FS Instructor/OUPUT directory
		-	Your own failures.txt has to be stored in the CUSTOM directory
V4.05	October	New	· · · · · ·
	2017	-	Add a virtual keyboard for tablet users
		-	DME navaids appear on the map
		Fix	
		-	POSITION > Runway buttons size fixed
		-	SELECT A PAGE: this menu appears only when we are connected
		-	Database generation: better add-ons management
V4.04	June 2017	New	
		-	Prepar3D V4.x support
		-	Soft launcher V4 implementation
		-	Password protection to open the settings dialog
		-	Dodosim PRO support – dedicated Add-on
		-	New Prosim implementation (B737/A320)
		-	Full adaptation for light, jet or helicopter
		-	Open Architecture with our SDK: Developers can create FS Instructor add-
			ons (ask us our SDK).

2 Install and start

2.1 Requirements

HARDWARE

- CPU: At least Intel Core i5 1,40 Ghz (poor performance expected in the MAP page)

<u>SYSTEM</u>

- PC or Tablet PC (running Windows OS)
- Windows Vista to Win 10 32 or 64 bits Screen resolution higher than 800 x 600
- .NET Framework 4.5 (https://www.microsoft.com/fr-fr/download/details.aspx?id=49981)
- <u>Peter Dowson's FSUIPC</u> registered version 4.9 and 5.x.
 - For a remote use:
 - WideFS (6.9 and higher) <u>http://www.schiratti.com/dowson.html</u> set and tested
 - A good network (avoid Wi-Fi) 100MB or Higher recommended)

SIMULATORS

- Lockheed Martin Prepa3D[@] V1.x to V4.x
- Microsoft Flight Simulator FSX™, ESP™, STEAM edition (FSX se)

Add-On supported

- PROSIM737 and PROSIMA320
- Ifly thru *iFly to FSUIPC* V2.x module.
- Project Magenta
- o Jeehell A320 (as standard)
- AST 320 (as standard)
- o All standard aircraft
- o Dodosim (dedicated plugin for the DODOSIM PRO users)

→ X-PLANE is not supported, even though XUIPC gateway.

2.2 Support

Support is exclusively done via email: contact@fsinstructor.com

We don't support issues between WideFS and FSUIPC. Try to read chapter 2.3 (To check if the connection between WideFS and FSUIPC works) or contact the program's author.

2.3 To check if the connection between WideFS and FSUIPC works

If you launch FS Instructor on a remote computer, you have to use WideFS. It manages a communication with FSUIPC. It's a gateway between the instructor station and the remote Flight Simulator

You have to use the last FSUIPC AND WIDEFS release. (http://www.schiratti.com/dowson.html).

Read the WideFS handbook to install, set WideServer.ini file (On the Flight Simulator side) and WideClient.ini (On the FS Instructor side).

To check that it works, you have to read on the Flight Simulator window title « one client connected ».

2.4 Installation

- Install .NET Framework 4.5:
- Run FS Instructor V4.exe as an administrator

Note: At the first launch, a « FS_Instructor » folder is created in "my Documents". It stores necessary files. If this folder is deleted, it will be automatically created again but you will lose your license file.

 In certain cases, the application could appear outside of your screen.
 To reinit his position you will find an icon on the right of the task

	Init position		
	Exit	Car 13	INS
_	X - X)	🖌 🖯 🚔 🤃	12:35 📃

bar. This icon changes according to the launched application.

2.5 QUICK START

- Install .NET 4.5
- Check that Wideclient is well configured and communicates with Flight Simulator
- Start FS instructor as an administrator

2.5.1 Aircraft type selection

During the first execution, a screen asks you which kind of aircraft you will use. Just click on one type.



	JET	LIGHT	HELICOPTER
Circuit Pattern	IFR	VFR	VFR
Type of Gate	Medium and large	Small	-
Surface to land	Hard only	Hard & grass	Helipad, Grass & Hard
Background	Right 1928 kg		Urin register
Menu	Pushback page	Pushback = deactivated	Pushback = deactivated
	FMS page	FMS = deactivated	FMS = deactivated
AIRCRAFT PAGE	Show FLAPS	Show FLAPS	-
	Show SPOILERS	-	-

You kind change this configuration later from the Settings Windows> AIRCRAFT

GENERAL		
MENU	Aircraft type	JET •
	Full flaps dogroos (max)	40 [•]
AIRCRAFT	Full haps degrees (max)	40 🗸
DATABASE		

2.6 Update FS Instructor

To update your current release, use the "Check Update Online" feature (menu > File). It requires to be connected on Internet.



If a new version is available, you can use the "UPDATE" button. It downloads the new release.

The download begins Please wait	UPDATE	
	EXIT	
Downloading: 13%		

If the download is successful a window appears with the procedure to install the new release.



Note, when you update FS Instructor, it keeps your settings.

3 SETTINGS



It is important to tune FS Instructor at the first start. Open the configuration windows from MENU > File > SETTING

3.1 General settings

GENERAL	Global Font resize	0	
MENU	Screen mode	WINDOW	
AIRCRAFT	Default page at start	NONE •	
DATABASE	MENU number of lines	2 -	
ADD-ON	WideClient Instance ID	0	instance label
UNITS / FUEL	Error Mode Log	1 - Log Errors on -	OPEN DEBUG WDW
SECURE	Use a virtual keyboard		
MODULES			
MAP	Update weather when you open weather	ather module	
POSITION	🗖 Traffic update includes general aviati	ion	
BLACK BOX			
COMPUTERS			
MOTION			

Global Font resize Screen mode Default page at start Menu number of lines Error Mode log DEBUG Use a virtual Keyboard

Use it only if you have troubles and you need to send traces to our support It opens a new window to follow log traces If you have a tablet, this open opens a virtual keyboard when you click in a field

Choose if one page has to be opened when you start FS instructor



Update weather when you open Weather module Traffic update includes General aviation

If you are using an external weather engine, you have to deactivate the automatic FS Instructor weather.

Traffic feature impacts Airlines density. By default, general aviation is OFF (0%).

It adapts the font size of the application

Switch from FULL SCREEN or WINDOWED

How the MENU buttons are distributed

If you want to keep general aviation, you have to enable this feature

3.2 Menu Settings

GENERAL	_Select the displayed pages					
	ID	NAME	SHOW	OUTSIDE	UP	DN
MENU	POSITION	POSITION			UP	DN
	ENVIRONMENT	ENVIRONMENT	¥		UP	DN
AIRCRAFT	FUEL	FUEL	¥		UP	DN
DATADACE	WEIGHT	WEIGHT	V		UP	DN
DATABASE	PUSHBACK	PUSH	V		UP	DN
	AIRCRAFT	AIRCRAFT	V		UP	DN
ADD-ON	RADIO	RADIO			UP	DN
LINITS / ELIFI	FAILURE	FAILURES	¥		UP	DN
ONTOTIO	VIEW/SLEW	VIEW/SLEW	V		UP	DN
SECURE	BLACK BOX	BLACK BOX	V		UP	DN
	COMPUTERS	COMPUTERS	V		UP	DN
MODULES	MOTION	MOTION			UP	DN
MAP	PRINTER	PRINTER			UP	DN
	SITUATION	SITUATION	V		UP	DN
POSITION	APP GRAPH	APP GRAPH			UP	DN
	GRAPH	GRAPH	V		UP	DN
BLACK BOX	MAP	MAP	V		UP	DN
	FMS	FMS	¥		UP	DN
COMPUTERS	DOWNLOAD	DOWNLOAD			UP	DN
	FREEZE	FREEZE	V		UP	DN
MOTION	SETTING	SETTING			UP	DN
	EXIT	EXIT			UP	DN
	DODOŠIM	DODOSIM			UP	DN

3.3 Aircraft settings

GENERAL		
MENU	Aircraft type	JEI
AIRCRAFT	Full flaps degrees (max)	40

3.4 DATABASE SETTINGS

GENERAL	Extract Prepar3D/FSX Database for airport/runway/taxi/parking	
MENU	Scenery Folder (root) \\FLIGHTSIM-PC-1\FLIGHTSIM PROGRAMS\PREPAR3D\SCENERY	BROWSE
AIRCRAFT	Build date: dimanche 1 avril 2018 from FSI Build Database V1.1.0	.0
DATABASE	🖬 Generate taxiways	BUILD THE DATABASE
ADD-ON		
UNITS / FUEL	Navigraph Database for Navaids	
SECURE	Cycle 1711 From 12OCT17 to 08NOV17	
MODULES	12 808 navaids	
MAP	258 717 waypoints 706 439 procedures	
POSITION		
BLACK BOX		
COMPUTERS		

3.4.1 Update the airport/runway/parking/taxiway database

Runways, Airports, Taxiways, parking are extracted from your own sceneries. Build your database according your installed sceneries. Do it each time you install or update a scenery. This step is needed to have an up-to-date moving map and Position modules.

1 – Browse to your sceneries directory. You can use a network/remote directory.

Extract Prepar3D/FSX Database for airport/runway/taxi/parking			
Scenery Folder E:\PREPAR3D V4	BROWSE		
Build date: dimanche 4 juin 2017 from FS INSTRUCTOR V4.3.0.0			
Generate taxiways	BUILD THE DATABASE		

GENERATE TAXIWAYS - The taxiway paths create a big database file. It takes time to load and could decrease performance.

Uncheck this feature, rebuild the database.

2 - Build the database. It takes a while to scan all your directories and to generate the new database.

If you have errors during database generation:

- Check you have enough rights on the files/directories (at least read rights)
- If data are stored on a remote computer, try to copy Scenery path on the local machine.

This action doesn't update the navaids (VOR/ADF...). This kind of data is extracted from AIRAC.

3.4.2 Create the airports/runways database from your FSX/P3D installation

If you don't have a network access to your P3D or if sceneries are shared on several drives, you can't use the FS Instructor database generator.

You have to use "FSI BUILD DATABASE STANDALONE version" http://www.fsinstructor.com/download/FS_Instructor_4/FSI_Build_Database_STANDALONE.zip

This software is deployed in your FSX/P3D directory and can read the scenery.cfg file and manage specific path for add-ons.

It creates an extraction file to move in your FS Instructor path. Check the embedded manual.

🖳 FS INSTRUCTOR V4 - BUILE	D DATABASE FOR FSX & P3D		-		×
Click on BUILD THE	DATABASE to start	BUILD THE DATABASE	CLO	SE	
Prepar3D directory	F:\Soft\P3DV4\		BROV	/SE	
Scenery.cfg file	C:\ProgramData\Lockheed Martin\Prepar3D v4\s	cenery.cfg	BROV	/SE	
Add-on directories (fe	eatures from P3D V3)				
F:\Soft\EHAM		^	AD	D	
			REMO	DVE	
		~			
status			<u>Handbool</u>	<u> </u>	

Extracting /Scenery\0603\Scenery\APX48290.bgl	
PS INSTRUCTOR - BUILD DATABASE FOR FSX & P3D	
File created. Please move the Airports_data_from_BGL.xml in your FS Instructor/Resources/Moving_Map directory	CLOSE

3.4.3 Update the Navigraph database

3.4.4 Check the installed database

FS Instructor loads navaids (VOR / NDB), Waypoints and Procedures (SID / STAR / APP) from a Navigraph database.

You can buy the latest Navigraph packages on www.navigraph.com

After the Navigraph database installation check that you have a file "navaid.db" in <Your document>\FS_Instructor directory (see the procedure below)

To be sure that FS Instructor uses this database, open FS Instructor > Setting > DATABASE Prepar3D/FSX Database for airport/runway

Scenery Folde	r	BROWSE
	Build date: dimanche 4 juin 2017 from FS INSTRUCTOR V4.3.0.0	
	Generate taxiways	BUILD THE DATABASE
-Navigraph Data	abase for Navaids	
Cycle	e 1611	
From	n 13OCT16 to 09NOV16	
10 1	.55 navaids	
252	136 waypoints	
683	758 procedures	

You can see Navigraph information.

If FS Instructor can't find the database, you have this message.

GENERAL	Prepar3D/FSX Data	base for airport/runway		
DATABASE	Scenery Folder		BROWSE	
ADD-ON		☑ Generate taxiways		
MODULES		BUILD THE DATABASE		
MOVING	r Navigraph Database			
МАР	Navigraph database	NOT FOUND (file E:\Mes Documents\FS_Instructor\navaid.db).		
POSITION	https://www.navigraph.com/FmsDataManager.aspx			
FUEL	If you have installed already, please check that the file is well located in E:\Mes Documents\FS_Instructor\navaid.db.			

3.4.5 Install a Navigraph AIRAC database

Buy the latest Navigraph packages on <u>www.navigraph.com</u>.

Install the exe file

🕐 Setup - FS Instructor	🚺 Setup - FS Instructor
AIRAC Cycle 1512 Ver.1 Effective from 12/NOV/2015 to 09/DEC/2015	AIRAC Cycle 1512 Ver.1 Effective from 12/NOV/2015 to 09/DEC/2015
Welcome to the Navigraph FMS Data Update Setup. This Setup-Wizard will install the AIRAC update for the addon FS Instructor on your computer. Data provided by Navigraph. This data is copyrighted and may not be used, recomplied, interpreted or distributed for any purpose without the written consent of Navigraph. WARNING: This program is protected by copyright law and international treaties. The contents of this database is dated and must not be used for real world navigation as it is unlawful and unsafe to do so. Click Next, when you accept and understand the lines above, or Cancel to exit the setup.	Please select your flight simulator version: Tool/Addon - no flight simulator version required Backup option: Image: Ima
http://www.navigraph.com Next > Cancel	http://www.navigraph.com < Back Next > Cancel

Select "My documents" directory

🖑 Setup - FS Instructor	
AIRAC Cycle 1512 Ver.1 Effective from 12/NOV/2015 to 09/DEC/20	15
Please click Browse, when you would like the second	to select a different folder. Browse
🔆 Setup - FS Instructor	🗆 🗙 🔆 Setup - FS Instructor
Installing Please wait while Setup installs FS Instructor on your computer.	AIRAC Cycle 1512 Ver.1 Effective from 12/NOV/2015 to 09/DEC/2015
Extracting files E:\My Documents\FS_Instructor\navaid.db	Completing the AIRAC data update for FS Instructor
	Setup has finished installtion the AIRAC Cycle 1512 Ver.1 for the addon FS Instructor on your computer.
	Click Finish to exit Setup.
http://www.navigraph.com	el http://www.navigraph.com Finish

Restart FS Instructor to load this new database.

