

AIRBUS A318/A319 A320/A321

Volume 1
The Aerosoft Airbus A318/A319 & A320/A321 in FSX
Version 01-03-002

RECORD OF REVISIONS

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-1 21 October 2015
--	---	-----------------	----------------------------

Although there are several extensive manuals with this product there is only one manual that really matters and that is the **Step By Step** guide. In that manual all the aspects of the product are explained in some detail. It is where your journey with the Aerosoft Airbus should start.

If you ever have to contact support the first thing we will ask will be: "*Have you flown the Step by Step flight and where did it behave differently than expected?*" Please do this flight. It's important.

One last tip. If you have no experience with flying an Airbus it might be a good idea to read Volume 8 of the manuals. It describes some of the quirks that makes an Airbus an Airbus.

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-2 21 October 2015
--	--	-----------------	----------------------------

CONTENTS

INTRODUCTION	3
THE MANUALS.....	3
COPYRIGHTS.....	4
CREDITS.....	5
SYSTEM REQUIREMENTS	6
CONTACT SUPPORT	6
INSTALLATION AND REMOVAL.....	6
AFTER LOADING THE AIRCRAFT	6
NAVIGATION DATABASE	7
DEBUG GAUGE	7
SUPPORT FORUMS, RELEASES AND UPDATES	7
VERSION NUMBERS	7
MAKING VIDEOS.....	7
WEATHER RADAR	8
TERRAIN DISPLAY.....	8
CONNECTED FLIGHT DECK	9
SAVING AND LOADING MODES.....	10
FRANK, OUR AVATAR.....	10
TOOLS	11
AIRBUS A320_A321 CONFIGURATOR	11
RUNWAY AWARENESS AND ADVISORY SYSTEM.....	12
FLIGHT RECORDER	13
FUEL PLANNER.....	12
LIVERY MANAGER	13
COMPANY ROUTE EDITOR	13
MCDU INTERFACES.....	13
MCDU WEB INTERFACE	13
MCDU COMPANY ROUTES.....	14
PERFORMANCE SHEET PRINTING.....	14
RIGHT MCDU	15
ACFT STATE (AIRCRAFT STATE).....	15
ACFT DOORS (AIRCRAFT DOORS)	15
GND SERVICES (GROUND SERVICES)	15
OPTIONS.....	15
SOUND.....	15
VIEWS	16
CHECKLIST.....	16
FL DATA REC (FLIGHT DATA RECORDER).....	16
FLIGHT	16
AIRCRAFT.....	17
LOAD/FUEL	17
VIEW SYSTEM	18
ST.ELMO'S FIRE.....	18
ANIMATIONS.....	19
MAKING THE TILLER FUNCTIONAL	21
FSX SETTINGS	22
OPTIONS SETTINGS DISPLAY	22
OPTIONS SETTING AIRCRAFT	22
AIRCRAFT REALISM SETTING	23
OPTIONS SETTING GENERAL	24
OPTIONS SETTING CONTROLS CALIBRATION	24
APPENDIX A: CHECKLIST WAVE NAMES AND CONTENT	26
PF = PILOT FLYING.....	26
PnF = PILOT NON FLYING	29
APPENDIX B: THE MAKING OFF.....	33

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-3 21 October 2015
--	---	-----------------	----------------------------

INTRODUCTION

The Aerosoft Airbus A318/A319 is a follow up project on the previous Airbus Extended projects. In that project we created an Airbus aimed at an audience that outgrew the simpler default aircraft and wanted a more complex simulation. Almost all code has been rewritten to give you the best experience. What has been kept is the strong focus on the left seat, the captains' seat. The whole project is designed to be flown from that location and you will find the controls at the right side of the cockpit simplified or simple copies of the left side. We figured that if you buy a project like this you want to be the captain and not the co-pilot!

THE MANUALS

There are 9 separate documents that make up the manual.

- **Readme.txt:** Contains the change log, version number information and last minute information.
- **Vol1_InFSX.pdf:** You are reading it now. Contains information on using the aircraft in FSX and more general information.
- **Vol2_Normal_Procedures.pdf:** Contains all the procedures used to fly the Airbus.
- **Vol3_Procedure_Guide.pdf:** Contains the information in the Normal_Procedures.pdf in a more condensed (checklist like) format.
- **Vol4_Systems.pdf:** Contains an in-detail description of all systems.
- **Vol5_Checklist.pdf:** Full checklist for use in the cockpit.
- **Vol6_Step_by_Step.pdf:** A flight described in great detail for you to follow.
- **Vol7_Thrust Lever Setup.pdf:** Only to be read when you have problems with the Thrust levers in FSX and P3D.
- **Vol8_Airbus Weird and Wonderful Airbus Logic.pdf:** A document that describes some of logic of Airbus systems. Recommended reading if you come from non FBW aircraft or have never flown and Airbus.
- **Vol9_Connected Flight Deck Flows** (some work still needs to be done on this one)

If you are using Prepar3D V2 or FSX: Steam Edition it should not be a problem finding the same locations and settings. If there is a problem just contact us and we'll assist!

Also note that the readme.txt always contains the information on the latest updates. Before contacting support do make sure you installed the latest version!

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-4 21 October 2015
--	--	-----------------	----------------------------

COPYRIGHTS

The manual, documentation, video images, software, and all the related materials are copyrighted and cannot be copied, photocopied, translated or reduced to any electronic medium or machine legible form, neither completely nor in part, without the previous written consent of AEROSOFT. THE SOFTWARE IS FURNISHED «AS IS» AND IT DOES NOT COME FURNISHED WITH ANY GUARANTEE IMPLICIT OR EXPRESS. THE AUTHOR DECLINES EVERY RESPONSIBILITY FOR CONTINGENT MALFUNCTIONS, DECELERATION, AND ANY DRAWBACK THAT SHOULD ARISE, USING THIS SOFTWARE.

Copyright © 2015 AEROSOFT. All rights reserved. All trademarks and brand names are trademarks or registered trademarks of the respective owners. Copyrights are serious stuff. If you find any pirated copies of this software please notify us at support@aerosoft.com. We will make sure reports of copyrights violation are rewarded.

Aerosoft GmbH
Lindberghring 12
D-33142 Büren
Germany
www.aerosoft.com

UDT Copyright & License. Copyright (c) 2001 - 2011, The Board of Trustees of the University of Illinois. All rights reserved.
Redistribution and use in source and binary forms, with or without modification, are permitted provided that the following conditions are met:

1. Redistributions of source code must retain the above copyright notice, this list of conditions and the following disclaimer.
2. Redistributions in binary form must reproduce the above copyright notice, this list of conditions and the following disclaimer in the documentation and/or other materials provided with the distribution.
3. Neither the name of the University of Illinois nor the names of its contributors may be used to endorse or promote products derived from this software without specific prior written permission.

THIS SOFTWARE IS PROVIDED BY THE COPYRIGHT HOLDERS AND CONTRIBUTORS "AS IS" AND ANY EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE COPYRIGHT OWNER OR CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-5 21 October 2015
--	--	-----------------	----------------------------

CREDITS

Concept:	Aerosoft
Modeling/Texturing/Animation:	Stefan Hoffmann (Aerosoft), Holger Sobl
Project Management:	Mathijs Kok (Aerosoft), Joshua Che (Aerosoft)
Manual, documentation:	Mathijs Kok (Aerosoft) & Finn Jacobsen (Aerosoft)
Step by step guide:	Christoph Beck & Kyle Kline
MCDU programming:	Rolf Fritze & Steffen Froemter
XML coding:	Baylan Cannol (Aerosoft)
PFD coding:	Finn Jacobsen (Aerosoft) & Joshua Che (Aerosoft)
ND coding, weather radar:	Scott Printz
Flight modeling:	Frank Wiessman (Aerosoft)
Sounds:	John Cagle
Installer:	Turbine Sound Studios , Aerosoft,
Fuel/Load Planner:	Steffen Froemter Rolf Fritze Alex Ridge
Additional liveries:	Andreas Mügge
Digital Flight Data Recorder add-in:	Ross Carlson
Configurator:	Holger Sobl
RAAS add-in:	Thomas Molitor
Right MCDU + divers add-ins:	Robert Miroszewski
Project Advisor:	FS2CREW (see below)
Pictures:	Steffen Froemter & Rolf Fritze
Voices actors:	Frank Docter, Jaap Korteweg
Pushback gauge code:	Nick Churchill
Livery Manager:	Rolf Fritze, Kathrin Schauer, Thomas Paganon,
WebServer tweaks:	Jonathan Berthier, Werner Gass-Müller, Sylvia Schäfer,
ISIS & VC Night lighting tweaks:	Bob Laylock, Adam Banks, Travis Guy, Lucy Guy, Dave Rodgers
	Arjan Scheffel
	Hauke Fehr (Fehrware.de)
	Robert Steffens
	Emanuel Hagen

The beta testers of this product deserve special mentioning. In this development we experimented extensively with involving them directly in the production, they often tested code minutes after it was written, gave feedback and got new code almost immediate. Without them the product would not be where it is now.

The RUNWAY AWARENESS AND ADVISORY SYSTEM (RAAS) was developed by FS2Crew (www.fs2crew.com) with additional technical support from Tebin Ulrich and Manuel Ambulo. To purchase an unrestricted version of RAAS Professional that works with every FS9, FSX and Prepar 3D aircraft (not just the Aerosoft Airbus), please click here: <http://www.fs2crew.com/cart/products/FS2Crew%3A-RAAS-Professional.html>

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-6 21 October 2015
--	--	-----------------	----------------------------

SYSTEM REQUIREMENTS

- Intel Core 2 Duo E6850 CPU (Core 2 Quad recommended)
- 4 GB RAM (8 GB recommended)
- Direct X 9 compatible Graphics Card with minimal 1 Gb (2 Gb recommended)
- Microsoft FSX (SP2, Gold or Acceleration) or Lockheed Martin Prepar3D
- Windows VISTA, Windows 7, Windows 8 (fully updated), 64 bit versions recommended
- **note that Windows XP is specifically NOT supported**
- Adobe Acrobat® Reader 8 minimal to read and print the manual ⁽¹⁾

⁽¹⁾ Available for free, download at: <http://www.adobe.com/prodindex/acrobat/readstep.html>

CONTACT SUPPORT

Support for this product is done by Aerosoft. We prefer to do support on the support forum for one simple reason, it is fast and efficient because customers help customers when we are sleeping. **It's also the difference between one support person reading the question and 500 people, some of why know a LOT about the aircraft.**

- Airbus A 318/A319 forums: <http://forum.aerosoft.com/index.php?/forum/664-aerosoft-airbus-a318a319/> (there are version in other languages as well)
There are FAQ in every section, please check those first
- If you prefer support by email: https://aerosoft.zendesk.com/anonymous_requests/new
Please note that email support can be slow when things are busy (shortly after a major release for example). We try to get back to you in 24 hours, but if you want an answer fast, got to the forums.

