

FS2Crew: PMDG 747 QOTS II MAIN OPS MANUAL

REQUIREMENTS:

- ✓ PMDG 747 QUEEN OF THE SKIES II. Available at: <u>www.precisionmanuals.com</u>
- ✓ FS2Crew PMDG 747 QOTS II Edition. Available at: <u>www.fs2crew.com</u>
- ✓ If using Voice Control: A Microphone

RECOMMENDED:

- ✓ Windows 10 64 Bits
- ✓ USB Headset. A generic no-name headset is usually sufficient
- ✓ P3D V4+ (64 Bits)

SUPPORT FORUM:

Need help? The FS2Crew Support Forum at Avsim.com is the place to go.

If you can't find an answer to your question in the forum, we can also be reached via Facebook and Support Tickets.

Forum link:

https://www.avsim.com/forums/forum/212-fs2crew-support-forum/



INTRODUCTION:

SOP 1 follows stock Boeing procedures to a large degree, with some variation to account for the limitations imposed by desktop flying on a computer. Many airlines around the world use stock Boeing procedures, or slightly modified versions of them.

For a full list of voice commands and explanations, please consult the MAIN OPS MANUAL.

If you have any questions or problems, please consult the FS2Crew Support Forum at Avsim.com. This is complex software and we're trying to do things as realistically as possible, so don't be afraid to ask questions!

For the Flight Route, we'll leave that up to you. Pick your favorite airport and fly there!

DISCLAIMER: This tutorial is made for flight simulation purposes only and does not necessary reflect real world procedures to their fullest. FS2Crew 747 QOTS II is an entertainment product. It is not meant for real-world flying or training. It is not affiliated or associated with any specific airline or company.

SPEECH RECOGNITION SETUP:

WINDOWS XP ONLY

Step 1:

XP users may or may not have the required 'Speech Recognition API' (SAPI) installed on their computer.

To check if you already have SAPI voice recognition software on your computer, open the 'Windows Control Panel' and click the 'Speech' icon if it's there. If you can see a 'Speech Recognition' tab, then SAPI is already installed on your computer.

If you're an XP owner and you do not have SAPI installed, you can download SAPI via the following link:

http://download.microsoft.com/download/B/4/3/B4314928-7B71-4336-9DE7-6FA4CF00B7B3/SpeechSDK51.exe

The file is called: SpeechSDK51.exe

Step 2:

How to install SAPI:

- 1. Create a temporary folder on your desktop. You can give it any name.
- 2. Double click the 'SpeechSDK51.exe' file you just downloaded.
- 3. You will be asked to extract the contents of the exe to a folder.
- 4. Click the 'Browse' button and select your temporary folder, then press 'Unzip'.
- 5. Open your temporary folder, and double-click "Setup.exe".
- 6. When done, you can delete the temporary folder.

Step 3:

Your Speech Properties panel in XP should look like the following screen shot:

eech Properties	?
Language	
Microsoft English Recognizer v5.1	Settings
Recognition Profiles Profiles store information about how to recognize your voice. Change a profile to recognize a different voice or a different noise environment.	New
GKICT	Delete Settings
Training your profile will improve your speech recognition accuracy.	Train Profile
Microphone Level Audio Input Configure Mi	icrophone
OK Cance	Apply

Step 4:

Press 'Train Profile' to run the voice training.

Note:

If you experience difficulties with Speech Recognition, please consult the Troubleshooting section.

WINDOWS VISTA, WINDOWS 7, 8 AND 10

Step 1:

Open the 'Windows Speech Recognition' panel via the Windows Control Panel. You can locate this panel easily by typing "speech recognition" in the Search Box on the Windows Control page as shown below.

0	Speech Recognition	
Ŷ	Start speech recognition Set up a microphone	
	Ease of Access Center	

Step 2:

Microsoft's 'Windows Speech Recognition' system must be **OFF** prior to loading Flight Simulator.



To ensure Windows Speech Recognition does not load on Windows Startup, make sure '**Run Speech Recognition at Start-up**' is <u>unchecked</u> on the **Speech Properties -> Speech Recognition** page, which is located in the Windows Control Panel.

Microsoft Speech Becogn	izer 8.0 for Windows (English - US)	Settings
meredati opecen neoogn	izer e.e.ter Windows (English, 66)	Jetungs
Recognition Profiles		
Profiles store information ab Change a profile to recogni:	oout how to recognize your voice. ze a different voice or a different noise	6
environment.		New
Default Speech Profile		Delete
Training your profile will imp accuracy.	rove your speech recognition	Train Profile
User Settings		
🔲 Run Speech Recognitio	on <mark>at startup</mark>	
R documents and	mail to improve accuracy	
Read privacy state	ment online	
Enable e activation		
Number Jces to insert	after punctuation:	2
Microphone		
Level		
Audia laura		
Audio Input	Advanced Configu	re Microphone

Make Sure 'Run Speech Recognition at start-up' is <u>UNCHECKED</u>!

Step 3:

The 'Language' setting on the Speech Properties -> Speech Recognition page must be set to ENGLISH - US.

This is a **CRITICAL** step that is often overlooked by users from English speaking countries other than the United States, especially those from the **UK** and **Australia**.

WINDOWS 8 AND 10 USERS: You will need to <u>download</u> the **English - US** language pack from <u>Microsoft</u> if your OS is not currently set to English - US. The good news is that **anyone** can add the **English - US** language pack very easily. <u>Click this link to learn how!</u>

Language	41		
Microsoft Speech Recognizer 8.	0 for Windows (Eng	lish - US) 🔻	Settings
Recognition Profiles Profiles store information about ho Change a profile to recognize a di environment.	w to recognize you fferent voice or a d	r voice. ifferent noise	ew
Training your profile will improve y accuracy.	our speech recogni	tion	Frain Profile
User Settings			
Run Speech Recognition at st	artup		
Review documents and mail to	improve accuracy		
Fead our privacy statement of	inline		
Number of spaces to insert after p	unctuation:		2 -
Microphone			
Audio Input	Advanced	Configure Micro	ophone

Here's a great video showing you how to install language packs in Windows 10.

If you are running a **non-English** 'Home' version of Windows 7 or Vista, and you cannot set your speech language setting to English - US, your best option is to install Windows 10.

Step 4:

Run the Voice Training so the computer can learn your voice.

This is a **CRITICAL** step. If you don't run the voice training, your speech recognition accuracy rates will not be high.

You may even want to run the voice training more than once.