Check that FS Instructor found the database (MENU > SETINGS > DATABASE)

– Prepar3D/FSX L	atabase for airport/runway	/	
Scenery Folder			BROWSE
	Build date: dimanche 4 j	uin 2017 from FS INSTRUCTOR V4.3.0.0	
Generate taxiways		BUILD THE DATABASE	
- Navigraph Datal	base for Navaids ———		
Cycle	1611		
From 10 15	13OCI 16 to 09NOV16 5 navaids		
252 1	36 waypoints		
683 7	58 procedures		

3.5 Add-Ons settings

GENERAL	None specific pro	oduct				
MENU	ProSim Server — Host Main	PC		Port	8080	TEST
AIRCRAFT						
DATABASE	Projet Magenta -					
ADD-ON						
UNITS / FUEL	C - ASI Server	0.0.1				
SECURE						
MODULES	FS Instructor Add-	Ons				
MAP	Add On	Version	Editor			
POSITION	DODOSIM	0.3	FS Instructor	For Dodosim version Prot	fessional (remot	e failures ar
BLACK BOX	•					•
COMPUTERS						
MOTION						

3.5.1 Set editor Product (Prosim, Project Magenta)

By declaring a specific product, you take the advantage of specific features:

- Dedicated failures system
- Dedicated FMS support

3.5.2 Add-Ons

FS Instructor is an open architecture. It means you can add new plugins and new features.

.NET Developers can ask an SDK to create their own FS Instructor add-ons.

The available add-on list can be found in our shop: <u>http://fsinstructor.com/</u>

GENERAL Units Altitude feet Distance in metric MENU Pressure millibar apply on atmospheric pressures AIRCRAFT Weight lb DATABASE FUEL ADD-ON Fuel USG To Refuel only with engines stopped • SECURE MODULES MAP POSITION BLACK BOX COMPUTERS MOTION

3.6 Units / Fuel Settings

3.7 SECURE settings

GENERAL	Force FS Instructor always on top	
MENU	Password protection	
AIRCRAFT	Password *****	**** (case sensitive)
DATABASE	Confirm password ******	****
	use the password for EXIT vise t	e the password to open SETTINGS
UNITSTFULL	Access with an ID card	
SECURE	Force on pause when no badge found on	on the cradle
MODULES		
MAP		

Feature Description

Force FS Instr. Always FS Instructor can't be on the background. It prevents users to open on top another windows program. This password protects the access of the Settings window and prevent to Password protection EXIT without Authorization. The password is encoding and linked to the current user. You can't unlock the feature by using this password from another Windows account. If a user try to access to a secured feature, it will ask the password GRANT ACCESS Insert the password (case sensitive) **** OK Access with an ID card [Hardware and specific plugin required to work] Contact us to manage cockpit access with ID badge

3.8 Map settings

Each map element can be customized GENERAL Reset track aircraft after "Go to..." Performance MENU Perf Very high Perf Very poor Country map shap LOW DETAILS AIRCRAFT Refresh screen every 1s / data every 10s / max Navaid Range = 350 NM DATABASE Default Printer Custom the map QWERTY ADD-ON AIRPORT SID FLIGHT PLAN This local or remote printer is used in the map page RUNWAY ROSE STAR UNITS / FUEL "PRINT" button **RWY PATH** APP TRACK \\Prevert\PICASSO SECURE RWY ID WIND VOR MODULES White background ILS NDB FLIGHT INFO PARKING WYPT SCALE POSITION TAXIWAY YOUR AIRCR. A.I. **BLACK BOX** MEASURE COUNTRY COMPUTERS

For example - to have a pink rose with a taller font, click on rose "QUERTY" button



It gives



3.8.1 Improve map performance

When you try to display too much element, the map could stop to move. Decrease the number of display elements or limit the performance (slide):

<u>A - Slide Perf Very high/very poor</u>

GENERAL	Open the ma	ap into anothe	screen						
DATABASE	Performance Perf Very high	1	Perf	Very poor		1ap shape b	etter details		low details
ADD-ON					250 114	I			
	Refresh scree	en every 1s / da	ata every 10s / max	Navaid Range	= 350 NM				
MODULES	\Box Custom the m	nap ———							
MOVING MAP	AIRPORT	QWERTY	SID	QWERTY	FLIG	HT PLAN	QWERTY	MEASURE	QWER
	RUNWAY		STAR	QWERTY	ROS	E	QWF	COUNTRY	

This option has impacts on:

- Screen refresh time
- Data loading
- Navaids range

B – Limit details for the countries shape

GENERAL	Open the ma	ap into another	rscreen					
DATABASE	Performance - Perf Very high	1	Perf	Very poor	Map shape b	etter details		low details
ADD-ON	Refrech seree		ata oyony 105 / max	Navaid Panga	- 250 IM			
	Kerresh scree	n every 15 / da	ata every 105 / max	Navalo Kange	- 350			
MODULES	Custom the m	iap ———						
MOVING MAP	AIRPORT	QWERTY	SID	QWERTY	FLIGHT PLAN	QWERTY	MEASURE	QWER
	RUNWAY		STAR	QWERTY	ROSE	QWF	COUNTRY	



3.8.2 Open the moving map in another screen You can open the moving map in a second monitor



The moving map window position will be stored. This module will open each time at the previous location and size.

3.9 Position settings



After any modification, you need to restart the application

IFR/VFR Mode	Choose between VFR or IFR patterm. It modifies the altitude and distance for downing legs (5000" for IFR / 1000" for VFR)					
Additional length	Depending on the used aircraft, you can be too close or far from the gate. Set this value.					
Searched type of gate	Restricts the parking list according to your aircraft category. i.e. for a B737, keep only Ramp & Gate medium.					
Pause after a move / and ask to unfreeze	When you click on "Pause after a move", a checkbox appears "and ask to unfreeze". It displays an explicit "UNFREEZE" message after moving the aircraft.					
Disable Set auto ILS & QNH	Uncheck = Position Module allows you setting auto ILS frequency and QNH Settings Speed (kts) 180 Set ILS freq Trim 7 Set QNH					

3.9.1 Helipad Support

To use helipad, Activate this feature from the configuration menu > Position



The helipad will appear on the Position and Map pages.



3.10 Black Box settings

GENERAL	Google Earth tracking activation
MENU	Coogle Earth tracking
AIRCRAFT	Black 📑 🔽 Show Air traffic
DATABASE	
ADD-ON	Max Bank angle (°) 30
UNITS / FUEL	Max Vertical Speed (ft) 4000
SECURE	
MODULES	
MAP	
POSITION	
BLACK BOX	
COMPUTERS	
MOTION	

By clicking on "Google Earth tracking activation" you allow following the aircraft in real time in Google Earth.

Google Earth tracking activation			
Google Earth tracking			
В	ilack -	\geq	Show Air traffic



You can change the plane color from black to red

You can add the Air Traffic (AI) (green arrows)



3.11 Remote Computers settings

GENERAL		Netbios Name (optional)	IP	PORT	ADD NEW
MENU	Computer 01	MainPC		5 029 ÷	TEST REMOVE
AIRCRAFT					
DATABASE	Computer 02	MIP	192.168.0.20	5 029	TEST REMOVE
	Computer 02	CDU1		5 and 1	
	Computer 03	CDOI		5 029	TEST REMOVE
UNITS / FUEL	Computer 04	CDU2		5 029	TEST REMOVE
SECURE					
MODULES	Computer 05	Instructor station #1	192.168.0.25	5 029	TEST REMOVE
MAP			_		
POSITION	Computer 06	Instructor station #2	127.0.0.1	5 029	TEST REMOVE
BLACK BOX					
COMPUTERS					

3.12 Motion settings



4 Licenses

4.1.1 Two different licenses: Commercial/integrators and Home user releases

FS Instructor is a payware application. It's a one-time deal. You pay only once (no annual fees).

When you start the software, you need a key code. Without this code, the program runs in demo mode and stops automatically (from 5min for the first utilizations to 30 sec after a while). You have time to discover the different features before to decide to buy, or not, a license.

Who can buy a Home User License?

Only people who builds a simulator <u>at home for their own use and not make money</u>. Pilots who access to this simulator doesn't' have to pay for it. In all other cases, you need a professional license:

If you are an association, a flight school, a company, a simulator renter or if you sell something linked to the instructor station, so we consider you to be a professional user.

The commercial license is distributed from http://fsinstructor.com site

The key code is unique to your computer. It means that if you want to install the application on another computer, or if you modify your computer, you will need a new license code.

FS Instructor license				
Thank you for using FS Instructor To order a COMMERCIAL or HOME license use the BUY button or go on: <u>http://fsinstructor.com/news/?product=fs-instructor-v4</u> After the purchase, send your installation and order ID. contact@fsinstructor.com				
Installation ID DA8B-C713-79D4	1 - BUY	2 - PURCHASED PRODUCT REQUEST MY KEY		
Insert your key	3 - REGISTER MY KEY	LATER		

Here, the installation ID is «DA8B-C713-79D4». It can be sent by pressing the « **2 – PURCHASED PRODUCT REQUEST MY KEY** » button. It must be accompanied of:

- The order's date
- Your name

You will receive your key by e-mail in the next hours.

Copy the license key in the "Insert your key" filed.



4.1.2 What are the different licenses

The commercial/integrator license has the same features as Home user version excepted:

- Home has no screen customization (to show another aircraft in the module background)
- Home has no Splash screen customization with your own logo
- Home has a plash screen during 7 sec that you can't by-pass.
- Multiple FS Instructor instances or screens is able only in the commercial version

Commercial license allows some specific services like an extended support. See chapter <u>25</u> <u>Additional service for professional</u>

4.2 Prepar3D / Flight Simulator connection

FS Instructor communicates with FS through *FSUIPC*. If *Flight Simulator* and *FS Instructor* are installed on different computers, you must use *WideFS*.

The connection begins as soon as the program is launched. So, you have to start *Flight Simulator and WideFS (if you need it)* **prior** FS Instructor

The reconnection is automatic as soon as FS Instructor find Flight Simulator.

Note : the rest of the application is disable when the connection fails or if you load, slew or pause FS.

5 Multi-screens

You have two ways to manage multi-screen. It requires a commercial license

If you want to keep the tab menu on each screen:

- Duplicate your FS Instructor directory for each instance. Each one records his own pages list and own windows location
- From the setting page, set Pages to be open in an external view. Such as



6 POSITION PAGE

It moves your aircraft to your own location, on a pattern, in flight, on approach or on the runway.



Insert an ICAO code into the search box.

If the ICAO code is known, the runway and parking part are displayed.

ICAO	Same Exupery runways						
LFLL	18L (ILS)	18R	36L (ILS)		36R (ILS)		HELI
	- Runway information - Type of surface=ASP	HALT	Pa	arking			
SITUATION	Length: 8 757ft Altitude: 82	1' QFU: 356° I	L\$ freq: 111.50				
RADIO COM	Approach / Arrival pattern	ind 50001					
METAR				Gate C20	Gate C43	Gate 061	Gate C81
Customize	hdg	356	LFLL				
Create	$\rightarrow \rightarrow \rightarrow$	$- \rightarrow - \rightarrow -$	→ 36R 				
FL100	20nm 15nm 10nr	n 7nm 4înm 💻		Gate C84	Parking 22	Parking 23	Parking 24
FL250		+-	IIL				
	Settings	RIM 7 Set ILS freq	Set QNH	Parking 25	Parking 26	Parking 27	Parking 28

You have three areas:

- Position regarding a runway
- Choose a parking stand
- Create/load a preset situation

6.1 Choose a runway



Here , we choose the 09 runway (green)

So, the available runways list opens automatically. As soon as you select one runway, the *Runway information* block is updated. It shows you:

- The runway length (feet)
- The Altitude (feet)
- The QFU (runway heading)
- An ILS frequency (if available)
- The type of surface (water, macadam...)

- Runway information - Type of surface=MACADAM					
Length: 9 498ft	Altitude: 90'	QFU: 27°	ILS freq: 110.90		

6.2 Choose a position (middle part)



When you've selected a runway, you access to 9 preset positions :

- One on the runway, ready to take-off (T/O)
- Approach locations :
 - Short Final (4NM / 150kts)
 - Final (7NM / 170 kts)
 - Approache (10NM / 200 kts)

- Before the descent (15NM / 220 kts)
- Interception left and right (20NM)
- 2 Tailwinds position (5000"/240 kts)



On the left, two cruising situations in "In Flight" block : for the flight level 100 (FL100) and 250 (FL250).