We feel strongly about support. Buying one of our products gives you the right to waste our time with questions you feel might be silly. They are not.

INSTALLATION AND REMOVAL

Installation is simple-- start the .exe file you downloaded and follow the instructions on screen. Make sure FSX (P3D) is closed and we do advise you to reboot your system before installing. Log in with administrative rights to your system! Install before doing anything else. After installing it can help to defragment your hard disk (unless it is a SSD drive that should not be defragmented). Having your virus scanner disabled is a good idea but do not forget to activate it again!

At the end of the installation you are asked if RAASPro and the Aerosoft LAUNCHER should be installed. RAASPro is a fully functional version of the product with the same name released by FS2Crew (but it is locked to Aerosoft Airbus). Our LAUNCHER (fully optional) will help with updates, manuals etc.

Removal should **never** be done manually but only using the software removal applet you will find the Windows Control panel.

AFTER LOADING THE AIRCRAFT

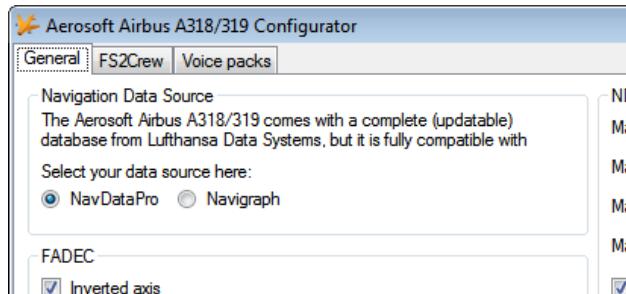
When you load the Airbus (or select another mode) it needs to configure systems and load files. This will take around 20 to 30 seconds. Just wait, don't do anything, don't click, and don't press any keys until all is stabilized. If this is your first start, make sure you got the Step By Step guide open!

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-7 21 October 2015
--	--	-----------------	----------------------------

NAVIGATION DATABASE

With this Airbus comes a complete copy of the NavDataPro navigation database. This database contains the LIDO data and is the worlds most used navigation database in aircraft. The database is fully updatable; check its product page on our websites: www.aerosoft-shop.com/products/navdatapro/navdatapro.html

The Airbus is fully compatible with the well-known Navigraph database. You can use the configurator to select which database to use. Although these databases come from a different source and have some differences they are basically the same and you should not see any differences between the two.



DEBUG GAUGE

If you have a problem with the Airbus it helps us a lot to know exactly what the state of all the systems is. That is why there is a debug gauge ([shift]-[6]. We might ask you to make a screenshot with that gauge visible to understand exactly what is happening. It ALWAYS helps to see the FMA as well.

SUPPORT FORUMS, RELEASES AND UPDATES

No product is bug free and we don't claim this one be. What is important is how bugs are handled and we feel it is important that we explain how we intend to handle that.

Our main communication channel to customers is the forum system. There we can discuss the possible problems, get more information from customers when needed and provide quick fixes. We will always try to maintain forums in several languages but only the English one will be fully up to date.

If you prefer support via email use support@aerosoft.com, we can handle support there in English, German, French, Spanish, Portuguese and Dutch. Keep in mind however that support on the forums is always faster.

VERSION NUMBERS

- The release version number will be **1.00**.
- A service pack will show in the tens, **1.10** (first service pack) -> new full build
- A hotfix will show in the hundreds **1.11** (first hotfix to be put on service pack 1)

When there are many hotfixes we will also make full new builds. If you are ever in doubt which version you have, check the product.cfg that you can find in FSXMainFolder\Aerosoft\Airbus_A318_A319.

MAKING VIDEOS

If you make video's you might see the FBW system show the flight control surfaces animate where they should not in replay mode (or when using a tool like FSRecorder). To avoid this you can disable the FWB system for reply using a hidden option. In the right MCDU, under Options, press the LSKR1 button to activate. The aircraft will hardly be flyable with this de-activated though!



WEATHER RADAR

As the weather radar is a totally new development and not in this form in any other project it is good to discuss its virtues and limitations.

The weather radar in the Aerosoft Airbus products **works with any weather add-on or even without**. It actually reads the weather conditions in FSX and does not need to link to any weather add-on. However because it does just that it also shows some of the limitations of weather in FSX. For example it is always build up in square blocks. We choose to leave this effect visible because we believe a weather radar should show where the weather is, not how it should look in an ideal simulator. Because we simulate the actual working of the weather radar it also means a lot of calculations need to be done, this can have an effect on your frame rate. Because wind shear and turbulence cannot correctly be placed in FSX detection of that is currently not possible.

As stated, the weather radar works with any weather add-on we have tried. But only the weather they inserted in FSX is detected. If they have weather that is shown on their own display but that has not yet been send to FSX it cannot be shown. As this weather is not in FSX it is of course not part of the simulation at that moment. In other words, if you can't see the weather the weather radar can't see it. Compatibility with weather tools that do not adhere to SDK standards is considered but not guaranteed.

The display of the weather (and terrain) on the Navigation Display is controlled by the larger part of the ND control knob.



On a few systems the Weather Radar has shown to cause severe drop in frame rates combined with some advanced settings in weather tools. It is now possible to edit some functions via the AB_ND_GDI.ini (to be found in MyDocuments\Aerosoft\Airbus. The options are explained in the comments in that file.

TERRAIN DISPLAY

Just as the Weather Radar the Terrain Display is an overlay on the Navigation Display. The terrain is shown in colors depending on the height of the terrain in relation to the altitude of the aircraft.

A/C Altitude +2000	50% Red
A/C Altitude + 1000	50% Yellow
A/C Altitude -250 <> +500	25% Yellow
A/C Altitude -1000	50% green
A/C Altitude -2000	16% Green
A/C Altitude >2000	Black

Note that the terrain and weather cannot be displayed at the same time and that the same control is used as the weather display to set the transparency of the overlay.

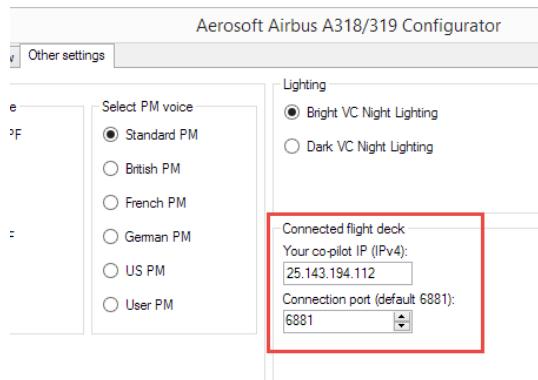
CONNECTED FLIGHT DECK

Another special feature almost no other add-on has. Connected Flight Deck (CFD from now on) allows you to connect your computer running the Aerosoft Airbus to another computer running the same aircraft. Using CFD is not complex (not as complex as flying an Airbus anyway and following these steps should help you getting connected. On our forum you will find a specific support forum for CFD btw.

1. You will need a voice connection of course if you are not in the same room. You can use Skype or any other VOIP service. But for gaming we prefer TeamSpeak (<http://www.teamspeak.com/>). It's free, very reliable and most online pilots already use it.
2. While FS is NOT running edit the IP address of your friend's computer using the Configurator. Leave the port as it is, 6881 is a good default that will work almost always. If you have problems with firewall, routers or anything we recommend Hamachi. LogMeIn Hamachi is a free service that allows two computers to be linked at IP level without any firewalls or other details to be an issue. Do note this creates an IP connection on your system that is probably not protected by firewalls! You can find it here: <https://secure.logmein.com/products/hamachi/download.aspx>. Note you only need the free unmanaged version.
3. When both pilots have done this you can start FSX.
4. When FSX is started move to the same location.
5. Load the same aircraft.
6. Make sure you got the same weather.
7. Select the same time (this is not highly critical)
8. Select the same Aircraft State (this will avoid problems with the initial synchronizing)
9. In the right MCDU select CONN FLTCK.
10. From this moment on the order of the steps is important!
 - a. Captain selects [MASTER] and Connection [ON]
 - b. CoPilot selects [SLAVE] and Connection [ON]
11. Keep in mind that only the MASTER can fly the aircraft, though both parties can operate all other instruments.
12. If you want to switch roles (so the other party becomes MASTER) only one party has to change his role, the other will be handled automatically.
13. SYNC DISPLAYS will synchronize the ND range and mode.
14. SYNC ND OVERLAY will synchronize the weather overlay. Best set to on even though the SLAVE might not have the exact same weather in front.

A few things to keep in mind when using CFD:

- Use the same weather engine is possible (otherwise make sure the weather is as similar as possible) as our weather radar will send the WX overlay from the master to the slave computer.
- Stability is more important than bandwidth in the connection, but still a broadband connection is needed.



Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-10 21 October 2015
--	--	-----------------	-----------------------------

- You do not have to be connected to any online flying service like IVAO or VATSIM but it is most certainly possible.
- You do not need any of FSX standard ways of connection, this is a fully stand-alone Peer to Peer connection.
- You can mix and match FSX, FSX:SE, P3D V2 in connection.
- Vol 9 of the manuals contains a complete procedural flow of what is done by each pilot. Unless you are very experienced it is a good idea to have this on hand.

SAVING AND LOADING MODES

There are so many systems in the Airbus that it is simply not possible to start up the sim and take-off. Many systems would simply not work. That's why we include an option to save AIRCRAFT STATES. In these saved states all the systems (except the MCDU) are stored. There are 4 predefined states that are most used: COLD & DARK, TURN AROUND TAXI and TAKE-OFF.

Note: when you used COLD & DARK you will need to activate the Batteries (or External Power) to be able to use the right MCDU.

After installation of SP3 it is now possible to save a complete flight (situation and aircraft state – including all MCDU settings) just with one click. Just use the FS-menu function to save the complete flight. It is not necessary anymore to save the aircraft state separately and therefore this MCDU menu option has been deleted.