Any time you change ports or headsets, you will need to re-run the voice training.

Language		
Microsoft Speech Recognize	er 8.0 for Windows (English - US)	Settings
Recognition Profiles Profiles store information abou Change a profile to recognize environment.	ut how to recognize your voice. a different voice or a different noise	New
Default Speech Profile		Delete
Training your pro <mark>file will</mark> impro accuracy.	ive your speech recognition	Train Profile
Jser Settings		^
Run Speech Recognition	at startup	
Review documents and m	nail to improve accuracy	
Read our privacy stateme	ent online	
Enable voice activation		
Number of spaces to insert af	ter punctuation:	2
Microphone Level		
Audio Input	Advanced Configu	ure Microphone

LET'S BEGIN:

The first thing we need to do is run the FS2Crew PMDG 747 Configuration Manager. There
should be an icon on your desktop that looks like this:



- If using P3D, use the P3D version of the Config Manager.
- You can also access the FS2Crew PMDG 747 Configuration manage via START ALL PROGRAMS – FS2CREW2017.
- Click "ENABLE" FS2Crew. This process adds the FS2Crew gauges to the PMDG 747's panel.cfg file. It also adds the required SDK entries to the PMDG Options.ini file that allows FS2Crew to talk to the 747.

SS2Crew - PMDG 747 QUEEN OF THE SKIES	I				-	
Steam FSX		Мар	Twitter	Facebook	Web	Exit
FS 2CR	-W	-0		192	0	2 La
FS2Crew - PM	DG 747 QUEEN	OF TI	HE SKIES	ll v1		
		/		0.0		
	FS2Crew is dis	abled. (Click to enab	le!		
	Online OPS Manua		Logs			
	Childred of Childridd		Logo			
	Support Forum		Updates P	age		
1990 B	Join Newsletter		Social Integr	ration		
-00	System Check					
- 0						
About manager					B	eport Piracy

• Next, run the **SYSTEM CHECK** to ensure everything was installed properly.



- If you get a FAIL code, <u>click this link to trouble shoot each code</u>.
- If you haven't already trained your voice and set your speech recognizer to ENGLISH US, please do so now.
- If your computer does not have ENGLISH US already installed, please download and install the English United States language pack with the speech components. This video shows how: <u>https://youtu.be/LlqbLhRX8ZU</u>
- Do not forget to train your voice profile. You'll need to train your profile anytime you change your audio input device or port. Please consult the **MAIN OPS MANUAL** for detailed info.

eech Recognition Text	to Speech	
Language		
Microsoft Speech Reco	ognizer 8.0 for Windows (English - U	Settings
Recognition Profiles Profiles store information Change a profile to reco environment.	about how to recognize your voice gnize a different voice or a different	noise
Default Speech Prof	ile	lete
Training your profile will accuracy.	mprove your speech recognition	Train Profile
User Settings		
Run Speech Recog	nition at startup	
Review documents a	and mail to improve accuracy	
Read our privacy st	atement online	
Enable voice activat	ion	
Number of spaces to ins	ert after punctuation:	2 🔻
Microphone		
Audio Input	Advanced C	onfigure Microphone

KEYBOARD/JOYSTICK ASSIGNMENTS:

OPENING AND CLOSING THE MAIN PANEL

The best way to open the Main Panel is by creating a keyboard/joystick assignment as shown below:

- Create a joystick or keyboard button assignment for 'AUTOFEATHER (ARM/OFF)' in the FSX / P3D 'SETTINGS - CONTROLS' menu.
- You can select any Joystick or Keyboard assignment (or both).
- If using a keyboard assignment, we recommend using a single key, like the letter "N", instead of a complex combination.
- You may need to over-write an existing FS key assignment. The majority of the FS key assignments you'll never use, so it's rarely a problem.
- If the button assignment doesn't seem to work, try using a different assignment or use the FSUIPC "CONTROL SENT WHEN BUTTON PUSHED" option. You may have a conflict with another add-on's key assignment.

FOR NON-ENGLISH USERS:

GERMAN: AUTOMATISCHE ANSTELLWINKELVERSTELLUNG (EIN/AUS)

FRENCH: AMORCAGE DE LA MISE EN DRAPEAU AUTOMATIQUE (ARMER/DESARMER)

ITALIAN: SISTEMA DI MESSA IN BANDIERA DELL'ELICA (ARMA/DISATTIVA)

SPANISH: PUESTA EN BANDERA AUTOMATICA (ACTIVAR/DESACTIVAR)

Controller type: Cyborg X			t mode Normal Slew	
Assignment list:	Keyboard	Joystick	Repeat	
Anti-detonation Tank Yalve Toggle	Shift + X			T
Autofeather (arm/off)				
Autothrottle (arm)	Shift + R			
Autothrottle engage (TOG)	Ctrl + Shift + G			
Auxiliary fuel pump (on/				
Carb heat/eng anti-ice (on/off)	Н			
Concorde reheat/afterburner (on/off)	Shift + F4			
Engine (auto shutdown)				
Engine (autostart)	Ctrl + E			
Engine (select)	E			-
New Assignment	Delete Key Assignment	-		
	D <u>o</u> loto noj noolgililoti			
Change Assignment	Delete Joystick Assignment	nt 🚽	Reset Defaults	

HARD MUTE (VOICE CONTROL)

- Used when you want to employ Mute for extended periods of time.
- Works on a Toggle On/Off basis.
- An "M+" symbol will appear in the left hand side of the FS2Crew Main Panel display when operating.
- Can be toggled On/Off by pressing the "**HM**" button on the FS2Crew Main Panel.
- Can also be toggled On/Off by creating a keyboard or joystick assignment for ALTERNATE STATIC SOURCE (ON/OFF) in the FSX /P3D 'SETTINGS CONTROLS' menu.