When you select a position, you have to confirm it :



Create your own position (only pro license): Customize If the seven preset positions are not enough your you, you can use the "Create a position" button : Create a position Custom location 0 From the runway 04R Altitude (ft AGL) 5000 360 Angle from the runway (*) Go Distance from the runway (NM) 10 Coordinates (degre<u>es</u>) \odot Heading (°) 360 Cancel

So, you have the possibility to choose your:

Altitude: compared with the runway altitude (AGL)

Heading: aircraft heading

Speed: desired GROUND speed (kts)

From the runway

Position in relation to the choosed runway (angle and distance with the runway)

Coordinates

Move the aircraft to coordinates.

- Pratical to move the aircart on an IAF.
- In this mode, the entered altitude is AMSL (Above Mean Sea Level).

3 – Settings (bottom part)

– Settings –––––				
	IAS 180 kts	TRIM 5	🗹 Set ILS freq	🗹 Set QNH

In the "Settings" block:

- Set ILS frequency is shown only when the runway owns ILS. It tunes ILS frequency as soon as you load a position.
- **Set QNH** set altimeter to the local pressure.
- **IAS** allows starting position with the desire speed (optional).
- **Trim** is very important. It forces a trim position. The value (from -7 to 12) depends on your aircraft. We advise to try the value « 2 ». Fine tune this value.

Advices

When you move to approach, check :

- The wind
- The gear, airbrakes & flaps
- The parking brake
- The throttles position
- The engines started
- A/P OFF

6.3 Parking place

It moves the plane on a specific place on an airport.



The stand list appears automatically when you insert an ICAO code and parking exists.

Just click on one of them



Depending on the used aircraft, you can be too close or far from the gate. Set this distance in the setting menu > POSITION > move to a gate

POSITION MODULE	
Circuit pattern IFR/VFR	Move to a gate
IFR	Additional Length (m) 2
	Searched type of Gate:

6.4 Save and load situations

6.4.1 To load a situation



On the left, you have a "Situation" button

This screen appears with all previous recorded situation

		Choose a recorded s	ituation	
RECORDED SITUATIONS	Description	The entered descript	ion	
My first flight Storm ILS EDDM KLAX Gate 08E Dark'n Cold Falcon 2000 Failures training (London) Gear inhibit CAT II LIPM Ubound training APRON LFRS for pattern Low visibility LOWI new flight	Approaching London with Eng CrossWind	gine 1 OFF A NI SITUATIO		
	Situation recorded in flight	If you plane positio been recorded or ground or in flig	n has h the ht	
	Date: 03/01/2011	The record date		
macumba	Remove	LOAD		

Note: When you save a situation, it's stored on the local HD. It means that if you use several FS Instructor, each one sees only the situations created on their machine.

6.4.2 To save a situation

– Save a situation –––––––––– Name	It is interesting to record a
Flight Before Failures	situation. Such as to practice procedures and to be able to
Description	retry many times easily.
We record this situation just before to se some hard failures. Aiport: LOWS, approach 4L	To save a new situation. Click on "Save a new situation". SAVE A NEW SITUATION
Weather Cavok	This action is invisible for pilots It's mandatory to insert a
Cancel S	SAVE situation name. We advise to add a description. It permits to remember the plane location, which aircraft was using

You can enter several lines.

The **SAVE** button is enabled only when you have entered a situation name.

Beware of not using an existing name situation.

If you recorded it with FS Instructor, a warning appears and asks you to change this name.

If you didn't record it with FS Instructor the situation will be erased without control.

It saves:

- The plane used and his location _
- Fuel state -
- Weather _
- Radio/Com settings -
- **Engines states** -

IMPORTANT NOTE: Flight Simulator saves the situation when you close Prepar3D/FS. If you kill Flight Simulator, the current situations are lost. So, close it properly.

6.5 **RADIO COM**



The radio com button is accessible from the POSITION and RADIO pages.

You can find a Radio frequency from an ICAO code. Buttons send the desire frequency on COM1, COM1 Standby, COM2 or COM2 standby.

FS Instructor	×
This situation name already	y exists
ОК	

Radio Com frequencies						
ICAO	Saint Exupe	ery (LFLL) Radic	frequency		EXIT	
APPROACH	120.225	SET COM1	SET COM1 STBY	SET COM2	SET COM2 STBY	
APPROACH	125.425	SET COM1	SET COM1 STBY	SET COM2	SET COM2 STBY	
APPROACH	125.8	SET COM1	SET COM1 STBY	SET COM2	SET COM2 STBY	
APPROACH	133.15	SET COM1	SET COM1 STBY	SET COM2	SET COM2 STBY	
APPROACH	136.075	SET COM1	SET COM1 STBY	SET COM2	SET COM2 STBY	
ATIS	126.175	SET COM1	SET COM1 STBY	SET COM2	SET COM2 STBY	
CLEARANCE	121.7	SET COM1	SET COM1 STBY	SET COM2	SET COM2 STBY	
GROUND	121.825	SET COM1	SET COM1 STBY	SET COM2	SET COM2 STBY	
TOWER	120.45	SET COM1	SET COM1 STBY	SET COM2	SET COM2 STBY	

7 ENVIRONMENT PAGE

This page manages weather condition, Time and Traffic.



7.1 Weather part

7.1 Wea	ther part		٦							
	Preset	2			and the second	Visibility				
ReLoad	Cavok	Fog	Snow	Rain	Storm	Visibility	5	Nm	4	
5 In progress	Yours Setting	Big Storm	No visi	Turbu lence	3 Jse	Cat I	Cat II	Cat III A	Cat III B	Cat III C

1 – Control buttons
- **SEND** to send the selected weather modification to the simulator
- **RELOAD** to reload the weather (to be sure to have the latest values)

2 - Direct Weather Preset

• Note: Apart Cavok (Ceiling And Visibility OK) the other presets own random settings. If you choose twice a storm. You will not have the same ceiling, wind and turbulence.

3 - Your Preset.

You can record your own Weather situation. Click on one of the four buttons.



SELECT: Loads only

SELECT AND SEND: Select and Send the weather preset Save: Save the current weather settings. A name will be asked.

4 - Visibility: Visibility part

You can insert a value for the visibility or use the + / - buttons.

Note, you have to click on Send button to validate.

For training, a rapid access is given to the different minima, by category.

From Wikipedia:

- Category I (CAT I) A precision instrument approach and landing with a decision height not lower than 200 feet (61 m) above touchdown zone elevation and with either a visibility not less than 800 meters or 2400ft or a runway visual range not less than 550 meters (1,800 ft) on a runway with touchdown zone and runway centerline lighting.
- **Category II (CAT II)** A precision instrument approach and landing with a decision height lower than 200 feet (61 m) above touchdown zone elevation but not lower than 100 feet (30 m), and a runway visual range not less than 300 meters (980 ft) for aircraft approach category A, B, C and not less than 350 meters (1,150 ft) for aircraft approach category D.
- Category III (CAT III) is subdivided into three sections:
 - **Category III A** A precision instrument approach and landing with:
 - a) a decision height lower than 100 feet (30 m) above touchdown zone elevation, or no decision height (alert height); and
 - b) a runway visual range not less than 200 meters (660 ft).
 - **Category III B** A precision instrument approach and landing with:
 - a) a decision height lower than 50 feet (15 m) above touchdown zone elevation, or no decision height (alert height); and
 - b) a runway visual range less than 200 meters (660 ft) but not less than 75 meters (246 ft). Autopilot is used until taxi-speed. In the United States, FAA criteria for CAT III B runway visual range allows readings as low as 150 ft (46 m).
 - Category III C A precision instrument approach and landing with no decision height and no runway visual range limitations. This category is not yet in operation anywhere in the world, as it requires guidance to taxi in zero visibility as well. "Category III C" is not mentioned in EU-OPS. Category III B is currently the best available system.

Select the required approach type and click the Send button. The visibility will be change according your choice.

5 – Current status:

- In progress: data sending
- Checking: data checking

7.2 Weather Advanced settings

If you click on "Show Advanced settings" part, it shows you the complete weather set.

Winds			High Clouds
Direction (°)	241		Up (ft) 0 Coverage None ·
Variance (°)	0		Low (ft) 0 Type Cumulus
Speed (kts)	7		Turbulence None · Icing None ·
Gusty (kts)	0		Precipitation None · Precip. Rate None ·
Turbulence	None	•	Low Clouds Up (ft) 0 Coverage None
Shear	Gradual	•	Low (ft) 0 Type Cumulus
Ground Temp	0 °C		Turbulence None · Icing None ·
QNH	0		PrecipitationNone · Precip. RateNone ·

Here, you can set precisely:

- 2 ceilings (type of clouds, turbulence, precipitation, icing, coverage...)
- One wind layer (from ground to FL360)
- Ground Temperature
- Local QNH

Note:

- When you sent a weather setting, I could take few seconds to take into account (sometime 20 sec). It's due to a Flight Simulator limitation.
- This is a global setting. That means that there is one weather configuration to all the FS scenery.

7.3 Change Time



DAY / NIGHT : as soon as you click on these buttons it changes Simulator time

MORE open a widow to choose the time and the season

Beware of using this panel airborne: the scenery will be refreshing during several seconds.



7.4 Traffic

7.4.1 Generic IA

You can control if you want traffic (IA).

- TRAFFIC -	Here none traffic
marine	Γ
0 %	
ON	
TRAFFIC	Here, you have the traffic maximum (100%).
100 %	You can reduce it (minus button) or stop it (OFF button)
OFF	
· ·	
_	
TRAFFIC	Here, you have 40% of traffic.
40 %	You can reduce it (minus button) or increase it (plus button)
OFF	
+	

When you start or increase the traffic, it reloads the scenery. It could disturb the pilots.

By default, general aviation is OFF (0%). If you want to keep GA you have to activate this option in the Settings window

7.4.2 TCAS ALERT

100 %
OFF
+
-
TCAS ALERT

The button TCAS ALERT opens a window.

Insert the detail of the new plane that you want to create.

When you are ready, click "GENERATE" button and a new TCAS aircraft is created.

TCAS ALERT			×
Route	248	4	0
TAS	250	•	kts
FL	100	•	
V/S	2500	4 Þ	'/min
From your position —			
From your position – Distance	20	4 4	NM
From your position – Distance From	20 Front	*	NM
From your position - Distance From	20 Front	*	NM

This TCAS Alert generates a traffic into the TCAS screen.

Note: **you don't see the plane in the Flight Simulator view**. It appears only on your TCAS



To remove this aircraft, click on « STOP IT ». The TCAS aircraft disapears after some seconds.

7.5 Simulation rate time

You can speed up the simulator X2. You can come back to a real time flight (X1).

The mode in progress is on green.





8 FUEL PAGE

This screen manages the fuel into the different tanks.

FS Instructor supports RIGHT, CENTER, LEFT, AUX LEFT, AUX RIGHT, EXTERNAL 1 and EXTERNAL 2 tanks.



The number of shown tanks depends on the current aircraft. If you load another aircraft, it is automatically updated.



1 – Refueling mode: switches to the edition mode (to field tanks)

- 2 Actual fuel quantity in the tank (here 3,928 kg in the right tank)
- 3 Fuel level. There are three color codes:
 - Blue over 40%
 - Orange between 20 and 40%
 - Red below 20%

8.1 Refueling mode

By clicking on « refueling Mode», you access to the fuel loading window:



- 4 Two quick presets: Half and Full tanks
- 5 Desired fuel quantity.

You can choose an inferior value of the fuel quantity. Tank will be emptied. If you ask more than the tank capacity, the extra will be ignored. Plus and minus button allow you to you a tactile screen.

6 – The total asked is shown here

7 – Choose the desired time to refuel (from 0 to 20min). Tanks will be progressively filled during indicated time (0=immediately).

8 – Load the tanks appears only when you change a value tank.



9 - STOP REFUELING button

10 – refueling progression bar.

<u>To know</u>

- During the procedure, the FSUIPC 66C0 variable is set to 1. Cockpit builders can read this offset to create a « Fueling door open » alarm.
- During the filling, the window can be closed. You can monitoring the refueling procedure in the title bar. Refueling in progress (127 sec)

8.2 Refueling Preference

Menu > File > Settings > UNITS & FUEL

GENERAL	Units ——			
	Altitude	feet	*	Distance in metric
DATABASE				
	Pressure	millibar	*	
ADD-ON				
	Weight	lb	-	
UNITS AND FUEL				
	FUEL			
	Fuel	USG	•	To Befuel only with engines stonned
				To refuer only with engines stopped

8.2.1 **Refuel only with engines stopped**

To improve realism, this option prevents refueling before engines stopped.

8.2.2 Use kg/lb

According your need, you can use kg instead of lb.

8.2.3 **Customize this screen**

Professional users can change the background to display their own aircraft.



8.3 **Frozen tank feature**

PRINTER

MAP

VIEW/SLE COMPUTE

For procedure training you can freeze the aircraft weight during the flight.

FREEZE

EXIT



If you press the "Freeze tank" button, it locks the fuel consumption until you press again.

COMPU

MOTION

PRINTER

MAP

FREEZE

FMS

Note: you can still use refueling feature to add or remove fuel.

BLACK

PUSHBACK PAGE 9

With this page, you manage pushback. It tows the aircraft to move it ready to taxi.



9.1 Procedure

You have three different pushbacks.

1 – Nose to the Right. Here you can note that it turns the plane to the South-East ("Heading: SE")

- 2 Straight away
- 3 Nose to the left

You can begin by a direct push (2) and chose during taxi to turn with the button left (1) or right (2)





When a pushback is in progress the arrow corresponding to the choose direction blinks (in blue).

The status (4) comes to "Pushback in progress"

You have to release the parking brake. If not, this

message appears: "

5 – If you have previously chosen an airport and a gate, this information is displayed into an "information" part.

Note: the pushback page is not accessible during airborne.

9.2 Customize this screen

Commercial users can change the background to display their own aircraft. Please contact us to receive the procedure.