FRANK, OUR AVATAR

If you are using PREPAR3D v3 you will be able to use Frank, our pilot, as the avatar (see the P3D v3 documentation about information on avatars). When selecting an aircraft you can also select the avatar to be loaded. You can load Frank with any aircraft btw. He is able to stand idle (duh..), walk, run, stand to crouch, walk while crouching, crouch to stand, jump, swim and fall, all using the default P3D v3 commands. To spawn the avatar go to any external view and use the [shift]-[control]-[e] command.



Select Vehicle

Airbus A318 British Airways G-EUNA

126 vehicles loaded Selected Avatar: Frank, Pilot Male with High Viz Jacket Group by: ▼

Vehicle Title	Vehicle Type	Publisher
Airbus A318 Aerosoft D-AERO EliteCJ	A318-114 CFM	Aerosoft
Airbus A318 Aerosoft D-AERO SATCOM	A318-114 CFM	Aerosoft
Airbus A318 Air France F-GUGA	A318-114 CFM	Aerosoft
Airbus A318 Al Jaber Aviation A6-ACJ	A318-114 CFM	Aerosoft
Airbus A318 British Airways G-EUNA	A318-114 CFM	Aerosoft
Airbus A318 Aerosoft D-AERO	A318-114 CFM	Aerosoft

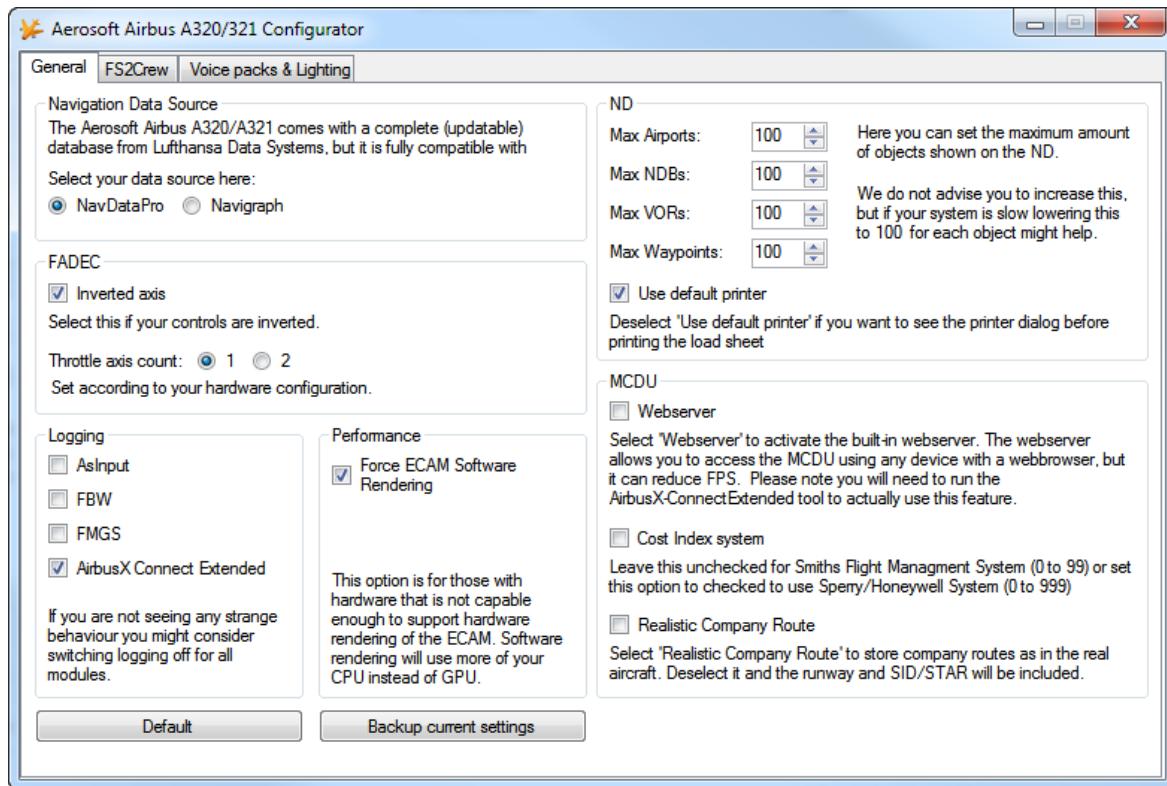
Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-11 21 October 2015
---	---	-----------------	-----------------------------

TOOLS

There are several tools provided with the Airbus. The RAAS is configured from inside FSX (via the ADDON | RAAS dropdown menu) and the Fuel Planner and the Flight Data Recorder can be started from the Windows Start Menu | Aerosoft | Airbus A318_A319.

AIRBUS A320_A321 CONFIGURATOR

The configuration allows you to configure the product before starting it.



NAVIGATION DATA SOURCE: Allows you to select either NavDataPro (Lufthansa data) or Navigraph if that is installed.

FADEC: Please make sure you select the right configuration here.

LOGGING: While useful for debugging it can affect performance and we suggest to keep it all off unless requested.

Performance: On some hardware (laptops) the ECAMs will not show. Setting this option will move the drawing actions from the GPU to the CPU.

ND (Navigation Display): Offers opportunities to reduce the amount of drawn elements.

MCDU: Allows configuration of the MCDU options

FS2CREW: Allows you to activate FS2Crew (assuming it is installed)

Voice Packs & Lighting: Allows you to select the voice for PF (Pilot Flying) and PM (Pilot Monitoring) and allows the user to change between two VC light levels. The brighter one (default) is easy on the eye and cheaper monitors, the darker one is a bit more realistic but might be hard to use on non-calibrated monitors.

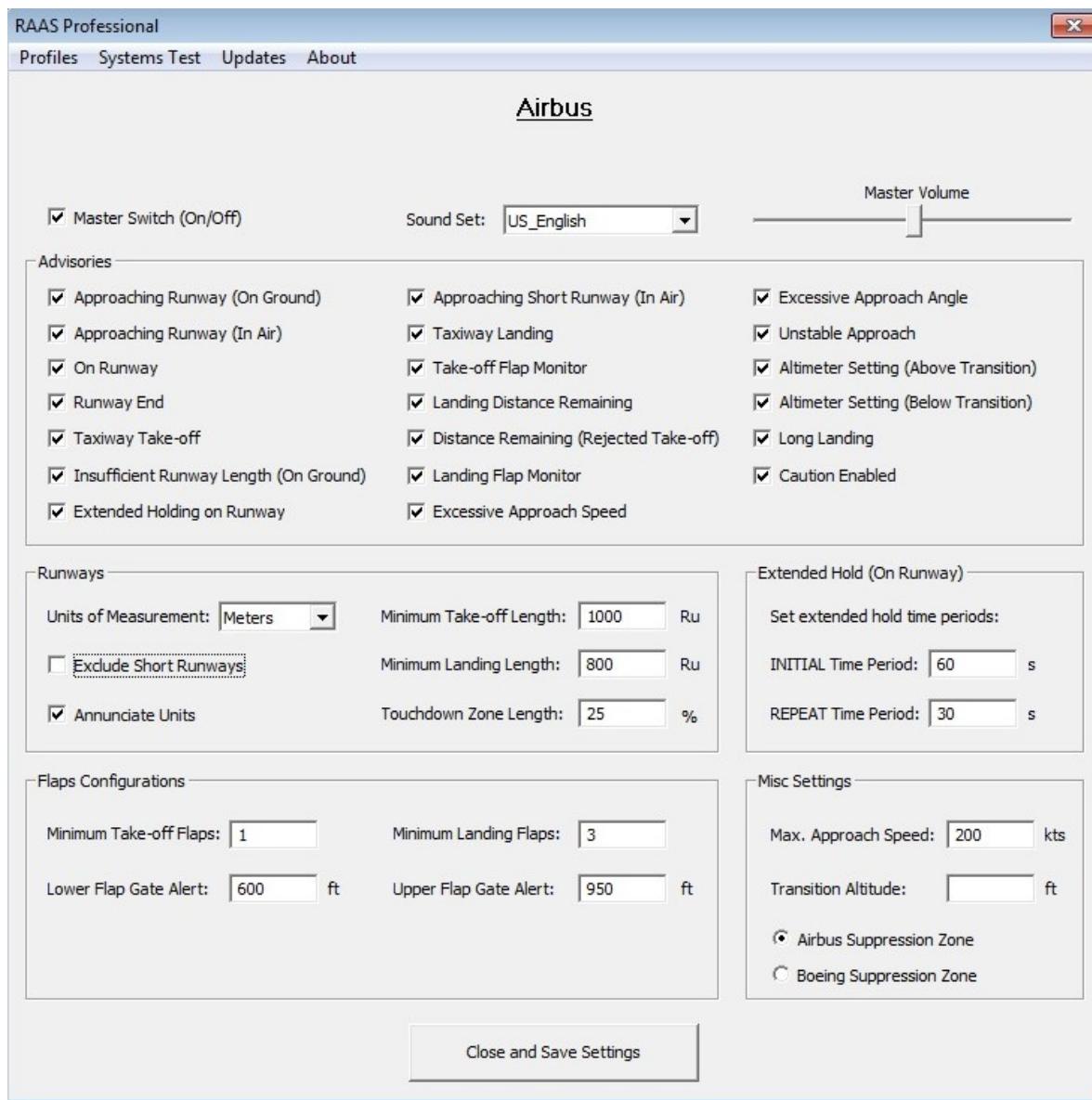
Note: If you install a 3rd party livery you will have to remove the AIRBUS_V2_VC_MAINPANEL_L file from it or it will overwrite the darker option!

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-12 21 October 2015
--	--	-----------------	-----------------------------

RUNWAY AWARENESS AND ADVISORY SYSTEM

The Runway Awareness and Advisory System (RAAS) is designed to provide to crews information about the aircraft's position relative to an airport's runway while operating at an airport. RAAS is a software upgrade to the later-model Enhanced Ground Proximity Warning Systems. It is designed to prevent runway incursion incidents. The RAAS is automatically triggered and does not have any user interface in the aircraft. The system comes with a configuration tool that allows you to change the settings. You can find this configuration tool in the FSX ADDON drop down menu.

Do note that the RAAS is disabled when you installed the Airbus but that it will remember when you activate it.



The default settings are correct for the Airbus, but you might like to change them. For example we left the Transition Altitude empty as that differs between areas in Europe, if you always fly in the US you can set this to 18.000 ft. The runway length is the minimum for a very light Airbus, if you fly long routes you might use 1350 and 1100. Keep in mind that the RAAS that is included ONLY works in the Airbus. If you want this to work for all aircraft you will need to buy a full license.