FOR NON-ENGLISH USERS:

GERMAN: QUELLE FUR STATIKDRUCK (EIN/AUS)

FRENCH: SOURCE STATIQUE DE REMPLACEMENT (ACTIVER/DESACTIVER)

ITALIAN: PRESA STATICA ALTERNATIVA

SPANISH: FUENTE ESTATICA ALTERNATIVA

Controller type: Cyborg X Event gategory: All events			ht mode) Normal) Slew	
Event	Keyboard	Joystick	Repeat	
Aileron trim (left) Aileron trim (right) Ailerons (bank left) Ailerons (bank right) Aircraft (reload) Aircraft labels (display/hide) Alternate static source (on/off)	Ctrl + Num 4 Ctrl + Num 6 Num 4 Num 6 Ctrl + Shift + L			
Altimeter (Standard Pressure) Altimeter (reset) Altitude bug (select)	B Ctrl + Shift + Z			3
Ne <u>w</u> Assignment Change <u>A</u> ssignment	Delete Key Assignmen Delete Joystick Assignme	ent	Reset Defaults	

SOFT MUTE (VOICE CONTROL)

- Used when you only want to employ Mute *temporarily*, such as when communicating with online ATC.
- Works on a "Push-to-Hold" basis.
- If using on-line ATC, you would assign 'Soft Mute' to the same key used for your ATC 'Push-to-Talk (PTT) switch'.
- An "**M**" symbol will appear in the left hand side of the FS2Crew Main Panel display area when operating.
- By default, the **LEFT** or **RIGHT CONTROL** key acts as the SOFT MUTE KEY (Note: There is a Config Option to disable this function).
- To create a Soft Mute key assignment in addition to the default LEFT and RIGHT CONTROL KEY, create a joystick or keyboard button assignment for 'PROPELLER SYNC (ON/OFF)' in the FSX / P3D 'SETTINGS CONTROLS' menu.
- If using a joystick button, you must set the **REPEAT SLIDER TO FULL RIGHT!**

FOR NON-ENGLISH USERS:

GERMAN: PROPELLERSYNC (EIN/AUS)

FRENCH: SYNCHRO DE L'HELICE (ACTIVER/DESACTIVER)

ITALIAN: SINCRONIZZAZIONE ELICA

SPANISH: SINCRONIZACION DE LAS HELICES

Controller type:		Flight	it mode <u>N</u> ormal	
Event category: All events			Slew	
Assignment [ist:	Kon Silata Balayeesi T			
Event	Keyboard	Joystick	Repeat	<u>Å</u>
Propeller (high RPM)	Ctrl + F4			
Propeller (increase RPM incrementally)	Ctrl + F3			
Propeller (increase RPM quickly)				
Propeller (low RPM)	Ctrl + F1			
Propeller de-ice (on/off)	×			
Propeller sync (on/off)				
Pushback (start/stop) Race Results Window (display (e) Radios (cycle backwards) Radios (cycle)	Shift + P			ET I
Ne <u>w</u> Assignment	Delete Key Assignme	int		Q
Chappe Assignmen	Delete Joystick Assign	ment	Reset Defaults	-

MAIN BUTTON (BUTTON CONTROL)

- To create your "Main Button" assignment, create a joystick or keyboard button assignment for 'ALTERNATE STATIC SOURCE (ON/OFF)' in the FS 'SETTINGS - CONTROLS' menu.
- You can select any Joystick or Keyboard assignment (or both).
- This button is also used for the MUTE key in Voice Control, but there's no conflict since Button Control is separate from Voice Control.

IMPORTANT: FS2Crew cannot use the same key assignment also used by a PMDG 747 Command function, or the Main Button will not work!

So, for example, if you use "C" as your keyboard assignment for the FS2Crew Main Button, you cannot use "C" for any PMDG 747 KEY ASSIGNMENTS!

FOR NON-ENGLISH USERS:

GERMAN: QUELLE FUR STATIKDRUCK (EIN/AUS)

FRENCH: SOURCE STATIQUE DE REMPLACEMENT (ACTIVER/DESACTIVER)

ITALIAN: PRESA STATICA ALTERNATIVA

SPANISH: FUENTE ESTATICA ALTERNATIVA

Controller type: Cyborg X		Flight	h t mode	
Event gategory: All events			Slew	
Assignment list:				
Event	Keyboard	Joystick	Repeat	3
Aileron trim (left)	Ctrl + Num 4			1
Aileron trim (right)	Ctrl + Num 6			Ĭ
Ailerons (bank left)	Num 4			
Ailerons (bank right)	Num 6			
Aircraft (reload)				
Aircraft labels (display/hide)	Ctrl + Shift + L			
Alternate static source (on/off)				
Altimeter (Standard Pressure)				
Altimeter (reset)	B			
Altitude bug (select)	Ctrl + Shift + Z			3
Ne <u>w</u> Assignment	Delete Key Assignmen	1		
Chapter Applanment	Delete Joystick Assignm	ent in	Reset Defaults	

SECONDARY BUTTON (BUTTON CONTROL)

- To create your "Secondary Button" assignment, create a joystick or keyboard button assignment for 'PROPELLER SYNC (ON/OFF)' in the FS 'SETTINGS CONTROLS' menu.
- You can select any Joystick or Keyboard assignment (or both).

IMPORTANT: FS2Crew cannot use the same key assignment also used by a PMDG 747 Command function, or the Secondary Button will not work!

So, for example, if you use "D" as your keyboard assignment for the FS2Crew Secondary Button, you cannot use "D" for any PMDG 747 KEY ASSIGNMENTS!

FOR NON-ENGLISH USERS:

GERMAN: PROPELLER (SEGELSTELLUNG)

FRENCH: SYNCHRO DE L'HELICE (ACTIVER/DESACTIVER)

ITALIAN: SISTEMA DI MESSA IN BANDIERA DELL'ELICA (ARMA/DISATTIVA)

SPANISH: PUESTA EN BANDERA AUTOMATICA

Controller type: Cyborg X Event category: All events			it mode <u>N</u> ormal <u>S</u> lew	
Assignment list:	Keyboard	Joystick	Repeat	18
Propeller (high RPM) Propeller (increase RPM incrementally) Propeller (increase RPM quickly) Propeller (low RPM) Propeller de-ice (on/off)	Ctrl + F4 Ctrl + F3 Ctrl + F1 X			
Propeller sync (on/off) Pushback (start/stop) Race Results Window (displa, te) Radios (cycle backwards) Radios (cycle)	Shift + P			4
New Assignment	Delete Key Assignme Delete Joystick Assign	nt ment	Reset <u>D</u> efaults	

THE MAIN PANEL:

VOICE PREFLIGHT CHECKLIST

CK 🔆 HS HM SEC PS LK. 🐠

If the Main Panel does not open, double check your keyboard assignment that you assigned to **AUTOFEATHER (ARM/OFF).** We recommend using the "**N**" key on your keyboard. If the MAIN PANEL still doesn't appear, try assigning a different key. Nine times out of ten assigning a different key solves the problem. Also run the **SYSTEM CHECK** via the Config Manager to ensure everything installed properly.

Also check that your 2D Window Transparency slider in FSX/P3D is <u>not set</u> to full transparent.