10 STANDARD FAILURES

By default, FS Instructor uses the FS/Prepar3D standard failures.

You can change these settings to have supports Project Magenta or PROSIM. They have their own failures module.

GENERAL	None specific product					
DATABASE	ProSim Server				3080	
ADD-ON						
UNITS AND FUEL	Projet Magenta					
	AST Server					
MODULES	127.0.0.1	L				
MOVING MAP	FS Instructor Add-Ons					
POSITION	Add On	Version	Editor	Description		
BLACK BOX	TEST ADD-ON C# TEST ADD-ON	1.2 1.1	My company My company	This line sum up your add-on in the setting > Add on li This is a my Description. This add-on is great.		

CUSTOM FAILURES

- Pages			In progress
FAILURES		REVERSER EING 2	FLAPS
INHIBIT	SPOILER	LEFT BRAVE	LEFT BRAKE
FAILED	GEAR	RIGHT BRAKE	
LIGHT	REVERSER ENG 1		

In RED: the current sent failure

In Orange: Trigger malfunctions. They aren't yet applied. You can click on the orange button to know the trigger condition.

10.1.1 Send or arm a failure

Click on a page button and on a failure button.



This screen allows to send a direct failure (button green SEND) or field trigger conditions. You can cumulate the three following settings:

- Delay to postpone the failure effect. 0=now. When you change this value, it shows you the time (according the instructor station clock) when the failure will be sent:



- Indicateed Air Speed Above (+)/Lower (-) knots
- Altitude of the aircraft Above (+)/Lower (-) feet

In the following example, we want to create a failure in 25 min when IAS will be < 210 kts and ALT < 5000.



The green button "SEND" becomes orange and indicates now "ARM". It means the failure will be armed and not sent now. Click on this button.



The failure becomes orange (ARMED status). If you click again on this button, you can see the current conditions:



Now there are 6 minutes remaining. You can Remove these armed failures with the "REMOVE" button or change conditions.



When all conditions are true, the armed failure is sent and becomes RED.

To remove the failure, click again on this red button.

Note: PITOT and VACUUM failures worked only with FS2004.

10.1.2 Available standard P3D failures list

FAILURES	
	HYDRAULIC
	BRAKES L
	BRAKES R
	ADF
	IAS
	ALTIMETER
	ALTITUDE INDICATOR
	COMPASS
	ELECTRICS
	ENGINE L
	ENGINE R
	HEADING INDICATOR
	VSI
	TRANSPONDER
	PITOT
	HYDRAULIC SYSTEM INTEGRITY
	50%
INHIBIT	
	FLAPS
	SPOILER
	GEAR
	REVERSER ENG 1
	REVERSER ENG 2
	LEFT BRAKE
	RIGHT BRAKE
FAILED	
	ENGINE 1
	ENGINE 2
	FIRE ENGINE 1
	FIRE ENGINE 2
	АР
	HYDRAULIC
	GEN 1
	GEN 2
	AVIONIC
	STATIC PORT
	VACUUM
	PITOT (IAS)
	ELECTRICITY

<u>Useful</u>

- If you use some add-ons or FSUIPC special functionalities, it could happen that some failures don't work.
- At the end of the flight, the Logbook gives a list of used failures (comment part)

10.1.3 RANDOM failures

It allows creating random failures with 5 reliable levels:

LEVEL	RELIABILITY
Never	None failure
Reliable	About one for 50 hours of flight
Sometimes	About one for 20 hours of flight
Often	About one every 3h of flight
Garbage	One problem or more for 1h

<u>Useful</u>

- The random failures are only generated airborne. Newer on ground.
- The reliability level is recorded. It's reused for the next FS instructor start

10.1.4 Customize these failures

You can create your own failures to manage Project Magenta Offset or all specific features from FSUIPC.

Copy the file failure.txt from the FS instructor installation folder, resource directory



Structure of this file:

- All comment have to begin by a quote "'". Such as:
 - ENGINE 1, 3590, 4, 0, 1 'Engine 1 Fuel Valve, 1 = open, 0 = closed
- You create PAGE with the sign [and]. Such as: [PM BLEED]
- You declare two kinds of FSUIPC variables:
 - Simple offset
 You give a failure title, FSUIPC offset, variable length or bit, value when fail, value when normal and say if the failure value is repeated every second
 - TOGGLE. It's a ON/OFF mode. They are documented into the FSUIPC SDK (List of Controls.pdf, such as

http://fsuipc.simflight.com/beta/Revised List of FSX Controls.pdf)

- Each field has to be separated with a **<u>coma</u>**

To know which FSUIPC offset you have to use, please check FSUIPC SDK documentation or your plane system suit like Project Magenta. <u>http://www.projectmagenta.com/all-fsuipc-offsets/</u>

When you close FS Instructor, the failures are reset.

Beware:

- If you forgot one coma into your offset declaration, the variable will not appear
- The failures are only known during your FS instructor session. It means that if you use a second Instructor session, it can't see the current failures. Furthermore, if you restart Fs Instructor you no more know which failures are in progress
- Newer used reserved keywords (TOGGLE/REPEAT) in the offset description

10.1.4.1 How to switch off the avionics

The FSUIPC documentation shows the offset 2E80, size=4

	2E80	4	Master avionics switch (0=Off, 1=On)
--	------	---	--------------------------------------

You have to declare: AVIONIC, 2E80, 4, 0, 1, REPEAT

We add REPEAT mode to send AVIONIC OFF every second.

10.1.4.2 How to inhibit spoiler

The FSUIPC documentation shows the offset 32F8 and the bit 1

32F8	1	This provides use in breakd individual bits are available, al	options to inhibit certain aircraft operations, for lown or precise control implementations. Set for individual subsystems. Currently the following Il related to hydraulic power:
		2^0 2^1 2^2 2^3 2^4 2^5 2^6 2^7	Set to inhibit flap operation Set to inhibit spoiler operation Set to inhibit gear operation <i>reserved</i> Set to inhibit Engine #1 reverser Set to inhibit Engine #2 reverser Set to inhibit Engine #3 reverser Set to inhibit Engine #4 reverser

You have to declare: SPOILER, 32F8, .1, 1, 0

10.1.4.3 How to stick brakes

The FSUIPC controls shows the toggle 66310 TOGGLE TOTAL BRAKE FAILURE

66310

You declare

STUCK BRAKE, TOGGLE, 66310

Note: for toggle mode, you can't specify a fail and normal value. It's like a switch. It sends ON for the first use and OFF the second time.

```
.
              CUSTOM FAILURES for FS Instructor
.
              [a name] => page
.
              failure_title, FSUIPC offset, length, value_fail, value_normal
             Options:
               - TOGGLE ==> ON/OFE
              - REPEAT : repeat the command every second
  [INHIBIT]

        ITJ
        FLAPS,
        32F8, .0, 1, 0

        SPOILER,
        32F8, .1, 1, 0
        32F8, .2, 1, 0

        GEAR,
        32F8, .2, 1, 0
        32F8, .2, 1, 0

              REVERSER ENG 1, 32F8, .4, 1, 0
              REVERSER ENG 2, 32F8, .5, 1, 0
              LEFT BRAKE, TOGGLE, 66311 ' TOGGLE_LEFT_BRAKE_FAILURE
RIGHT BRAKE, TOGGLE, 66312 ' TOGGLE_RIGHT_BRAKE_FAILURE
[FAILED]
             I]ENGINE 1,S590, 4, 0, 1ENGINE 2,AP,O'BC, 4, 0, 1,REPEATHYDRAULIC,TOGGLE, 66309' TOGGLE_HYDRAULIC_FAILUREGEN 1,STATIC_PORT,TOGGLE, 66308' TOGGLE_STATIC_PORT_BLOCKAGEVACUUM,TOGGLE, 66307' TOGGLE_PITOT_BLOCKAGE - B71, 1, 1,0 for PM' IDGGLE, 66306' TOGGLE_PITOT_BLOCKAGE - B71, 1, 1,0 for PM' IDGGLE, 66306' TOGGLE_PITOT_BLOCKAGE - B71, 1, 1,0 for PM' ELECTRICITY,TOGGLE, 66306' TOGGLE_ELECTRICAL_FAILURE
[PM BLEED]
              BLEED1/FAULT, 5679, .0, 1, 0
              BLEED2/FAULT, 5679, .1, 1, 0
              BLEED3/FAULT, 5679, .2, 1, 0
              BLEED4/FAULT, 5679, .3, 1, 0
```

11 PROSIM support

If you set PROSIM, you have access to specific features:

- o PROSIM Failures
- o FMS
- o Flight Plan on the MAP
- GPU control on Aircraft page

11.1.1 Prosim Setting

FS Instructor needs to know where is located PROSIM737. You have to set it into the preference window (PROSIM, PM tab) and check "Use PROSIM".

GENERAL	None specific product
DATABASE	Use PROSIM
ADD-ON	ProSim Server
	Host 127.0.0.1 Port 8080 TEST
MODULES	

You have to insert Host name/IP Address and the default com Port (8080 by default)

The Test button tries a connection to PROSIM



If after a while PROSIM is not found, you have to check that your settings are correct and PROSIM is started.

In Prosim setting, you have to declare

To have the green arc of the altitude selected on MCP



🛃 Configuration Main Drivers Switches Switches MCP/Throttle Indicators Indicators MCP/Throttle Gauges Displays Gates Numerical Audio Analog Encoders Levers Enabled Use only when the boards are connected to the MCP CPFlight boards/ICS MIP through MCP CPFlight boards direct connection [Not installed] Use only when the boards are directly connected to the computer without an MCP Enabled Directinput support for joysticks EHID Server E 1 Advanced Enabled FDS hardware support Advanced Flight Illusion support + [Not installed] • FSBUS support [Not installed] • Enabled FSUIPC support

þ	Configuration														
												. ,			
	Main	Drivers	Switches	Switches MCP/Throttle	Indicators	Indicators MCP/Throttle	Gauges	Displays	Gates	Numerical	Audio	Analog	Encoders	Levers	
	МС	P ALT VA	L output		+ FSI	JIPC 32 bit S		• Ox	86E0						

11.1.2 PROSIM FAILURES PAGE

- Domains							In progress
Engine	Engine 1 hot start	Engine 2 hot start	ΑΡυ	Fire engine 1	Left fire handle pulled	APU bottle discharged	Static inverter
Navigation							Electrical papel
Electric	Engine 1 hung start	Engine 2 hung start	Engine 1 start valve remains open	Fire engine 2	Right fire handle pulled	Engine 1 loop A	items
							Fire engine 1
Busses			Engine 1 start		APIL fire bandle		The engine 1
Fuel	Engine 1 no N1	Engine 2 no N1	valve does not open	Fire APU	pulled	Engine 1 loop B	
Pneumatic	Engine 1 no N1	Engine 2 no N1	Engine 2 start valve remains	Overheat engine 1	L bottle	Engine 2 loop A	
Hvdraulic			open		uschargen		
<u> </u>							
Heating	Engine 1 failure	Engine 2 failure	Engine 2 start valve does not open	Overheat engine 2	R bottle discharged	Engine 2 loop B	
Misc							

If you own PROSIM737, FS Instructor can manage the failures panel.

This page sends or stops failures.

The screen is divided in 3 parts:

- On the left, you have the 9 domains. If you click on one of them, the corresponding failures appears on the center part
- The center part displays the failures list of the current domain (in green). If you move the mouse on a failure, it shows details

Left Fwd	Right Aft	DEU 1	Cargo
Overwin	Overwin	failure	fire fwd
The door may no	ot have been properly	v locked. Crew should che	ck door status.
Leit Aft	Aft	DEU 1 is booting.	Cargo
Overwin	Service		fire fwd

When you click on a failure, a window allows to send now the malfunction or to arm it with conditions:



Here we arm a Fire Engine in 1 hour above FL300

Details on this trigger window: <u>10.1.1</u> Send or arm a failure



On the right

• In red, the current failures. Just click on it to remove it.

Beware: when you stop a failure, such as Engine failure, it stops the reason why the failure appears. Pilots have to restart the engine.

• In orange, the armed failure. Click on it to show the current trigger conditions.