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-13 21 October 2015
--	--	-----------------	-----------------------------

FLIGHT RECORDER

Included in the Airbus is a Flight Recorder. This is similar to the Quick Access (Data) Recorder that is part of most Airbus A320/321 aircraft. The Quick Access (Data) Recorder records flight parameters from the moment the aircraft is powered up to the moment it is shut down. This is not the same as Flight Data Recorder (aka Black Box) that is used by investigators after a crash!

The data in the QAR is used by the airline to study flights and to backtrack what caused problems or failures. The Airbus includes a QAR that will log many flight parameters and will save them on your hard disk. These data files can be read and displayed with a tool that is delivered with the Airbus. A far better tool to read these files is Flight Simulator Flight Keeper, a tool that is used by dozens of Virtual Airlines and thousands of serious enthusiasts. In the real aircraft there is no interface for the QAR but in the simulator you will find the option to activate and deactivate this recorder in the right MCDU.

Events the FDR module records:

- Block events OUT (Engine on), OFF (TO), ON (LA), IN (Engines off)
- Engines On/Off
- Flaps
- Spoiler
- Gear
- Lights
- Autopilot On/Off
- Autopilot Mode
- Autothrottle On/Armed/TOGA/Off
- Transponder Code
- Pressure
- Altimeter
- Taxi and Flight Path (invisible on the details dialog as it is only used for KML and FSFK export)
- Position (only if there has been no other event triggered - on a regular interval)
- Aircraft Crash
- FDR Test (after pressing the corresponding button)
- FDR Event (after pressing the corresponding button)

This data is recorded for all events

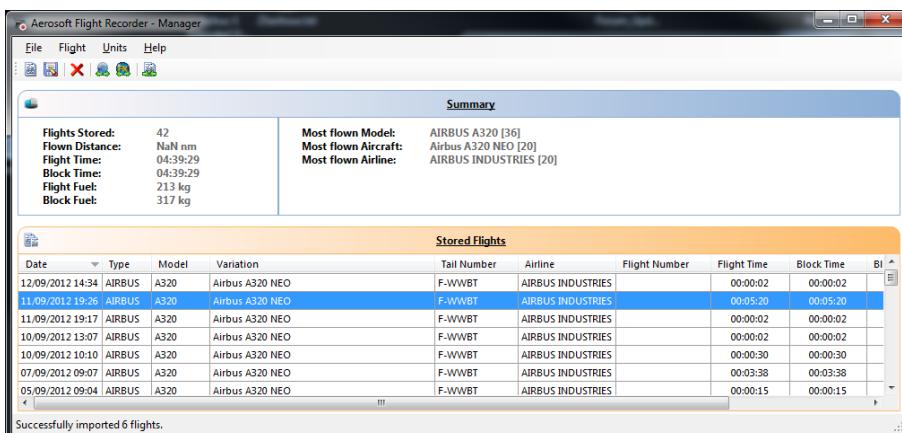
- Altitude
- GroundAltitude
- IAS
- TAS
- GroundSpeed
- WindHeading
- WindSpeed
- Fuel
- OAT
- TAT
- Latitude
- Longitude
- Heading
- TrueHeading
- FramesPerSecond
- GlideslopeNeedle
- LocalizerNeedle
- VerticalSpeed
- PitchAngle
- BankAngle
- GForce
- AileronTrim
- ElevatorTrim
- RudderTrim
- EventTime
- EventDate
- EventTimeZone
- EventTimeOfDay

With each event time, speed, heading, trim, fuel, glide slope, localizer, weather and some more data are recorded. This is a powerful tool to see where you can increase your flying skills.

The recorder is normally always active, but if you would like to deactivate it (for example because you use a different data recorder you can do so in the right MCDU, under OPTIONS | FL DATA REC. On the right side of the center console you will find a DFDR EVENT button. If you press that button a DFDR Event is logged. You can use this to 'bookmark' the log file. This can be useful if have a problem and want to study that situation later.

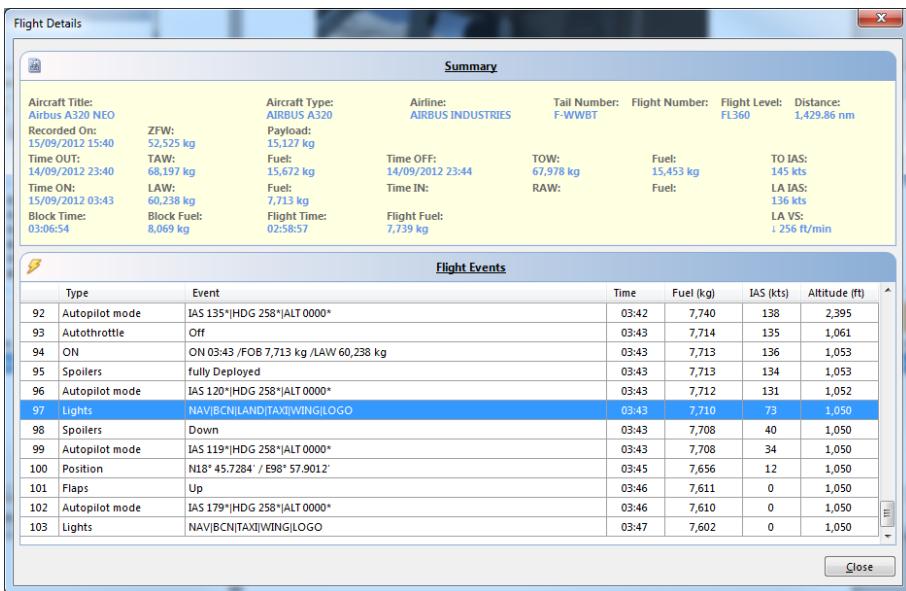


To see your flight log you use the AS_RecorderManager (you can find that in the FSXMainFolder\Aerosoft\Flight Recorder but also via the Windows Start menu). All your flights will be shown there. Double click one and all events will be displayed.



You will find buttons to see your flights in Google Earth (get that here: www.google.com/earth/index.html), to open it with FS Flight Keeper, delete a flight, import a flight or to save a flight. A saved file can be shared with other people, for example your Virtual Airline.

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-11 21 October 2015
---	---	----------	-----------------------------



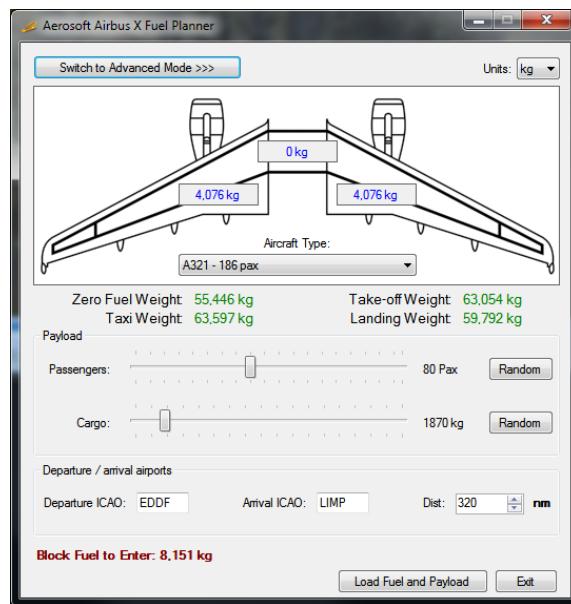
Please keep in mind that the display tool is just a weak dilution of what Flight Simulator Flight Keeper can do. Do check it out at: <http://www.aerosoft-shop.com/products/fsfk/fsfk.html>.

The recorded flights are stored in \Documents\AerosoftFlightRecorder. This path is chosen because we will add this module to more aircraft models.

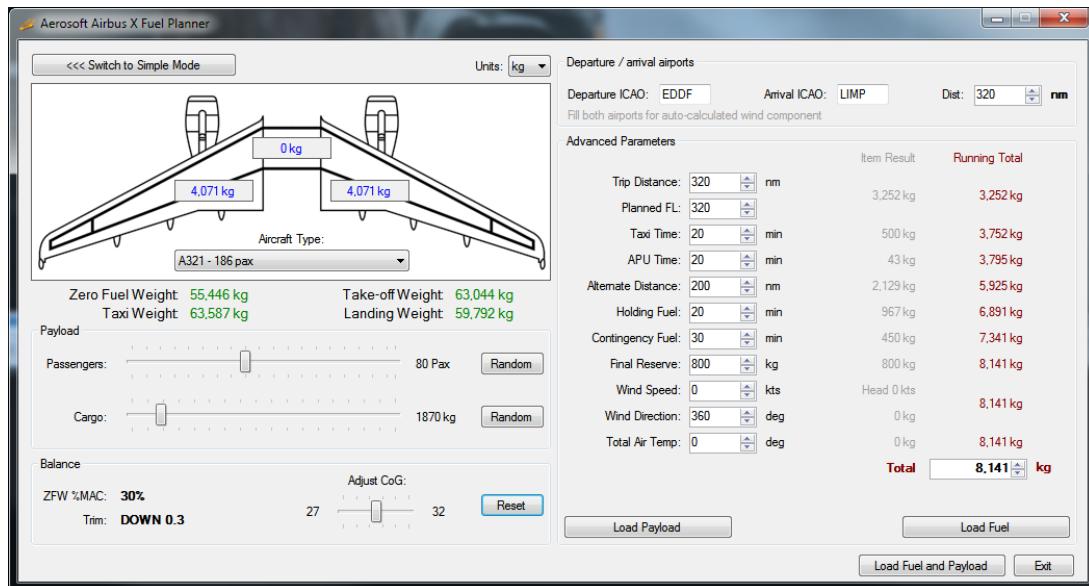
FUEL PLANNER

Included with the Airbus A318/A319 is a fuel planning tool. Actually it does a bit more as it also allows you to load passengers and cargo. The tool has two main modes, Simple and Advanced. In the simple mode you can move sliders and set the amount of passengers and cargo and set the departure and destination airports.

On normal passenger flights you would most likely not carry a lot of cargo (the luggage of the passengers is calculated in the weight of the passengers). When any of the weights is too high it will show in red meaning you cannot fly like that. You will have to loose passengers or cargo! Keep in mind that flying with a lighter aircraft is most likely to be more pleasant.



If you want to do a more detailed fuel planning use the Advanced Mode. Here you got control over far more variables but things are a lot more complex.