If using FSX and earlier versions of P3D V3, you can also open the Main Panel via the **VIEWS** -> **INSTRUMENT PANEL** menu.

If using P3D V3.3 or later, you can also open the Main Panel via the **VEHICLE -> INSTRUMENT PANEL** menu.

 If it's dark, turn on the FS2Crew Night Lighting by turning the larger, <u>inner ring</u> on the Captain's Panel Knob to a position greater than half way.



MAIN PANEL FUNCTIONS:

"VOICE/BUTTON" TEXT: Displays active Control Method (Voice or Button Control).

"SOP1" / "SOP 2": Active SOP Set.

"(H)" TEXT: If headset is on, the (H) text will appear beside the active Control Method. Example: VOICE (H).

"MUTE" TEXT: Soft Mute is active. Soft Mute is used to prevent the First Officer from <u>acting on</u> speech commands detected by the speech recognition system as shown in the Green Bar. If using on-line ATC, it's recommended that you assign the Soft Mute keyboard button to the same button used with your Push-To-Talk (PTT) button.

"MUTE+" TEXT: Hard Mute is active. To prevent the FO from acting on any unintended speech commands detected by the speech recognition system, it's recommended that Hard Mute be activated during long stretches when voice commands would not be used (such as during cruise).

ACTIVE MODE TEXT: Displays the current FS2Crew Mode.

"LOCK" TEXT: If the FS2Crew panels are locked, the panel windows will remain open when views are changed. If the FS2Crew panels are left in the unlock position, the panel windows will automatically close when views are changed.

"DM" TEXT: If FS2Crew is in DESCENT MODE, the DM text will flash. For most FS2Crew approach, landing and descent callouts to function, FS2Crew must be in DESCENT MODE.

ARROW BUTTONS (DOWN/UP): Cycles ACTIVE MODE forward and backward.

Special Note: Right Clicking the down arrow button can be used to fast forward the preflight events timer down.

HS = Routes most, but not all, of the First Officer audio to your headset. Your headset audio device must be selected on the Audio Page.

HM = Turns on **HARD MUTE**. Hard mute blocks the First Officer from acting on any speech detected by the speech recognition system. If you don't anticipate talking to the FO for a long stretch of time, we recommend activating Hard Mute.

SEC = Opens the SECONDARY PANEL.

PS = Opens the **PANEL SWITCHER PANEL**. The Panel Switcher allows you to easily switch to different camera views.

LK = Locks the FS2Crew Panels open. This option exists because FS will close any 2D windows automatically any time you change views. This gets around that problem by forcing the panels open.

PANEL SWITCHER:

Note: Due to differences between FSX and P3D V4, the Panel Switcher panel officially only works in the P3D v4 version. However, there is a work-around to make it work in FSX.

Please see the <u>FS2Crew Support forum</u> at Avsim.com (PMDG 747 QOTS II FAQs Thread) for a custom workaround to make it work in FSX.

- **CPT =** Captain's VC camera.
- FO = FO VC camera.
- **OVH_U** = Overhead Upper Panel camera.
- **THR** = Thrust levers VC camera.
- **MCP** = MCP 2D Pop Up.
- **OVH_L** = Overhead Lower VC camera.
- **CTR** = Center Console VC camera.
- **EFIS** = EFIS 2D Pop Up.
- **CDU_L** =Left CDU 2D Pop Up.
- **RADIO** = Radio Panel Pop Up.
- **AC** = Aircraft view.



THE SECONDARY PANEL:

 Press the SEC button on the MAIN PANEL. A new panel should open up that looks like an FMC. This panel is called the SECONDARY PANEL.



MAIN PAGE

SETUP = Setup Page

CALLOUTS = Callouts Page

MISC = Misc Page



SETUP PAGE

PRESS THE LEFT LINE SELECT BUTTON TO CHANGE OPTIONS

INTERFACE: Button or Voice Control.

NOTE: TO PREVENT PEOPLE FROM RAPIDLY TOGGLING VOICE AND BUTTON CONTROL ON AND OFF, THE SYSTEM WILL LOCK YOU FROM CHANGING THE INTERFACE METHOD. <u>**RIGHT CLICK THE LEFT LINE**</u> <u>SELECT KEY TO UNLOCK THE INTERFACE METHOD</u>. **DISPLAY GREEN SPEECH BAR:** Displays what the speech recognition system detects. If using Voice Control, it's highly recommended you can keep this bar visible.

ENABLE CTRL SOFT MUTE KEY: Allows the CTRL key to be used for Soft Mute.

SOP: Allows selection of SOP SET 1 or 2.

SUPPRESS FA (PAX MODELS): If yes, Flight Attendant is suppressed on Pax models.

FAILURES: Reserved.

ON-LINE MAP: Displays your position on the FS2Crew on-line map.

TWITTER/FACEBOOK INTEGRATION: Allows integration with Facebook/Twitter. Facebook/Twitter must be setup via the FS2CREW PMDG 747 CONFIGURATOR on the SOCIAL INTEGRATION page.

UGCX INTEGRATION: Allows integration with Ultimate Ground Crew X.

FIRST FLIGHT OF DAY: Self Explanatory. This selection auto-updates after the first flight to NO.

FUEL UPLIFT REQUIRED: Self Explanatory. If selected to YES, the FO will be handed the fuel slip during the pre-flight events.

USE PMDG GROUND VEHICLES: If selected to YES, FS2Crew will attempt to position some, but not all, of the PMDG Ground Service Vehicles automatically during the preflight and shutdown events.

CONFIG – CALLOUTS (1)

The available callouts are self-explanatory. If you require clarification, please post a question on the FS2Crew Support Forum.



CONFIG – CALLOUTS (2)



CONFIG – MISC (1)



FS2CREW CONTROLS JETWAY: FS2Crew will attempt to control the default FS Jetway. Note: It may not be able to control some 3rd party scenery jetways that do not use the default FS command to toggle the jetway.

FS2CREW CONTROLS DOORS: Self-explanatory.

FO POWER UP PROC: FO runs the Electrical Power up Procedure.

FO PREFLIGHT PROC: FO runs the Preflight procedure.

FO RESET MCP SHUTDOWN: FO resets the MCP during his shutdown flow.

PACK CONFIG 20C: FO makes pack selections based on if the OAT is above or below 20 degrees Celsius.

INBD LANDING LIGHTS: This option allows you to select when you want the inboard landing lights to be turned off. Many US airlines, for example, turn them off at 18,000 feet, not 10,000 feet.