11.1.3 List of the Prosim failures (for ProSim737 V1.x)

Battery	Navigation
Generator 1	IRS left
Generator 1 disconnect	IRS left alignment
Generator 2	IRS right
Generator 2 disconnect	IRS right alignment
TR 1 failure	GPS
TR 2 failure	
TR 3 failure	Pneumatic
Static inverter	Trim air valve

Source off left Source off right

Busses

TransBus1 TransBus2 MainBus1 MainBus2 GalleyBusLeft GalleyBusRight **ACStandbyBus** DCBus1 DCBus2 **DCStandbyBus BattBus** HotBattBus **SwitchedHotBattBus** GroundServicesBus switchedground Aux Battery

Fuel

Fuel Left Aft pump Fuel Left Fwd pump Fuel Center Aft pump Fuel Center Fwd pump Fuel Right Aft pump Fuel Right Fwd pump Crossfeed valve ENG fuel valve left ENG fuel valve right Spar valve left Spar valve right Filter bypass left Filter bypass right

Heating

Capt Pitot Heat Alpha Vane Heat L Elev pitot Heat L tempProbe Heat Copilot Pitot Heat Alpha Vane Heat R Elev pitot Heat R auxPitot Heat

L Bleed trip

L High stage locked close

L Bleed Stage shift R Bleed trip R High stage locked close R Bleed Stage shift Bleed air valve left Bleed air valve right Bleed air valve APU Pack L Pack R Pressure loss high Pressure loss low Pressuration controller 1 Pressuration controller 2 Passenger oxygen Pneumatic isolation valve Duct leak L Duct leak R Cowl overpressure L Cowl overpressure R

Hydraulic

Hyd ENG1 Hyd ENG2 Hyd ELEC2 overheat Hyd ELEC1 overheat Hyd Standby pump Standby hyd Iow quantity

Engine

APU Engine 1 failure Engine 2 failure Fire engine 1 Fire engine 2 Fire APU Overheat engine 1 Overheat engine 2 L bottle discharged R bottle discharged APU bottle discharged Engine 1 loop A Engine 1 loop B Engine 2 loop A Window heat Side L element Window heat FWD L element Window heat Side R element Window heat FWD R element Cowl valve L Cowl valve R WAI valve R

Engine 2 loop B APU loop

Misc

Speed trim fail Mach trim fail Auto slat fail Equip door Fwd entry door Left Fwd Overwing door Aft Entry door Fwd Service door Right Fwd Overwing door Right Aft Overwing door Aft Service door Fwd Cargo door Aft Cargo door DEU 1 failure DEU 2 failure Lavatory smoke Cargo fire fwd Cargo fire fwd detection loop A Cargo fire fwd detection loop B Cargo fire aft Cargo fire aft detection loop A Cargo fire aft detection loop B

11.1.4 PROSIM FMS

┌ Flight Informatio	on ———			•
Flight Number:				
Departure:		LFPO O	rly	- 737-800 26K
Destination:		EDDE E	rfurt	— 1306 30MAY13/26JUN13 —
Status:		In Fligh	t	
Remaining Time	(ETA):	15:41 U	JTC / 17:41 LOC	OP PROGRAM
		77 min	left	SUPP DATA
Route				
WAYPT	BEARING	DISTANCE	PHASE	- <index init="" pos=""> -</index>
RW08	75°	0 NM	CRZ	
PO246	245°	8 NM	CRZ	
PO271	359°	13 NM	CRZ	REF RTE CLB CRZ DES BRT
ADADA	182°	11 NM	CRZ	MENU LEGS DEP HOLD PROG EXEC
AGOPA	180°	13 NM	CRZ	
discontinuity	0°	0 NM	CRZ	LIMIT FIX A B C D E
RELKO	66°	409 NM	CRZ	PREV NEXT F G H J
DE410	212°	5 NM	CRZ	TAGE TAGE
DE437	212°	3 NM	CRZ	1 2 3 K L M N O
CI28	276°	6 NM	CRZ	A 5 6 P O R S T
FI28	276°	5 NM	CRZ	
RW28	276°	4 NM	DEST	🗢 7 8 9 U V W X Y 🕁
				O ☆ Z SP DEL / CLR O
	HIDE	CDU		Data will be refreshed in 4 seconds

This module is accessible if you have set a connection to PROSIM from the Preference menu.

It extracts information from the route inserted in the CDU.

To be able to display an embedded CDU (SHOW/HIDE CDU button) you need at least one ProSimCDU program running.

FS Instructor opens a web window to the PROSIM CDU.

11.2 PROSIM FLIGHT PLAN



12 PROJECT MAGENTA support

If you set PM, you have access to specific features:

- o FMS
- o Flight Plan on the MAP

12.1.1 PM Setting

FS Instructor needs to know where is located the NetDir directory. This folder shares all Project Magenta information in real time. Check your PM setting to know where it is.

<u> </u>	None specific	product			
•	ProSim Serve				
		127.0.0.1		8080	
~	 Proiet Magen	ta			
9	i rojec magen				
	NetDIR	C:\NETDIR		Browse	TEST
0					
		127.0.0.1			

12.2 Project Magenta FMS

┌ Flight Informa	tion ———					t Data ——		
Flight Number	:	TAM01			Trip	Distance Left:	93 NM (17	72 km)
Departure:		LFPO Or	ly		Altit	ude (AGL):	0 ft (0 m)	
Destination:		LFPG Cha	arles-de-Ga	ulle	Airs	beed (IAS):	0 kts (0 kn	n/h)
Status:		In Flight			Cruis	se Altitude:	FL110	
Remaining Tim	ne (ETA):	07:15 UT	TC / 9:15 LC)C				
		15 min le	eft					
Route —								
WAYPT	BEARING	DISTANCE	PHASE		<u> </u>			
LFPO24	0°	0 NM						
(2605)	255°	4 NM						
(OL09)	237°	4 NM						
D245M	245°	4 NM						
RBT	13°	2 NM						
INTCPT	13°	6 NM						
TSU	67°	36 NM						
CLM	77°	7 NM						
D355G	292°	1 NM						
INTCPT	292°	14 NM						
PGS	292°	0 NM						
(T/D)	0°	0 NM						
CI26L	266°	2 NM						
FI26L	266°	6 NM				-		
LFPG26L	0°	0 NM			-	Da	ta will be refres	hed in 2 seconds
POSITION	ENVIRON	FUEL	WE	IGHT	PUSHBAC	AIRCRAFT	FAILURE	VIEW/SLE
BLACK	COMPUT	MOTION		NTER	MAP	FMS	FREEZE	EXIT

12.3 Project Magenta Flight Plan



13 WEIGHT/PAYLOAD PAGE

This module shows you the current aircraft weight. It controls the payload elements (pilot, first class, baggage...).

Thin		1:04 00	مام مر م	+ l		a: manafr	
Ins	station	list de	penas	on the	current	aircraff	usea.
	56661011	1100 00	period	011 0110	Carrente	anorare	ascai

┌ Weight and Balance ───			Total Weight
Pilot	170 lb	- +	Empty: 91 310 lb
Co-Pilot	170 lb	- +	Payload: 24 450 lb
Crew	610 lb	- +	ZFW: 115 760 lb
First Class	1560 lb	- +	Fuel: 45 885 lb (25 927 L)
Coach 3-10	5640 lb	- +	Total: 161 449 lb
Coach 11-18	5440 lb	- +	Don't exceed max gross Weight: 172 600 lb
Coach 19-25	4960 lb	- +	
Forward Baggage	4700 lb	- +	Send
Aft Baggage	1200 lb	- +	

The values are only sent when you click on "Send" button.

During the flight, the plane could have an abrupt behavior if you change the mass a lot.

Note:

- You can insert aberrant value. For example, 2t for the pilot weight. It should have a very strong impact on the aircraft. It could be unflyable.
- Max Gross Weight: if you exceed this value, the aircraft weight appears in red. You can ignore this warning and send excessive values. However, the flight envelope will change and the plane could be unstable.
- After a crash or situation loading, these weights could be come back to the default values.
- If you try to update weight station during a flight (engine started), you will have to confirm it (a message box appears)

Total Weigh	Total Weight						
Empty: Payload:	41,4 t 30,2 t						
ZFW:	71,6 t						
Fuel:	20,6 t (25 668 L)						
Total:	92,3 t						
Don't exceed max gross Weight: 78,3 t							

• You can use lb or kg. Select the unit it into setting menu (UNITS Part).

🕅 FS Instructor 3.28				
File Help				
GENERAL	Units			
DATABASE	Altitude	Ť	Distance in metric	
ADD-ON	Pressure millibar	·		
	Weight Ib	·		
FUEL				
	Fuel USG	-	To Refuel only with e	ngines stopped

14 Aircraft

14.1 General Page

This page can change regarding your current aircraft and add-on used.

AIRCRAFT	┌ Altitude ────		Speed	Veather ———
	Alt 90' E	aro 1013	IAS 9kts	Wind 2° / 0kts
GENERAL	Height 00' C	NH 1013	TAS 9kts	Visi CAVOK
				Temp 15°C
RADIO/NAV	Drags		 _ Lights / Pitot	
	Flaps 0° Gea		Nav. ON Beaco	n ON Pitot: ON
	Spoile 0%	R	Landing OFF Strobe	ON Taxi OFF
	- Attitude			Throttles
	Pitch 0°	G Force 1g	Trim Elev 05,0	Eng 1
	Bank O°	Vert. spd 00'	Aileron trim 00,0	Eng 2
	Heading 312°			
		_		
	Doors close			
	Park Brake Release	GPL	J	

This page monitors the aircraft status.

You detect quickly pilot errors via color codes (orange: potential error, red: danger)

- Speed · IAS TAS	<mark>296kts</mark> 326kts	
 _ Altitude —		
Alt 8,6	20' Baro	1013



Drags					
Flaps	31*	Gear	с		
Spoilers		L.		R	

_□ Weather	
Wind	1° / 0kts
Visi	CAVOK
Temp	-2°C

IAS (Indicated Air Speed): The value becomes red if the plane exceeds 250Kt limitation under 10 000' or if the plane exceeds 30kts during taxi.

TAS (True Air Speed)

Alt: True Altitude (Ft., at sea level)

Height: Ground height

Baro: atmospheric pressure setting

• Above 7000', if QNH is not set to 1013 (standard pressure), the value appears in red

Local QNH: atmospheric pressure

Flaps: indicates the current flaps position (degrees) If you click on "Flaps" button you can choose to up or down flaps.

Note: according your aircraft, you have to specify the full flaps degrees value to have. Such as 40° for B737. Go to preference menu, aircraft tab to change this value.

Spoilers: indicates in % speed brakes position

- 0% = up / 100% = fully extended
- When spoilers are armed, ARMED text appears.
- When speed brakes are fully extended, the value appears in red.
- If you click on Spoilers. You release or extend the spoilers.

Gear: indicates the landing gear position.

- Black: Gear up,
- Red: In transition, gear unsafe.
- Green: Gear down and locked

These buttons can be activated to move the landing gear.

Actual Weather around the aircraft:

- Wind direction
- Wind speed
- External temperature (Celsius)

Pitch	/\ 4°	G Force	1g	Trim	04.0
Bank	0°	Vert. spd	1,100'	Aileron trim	00.0
Headin	89°				

Pitch.

- /\ indicates a climb pitch
- V indicates a descent pitch

Bank: Bank angle:

- <-- to the left
- --> to the right
- Becomes orange when reaching 30°
- Becomes red when reaching 50°

Heading compass.

G Force: Gravitational Force

• Becomes red after 2g

Vertical speed

- appears in orange after 3000"/min
- Appears in red after 4000"/min

Shown engines N1 in %

• Becomes red under 20% and over 90%

Lights / Pitot heat

- Nav Light should be ON during the flight
- Pitot Heat: Not mandatory but avoid using it on the ground
- Beacon should be ON when the engines are started
- Strobe should be ON when you line up and OFF runway vacated
- Landing: has to be ON when you line up and below the transition altitude (or FL100)
- Taxi

GPU / UNPLUG GPU appears only when Prosim is activated. It controls ground power.

Park Brake: Parking brakes status:

- Red, Parking brakes engaged/set
- Black, parking brakes released.

Door: Door status

• Black: Door locked,

Throttl	es –	Eng 3		
Eng 2		Eng 4		
Lights / P	itot -			
Nav.	ON	Beacon ON	Pitot:	OFF
Landing	ON	Strobe OFF	Taxi	OFF



• Red: Door opened.

Pilotage errors appear in the logbook page. Only highest values will be written.

	1 1 0		
AIRCRAFT	RAD/NAV		
GENERAL	ACTIVE STANDBY INSERT	OBS	
	NAV1 109.50 🕂 117.20 🗲	OBS1 273	DME: 1nm ID ILL (CAT III ILS/DME
RADIO/NAV	NAV2 110.60 🕀 116.80 🗲	OBS2 315	DME: 0nm ID BUN (BRUNO)
	ACTIVE STANDBY INSERT		
	СОМ1 128.30 🕂 128.25 🗲 📃	ADF 1 0421.0	ID (BURNHAM)
	Сом2 127.80 🕂 127.90 🗲 📃	ADF 2 0240.0	ID
	TYPDER		
	TRANSPONDER 1200		

14.2 RAVIO/NAV page

14.2.1 NAV 1, 2 tuning



- 1 Active NAV1 or 2 Frequency (read only)
- 2 Swap frequency button
- 3 STANDBY Frequency (read only)
- 4 Standby Frequency writing box. Click on the left arrow to send it.
- 5 Course setting (OBS) of each NAV. You can write a value.
- 6 DME distance (0=not available)
- 7 ID = IDENT. To listen to the Morse code. Green button=activated
- 8 If you are receiving a VOR. It shows the code and navaids name.

14.2.2 COMM tuning



- 1 Active Frequency (read only)
- 2 Standby Frequency (read only)
- 3 Frequency change button
- 4 –New Standby Frequency writing box
- 5 Button to send this frequency

14.2.3 NDB



ADF 2 works only with aircraft supporting a second ADF.

1- ADF Frequency – you can write a new value

2 - ID = IDENT. To listen to the Morse code. Green button=activated 3 – Frequency change button

3 – If you are receiving an ADF. It shows the code and navaids name.

14.2.4 Transponder XPDER TRANSPONDER 1354 2

- 1 XPDER Frequency you can write a new value
- 2 left arrow only appears in edit mode. Click on this button to send the actual XPDER value

14.3 Module settings

The flaps position is calculated regarding the max full flaps degrees. It depends on your current aircraft. You can manage it from the Menu Config > General



15 MOVING MAP

A moving map display is a type of navigation system that shows the aircraft current location at the center of a map. As the plane moves, the map moves to keep it at the center of the display.



15.1 "Obsolete navaids database" message



If a message "Obsolete navaids database" appears on the map, it means that you are not using a Navigraph database.

Please follow this chapter to download and install the last Navigraph database:

15.2 Zoom

By default, auto zoom is activated. The scale depends on the plane altitude. On ground, the focus is on the airport. To bypass, click on the "AutoZoom ON" button. Two new buttons appear. You can now manage manually the zoom.