After setting the variables you have to push "Generate Loadsheets". There are two ways to load the data (passengers, cargo and fuel) to the Airbus. Automatically if "Autoload with aircraft" is ticked or manually using the MCDU2 LOAD/FUEL menu. The fuel will be loaded correctly, so the center tank will only be used when the wing tanks are full and the balance of the aircraft will be set correctly.

Note that every airline has got its own layout of seats and additional equipment and every airline got its own specific rules about fuel load. Even simple things and the Zero Fuel Weight can vary far more than we expected. What we used is an average of many airlines and might not be spot on for your preferred airline.

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-13 21 October 2015
--	--	-----------------	-----------------------------

LIVERY MANAGER

There are hundreds of liveries available for the Airbus A318/A319 and there is a simple livery manager that will assist you in adding and removing them. You will find the livery manager (AirbusX Extended Livery Manager.exe) in FSXMainFolder\Aerosoft\Airbus A318/A319\AXE Livery Manager. After starting it will ask for the FSX or P3D folder.

Installing a livery is as simple as dragging the zip file you downloaded on top of the livery manager. For 90% of the additional liveries this will work. All other livery ZIP files that meet the following conditions will be handled automatic (*if this method does not work ask the livery designer to be compliant with our standards*):

- There must be a txt-file ("readme.txt" or different name as long as it's the only txt-file) with the code snippet for the aircraft.cfg included.
- The snippet starts with [FLTSIM.X] and ends with a blank line.
- In this snippet the line "ui-type=*aircraft_type*" must be contained, otherwise the manager doesn't know which plane the livery should be added to.
- Each ZIP-file can only contain **one** livery / alternative versions must be separated into two ZIP files.
- The whole file must be a proper ZIP-file containing the file and folder structure on the first level. So do not zip the folder with the files but only the files themselves.
- Beside the text file there needs to be the texture folder with its extension name, containing a "thumbnail.jpg"

COMPANY ROUTE EDITOR

This simple tool makes it possible to edit, create and save company routes that you can call up in the MCDU. It's faster than doing all that in the MCDU!

MCDU INTERFACES

The MCDU has two hidden click zones. One to toggle keyboard input and one to open the MCDU as a 2D panel. With the keyboard activated you can use your normal keyboard to enter data in the MCDU. Keep in mind that this disables any keyboard command to FSX!

The 2D MCDU panel can be undocked and moved to other displays.



MCDU WEB INTERFACE

Because the MCDU is arguably the most complex instrument in the cockpit it makes sense to allow it to be used as simply as possible. So by using a simple webserver that runs inside FSX (don't worry it hardly uses any resources) you are able to connect any device that has a web browser to the Airbus A318/A319 and use the MCDU on that device. Ideal are tablets because you will not need a mouse.

To use the web interface start **Airbus_WebInterface.exe** that is located in **FSXMainFolder\Aerosoft\AirbusXConnectExtended.exe**. You can do this before starting FSX or later. It will open a small window showing you the ip address and the port, something like this: 123.123.123.123:4040.

You can enter this in the address bar of the browser on any device that is connected to the same network. It will open showing a simple information screen. This one is ideal to keep track of your long flights via your smartphone. Click on MCDU and you can use the left MCDU it as you would in the aircraft.

MCDU COMPANY ROUTES

The MCDU allows you to store flight plans as 'company routes'. The saving and loading of company routes is done via the left MCDU. Press the MCDU MENU button to access these options. These company routes are very useful when an aircraft flies the same route day after day. A company route consists of the departure and arrival airport plus the routing. It does not contain the runway and SID/STAR because those can differ (for example because of the wind). The route is made up of waypoints and the airway name between them: AIRPORT > WAYPOINT > ROUTE > WAYPOINT > ROUTE,..., WAYPOINT > AIRPORT

Now an actual flight starts on a runway, then follows a SID (Standard Instrument Departure) before following airways to the destination. Close to the destination you follow a STAR (Standard Terminal Arrival Route) to the runway: RUNWAY > SID > WAYPOINT > ROUTE > WAYPOINT > ROUTE,..., WAYPOINT > STAR > RUNWAY

The Airbus A318/A319 defaults to the realistic company route format, but if you prefer to save your company routes with the runways and SID/STAR it will allow you to do so by editing a configuration file. Look for the FMGS.ini file in the My Documents\Flight Simulator X Files\AerosoftAirbusExtended folder.

You will find:

[CoRte]

FullRoute=0

Default this is [0] indicating it will save realistic company routes. Change it to [1] and it will save the complete but slightly less realistic flight routes.

PERFORMANCE SHEET PRINTING

There is a small printer on the center console that is used to print some reports and datasheets. The most important one is the performance sheet that contains the data needed for take-off. After you have completed inserting all the data in the MCDU (so before taxi), press the [AIDS PRINT] button. If you have a printer connected to your computer it will now print the performance sheet.



Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-15 21 October 2015
--	--	-----------------	-----------------------------

RIGHT MCDU

For all the functions that are not part of the actual Airbus cockpit we use the right MCDU. This allows you to access all these functions inside the simulator without having to open menu's or pause the simulator. Spending some time here will be well worth the effort as it can unlock a lot of features you might now have expected!

Note: If the right MCDU is dark, click the two battery buttons on the overhead!

ACFT STATE (AIRCRAFT STATE)

Under this menu you can find several predefined 'states'. A state contains the setting for all the systems in the aircraft. Click the TAKE-OFF STATE and after a few seconds the aircraft is completely configured for take-off. If you like to change a state configure the aircraft as you want and use the SAVE USER STATE button.

ACFT DOORS (AIRCRAFT DOORS)

Here you will find the option to open the doors and hatches of the aircraft. Do note the parking brakes have to be set or chocks have to be put in place and the main engines off to be able to open the doors.

GND SERVICES (GROUND SERVICES)

Under this option you can toggle the display of cones under the wingtips and tail (to prevent vehicles driving under the aircraft) and wheel chocks. You can also toggle the display of an External Ground Power Unit and even toggle the external power option (so you can configure the aircraft without having to use batteries or APU). The display of these elements is not advised if you use Airport Enhancement Services or any other tool that shows external objects close to the aircraft.

The various options are only available if the following conditions are met:

- CHOCKS: Parking Brake is set to ON
- CONES: Only if CHOCKS are SET
- EXT POWER: Parking Brake is ON or Chocks are SET

OPTIONS

Many options are available under the subpages of the OPTION menu

SOUND

- CABIN CREW: With this option on you will hear the cabin crew communicating with you when that is necessary. We advise you to leave this on.
- FLIGHT CREW: Your copilot does make noise. He coughs, opens charts etc. Activating this option will give you some audio feedback on all these things. We advise you to leave this on.
- ATC: Toggling ATC on will according to your flight status add random ATC to the sound environment. This will add some realism if you do not fly online.
- ENH GPWS (ENHANCED GROUND PROXIMITY WARNING SYSTEM): Enabling this feature you will hear various altitude callouts (p. e. 2500, 1000, 500 etc.) during your landing.

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-16 21 October 2015
--	--	-----------------	-----------------------------

- **VOLUME:** On the volume control page you can adjust your individual background noises and other audio elements. Keep in mind that the Airbus Cockpit is a noisy environment. In cruise you will hardly hear the engines and wind noise over the noise the cooling fans that keep the electronics cool! Changes made are kept for your next flight. If you like your own default settings ask us on the forums and we'll be glad to assist. VIEWS

IEWS

- **VIEW SYSTEM:** There is a simple yet effective way to switch your views using small icons in the view bar. You open the view bar by clicking the grey triangle in the upper right (or left) corner. If you do not like this, or you are using another viewing add-on you can disable the whole viewing system here.
- **PANEL BAR:** Toggles the viewing selection of panel views.
- **WINGVIEW BAR:** Toggles the viewing selection of wing views.
- **VIEW MODE:** Here you can select if the panel views should be seen from a realistic angle or a straight on, not very realistic, viewpoint.
- **POSITION:** Toggles between a horizontal or vertical layout.
- **SOUND:** There is a small sound effect added to any view changes, you can disable it here.

CHECKLIST

- **CHECKLIST:** You can toggle the complete checklist system on or off here.
- **COPilot:** In combination with the CHECKLIST function the "Copilot" works timely aligned with the checklist i.e. performs his duties when the task should be done according to the checklist
- **INFO BAR:** If you want you can get additional instructions at the top of the screen. Certainly for beginners we strongly advise this option activated.
- **HOTKEYS:** Many of the interactions with the checklists can be done with key command if you so desire.
- **AES PUSH:** If you own AES you want to use its advanced push back system. If not you can use the build in push back.
- **APP SPD LMTR (APPROACH SPEED LIMITER):** If you want the co-pilot to warn you about high speeds on approach activate this option.
- **250 KTS LMTR (250 KNOTS LIMITER):** If you like to be warned if you exceed 250 Knots IAS below FL100 activate this option.

FL DATA REC (FLIGHT DATA RECORDER)

Included in this product is an advanced Digital Flight Data Recorder that records all your flights (see the special chapter on that). You can toggle the activation of this module here.

FLIGHT

- **PAUSE AT TOP (PAUSE AT TOP OF DESCENT):** Pauses the simulator app. 10 NM before the point the MCDU switches from cruise to descent mode.
- **PAUSE AT NEXT WP (PAUSE AT NEXT WAYPOINT):** Will pause the simulator the moment you reach the next waypoint on your flight plan.

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-17 21 October 2015
--	--	-----------------	-----------------------------

AIRCRAFT

- **FLY BY WIRE:** Using this menu option it is possible to switch ON and OFF the “FLY BY WIRE” function – OFF maybe necessary for certain video recordings.
- **ACFT THRUST BUMP (AIRCRAFT THRUST BUMP):** This menu option (set to ON) enables an “unrealistic feature” where users can get additional thrust for takeoff p. e. for “high” airports, at hot temperatures or short runways.
- **TILLER:** If your system does not have a free axis you can disable the innovative tiller option.
- **AUTO RUDDER:** If you do not have a rudder control (which we STRONGLY RECOMMEND) you can achieve some of the functionality by setting this option

LOAD/FUEL

- **PAX (NUM) (PASSENGER NUMBER):** Allows you to set the amount of passengers you want to board and to start the boarding process.
- **CARGO (MT) (CARGO METRIC TON):** Allows you to set the weight of cargo and start loading it.
- **FUEL (MT) (FUEL METRIC TON):** Allows you to set the fuel amount and start transferring it to (or from) the aircraft.
- **TOW (MT) (TAKE OFF WEIGHT):** The calculated weight on take-off.
- **CG (PCT) (CENTER OF GRAVITY):** The center of gravity before or aft the aero dynamical center of the aircraft.
- **INIT LOADSHEET:** Push the LSK and the data from the Fuelplanner Loadsheet are automatically loaded.
- **INSTANT:** Loads all fuel, cargo and passengers instantaneously.
- **SETUP:** Allows you to set the weight per passenger (only if INIT LOADSHEET function is not used). Some airlines use different weights here as on average an American will weigh more than a Japanese person

VIEW SYSTEM

As explained in the section on the right MCDU we included a rather clever view systems that makes it easy to switch your view to a certain part of the cockpit.