SPOILER TRIGGERS A.LDG FLOW: If YES, stowing the speed brakes (spoiler) will trigger the FO to start his After Landing procedure.

RESET XPONDER (SHUTDOWN): If NO, FO will not reset the transponder code during shutdown.

ASDE-X: If using ASDE-X, leave the transponder mode in TARA or XPNDR.

FO CONTROLS IRS: If YES, FO will set the IRS during his respective flows.

LOADSHEET FROM ACARS: Loadsheet received in person or via the ACARS printer.

CALL 100 ABV AS: There are two options: PLUSS 100 or APPROACHING MINIMUMS.

CONFIG – MISC (2)



MCP COMMNDS AVAIL ON GND: If YES, MCP voice commands will function while the aircraft is still on the ground.

DISABLE FMA CALLOUTS DET: Disable FMA callout detection (Voice Control only).

USE NOSE CARGO DOOR: If using a Freighter model, determines if Nose Cargo door used. (Note: in real life, the nose cargo door is very rarely used).

USE DOOR L5: Use door L5.

MANUAL VREF ENTRY: FO enters VREF during the Descent Procedure.

USE DOOR L1: Use door L1.

3 MIN ENG COOLDOWN: 3 minute engine cooldown required after landing.

FO TURNS ON LDG/TAXI LIGHTS: If the landing/taxi lights cause significant performance issues in P3D V4 due to dynamic lighting issues, use this option to stop the FO from turning on the landing and taxi lights.

NIGHT LIGHT: FO uses dorm or storm light at night.

FO SELECTS TERRAIN: If selected to YES, the FO will select TERR.

FO CONTROLS HYD: If selected to NO, all controls of the hydraulic switches rests with the user, not the FO.

DUAL APU GEN IN FREIGHTER: If selected to YES, the FO will connect both APU generators to the buss in the Freighter.

GROUND CONNECTIONS (GND)

Passenger Version:

Dial "P1" on the Interphone by pressing P then 1.



Be sure to press the "**RST**" button at the end of the conversation.

Freighter Version:

Press the GND call button located at the bottom of the center console.





PUBLIC ADDRESS (PA)

In addition to pressing the PA button on the Main Panel, you can open the PA screen by entering 4 and 6 (46) on the interphone panel. If it doesn't work, try pressing the **RST** button.

Passenger Version:

Dial "46" on the Interphone:





Notes:

1. To play a Takeoff sequence PA, enter a number in the scratch pad and transfer it to the Takeoff Sequence line.

FLIGHT ATTENDANT PAGE (FA)

In addition to pressing the PA button on the Main Panel, you can call the FA by double tapping the **CAB** button quickly on the Captain's audio control panel.



You can also use the interphone::

Dial "32" or "56" on the Interphone:



IMPORTANT: Press the "RST" button when finished.

AUDIO SETUP



Notes:

- 1. If using a Headset, select the headset audio device by pressing LSK 4. Then press the "**HS**" button on the MAIN PANEL. Most, <u>but not all sounds</u>, will be routed through your headset.
- 2. RESET AUDIO SYSTEM is used if the FO's audio drops out. Do not touch your computer during the audio reset.

TROUBLESHOOTING:

FS2Crew has years of experience developing flight simulation products. The following solutions can be used to solve problems you may experience.

NOTE: For the latest info, always check the <u>FS2Crew</u> <u>Support Forum</u>. The "Search" function will turn-up almost any possible issue.

Problem: The FO is acting strange and I'm getting an audio "**SDK Warning**" alert when I open the FS2Crew Main Panel.

Solution:

- 1. Run the "SYSTEM CHECK" in the FS2Crew 747 Configurator and check for Error Codes.
- 2. DO NOT USED SAVED SITUATION FLIGHTS. In FSX, default aircraft should be the Trike.



Problem: I assigned a button to **AUTOFEATHER ARM/OFF**. But when I press that button, nothing happens. The Main Panel doesn't open.

Solutions:

- 1. Assign **AUTOFEATHER ARM/OFF** to a different button, like "**N**". You may have a conflict with another add-on.
- Try opening the Main Panel via the VIEWS INSTRUMENT PANELS menu in FSX, or VEHICLES INSTRUMENT PANEL in P3D V3.3 or later. If the FS2Crew Main Panel is not visible in the drop down list, then FS2Crew was not added to your panel.cfg properly.
- 3. Try assigning the button via a registered version of **FSUIPC**. Some users, due to their joystick and hardware setup, can only assign buttons via FSUIPC.
- 4. You may have a Windows write permission issue, especially if you have FSX installed the Program Files folder. Right click on the FSX.EXE and select "Run this program as an Administrator" in the Compatibility tab. Right click on the FS2Crew PMDG 747 Config Manager on your desktop and select "RUN AS ADMIN". Click the button that says "ENABLE FS2CREW VOICE CONTROL". Assuming nothing is blocking the Config Manager, the required FS2Crew window and gauge entries should be added to the PMDG 747's panel.cfg file. If you want to check, you can open the PMDG 747's panel.cfg file with Notepad. It's located here:

SimObjects\Airplanes\PMDG 747-400\panel.cfg

Problem: I installed FSX and FS2Crew with Admin rights, but I am using Flight Simulator in a **NON-ADMIN** account. I am not able to select a Headset device. FS2Crew says "**No Such Device**"

Solution:

Copy the FS2Crew2010 folder below from the AppData folder in your Admin account to the same AppData folder in your non-admin account.

C:\Users***YOUR USER NAME***\AppData\Roaming\FS2Crew2010\

Problem: I'm getting a Crash to Desktop (CTD) when I load the host Aircraft, and the error message refers to **'FS2AUDIO.DLL'**.