Two different ways to zoom:

- Use mouse wheel scroll (in/out)
- Use buttons



15.3 The controls

On the left, you find buttons.

CENTER ON AIRCRAFT		LFID Pacific 20,400			358
				AGN	
FIND					
AIRPORT		RUNWAY	ILS	AXE	TAXI/PARK
AIRCRAFT	ROSE	PLOT	Flight Info	A.I.	
NAVAID	VOR	NDB	WAYPT		

Gray button = inactive

Orange button = first notch

Green button = ON or second notch

15.3.1 ICAO

This button has three states:



15.3.2 RUNWAY

This button has three states:



Note: you can filter the runways displayed according the surface (see Menu > Settings > POSITION)

GENERAL			
	Circuit pattern IFR/VFR	☐ Move to a gate	
DATABASE		Additional Length (m)	1
ADD-ON	IFR *	Searched type of Gate:	
	Pause after a move	Ramp Small	🔲 Gate small
MODULES	and Ask to unfreeze	🗹 Ramp Medium	🗹 Gate Medium
	Disable "Set auto ILS and QNH"	Ramp Large	Gate Large
MOVING MAP		Ramp Cargo	
DOCITION	Runway Surface type filter		
POSITION	✓ Hard-surface	Water	
FUEL			

15.3.3 ILS

This feature works only if you display the runway. This button has three states:



15.3.4 AXE

This feature works only if you display the runway. This button is ON/OFF:



15.3.5 TAXI/PARK

This feature works only with a high zoom. This button has three states:

None (gray button)	Taxiways (orange button)	Taxiways designator and Parking
		(green button)



Note: to work, you have to build the sim database with the taxiway checkbox activated.

15.3.6 Flight Information

Switch to show aircraft information



15.3.7 Rose

Show a heading rose



15.3.8 PLOT

Track the aircraft (blue line)



15.3.9 A.I.

It displays the other aircrafts.

This button has three states:

- None (gray button)
- Airborne aircrafts (orange button)



- \circ ~ The yellow aircrafts fly at between 500 and 1 000 $^{\prime\prime}$ of your current altitude.
- \circ $\;$ The red aircraft fly nearly at the same altitude as your airplane
- Airborne and ground aircrafts (green button)



15.3.10 VOR

This button has three states:



15.3.11 ADF This button has three states:



15.3.12 WAYPOINTS



It an ON/OFF feature. Beware it has strong impact on performance.

15.3.13	Flight Plan
AIRCRAFT	
Flight Info	
PLOT	
Flight Plan	
	I his button

his button is only accessible if PROSIM or Project magenta is set and connected.

Orange button shows only Flight plan path. Green button shows the Waypoint ID.



15.4 The contextual menu

By clicking on the map, you display a contextual menu



15.4.1 Export Map



Export map gives access to two features:

- Print the map

It prints the map on your printer. An option in the SETTINGS windows uses a white background instead of black.

Default Printer
 This local or remote printer
 is used in the map page
 "PRINT" button
 \\prevert\COROT
 White background

You have set a printer from MENU > Settings > MOVING MAP.

Take a screenshot

It exports a png file in the OUPUT directory

15.4.2 Center screen here



It centers the map on the clicked point.

15.4.3 Distance and bearing of one point on the map

When you click on the map, the menu appears. In yellow, you find the bearing and distance of this point to the aircraft.



15.4.4 Measure

ED	FM	
- I	Export map	•
	Center Screen Here	
	Measure	
	Quit	

EDFM 113.55 MND	
€ ^{ETIE}	23.4 NM / 99°

Measure creates an arrow with distance and bearing to the selected point.

15.5 User objects

User map objects are graphic elements added on the map. Such as:



From a map click, you display a contextual menu

ED	FM				
- I	Export map	•			
	Center Screen Here				
Measure					
Quit					
	EDFM RWY 27 (272°), ILS 108.55 MHz	•			
	EDFM RWY 09C (92°)	•			
	EDFM RWY 27C (272°)	•			
	VOR: MND 113.55 MHz	•			
	This point	•			
	Manage the user objects				

Export map	•	
Center Screen Here		
Measure		
Quit		N
LFPT RWY 12 (120°)	•	
This point	►	MOVE TO
Manage the user objects		ADD VECTOR
~		ADD CURVE
		ADD RECTANGLE
		ADD CIRCLE
		ADD TEXT
		ADD POINT

It is used to add some information on the map

15.5.1 User object: Text

It adds a free text on the map.

	User objects			x
Y	Object ID ┌ Attributs —	This point		
	Text	This is a free text on the map		< >
	Latitude: Longitude:	N 43° 27' -5,792843 W 02° -27' -26,09482		
8 LFBZ	Color	Silver	Heading (°) 45	▲ ▼
Heete	Text format			
This he had	2e	19		
<u>0</u> ,	CLOSE			

15.5.2 User object: Vector

It creates lines. You can change the start and end cap (to create arrow) and modify the line style (dot, dash, fulled)

	User objects				×
	Object ID ┌Attributs —	This point			
	Text	My vector			< >
	Latitude: Longitude:	N 43° 27' -19,40687 W 02° -24' 15,76155	N 43° 27' -1: W 02° -28' -:	1,03266 24,77595	
8	Color	Wheat	Heading (°)	88 🛓	
	Font size	30 🕂			
jjeen a meet a meet a meet a meet a meet My vector (88°)	Line format				
	Start cap	Square	- Style	DashDot	-
	End cap	Arrow	 Thickness 	9 🕂	
	CLOSE				

15.5.3 User object: curve

It draws curve on the map based on 3 points:

- 1 a start point
- 2 an end point
- 3 an intermediate point

	User objects		
	Object ID Attributs —	My yellow curve	
End point			
	Latitude:	N 43° 28' -23,29863	N 43° 29' -11,52245
	Longitude:	W 02° -26' -10,9725	W 02° -27' 21,9923
	Color	Yellow 🔽	
	∟ Line format		Style Dash 🔹
intermediate point ->)			Thickness 2
Start point	SAVE	CLOSE	

15.5.4 User object: Point

Add you waypoint on the map:			
	User objects		×
	Object ID ⊤Attributs –	This added point	
	Text	Wy own point	~
	Latitude: Longitude:	N 43° 28' -24,10032 W 02° -26' -20,15376	
	Color	Orange	
	Text format	t	
	Font size	30 🕂	
Wy own point	APPLY	CLOSE	

15.5.5 User object: Rectangle Create squares and rectangles

	User objects		
	Object ID	rectangle	
·	Latitude: Longitude:	N 43 28 -19,95524 W 02° -26' -18,13287	N 43° 28° 28,87241 W 02° -27' -19,54666
	Color	Yellow 🔽	
	Line format		
			Style Dash 🗸
ll			Thickness 2
	SAVE	CLOSE	

15.5.6 User object: Circle

User objects			
Object ID	nice circle		
Attributs –			
Latitude:	N 43° 28' 5,999733	N 43° 27' 23,75129	
Longitude:	W 02° -29' 27,24335	W 02° -30' 2,72477	I
Color	Yellow	•	
Line format	t		**************************************
		Style Dash 🔹	114.15 812
		Thickness 2	
SAVE	CLOSE		

15.5.7 Custom objects manager

Export map	►
Center Screen Here	
Measure	
Quit	
This point	•
Manage the user objects	

All your custom objects added on the map are managed from map click>Manage the user objects.

It opens a dedicated window

Manage user objects on the map								
Туре	Object ID	Text	Color	EDIT	REMOVE			
VECTOR	LFPT RWY 30 (300°)	Take off	Yellow	EDIT	REMOVE			
VECTOR	This point	3000"/ 120 kts	Yellow	<u>EDIT</u>	<u>REMOVE</u>			
POINT	This point	Gear down	White	<u>EDIT</u>	<u>REMOVE</u>			
VECTOR	This point	Approach Red		<u>EDIT</u>	<u>REMOVE</u>			
CURVE	This point		Yellow	<u>EDIT</u>	<u>REMOVE</u>			
CURVE	This point		Yellow	<u>EDIT</u>	<u>REMOVE</u>			
RECTANGLE	This point		Gray	<u>EDIT</u>	<u>REMOVE</u>			
TEXT	This point	LFPT Patern Rwy 12 Wind 320/12	Gray	EDIT	<u>REMOVE</u>			
CURVE	This point		Yellow	<u>EDIT</u>	<u>REMOVE</u>			
CURVE	This point		Yellow	<u>EDIT</u>	<u>REMOVE</u>			
техт	This point	_ Forbidden Area	Red	<u>EDIT</u>	<u>REMOVE</u>			
CIRCLE	This point		White	EDIT	REMOVE -			
Preset LFPT		•	SAV/E	NEW PRESET	CLOSE			
			SAVE	REMOVE				

Settings

Nom	These presets are stored as xml_UO files located in your FS instructor / SETTINGS directory
 Config.xml Config_moving_map.xml DEFAULT.xml_UO LFPT.xml_UO Menu.xml Remote_Machine.xml 	If you create objects and don't save the preset, you will not find your objects at the next session. You can manage several presets:

You can save your current list of objects into preset files.

reset LFPT		NEW PRESET	01.005
Approach EDDF	SAVE	REMOVE	CLOSE
LFPT			

15.6 FIND button

Find button opens a window to find a database record: Airports, VOR, NDB and waypoints. Insert at least 2 characters in the IDENT filed to search records.

Search a database reco	rd			
Airport ICAO	Airport Name	VOR	NDB	Waypoint
Ident				
				FYIT

We use "KLA". It gives all ICAO containing this string.

Search a database re	ecord ————				
Airport ICAO	Airport Name	• VOR	• NDB	Waypoint	
Ident KLA					
AIF	PORT				
6799NM - KLAX Los /	Angeles Intl				
6610NM - KLAS McC	arran Intl				
6107NM - KLAR Lara	mie Regl				
6191NM - KLAM Los	Alamos				
6001NM - KLAA Lam	ar Mun				
5819NM - KLAW Law	ton-Ft Sill Regl				
5264NM - KLAF Purd	lue Univ				
5165NM - KLAN Capi	tal City				
4981NM - KLAL Lake	land Linder Regl				
4374NM - SKLA Mala	iga				
				FXIT	

Search a database record —			
Airport ICAO Airport Name	VOR	NDB	Waypoint
Ident KLA			
	SID	STAR	ADD
6799NM - KLAX Los Angeles Intl 6610NM - KLAS McCarran Intl 6107NM - KLAS McCarran Intl 6191NM - KLAR Laramie Regl 6191NM - KLAM Los Alamos 6001NM - KLAA Lamar Mun 5819NM - KLAA Lamar Mun 5819NM - KLAW Lawton-Ft Sill Regl 5264NM - KLAF Purdue Univ 5165NM - KLAN Capital City 4981NM - KLAL Lakeland Linder Regl	BOACH6 COWBY6 HOOVR4 LAS4 MCCRN4 PRFUM3 SHEAD9 STAAV6 TRALR6	CLARR2 CRESO3 FUZZY7 GRNPA1 KADDY1 KEPEC3 LUXOR2 SUNST3 TYSSN3	VORDME 01L (Rwy 01L) VORDME 01R (Rwy 01R) VORDME 07L (Rwy 07L) VORDME 07R (Rwy 07R) VORDME 19L (Rwy 19L) VORDME 19R (Rwy 19R) VORDME 25L (Rwy 25L) VORDME 25R (Rwy 25R) ILS 01L (Rwy 01L)
4374NM - SKLA Malaga			ILS 25L (Rwy 25L) ILS 25R (Rwy 25R) RNAV 01R (Rwy 01R) RNAV 19L (Rwy 19L) RNAV 19R (Rwy 19R) VORDME 25L (Rwy 25L) VORDME 25R (Rwy 25R)
	MAP ON AII	RPORT KLAS	EXIT

By selecting an airport, the SID, STAR and APP lists appear.

You have selected KLAS airport, you can choose a SID or STAR or APPROACH or just click on "MAP on AIPORT KLAS" green button.

The map is centered on our airport





When you select an airport, you access to the SID/STAR and APPROACH.

If this procedure owns different runways and Transition, a new window asks you to select mode information. When you have selected all available information, the green button "SEND IT TO THE



PROCEDURE SELECTION	
RUNWAY	TRANSITION
RW06L	FICKY
RW06R	IPL
RW07L	MZB
RW07R	TRM
RW24L	
RW24R	
RW25L	
RW25R	
SEND IT TO THE MAP	CLÓSE

Our SID appears on the map. You could have to change zoom value to see your SID. A new button is



added (here SID: LAXX7). If you click on it, it remove the SID path.

You can display on the map, at the same time, one SID, one STAR and one APP. In this picture, we see a STAR and his APProach on LFPG.



16 BLACK BOX PAGE

For debriefing, you have some tools located into the black Box page.

Session name	GOOGLE EARTH
TRAINING FLIGHT	Show local Approaches
Save the Flight Records	Show local VOR
Open a Flight Log	
Open a Google Earth Flight	Show local ILS
Open a landing report	Show local NDB
Open a map screenshot	

16.1 Flight Recording

During a flight, several kinds of file are generated:

- A raw flight log (csv file) that you can use to brief and create your own graphs.
- a Google Earth file to show your flight profile, events and mistakes
- a landing report (pdf format)

16.1.1 Control the files creation

The record feature is automatic. You can force a new file by clicking on "Save the Flight Records" button.