However there is a second way to navigate around the cockpit. We redefined the F9, F10, F11 and F12 keys to show different views of the cockpit (standard, upper mid console, lower console, and overhead). You will see that this often is the quickest way to navigate your view.

We did not add any 2D panels (except for the left MCDU) because we feel it is an outdated system and no longer needed. Using dedicated VC views allows you to get realistic views angles while getting realistic lighting and colors. And using the VC system it is not hard to create any view you want. You can even undock them and move it to another monitor.



ST. ELMO'S FIRE

St. Elmo's fire is a spectacular weather effect that is caused by electrostatic discharges that look like small lightning bolts. They can occur on many places (ships masts for example) but they are now best known by pilots. As an aircraft moves through the air it creates friction and that charges the aircraft. When the charge is too high (around 30,000 volts per centimeter of space) the charged object will discharge its electrical energy. In the case of an aircraft this is mostly in the form of a spark from the window frames. It's spectacular and totally harmless.

We have included this effect in the Airbus. You will not see it often but there are conditions that will cause it to appear more often. Being close to a thunderstorm is by far the most obvious, but also heavy rain and being in the tropics will make it more likely.



ANIMATIONS

There are many animations in the Virtual cockpit. As with all elements in the cockpit they open with the left mouse button and close with the right mouse button. The areas where you can click are shown in the images. All animations have their own sound effects. Do not be surprised if some animations are driven by events in the cockpit.





On the external model all the usual flight controls are animated but also smaller elements like the APU air inlet. The doors and cargo hatches can be opened using controls built into the right MCDU (see AIRCRAFT DOORS). A special animation will make the engines rotate in the wind when the aircraft is parked. Rotational heading and speed depends on the wind.

MAKING THE TILLER FUNCTIONAL

On the ground (at speeds under 60 knots) the Airbus is steered with the 'tiller'. This functions the same as a steering wheel in a car. We tried controlling this with the mouse for additional realism but were not happy with the results. So as with all aircraft you use the rudder to steer the aircraft. However it is now also possible to use a not used control axis (rotary control) on your steering hardware. The tiller axis is connected to the FSX Engine 3 Throttle axis. You can use the SETTINGS-CONTROLS of FSX to assign one of the controls on your hardware to this axis.

Pressing the center button (marked PEDAL DISC) will disconnect the rudder from the nose wheel. Press it again and the nose wheel will connect to the rudder again.



SETTINGS - CONTROLS

CALIBRATION **BUTTONS / KEYS** **CONTROL AXES**

Controller type: **Saitek Pro Flight X-55 Rhino Throttle**

Flight mode: Normal Slew

Event	Axis	Reverse
Elevator axis	X Axis	<input type="checkbox"/>
Elevator trim axis		
Engine 1 mixture axis		
Engine 1 propeller axis		
Engine 1 throttle axis		
Engine 2 mixture axis	Y Axis	<input type="checkbox"/>
Engine 2 propeller axis		
Engine 2 throttle axis		
Engine 3 mixture axis		
Engine 3 propeller axis		
Engine 3 throttle axis	Z Axis	<input type="checkbox"/>
Engine 4 mixture axis		

New Assignment... Delete Key Assignment
Change Assignment... Delete Joystick Assignment Reset

HELP CANCEL

4-5-2014 10-52-50 AM.png - IrfanView

File Edit Image Options View Help

302 x 243 x 24 BPP 11/25 100 % 61.57 KB / 215.51 KB 4/5/2014 / 10:52:58

FSX SETTINGS

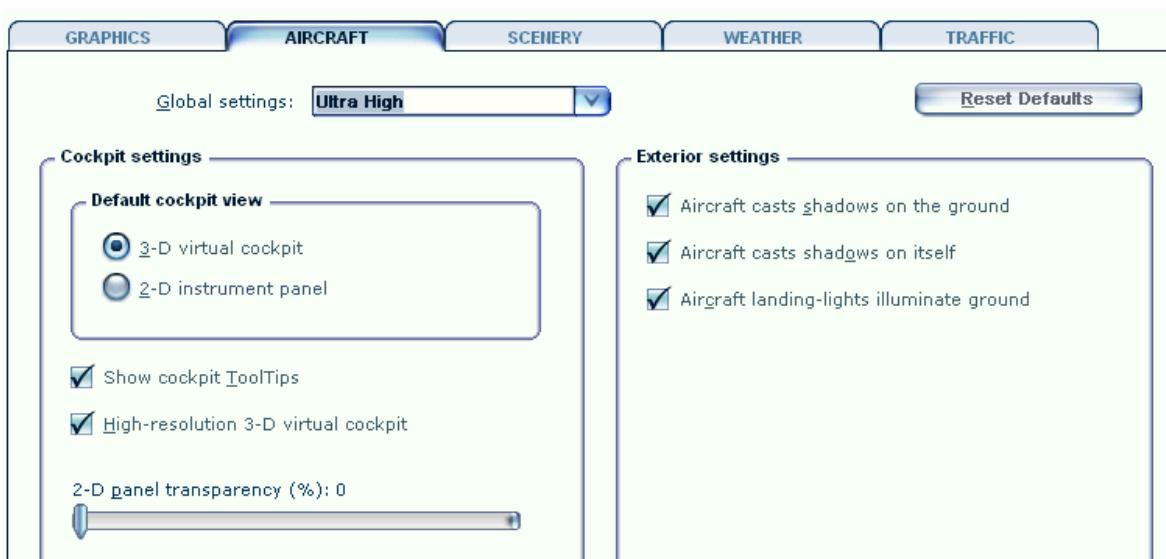
There are a few settings that influence this aircraft.

OPTIONS | SETTINGS | DISPLAY



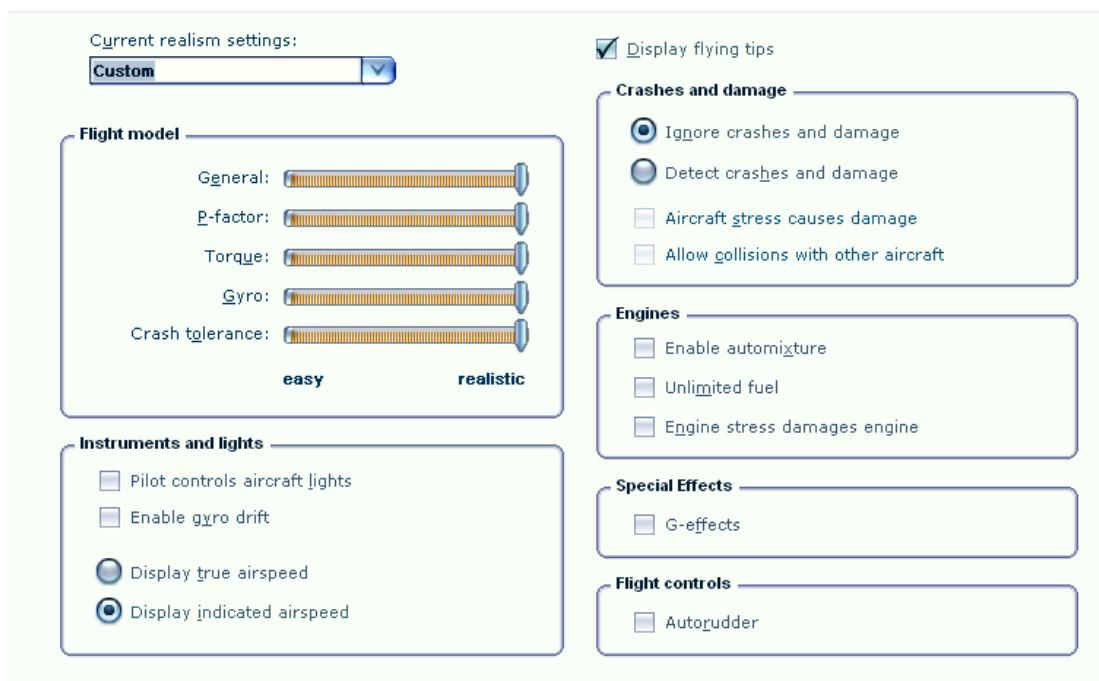
- **Advanced animations** needs to be ON.
- **Preview DirectX 10** can be activate it, but to avoid problems we advise you to keep it OFF.

OPTIONS | SETTING | AIRCRAFT



- **Aircraft cast shadows on the ground** can be left ON as it will hardly affect frame rate.
- **Aircraft cast shadows on itself** can be ON when you got a fast machine, but it will hurt frame rate in external views.
- **High-resolution 3-D virtual cockpit** has to be ON.

AIRCRAFT | REALISM SETTING



The most important settings are in the Aircraft settings: realism dialog.

- **Flight model:** Set it to full realistic. Believe us; it will fly easier that way.
- **Instrument and lights:** You do want to control the lights and the gyro drift. Of course we want indicated airspeed, true airspeed is totally useless.
- **Crashes and damage:** Not to important. You might gain a bit of FPS setting this all **OFF**.
- **Engines:** Set as shown, but it does not really matter.
- **Special effects:** Yes, you do want special effects! But if all goes well you never see them in the Airbus because the Fly By Wire protection rules will prevent that. Keep it on though.
- **Flight Controls:** Well it's an Airbus and that has Auto Rudder build in, but to prevent FSX messing things up best keep this **OFF**.

OPTIONS | SETTING | GENERAL

Program

- Show opening screen
- Pause on task switch
- Prompt on exit
- Use system time for Free Flight

Air Traffic Control

- Show message log in ATC menu
- Auto-open ATC window
- Use a pilot voice:

Pilot voices:

Missions

- Show captioning

Compass/Pointer:

International

Unit of measure:

Select the default hemisphere for latitude and longitude in map dialogs:

Latitude: Longitude:

- **International** is best set at hybrid as the MCDU weight and temperature settings are in kg and degree Celsius. To compare values the FSX should be set accordingly.