Solutions:

- 1. If you have two sound cards running in parallel, disable one of them.
- If you are running any program in the background that attempts to strip Digital Music Rights (DRM) from music, such as Tune Bite, Sound Taxi, Audials or Sound Bite, please disable them. They interfere with FS2Crew's Audio Engine. Some of these types of programs are legal in parts of Europe, but they are not legal in the United States.
- 3. Re-install FS2Crew again, but do not click 'cancel' during the install. Wait for the install to finish.
- 4. If using a **Creative Labs X-Fi Extreme Audio Sound Card**, uninstall the latest driver and re-install the original driver off the CD that came with your Sound Card. The latest driver conflicts with the FS2Crew Audio engine. (If you no longer have your original driver disk, click <u>here</u> to download the original driver).
- 5. Sometimes users have corrupt system files/data on their Operating System. They solved their problem by doing a clean re-install of their OS or by repairing their OS. Follow <u>this link</u> to learn how to repair a corrupt Windows 7 installation. You will need to go to the <u>Windows Download</u> <u>Center</u> and Download Windows 7, for example, with SP1 and install using the Update option. You will need to re-activate Windows 7.
- 6. Sometimes users have corrupt versions of the **FSX.CFG** file. Delete the FSX.CFG file. It will rebuild automatically when you load FSX. Your FSX.CFG file is located here:
- Windows XP: \Documents and Settings\<username>\Application Data\Microsoft\FSX
- Windows Vista/ 7 & 8: \Users\<username>\AppData\Roaming\Microsoft\FSX

7. Ensure the Trike is the default FSX aircraft on the Free Flight Screen. **NEVER USE SAVED SITUATION FILES!**

Problem: The 'VOICE' button on the FS2Crew Main Panel will not stay on.

Solution:

If using Vista or Windows 7, 8 or 10, ensure your <u>Microsoft Speech Recognizer</u> is set to **English** - **US**. This is something users from the UK or Australia often miss. If using XP, ensure you installed SAPI.

anguage		
Microsoft Speech Recognizer 8.0 for Windows (English - US) 🕊	-	Settings

Check for error messages in the 'Speech Recognition Init Log', which will be available via:

C:\Users**YOUR USER NAME **\AppData\Roaming\FS2Crew2010\Speech Engine Log.

Open the Log with Notepad.

In 99 percent of all cases the problem is because you forget to set your Speech Recognition Language Setting to **English - US** if using Vista or Windows 7, but sometimes the problem is associated with having a corrupt system that prevents the Speech Recognition engine from loading properly, particularly if the Speech Recognition Init log shows this error:

Creating the ISpRecoContext object... Error Code: 0x80045003

We're finding that some 3rd party programs that perform Systems Repair/Mechanic type functions may be damaging the user's Registry, which in turn damages the speech recognition system that comes with Windows.

In these cases you'll find that all 3rd party programs on your computer that use Microsoft's Speech Recognition API will be non-functional, not just FS2Crew.

Vista / Windows 7 users have resolved this problem by re-installing Windows. We also suggest trying a <u>Systems Restore</u>.

XP users can try uninstalling SAPI and then re-installing it.

If you get this error:

Creating the ISpAudio object... Error Code: 0x8004503a

Check your USB headset. It may be faulty. Exit Flight Simulator, and try loading FS2Crew again but with your USB headset unplugged.

Problem: I'm using Windows 10. How do I add **English – US**.

Solution:

- 1. Go to Settings > Time & language > Region & language.
- 2. Select Add a language.
- 3. Select the language you want to use from the list (ENGLISH).
- 4. Choose which region's version you want to use (ENGLISH US)
- 5. Then you must click 'options' and then click 'download' under the 'speech' category.
- 6. Go to the speech recognition settings page in the Control panel.
- 7. English US should now be visible in the Language drop down menu.
- 8. Don't forget to train your voice!
- 9. You may also need to set your display language to English US as well. But you should be able to set it back to your local language after setting your speech recognizer to ENGLISH US.

Problem: During flight, I get random crashes.

Solution:

Random crashes can be attributable to numerous different sources and can be very complex to troubleshoot. They are often connected to bad video and audio drivers. Also, certain 3rd party scenery or AI traffic in Flight Simulator can be faulty and eat up huge amounts of memory. If you get a random crash, you should try flying in an area that does not use 3rd party scenery or AI traffic. Certain 3rd party scenery add-ons are infamous for causing problems. FS2Crew adds very little overhead to the simulation in terms of memory usage. FS2Crew is not a heavy graphic program, and heavy graphics are what eat up the largest amounts of memory. If you're experiencing random crashes, you may want to move your FSX display sliders to the left (lower the LOD especially) as you may be hitting FSX's 4 GB internal memory limit. You may simply be pushing your system too hard. You may also want to consider deleting your FSX.CFG file as it may be corrupt. FSX will rebuild a new FSX.cfg file when it loads. You should also read the Introduction Section in the PMDG Manuals as it contains several good tips for managing OOMs and other problems.

Upgrading to Windows 10 - 64 bits (or later) is highly recommended. Windows 10 handles memory more efficiently than XP or Vista.

We also strong suggest updating to P3D V4 or later (64 bits). It offers twice the available memory space of FSX.

Recommended Sites to help Troubleshoot Random Crashes:

Avsim CTD Forum

Problem: I'm experiencing a frame rate drop.

Solution:

- 1. Ensure your speech recognition language is set up properly. If it's not, your system will grind to a halt.
- 2. Double check your Sound Card settings. One beta tester cranked his sound card's settings up to 24 bit (192,000) and had some frame rate loss. When he returned his sound card settings to their default settings 16 bit (44,000) his frame rates returned to normal.

Problem: The 747 is not acting properly.

Solution:

1. Do NOT used saved situation files. In FSX, the default aircraft should always be the Trike.

Problem: I cannot hear the FO's voice, or other voices.

Solution:

- Check your audio setup. If using a headset, ensure you've selected the associated Audio Device on the FS2Crew Configuration Panel. As a test, make sure HS (Headset) is unchecked on the FS2Crew Main Panel. This way all sound should be routed through your main speakers. Sometimes users just have complex audio hardware setups, and they just need to experiment with their audio hardware settings. Also consider getting a USB headset: USB headsets can resolve a lot of problems due to their simplicity.
- 2. FS2Crew uses the right and left speaker channels. If using surround sound, ensure you have right and left speakers assigned and available. One user mistakenly had his rear speakers setup as his side speakers with no side speakers physically present.
- 3. Shutdown any other programs running in the background that may use audio, such as Skype.
- 4. If you have a **5.1 speaker sound system**, try setting your speaker configuration to "**Stereo**" via Windows Control Panel Sound Options section.
- 5. If using a headset, ensure your headset's audio device is selected on the CFG screen and press HS on the Main Panel. Remember that only the FO's checklists and callouts will be routed through your headset, not all FS2Crew sounds.
- 6. Uninstall **ASUS Sonic Studio**. Another user has **NAHIMIC** running on this laptop. Exiting that software prior to loading FS solved the issue for him.

na jouer	Recording	Sounds	Communications	1	
Select a	playback de	evice belo	w to modify its s	ettings:	
		HDMI O High De ugged in HDMI O High De ugged in	utput (Port 2) finition Audio utput (Port 3) finition Audio		^
	Speake Realte Defaul	e rs c High De t Device	finition Audio		
	Realte Realte Ready	k <mark>Digital (</mark> k High De	Dutput finition Audio		
	Realte Realte Ready	k Digital (k High De	Output(Optical) finition Audio		
Confi	gure		Set Def	ault 🛛	Properties

Choose your configuration	
Select the speaker setup below that is most like the configuration on your computer.	L.
Audio channels:	
Stereo	
5.1 Surround 7.1 Surround	$(() \land ())$
	A. A.
▶ Test	
	Click any speaker above to test it.