New flight files are created when:

- The plane crashes
- You move the plane to a position
- Engines start



- Google_Flight_737_CRASH_2012_11_22__14h18-06sec.kml
- Google_Flight_FAILURES_FL200_2012_11_22__13h56-07sec.kml
- Soogle_Flight_M WESTON & M JAMES_2012_11_22__14h18-13sec.kml
- Google_Flight_SESSION_1-_2012_11_19__14h29-14sec.kml
- Google_Flight_SESSION_2-_2012_11_19__14h29-55sec.kml

16.1.2 Google Earth Flight recorder

Automatically, each flight is recorded into a Google Earth file (kml extension).

It includes Navaid (VOR/ADF) near of the route.

It records Extra Data. Shows on the flight trace some different information:

- o Flaps/Gear shows Flaps UP, Flaps Down, Gear Up et Gear Down
- Bank Angle > x° Show bank angle overshooting. This value is editable in the preferences (menu > preferences).
- V/S > xxxx"/min: shows vertical speed excesses.
- **Overspeed**: VNE exceeding
- o Stall: already not implemented
- AP: Autopilot ON and OFF

The .kml file can be opened with Google earth by clicking on "Open a Google Earth Flight". Also, you will find these files into your FS Instructor/OUTPUT directory.



VOR DME example (Nantes)



16.1.3 CSV Flight logs

The first line is the header with the startup date/hour

Record start	at: 01/06/201	2 10:33:01													
Time (sec)	ALT (ft)	AGL (ft)	IAS (kts)	TAS (kts)	VS (ft/min)	N1 (%)	THR (%)	PITCH	BANK	AP	FLAPS	GEAR	SPOILERS	STALL	FAILURES
(1800	1800	150	155	8196	115	100%	4	5	5 AP ON	V Flaps +				
1	. 1800	1800	150	155	8196	115	100%	4	5	10		Gear Down			
2	1800	1800	150	155	8196	115	100%	4	5	10					
3	1800	1800	150	155	8196	115	100%	4	5	15					
4	1900	1900	145	150	8026	115	100%	4	5	15					
5	2000	2000	140	145	7643	115	100%	4	5	20					
6	2200	2100	135	135	7053	115	100%	4	5	25					
7	2300	2200	125	130	6405	115	100%	4	5	25			SPOILER DEPLOYED		
8	2300	2300	120	125	5606	115	100%	4	5	30					
9	2400	2400	115	120	4773	115	100%	4	5	30					
10	2500	2500	110	115	3910	110	100%	4	0	35					
11	. 2500	2500	105	110	2984	110	100%	4	0	35	Flaps UP				
12	2500	2500	105	105	1829	110	100%	4	0	40					
13	2600	2500	100	105	1051	110	100%	3	5	40					
14	2500	2500	100	105	39	110	100%	3	5	40			SPOILER ARMED		
15	2500	2500	100	105	-1018	110	100%	3	0	40					
16	2500	2500	105	105	-2026	110	100%	3	0	40			SPOILER RETRACTED		
17	2400	2400	110	110	-3070	110	100%	2	5	35					
18	2300	2300	115	115	-4005	110	100%	2	0	35					
19	2300	2200	120	125	-4933	115	100%	2	0	35					
20	2100	2100	130	135	-5845	115	100%	1	5	30					
21	2000	2000	140	140	-6648	115	100%	1	0	25			SPOILER DEPLOYED		
22	1900	1900	150	150	-7319	115	100%		5	20 AP OF	F				
23	1800	1800	160	165	-7916	115	100%		5	15					Failures: inhibit Flaps
24	1600	1600	170	175	-8393	115	100%		0	0					Failures: Reverser 1
25	1500	1500	180	185	-8742	115	100%		0	0					Failures: GEN1Failures: NAV
26	i 1300	1300	195	195	-8997	115	100%		5	0				STALL	Failures: VACUUMFailures: GEN2

16.2 Real-Time graphs

	APPROACH	ALT	GROU	IAS	VS	PITCH	BANK	PRINT	FREEZE	RESET
--	----------	-----	------	-----	----	-------	------	-------	--------	-------

These buttons allow displaying real-time graphs.

- 1 Approach graphs
- 2 Parameters graphs

You can choose to see ALT, AGL, IAS, VS, PITCH and BANK.

Three buttons appear with the graph:

- FREEZE allows freezing a graph. It's useful to handle (zoom/move) or print the graph (see below). Beware, none data are storage during a freeze
- RESET resets ALL graphs at one stroke.
- PRINT To print the page

16.2.1 Approach graphs



You need to select an active runway before to use this feature.

This screen has 3 parts:

16.2.1.1 Information header part

LFLB - Rwy: 18 ILS freq: 109.50 QFU: 177° Length: 6 631ft Altitude: 779' Glide: 4,46° Visibility: 0,00 Wind: no Temp: 0°C 2755,5 Nm Speed: 0 kts You find some runway (on the left) and aircraft (on the right information). For ILS, the glide value appears.



16.2.1.2 The vertical/horizontal approach graphs part

Beware about the glide. For ILS approach, the glide value is known, and the graph uses it. In the other case, FS Instructor uses the standard glide $(3^{\circ} / 5.2 \%)$

16.2.1.3 Range part



16.2.1.4 Report

• How it works

You can export an approach diagram to a pdf file or to a printer.

When FS Instructor detects a touchdown, it creates a report. Then, an "Export Report" green button appears.



It opens the last report pdf file. It is saved into the REPORTS directory located in FS Instructor. This directory is created when the first report pdf is generated

📙 Custom	Nom ^	Modifié le	Туре
	Landing Report LFMN - Rwy 04L_2015-12-10_(092002).pdf	10/12/2015 09:20	Adobe
Resources	Landing Report LFMN - Rwy 04L_2015-12-10_(093754).pdf	10/12/2015 09:37	Adobe /
麏 config.xml			
麏 config_menu.xml			
올 config_Remote_Computers.xml			
FS_Instructor.application			
🕅 FS_Instructor.exe			
ES_Instructor.exe.config			

To read this file please install a PDF reader software.

• Report content

You will find this data:

- INFORMATION:
 - Airport ICAO Code + current runway
 - Horizontal visibility
 - Wind direction (°)/speed (kts) on ground
 - Ambient temperature on ground
 - Touchdown Datetime
- TOUCHDOWN data:
 - RoD (Rate of Descent)
 - G Force
 - Bank angle
 - Pitch
 - IAS
 - Centerline deviation
 - Threshold distance
- o Aircraft data
 - Spoiler state
 - Total Weight
 - Landing distance



• The header

If you own a commercial license, you can customize the header image by changing the header.png image located in the FS Instructor/CUSTOM directory





Some events appear on the graph:

Elements	Error
IAS	Overspeed
	IAS > 250kts under 10 000''
VS	Vertical speed > MAX Vertical Speed setting (see menu > Preference)

PITCH	Pitch > 20°
BANK	Bank angle > MAX BANK ANGLE setting (see menu > Preference)
AP	Shows Autopilot ON/OFF (available for FSX standard plane)
GEAR	Show Gear movements
FLAPS	Shows flaps movements
SPOILER	Show Airbrake movements (Retracted / Armed / Deployed)
STALL	Show STALL Warnings



16.2.3 Handle the graphs

With your mouse, you can:

- Scroll Wheel: you zoom/unzoom
- Right click: a menu appears depending on your OS language



You can copy the picture, save it on your hard drive, print it...

- Left click: it selects a graphic range to zoom on it

16.3 Google Earth – tracking

FS Instructor permits to show in real time the airplane in Google Earth.

Set Google Earth before (see 16.3.1 Google Earth settings) and activate this feature into the FS Instructor settings > Black Box.

Google Earth tracking activation				
Google Earth tracking	Black	÷	Show Air traffic	

The application will automatically choose the best zoom depending your flight phase.

- GOOGLE EARTH	You can choose to add some information to Google earth.
Show local Approaches	Show local Approaches generates, in a 100nm range around the aircraft, approach road.
	• We use the standard glide (5.2% / 3°). It couldn't match with
Show local VOR	 the true operative rate of the runway. The approach entry is located 12nm before runway threshold Only > 4000'' length concrete runways appear During flight, you can generate this file again.
Show local ILS	Show local VOR / ILS / NDB generate NAVAID in a 100nm range around the aircraft.
Show local NDB	

Top view



Lateral view





In the Google Earth right lateral bar, you have access to all approaches (RUNWWAYS folder)

- OACI code, Runway number, QFU
- Runway length and ILS frequency

By clicking one time on the runway link, information appears on the scope.

By double clicking, scope view goes on this approach.



16.3.1 Google Earth settings

If you want to use the tracking, you must set up *Google Earth*.





Google Earth - Edit Network Link
Name: My plane 1 Link: Z:/FS Instructor 4/Output/Aircraft.kml 2 Millow this folder to be expanded Show contents as options (radio button selection)
Description View Refresh 3
Time-Based Refresh
When: Periodically Ohrs Omins 4 secs
View-Based Refresh
When: Never O hrs O mins 4 secs
View Bound Scale: 1
OK Cancel

1 – Choose a name

2 - Link: Write the aircraft.kml file address which is in your «FS Instructor/OUPUT » directory. It is created when you launch tracking for the first time.

3 – Open the Refresh Tab

4 – Select Periodically and 4 seconds

5 – Check "Direct access to the view during actualization" or "Fly to view on refresh" to center view on the aircraft.

▼ Lieux	Ajouter du c	ontenu
🖻 🗹 🚫 Mes lieux préférés		
Pensez à cocher "	Bâtiments 3 D)" dans les
données géograp	hiques	
😑 🗹 🔯 My aircraft In FS		
🖳 🗠 🗶 On the ground		
🗏 🗄 🔄 InstructorConsole		

What to do if I see the plane but the camera moves slowly or not at all?

Go to Google Earth options, Navigation tab. My favorite Fly-To-Speed is 0.1460. You can grow this

value to speed-up the camera move.

Soogle Earth Options	<u>?</u> ×
3D View Cache Touring Navigation Genera Fly-To	Fast
Mouse Wheel	
 Invert mouse wheel zoom direction Non-mouse Controller Enable Controller Earth-Based (Move the Earth) User-Based (Move Me) Reverse Controls 	Navigation Automatically tilt while zooming Gradually slow the Earth when rotating or zooming
Restore Defaults	OK Cancel Apply

When you try to open the aircraft information module inside Google Earth, the bar disappears

Please set Google Earth into DirectX mode

Google Earth Options			?
3D View Cache Touring Texture Colors High Color (16 bit) True Color (32 bit) Compress Show Lat/Long Degrees, Minutes, Seconds Degrees, Decimal Minutes	Navigation General Anisotropic Filtering G Off C Medium C High Show Elevation G Feet, Miles C Meters, Kilometers	Labels/Icon Size Small Medium Large Fonts Primary 3D font Secondary 3D font	Graphics Mode C OpenGL DirectX Use safe mode Antialiasing C Off G Medium C use
C Decimal Degrees C Degrees, Minutes, Seconds C Degrees, Decimal Minutes C Universal Transverse Mercator Terrain Quality	 Feet, Miles Meters, Kilometers 	Primary 3D font Secondary 3D font	C Off C Medium C High
Lower (faster)	<u>J</u>	Elevation Exagger	Higher (slower) ation: 1 (0.5 - 3)
Map Size: Small Zoom Relation: infinity 1:1]		Large
Restore Defaults		ОК	Cancel Apply

16.3.2 Google Earth Tricks

If you want to measure the angle and the distance between the aircraft and a location on the map, you can use the "ruler" (Google Earth > Tools > Ruler).



17 Remote COMPUTERS system

Install and set "Soft Launcher V4 client" on each computer you want to control. <u>See chapter 17.2</u> <u>Soft Launcher</u>)

If you own Soft Launcher V2 you please upgrade to V4: <u>http://fsinstructor.com/news/?product=soft-launcher-v4</u>

This software works as a client. It's dedicated to start automatically all needed software shared on several computers. For example, on your first computer, it starts Prepar3D. Waits 60 sec. After, it launches Flight Illusion gauges, wait 15sec and starts Project Magenta/PROSIM. When it's done, it gives the focus to the Flight Simulator in a full screen mode. During this time, on your second machine, other softs are started automatically. While all these steps, pilots only see a message on the full screens with a timer.

Then, you have a control on this software from FS Instructor computer module.

17.1 FS instructor Settings *Menu file > config > Computers TAB* Insert the remote computers using "Soft Launcher". If you just field a machine name, the system will find this name on the network (NETBIOS), you can use an IP address to force it.

GENERAL		Netbios Name (optional)	IP	PORT	ADD NEW	
DATABASE	Remote Computer 01	Main FS	192.168.0.3	5 029 🔹	TEST	
ADD-ON	Remote Computer 02	MIP	192.168.0.4	5 029 🔶	TEST	
UNITS AND FUEL	Remote Computer 03	Viewer PC		5 029 🔹	TEST	
	Remote Computer 04	My Instructor station	127.0.0.1	5 029 🔹	TEST	
	Remote Computer 05	CDU F/O		5 032 🔹	TEST	
POSITION						
BLACK BOX						
REMOTE COMPUTER						

Any modification of this screen is applied immediately. You don't need to restart FS Instructor.

17.2 Soft Launcher V4



Soft Launcher is included with the FS Instructor. You can buy this software separately. It can be installed all your machine

Each installation needs a specific license. Please send us the given id to generate your licenses.

It is dedicated to start and control automatically all your software's needed for your simulator and shared on several computers.

During start, pilots see only a message on the full screens with a timer and a logo (Ready in x seconds).





On this image, 3 different computers are started. User doesn't see the Windows desktop. All software is launching in the background. As soon as everything is ready, Soft Launcher gives the hand.

You just have to set your computers to start when they are supply with electrical power. After, you have just to wait.

Please contact us to know the tariff:

To personalize this waiting

screen (logo + colors)

- For a remote assistance to set your machine.