OPTIONS | SETTING | CONTROLS | CALIBRATION

CALIBRATION
BUTTONS / KEYS
CONTROL AXES

Controller

Enable Controller(s) Calibrate...

Sensitivity and null zone

Controller Type:

Simple Controls Advanced Controls

Axis	Sensitivity	Null Zone
Ailerons axis	<input type="range" value="100"/>	<input type="range" value="100"/>
Elevator axis	<input type="range" value="100"/>	<input type="range" value="100"/>
Rudder axis	<input type="range" value="100"/>	<input type="range" value="100"/>

Reset Defaults

Keyboard Sensitivity

Ailerons: 100 <input type="range" value="100"/>	Rudder: 100 <input type="range" value="100"/>
Elevator: 100 <input type="range" value="100"/>	Reset Defaults

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-25 21 October 2015
--	---	-----------------	-----------------------------

To fly the Aerosoft Airbus A318/A319 in an optimal way a joystick (like in the real aircraft the sidestick) should be used. The Aerosoft Airbus A318/A319 customized FSX settings (Options / Settings / Controls / Calibration) for the joystick in FSX should look as in the above image. Additionally the following „Buttons / Keys“ should be assigned to the joystick. This makes it much easier to handle certain functions such as the critical take off phase, without having to take your hands off the joystick. The functions that are recommended to be assigned to the joystick are brakes, views, flaps, spoilers and landing gear.

Switching the Autopilot to ON doesn't work with assigned buttons or keys (only OFF like on the real Airbus sidestick). The joystick settings can be changed in the FSX under Options / Settings / Controls / Buttons / Keys. Please see also Vol8_ThrottleSetup_EN.pdf for details.

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-26 21 October 2015
--	--	--------------	-----------------------------

APPENDIX A: CHECKLIST WAVE NAMES AND CONTENT

Here is the complete text of the wav files that are included in the checklist system. If you like to create your own versions (in your own language) you can do so with this. Do share it with others!

PF = PILOT FLYING

NO	FILENAME	CONTENT - TEXT
1	ASC_PF_0	Zero
2	ASC_PF_0_sec	Zero
3	ASC_PF_1	One
4	ASC_PF_1_sec	One
5	ASC_PF_2	Two
6	ASC_PF_2_sec	Two
7	ASC_PF_3	Three
8	ASC_PF_3_sec	Three
9	ASC_PF_4	Four
10	ASC_PF_4_sec	Four
11	ASC_PF_5	Five
12	ASC_PF_5_sec	Five
13	ASC_PF_6	Six
14	ASC_PF_6_sec	Six
15	ASC_PF_7	Seven
16	ASC_PF_7_sec	Seven
17	ASC_PF_8	Eight
18	ASC_PF_8_sec	Eight
19	ASC_PF_9	Niner
20	ASC_PF_9_sec	Niner
21	ASC_PF_ADIRSaligned	ADIRS aligned!
22	ASC_PF_ADIRSset	Set to NAV!
23	ASC_PF_AFOff	Auto Flight Off!
24	ASC_PF_afterLanding	And the After Landing Checklist please
25	ASC_PF_afterStart	The After Start Checklist please
26	ASC_PF_afterTO	And the After Takeoff Checklist please
27	ASC_PF_AllOff	Off!
28	ASC_PF_AllOn	On!
29	ASC_PF_AP2On	Second Autopilot is on!
30	ASC_PF_APOff	Autoflight Off!
31	ASC_PF_APOn	Autopilot is going on!
32	ASC_PF_APOn2	Autopilot is on!
33	ASC_PF_Approach	Approach Checklist
34	ASC_PF_APUon	APU on!
35	ASC_PF_AreCheck	Are checked!
36	ASC_PF_Arm	Arm!
37	ASC_PF_AsRequired	And as required!
38	ACC_PF_ATCRecive	OK Ground – we have ATC clearance for push and start now – ah please confirm ground equipment and services are clear!
39	ASC_PF_ATCRecive2	OK Ground – we have ATC clearance for start and the taxi now – so please confirm ground equipment and services are clear!
40	ASC_PF_Auto	Ah Auto!
41	ASC_PF_BaroRefSet	Baro reference set – and cross check!
42	ASC_PF_beforeStart	OK let's do the Before Start Checklist
43	ASC_PF_beforeTO	Before Takeoff Checklist please

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-27 21 October 2015
--	--	------------------	-----------------------------

44	ASC_PF_BothOff	Both off!
45	ASC_PF_BothOn	Ah Both on!
46	ASC_PF_BrakeFansOn	Brake fans on!
47	ASC_PF_Check	Checked!
48	ASC_PF_CheckArm	Checked and armed!
49	ASC_PF_CheckDown	Checked down!
50	ASC_PF_CheckNormal	Checked normal!
51	ASC_PF_CheckOff	Ah Checked off!
52	ASC_PF_CheckOn	Checked on!
53	ASC_PF_CheckPos	Checked position!
54	ASC_PF_CheckRetr	Checked retracted!
55	ASC_PF_CheckStby	Checked standby!
56	ASC_PF_CheckZero	Checked zero!
57	ASC_PF_ChkNoBlue	Checked and no blue!
58	ASC_PF_ChocksSet	And the chocks are set!
59	ASC_PF_ClimbThrust	Climb thrust!
60	ASC_PF_ClosedLocked	Closed and locked!
61	ASC_PF_CockpitPrep	OK let's start with the Cockpit Preparation Checklist
62	ASC_PF_DescentInit	Initiating descent!
63	ASC_PF_DescentPrep	OK let's go through the Descent Preparation Checklist
64	ASC_PF_Disarmed	Disarmed!
65	ASC_PF_DiscOff	Disconnected and off!
66	ASC_PF_DownLock3Gr	Down and locked – three green!
67	ASC_PF_Eng1Run	Engine one stabilized!
68	ASC_PF_Eng2Run	Engine two is stabilized!
69	ASC_PF_EXPon	And the External power is on!
70	ASC_PF_FaPrepLnd	Flight attendants – prepare for landing!
71	ASC_PF_FaPrepTo	Flight attendants – seats for takeoff please!
72	ASC_PF_FDtoGnd	Flight deck to ground
73	ASC_PF_Flaps1	Flaps one!
74	ASC_PF_Flaps2	Flaps two!
75	ASC_PF_Flaps3	Flaps three!
76	ASC_PF_FlapsFull	And Flaps full please!
77	ASC_PF_FlapsUp	And Flaps zero!
78	ASC_PF_Flex	MAN FLEX and SRS
79	ASC_PF_Flex_Rwy	MAN FLEX, SRS and RWY
80	ASC_PF_Full	Full!
81	ASC_PF_FullDown	Full down!
82	ASC_PF_FullLeft	Full left!
83	ASC_PF_FullRight	Full right!
84	ASC_PF_FullUp	Full up!
85	ASC_PF_GearDown	Gear down!
86	ASC_PF_GearUp	Gear up!
87	ASC_PF_GearUpLtOff	Gear up – lights off!
88	ASC_PF_GoAround	Go Around – Flaps please!
89	ASC_PF_Idle	Idle!
90	ASC_PF_IsCheck	Is checked!
91	ASC_PF_Landing	Landing Checklist please!
92	ASC_PF_LandingCall	Continue!
93	ASC_PF_LightsOff	Lights off!
94	ASC_PF_LightsOn	Lights on!
95	ASC_PF_Low	Low!
96	ASC_PF_ManBrake	Manual Brakes!

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-28 21 October 2015
--	--	-----------------	-----------------------------

97	ASC_PF_Max	Max!
98	ASC_PF_Medium	Medium!
99	ASC_PF_Nav	Navigation
100	ASC_PF_Neutral	Neutral!
101	ASC_PF_Off	Off!
102	ASC_PF_OK	Is OK!
103	ASC_PF_On	On!
104	ASC_PF_ParkBrakeRel	Parking brakes – released!
105	ASC_PF_ParkBrakeSet	Parking brakes – are set!
106	ASC_PF_Parking	It was a nice flight. So let's do the Parking Checklist and then we are done for the day.
107	ASC_PF_PressedPedal	Pedal Pressed!
108	ASC_PF_RadarTilt	Radar tilt!
109	ASC_PF_Recived	Received!
110	ASC_PF_Released	Released!
111	ASC_PF_Review	Reviewed!
112	ASC_PF_Rudder	Rudder!
113	ASC_PF_Set	Set!
114	ASC_PF_SetOff	Set off!
115	ASC_PF_SetOn	Set on!
116	ASC_PF_SetStdCrossChk	Baro reference set and cross check!
117	ASC_PF_Speedbrakes	Speedbrakes!
118	ASC_PF_StartCmpl	And that's a good start on both engines - all systems are normal. Thank you for your help and all clear - we see you for signal on the right please.
119	ASC_PF_StartPush	Start push back!
120	ASC_PF_Std	Standard!
121	ASC_PF_Stow	Stowed!
122	ASC_PF_TA_TiltAbove	TA and tilt above!
123	ASC_PF_TakeOff	Takeoff!
124	ASC_PF_TARA_TiltAbove	TA / RA – tilt above!
125	ASC_PF_Taxi	Taxi!
126	ASC_PF_Taxiing	And the Taxi Checklist
127	ASC_PF_Toga	MAN TOGA and SRS
128	ASC_PF_Toga_Rwy	MAN TOGA, SRS and RWY

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-29 21 October 2015
--	--	--------------	-----------------------------