Problem: My voice recognition results are not very good.

Solution:

- 1. Check your audio setup.
- 2. Use a USB headset. Never use built in microphones!
- 3. Be sure to run the <u>Voice Training</u>.
- 4. Try creating a new "**RECOGNITION PROFILE**" on the Windows Speech Recognition page.
- 5. Speak in a neutral mid-western American style accent in a clear and distinct way.
- 6. Reduce ambient background noise as much as possible.
- 7. Upgrade to the very latest version of Windows- 64 bit.

Problem: Speech recognition is having problems detecting certain words. Can I train the speech recognition system for "specific" words?

Solution:

- 1. Yes, you can use the dictation facility in Windows.
- 2. First, start 'Windows Speech Recognition' (this is not the FS2Crew Speech Recognition system, but rather the speech recognition system that comes with Windows).
- 3. Open a text document.
- 4. Next, dictate a list of words you are having trouble with.
- 5. Every time the speech recognizer makes a mistake, use the "CORRECT THAT" voice command. This effectively trains the speech recognition engine to recognize how you pronounce these words. You may need to dictate and correct the same words multiple times until the recognition rate improves.

There is another way (and better way) to train specific words as well for Vista and Win 7 users:

1. Open the Microsoft Windows Speech Recognizer and <u>RIGHT CLICK</u> the microphone icon. You can open the Windows Speech Recognizer by typing "Speech Recognition" in the search for programs box in the start menu.



2. Click "ON: Listen to everything I say". Next, Select "OPEN THE SPEECH DICTIONARY" and select "ADD A NEW WORD".

3. When done, turn **off** Windows Speech Recognition. It CANNOT be running while using FS2Crew. It must be OFF!

)		X
	On: Listen to everything I say	
	Sleep: Listen only for "start listening"	
1	Off: Do not listen to anything I say	
	Open Speech Reference Card	
	Start Speech Tutorial	
	Help	
	Options	•
	Configuration	•
	Open the Speech Dictionary	
	Dictation Topic	
	Help improve Speech Recognition	
	About Windows Speech Recognition	
	Open Speech Recognition	
	Fxit	

Problem: I spoke, for example, "**BEFORE TAXI CHECKLIST**", and "Before Taxi Checklist" was displayed in the Green Bar. So I know the Speech Recognition system detected the correct phrase, but nothing happened. The FO never replied.

Solution:

1. You were probably in the wrong FS2Crew Mode. The displayed mode in the FS2Crew Main Panel must match the checklist you are attempting to use. For example, in order for the After Start Checklist to work, the mode in the FS2Crew Main Panel must say "BEFORE TAXI".

Problem: The FO's altitude related call-outs are totally off. For example, his 10,000 foot call-out occurred around 33,000 feet.

Solution:

Ensure your FS units of measurement are set to **FEET** for altitude, not meters:

<u>J</u> nit of measure:		
U.S. System (feet, inches	;)	V
U.S. System (feet, inche:	3)	
Hybrid (feet, milibars)		itude in map
metric (nieters, niiibars)		
_atitude:	L <u>o</u> ngitude:	
Northern	Western	

Problem: I can't get FS2Crew sounds to play through my headset with other sounds coming through my speakers.

Solution:

1. Go to the **FSX - SETTINGS - SOUND** menu. Set 'Sounds' to your speakers and 'Voice' to your headset. On the FS2Crew Config Panel, select your audio device associated with your headset then press '**HS**' on the FS2Crew Main Panel.

Problem: The FO's volume is jumpy or I'm losing FO sound.

Solution:

1. Go to Control Panel -> Hardware and Sound -> Sound -> Communications. Select "Do Nothing" when Windows detects communications activity and click apply.

layback	Recording	Sounds	Communications	
)	Windows ca sounds whe telephone c	an autom en you ar calls.	atically adjust the volume e using your PC to place o	of different r receive
When V	Vindows de	tects com	munications activity:	
⊚ Mu	te all other :	sounds		
Rec	luce the vol	ume of of	ther sounds by 80%	
🔘 Rec	luce the vol	ume of o	ther sounds by 50%	
💿 Do	nothing			
		-		

Problem: When I'm flying in FSX with FS2Crew running, if I change to the desktop and then change the task back to FSX, I lose my FS2Crew sounds.

Solution (Based on Windows 7 / 8 / 10):

- 1. Right click on the speaker in the taskbar (lower right near the clock).
- 2. Go up to "Playback Devices".
- 3. Right click on the audio device that is in use for your FS2Crew and go to "Properties".
- 4. Now click on the "Advanced" tab at the top.
- 5. Now uncheck the two boxes as shown below.

Speakers Properties	×
General Levels Enhancements Advanced	
Default Format	-
Select the sample rate and bit depth to be used when running in shared mode.	
24 bit, 48000 Hz (Studio Quality) - Test	
Exclusive Mode	
Allow applications to take exclusive control of this device	
Give exclusive mode applications priority	
Destana Defaulta	
Restore Defaults	
OK Cancel Appl	у

Problem: My Microphone volume resets itself to a value I did not select.

Solution from a user:

I noticed how my microphone volume every now and then resets itself to a value I didn't pick. Normally I have my microphone volume set to 75% but all of a sudden it may end up at let's say 32% without me doing anything or even being aware of this happening. This of course could result in the speech recognition engine and thus FS2Crew having problem recognizing what you say simply because the mic volume will be very low. I'm not sure if this is a Windows bug or if FS2Crew is to blame for doing this because I normally only see this when using FS2Crew and I've seen this not only in FS2Crew Reboot but also in previous versions of FS2Crew.