Thanks to this software you can also manage these software's. Imagine your Flight Illusion gauges don't react. With FS Instructor you can ask, by remote, to kill and launch again this part only.

17.2.1 Requirements

- .NET Framework 4.5
- Win 7 and + (32 or 64 bits)
- None firewall on 5029 port (you can choose another setting port)

17.2.2 How to set your software

Soft Launcher V4.2016 - WORKFLOW			<u> </u>
File Help			
START	BACKGROUND	SOUND	KIII
Begin sequence at Soft Launcher	logo.png	ATC.mp3	
Automatic start at Windows Boot	Full Screen	LOOP	Restart
			Shutdown
			Shutuown
TEXT	PROGRAM: Prosim737.exe	WAIT	Execute
Your training session is starting	Prosim737.exe	. WAIT 10 seconds	
			EDIT
TEVT I	PROCEMM, Provint MCD	PROCRAM PresinCDU	
	PROGRAM: ProsimmicP.exe	PROGRAM: ProsimcDU.exe	
Hight Simulator software in pro	ProsimMCP.exe	. ProsimCDU.exe	
PROGRAM: ProsimCDU.exe	PROGRAM: ProsimAudio.exe	PROGRAM: ProsimDisplay.exe	
ProsimCDU exe	ProsimAudio exe	ProsimDisplay.exe	
riosineostere		riosinioispiay.exe	
PROGRAM: Prepar3D.exe	WAIT	TEXT	
Prepar3D.exe	WAIT UNTIL SIM IS LOADED	Your B737 trainer is ready to use	
WAIT			
WAIT 10 seconds			
Server status: WAITING CONNECTION Last rec	eived message: none		

Directory: Click on "Directory" button to choose the file to execute

After wait: choose the waiting time after the execution of the selected program

<u>Minimized</u>: if you check it, Soft Launcher tries to minimized the window of the selected program (some software's don't support it)

kill app: it the name that appears into the software window title

🍂 Microsoft Flight Simulator 2004 - A C... 💶 🗖 🗙

can insert only the first string. Such as Microsoft

some program doesn't open a window and are only present into Windows Process. So, check Proc. It means that it will find the name into the Processes task manager.

🛤 Gestionnaire des tâches de Windows					
Fichier Options Affi	Fichier Options Affichage ?				
Applications Processus	Services Performance	Mise en réseau l			
Nom de l'image		Nom d'utilisateur			
iPodService.exe		Système			
WmiPrvSE.exe		Système			
SearchIndexer.exe		Système			
unsecapp.exe	Système				
WmiPrvSE.exe		Système			
Smc.exe		Système			

Beware some full screen mode can stick software's. If you run Flight Simulator X or Prepar3D into a full screen mode, we advise to start them at the end.



17.3 FS Instructor Remote Computer module

17.3.1 On the left: remote machines list (see previous chapter).

When you click on a machine, it tries to connect to the remote Soft Launcher. If it works, the rest of the screen appears.

If it can't be connected, "Unable to connect" appears after a while.

Choose a remote machine	
Main FS 192.168.0.3	Shutdown cabin
MIP 127.0.0.1	
Throttles	Postart cabia
Overhead	Kestart Cabin
CDU Captain	Unable to connect

17.3.2 On the middle: remote applications

If the connection is established, the remote applications are shown

- Remote applications	
sioc.exe	RESTART
WideClient.exe	RESTART
ProSim737.exe	RESTART
ProsimMCP.exe	RESTART
5.41	
MICTOSOT	FOCUS

You can restart one of them. Just click on "RESTART" button to re-launch one application.

The last line gives the focus on a program. Such as PROSIM Display or Prepar3D

17.3.3 On the right: restart/shutdown machine(s)

Shutdown cabin	SHUTDOWN CABIN Button stops all machines. It tries to connect on each machine and ask to stop after one minute. You can go. After a while (2 min) all your computers are stopped
Restart cabin	RESTART CABIN button restarts all machines. Beware, it doesn't stop electricity feed. So, I you have issues with interface like CP FLIGHT. It's better to Shut down, stopped electrical power, wait 1 min and restart all.
Control: MIP	
Restart the script	Control a machine:
	RESTART THE SCRIPT asks Soft Launcher to kill and restart all the application of one machine
Restart it	RESTART IT: restart only this machine after 1 minute.
	SHUTDOWN IT: Stop only this machine after 1 minute.
Shutdown it	

Note: When you exit from FS Instructor, the system will ask automatically if you want to shut down the cabin.

Warning	83	
Do you want to shutdown the complete cabin?		
	Out Non	
	- Non	
ZE	EXIT	

17.3.4 If something goes wrong

If you can't connect to soft launcher check:

- Start Soft Launcher as administrator
- Give rights in your Firewall
- Try to stop your security suit
- Check in <your user>/APPDATA/ROAMING/Soft Launcher/ the log file



18 View & Slew PAGE

This page is split into 2 modules. Slew mode on the left and View settings on the right

18.1 Slew mode

The slew mode allows the instructor to move the aircraft. To activate this mode, just click on the

"Activate Slew Mode" button

ACTIVATE SLEW MODE



To exit from the slew mode, you have to click on "DEACTIVATE"

DEACTIVATE SLEW MODE

18.2 Views management

The view module works **ONLY into the Virtual Cockpit View with PREPAR3D**. Some of these features don't work with the 2D view.



18.2.1 Zoom

You can increase or decrease the current zoom (quick and slew buttons)

18.2.2 View change



The green arrows change the orientation of the view.

"External Views" button switches the view (spot) to come back into the cabin, use the button "Return to cockpit View"

CPT & F/O buttons switch between the CAPTAIN and FIRST OFFICER views to avoid parallax. To allow this function, ask us our handbook to set these views (only commercial licensed users).

19 Printer module



This module manages the USB thermal printer and simulates the Acars system.

These printers are very close to the Airbus or Boeing pedestal printer.


r Header Text	************** Automatic Messag %date%	**************************************	**			Save	
-Body	**************************************	**************************************	** -] T		Print	
	Pitot Probe #2 : fai Pitot Probe #3 : wo	iled orking ged			***** Autor 02/08 ***** Pitot Pitot Autor ***** Messa 02/08 ****	<pre>************************************</pre>	**************************************
Footer ——— Text	************** Message END %date%	****	*				
POSITIO	ENVIRO	FUEL	WEIGHT	PUSH	IBA	AIRCRAF	FAILURE
VIEW/SL	BLACK	COMPU	ΜΟΤΙΟ	PRIN	ΓER	FREEZE	EXIT

On the left, you have the three areas of the message:

- Header
- Body
- Footer

You can use the %date% variable to display the current date

On the right, it displays a printer preview.

By clicking on PRINT, it sends the message on the DEFAULT printer connected on the local machine. None window appears.

You can save the current message with the SAVE button.

20 Motion Page

FS Instructor						
- Monitoring LEFT MOTOR Load [Temperature]	40 35°C ONT MOTOR		STOP МС	DTION		Motion Sensitivity – Smoother Motion
Load Temperature	36 31°C					Default Motion
RIGHT MOTOR	25					
Load Temperature	40°C					Harder Motion
POSITIO	ENVIRON	FUEL	WEIGHT	PUSHBAC	AIRCRAF	FAILURE
VIEW/SL	BLACK	COMPUT	MOTION	PRINTER	FREEZE	EXIT

This feature is only available for Revolution-Simproducts full motion.

21 Personalized the interface look

21.1 Backgrounds

FS Instructor is delivered with B737 background but you can custom this image with your specific aircraft (helo, Airbus, Cessna...).









Only Integrator and Commercial licenses have access to this feature.

1 – Open the custom directory

 Image: Custom

 Image: Resources

 Image: FS_Instructor.application

 Image: FS_Instructor.exe

 Image: FS_Instructor.exe.config

 Image: FS_Instructor.exe.config

 Image: FS_Instructor.exe.config

 Image: FS_Instructor.exe.config

 Image: FS_Instructor.exe.config

 Image: FS_Instructor.exe.manifest

 Image: FS_Instructor_3_Manual.pdf

 Image: FSI_Class_Tool.dll

 Image: FSI_Shapefile.dll

 Image: FSUIPCClient.dll

 Image: FSUIPCClient.dll

 Image: LockheedMartin.Prepar3D.SimConnect.dll

 Image: What's new FS Instructor.txt

 Image: ZedGraph.dll

2 - In this directory you will find the default shape





Example_for_Aircraft_shape_for_backgrounds.jpg

how to custom.txt

Copy "Example for aircraft shape for backgrounds.jpg" and rename it to "aircraft shape for backgrounds.jpg". Modify this file to display your own aircraft.

Advice:

- Choose a top-view with the aircraft nose on the left
- Do not resize the image
- Keep a black background.

21.2 Display your logo instead of "FS Instructor splash screen"

During start-up, a splash screen appears



We have a dedicated service to integrate your own logo. Please contact us for pricing (<u>contact@fsinstructor.com</u>)

21.3 Hide some pages

You can customize the menu bar.

Such as, from this menu bar:

POSITION	ENVIRONMENT	FUEL	WEIGHT	PUSHBACK	AIRCRAFT	FAILURE
VIEW/SLEW	BLACK BOX	COMPUTERS	MOTION	PRINTER	FREEZE	EXIT
То						
POSITION	FUEL	PUSHBACK	FAILURE	BLACK BOX	FREEZE	EXIT

MENU > SETTINGS > MENU.

- Select the displayed pages						
ID	NAME	SHOW	UP	DN	-	
POSITION	POSITION	>	UP	DN		
ENVIRONMENT	ENVIRONMENT	>	UP	DN		
FUEL	FUEL	\checkmark	UP	DN		
WEIGHT	CHOUCOLAT		UP	DN		
PUSHBACK	PUSH		UP	DN		
AIRCRAFT	AIRCRAFT		UP	DN		
RADIO	RADIO		UP	DN		
FAILURE	FAILURES		UP	DN		
VIEW/SLEW	VIEW/SLEW		UP	DN		
BLACK BOX	BLACK BOX		UP	DN		
COMPUTERS	COMPUTERS		UP	DN		
MOTION	MOTION	\checkmark	UP	DN		
PRINTER	PRINTER	\checkmark	UP	DN		
SITUATION	SITUATION	\checkmark	UP	DN		
FMS	MAURICE		UP	DN		
GRAPH	GRAPH		UP	DN		
MAP	MAP	\checkmark	UP	DN		
DOWNLOAD	DOWNLOAD		UP	DN		
FREEZE	FREEZE	\checkmark	UP	DN		
SETTING	SETTING		UP	DN		
EXIT	EXIT	>	UP	DN	-	

You find a list of the pages.

- check or uncheck which page you want (Show column)

- Change the order (UP/DN buttons).
- Change the display name (NAME column)

22 FS Instructor Add-ons

FS Instructor is an open software. Editor car write plugins.

They appear as page.

Currently DODOSIM PROFESSIONAL is available

23 IPhone/IPad and Android support

You can open a remote session from your IPhone or Android to your FS Instructor PC instance by installing Air Display <u>http://avatron.com/apps/air-display</u>

LEMN	OHL (N.S) Runney Informe Length: 8,754h	OHR (ILS) Hon Altitude: 12"	221. GPU: 44* ILS	228 freq: 109.93M	A 2 - Ramp Medium	82 M	0
SITUATION In Fight PL300			·····	D LEMP	X.S - Ramp Medium	Ya M	
Public Contention Creations					C 50 - Gete Medium	^	17
POSITION	ENVIRON	FUEL	PUSHBACK	FAILURE	AIRCRA	II FT	

24 FAQ

24.1 Is FS Instructor control planes on IVAO/VATSIM servers?

No, FS Instructor and VATSIM/IVAO don't use the same protocol.

24.2 Does it manage many planes?

Commercial users can launch several FS Instructor from the same computer and manage several WideClient connections.

One FS instructor is linked to one WideClient.

Please contact us to have the complete procedure.

24.3 Can people switch to FSX or Prepar3D without restarting the application?

No, each time you restart the flight simulator you should reopen FS instructor. If not, some features loaded at the beginning of the application could not work (Find a gate for example).

25 Additional service for professional/integrators

- Remote installation, configuration, customization of our products...
- New developments
- For simulator renters, a FS instructor plugin to manage cabin access from RFID badge.



 To help you to certificate your sim: Qualification Test Studio.



This tool has been developed to assist with the Master and Recurrent Qualification Test preparation (MQTG/RQTG) for sim based on FSUIPC (FSX and higher) or XPLANE What you can do:

- \circ Create your own scenarios/tests found in MQTG/RQTG guides.
- o Record these tests
- Obtain pdf or jpg files with all recorded events. You can customize the header.
- We provide over fifty different events to record but you can personalize the tool creating your specific FSUIPC offsets.
- If you are interesting by **Qualification Test Studio**, tell us and we will send you a demo.

26 Manage several sims at a same time

You can start several FS Instructor's (one instance= one license) under a same Windows session. Each one can manage one simulator



Please ask us the documentation to set this architecture.

27 Copyrights

FS Instructor uses these components:

- FSUIPCClient.dll version 2.4 by Paul Henty
- ZedGraph version 5.1.5
- FSUIPC and WideFS by Peter Dowson (Payware) http://www.schiratti.com/dowson.html
- PdfSharp version 1.32

FS Instructor could be interfaced with

- PROSIM <u>http://prosim737.com</u> (Payware)
- DODOSIM http://www.dodosim.com/ (payware)
- Air Display http://avatron.com/apps/air-display (Payware) © 2017 Avatron Software

This software is not associated with any aircraft manufacturers. It can NOT be used for the real flight. It is designed exclusively for training simulator sessions.