PnF = PILOT NON FLYING

NO	FILENAME	CONTENT – TEXT
1	ASC_PnF_0	Zero
2	ASC_PnF_0_sec	Zero
3	ASC_PnF_1	One
4	ASC_PnF_1_sec	One
5	ASC_PnF_2	Two
6	ASC_PnF_2_sec	Two
7	ASC_PnF_3	Three
8	ASC_PnF_3_sec	Three
9	ASC_PnF_4	Four
10	ASC_PnF_4_sec	Four
11	ASC_PnF_5	Five
12	ASC_PnF_5_sec	Five
13	ASC_PnF_6	Six
14	ASC_PnF_6_sec	Six
15	ASC_PnF_7	Seven
16	ASC_PnF_7_sec	Seven
17	ASC_PnF_8	Eight
18	ASC_PnF_8_sec	Eight
19	ASC_PnF_9	Niner
20	ASC_PnF_9_sec	Niner
21	ASC_PnF_70Knots	Seventy knots!
22	ASC_PnF_100Knots	One hundred knots!
23	ASC_PnF_250kt_Warning1	Captain – we have a speed limit of 250 knots!
24	ASC_PnF_250kt_Warning2	High speed – Captain!
25	ASC_PnF_10000ft	Passing ten thousand feet!
26	ASC_PnF_AccuBrakePress	Accu Brake Pressure?
27	ASC_PnF_ADIRS	A-DIRS?
28	ASC_PnF_AirCond	Air condition?
29	ASC_PnF_Altimeter	Altimeter?
30	ASC_PnF_Antilce	Anti ice?
31	ASC_PnF_Antiskid	Anti skid?
32	ASC_PnF_APU	APU?
33	ACC_PnF_APUBLEED	APU bleed?
34	ASC_PnF_APUMaster	APU master?
35	ASC_PnF_APOn	APU on!
36	ASC_PnF_AutoBrake	Auto brakes?
37	ASC_PnF_AutoBrakesOff	Auto brakes off!
38	ASC_PnF_BaroRef	Baro reference?
39	ASC_PnF_Battery	Batteries?
40	ASC_PnF_BeaconLights	Beacon lights?
41	ASC_PnF_BrakeChk	Brake check?
42	ASC_PnF_BrakeFans	Brake fans?
43	ASC_PnF_BrakeTemp	Brake temperature?
44	ASC_PnF_Check	Check!
45	ASC_PnF_Checked	Checked!
46	ASC_PnF_ChecklistCmpl	Checklist complete!
47	ASC_PnF_DH	Baro / Radio!
48	ASC_PnF_ECAMDoor	Ecam door page?
49	ASC_PnF_ECAMRecall	Ecam recall?
50	ASC_PnF_ECAMStat	Ecam status?

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-30 21 October 2015
--	--	-----------------	-----------------------------

51	ASC_PnF_EFCS	Electronic flight control system?
52	ASC_PnF_ElecPower	Electrical power?
53	ASC_PnF_Electric	Electric panel?
54	ASC_PnF_EmergEquip	Emergency equipment?
55	ASC_PnF_EmergLight	Emergency lights?
56	ASC_PnF_EngMaster	Engine master?
57	ASC_PnF_EngModeSel	Engine mode selector?
58	ASC_PnF_ExtLights	Exterior lights?
59	ASC_PnF_ExtPwr	External power?
60	ASC_PnF_FCUCheck	FCU?
61	ASC_PnF_Flaps	Flaps?
62	ASC_PnF_Flaps1	Speed Check - Flaps one!
63	ASC_PnF_Flaps2	Speed Check - Flaps two!
64	ASC_PnF_Flaps3	Speed Check - Flaps three!
65	ASC_PnF_FlapsFull	Speed Check - Flaps full!
66	ASC_PnF_FlapsUp	Speed Check - Flaps zero!
67	ASC_PnF_Flare	Flare!
68	ASC_PnF_FlightCntr	Flight controls?
69	ASC_PnF_FlightDirector	Flight director?
70	ASC_PnF_FltInstrum	Flight instruments?
71	ASC_PnF_FMAModel	FMA check?
72	ASC_PnF_FuelPumps	Fuel pumps?
73	ASC_PnF_Full	Full!
74	ASC_PnF_GAAlt	Go around altitude?
75	ASC_PnF_GearDown	Gear down!
76	ASC_PnF_GearLever	Landing gear lever?
77	ASC_PnF_GearUp	Gear up!
78	ASC_PnF_GearUpLtOff	Gear is up – lights off!
79	ASC_PnF_GndSpoilers	Ground spoilers?
80	ASC_PnF_GPWSys	Ground proximity warning system?
81	ASC_PnF_GSAlive	Glide scope alive!
82	ASC_PnF_GSCapt	Glide slope captured!
83	ASC_PnF_HandSig	Hand signal?
84	ASC_PnF_Hydraulics	Hydraulics?
85	ASC_PnF_LandElev	Landing elevation?
86	ASC_PnF_LandGear	Landing gear?
87	ASC_PnF_LandInfo	Landing information?
88	ASC_PnF_LndMemo	Landing memo?
89	ASC_PnF_LOCALive	Localizer alive!
90	ASC_PnF_LOCCapt	Localizer captured!
91	ASC_PnF_MinSafeAlt	Minimum safe altitude?
92	ASC_PnF_NAVAccur	Nav accuracy?
93	ASC_PnF_NavLights	Navigation lights?
94	ASC_PnF_NoseLight	Nose light?
95	ASC_PnF_NoSmoking	No smoking signs?
96	ASC_PnF_Off	Off!
97	ASC_PnF_On	On!
98	ASC_PnF_Packs	Packs?
99	ASC_PnF_ParkBrake	Parking brake?
100	ASC_PnF_ParkBrakeChocks	Parking brake and chocks?
101	ASC_PnF_PitchTrim	Pitch trim?
102	ASC_PnF_PosRate	Positive climb!
103	ASC_PnF_PowerSet	Power set!

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-31 21 October 2015
--	--	------------------	-------------------------------------

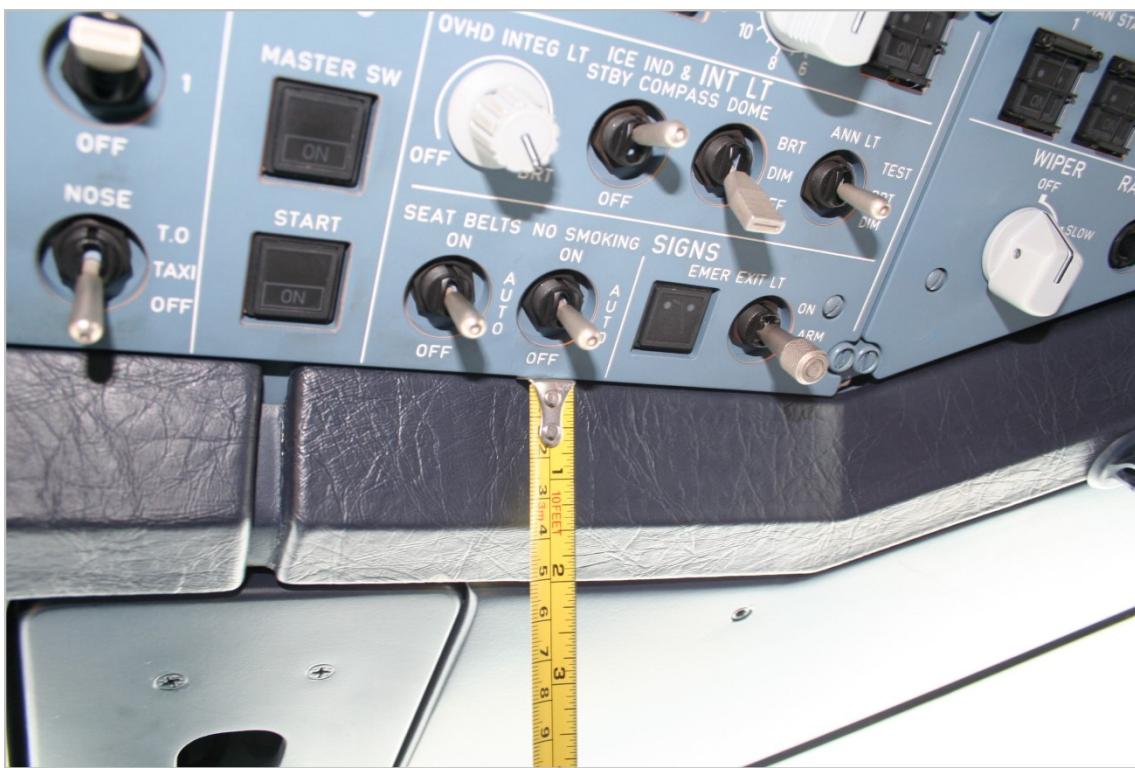
104	ASC_PnF_PressPedal	Press pedal!
105	ASC_PnF_ProbeWindowHeat	Probe window heat?
106	ASC_PnF_RadCntrPanel	Radio control panel?
107	ASC_PnF_ReverseGreen	Reverse green!
108	ASC_PnF_Rotate	Rotate!
109	ASC_PnF_RudTrim	Rudder trim?
110	ASC_PnF_SeatBelt	Seat belt signs?
111	ASC_PnF_SetBaroRefCpt	Set baro reference captain!
112	ASC_PnF_SetBelow	Set below!
113	ASC_PnF_Signs	Cabin signs?
114	ASC_PnF_SlideTable	Sliding tables?
115	ASC_PnF_SpeedBrakeLever	Speed brake lever?
116	ASC_PnF_Spoilers	Spoilers?
117	ASC_PnF_StartEng1	Starting number one!
118	ASC_PnF_StartEng2	Starting engine two!
119	ASC_PnF_Stow	Stowed!
120	ASC_PnF_TCAS	TCAS (sprich:T-cas) ?
121	ASC_PnF_ThrustLevers	Thrust levers?
122	ASC_PnF_TOConfig	TO Config?
123	ASC_PnF_ToData	Takeoff data?
124	ASC_PnF_TransAlt	Transition altitude!
125	ASC_PnF_TransponderMode	Transponder mode?
126	ASC_PnF_V1	V one!
127	ASC_PnF_V2	V two!
128	ASC_PnF_Vent	Ventilation panel?
129	ASC_PnF_WindowsDoors	Windows and doors?

Aerosoft Airbus A318/A319/A320/A321	The Airbus A318/A319/A320/A321 In FSX General guidelines	Vol 1	01-03-32 21 October 2015
--	--	-----------------	-----------------------------

Ground Crew

NO	FILENAME	CONTENT – TEXT
1	ASC_GND_GoAhead	Go ahead Sir
2	ASC_GND_PushCmpl	And pushback is complete captain, please set your parking brakes
3	ASC_GND_RdyTaxi	OK then captain, tow bar is connected, your steering pin is removed, all clear signal on the right, have a good flight
4	ASC_GND_Readyfor Push	Ground equipment and stairs are clear, doors are closed, steering pin is position and we are ready when you are captain
5	ASC_GND_Readyfor Start	Ground equipment and stairs are clear, doors are closed and we are ready when you are captain
6	ASC_GND_RelParkBrake	Please release the parking brakes
7	ASC_GND_Roger	Roger
8	ASC_GND_StartCmpl	Roger, OK two good starts, all clear, signals on the right
9	ASC_GND_StartPush	Starting pushback, start both engines at your discretion captain

APPENDIX B: THE MAKING OFF



"THE MAKING OF". Stefan Hoffmann measuring the A321 cockpit to make sure all details are as they should.