Anyway I found a very easy solution to this problem I thought I would share with all of you. I'm using a great freeware command line utility called Nircmd and what I've done is to simply create a standard task using Windows Task Scheduler that will run this utility whenever I logon to Windows with a certain set of parameters. The command I use looks like this:

nircmd.exe loop 172800 500 setsysvolume 49500 default_record

The parameters in the example above will run the Nircmd utility and set the volume of the default recording device selected in Windows to 75% and this will happen 172800 times every 500 ms. This translates to twice every second for 24 hours. To adjust the volume that will be set by the utility you can change the 49500 value in the example above to anything between 0-65536 where 0 obviously will result in 0% volume and 65535 100% volume.

You can find the utility following the link below.

http://www.nirsoft.net/utils/nircmd.html

SUPPLEMENTARY VOICE COMMANDS

GENERAL COMMANDS:

- HOLD THE CHECKLIST
- RESUME THE CHECKLIST
- CANCEL THE CHECKLIST
- SAY LAST PLEASE
- REPEAT LAST PLEASE
- LETS START AGAIN
- RESTART THE CHECKLIST
- LETS RESTART THE CHECKLIST FROM THE BEGINNING
- CANCEL LAST COMMAND (Used if an autopilot value does not stop spinning).
- SET AND CHECKED (Used if you are unable to reply to a Checklist item using the expected syntax).

MISC COMMANDS/ ANNOUCEMENTS:

- CANCEL EICAS
- SELECT RECALL
- CDU ON MY SIDE TO VNAV
- THIS IS THE CAPTAIN EVACUATE EVACUATE EVACUATE
- YOU HAVE CONTROL / I HAVE CONTROL
- SET XXX (POINT/ DECIMAL) ON (STANDBY) COMM (1 / 2)
- SWAP COMM (1 / 2)
- SET XXXX ON THE TRANSPONDER
- MANUAL BRAKING
- GREEN LIGHT ON THE AERO BRIDGE
- MARSHALLER IN SIGHT
- MY THROTTLES
- I AM OFF ATC FOR THE PA
- AUTOPILOT COMING OUT
- LEAVE THE FLAPS UP FOR TAXI
- CLEAR LEFT / CLEAR ON THE APPROACH / LEFT SIDE CLEAR
- CONTINUE (Optional phrase used during an approach).

- VISUAL (Used during an approach. FO will no longer make approach callouts)
- CANCEL THE BAROS / RESET THE BAROS (Used when transitioning to a visual approach after calling "VISUAL".
- AUTOTHROTTLE DISCONNECT (Used when manually disconnecting the auto throttle)
- AUTOPILOT DISCONNECT (Used when manually disconnecting the autopilot)
- MANUAL FLIGHT (Using when manually disconnecting the autopilot)
- GOING ON HEADSET (Toggles HEADSET selection on MAIN PANEL on)
- GOING ON SPEAKERS (Toggles HEADSET selection on MAIN PANEL off. If you suddenly find that sounds are no longer coming through the headset, make sure this voice command was not accidently detected).
- SET QNH / SET TRANSITION/ SET ALTIMETERS

AUTOPILOT VALUE COMMANDS:

NOTE: AIRCRAFT MUST BE AIRBORNE FOR THESE CALLS TO WORK.

- SET HEADING XXX (EXAMPLE: SET HEADING ONE TWO ZERO)
- SET SPEED XXX (EXAMPLE: SET SPEED TWO FOUR ZERO)
- SET FLIGHT LEVEL XXX. (EXAMPLE: "SET FLIGHT LEVEL THREE THREE ZERO")
- SET ALTITUDE XXX (EXAMPLE: "SET ALTITUDE FOUR THOUSAND")
- SET VERTICAL SPEED (UP/ DOWN) XXXX. (EXAMPLE: "SET VERTICAL SPEED UP FIVE HUNDRED. SET "VERTICAL SPEED DOWN ONE THOUSAND TWO HUNDRED").
- SET VREF PLUS XXX. (EXAMPLE: SET VREF PLUS FIVE)
- SET MISSED APPROACH ALTITUDE (MAP altitude must be entered on APPROACH BRIEF PAGE).
- MATCH HEADING
- MATCH SPEED
- BUG UP / FLAPS UP
- BUG 1 / 5/ 10 / 20/ 25 / 30

ANNOUNCING AUTOPILOT VALUE COMMANDS:

NOTE: AIRCRAFT MUST BE AIRBORNE FOR THESE CALLS TO WORK.

If the autopilot is engaged, as the Pilot Flying only you should touch the MCP panel. If you update an autopilot value, you should announce your selection as part of good CRM.

- HEADING ____
- SPEED _____
- ALTITUDE ____

- FLIGHT LEVEL _____
- VERTICAL SPEED DOWN / UP _____
- BUG UP / FLAPS UP SPEED SET

REMINDER: IF THE AUTOPILOT EVER 'RUNS AWAY' ON YOU (DOESN'T STOP CHANGING VALUES), USE THE COMMAND "CANCEL LAST COMMAND" TO STOP THE RUNAWAY!

MCP AND EFIS COMMANDS:

- SELECT (LEFT / CENTER /RIGHT) AUTOPILOT IN COMMAND
- (LEFT / CENTER /RIGHT) AUTOPILOT COMMAND
- SELECT FLIGHT DIRECTORS ON (OFF)
- RECYCLE FLIGHT DIRECTORS
- SELECT AUTO THROTTLE (ON / OFF)
- SELECT CLIMB THRUST
- SELECT MAXIMUM CONTINUOUS THRUST
- (ENGAGE / SELECT) VNAV
- (ENGAGE / SELECT) LNAV
- SELECT LEVEL CHANGE
- SELECT HEADING SELECT
- SELECT HEADING HOLD
- SELECT VERTICAL SPEED
- SELECT ALT HOLD
- SELECT SPEED INTERVENE
- SELECT ALTITUDE INTERVENE
- ARM LOCALIZER
- ARM APPROACH
- DISPLAY ENGINE
- DISPLAY STATUS
- DISPLAY ELECTRICAL
- DISPLAY FUEL
- DISPLAY ECS
- DISPLAY HYDRAULICS
- DISPLAY DOORS
- DISPLAY GEAR
- SELECT RAW DATA ON YOUR SIDE

FMC:

- SET GO AROUND THRUST
- SET MAXIMUM CONTINUOUS THRUST
- DELETE THE SPEED RESTRICTIONS

OVERHEAD COMMANDS:

- SET TAXI LIGHT OFF
- SET TAXI LIGHT ON
- SET STROBES OFF
- SET STROBES ON
- SET SEAT BELTS SIGNS ON
- SET SEAT BELTS SIGNS OFF
- SET SEAT BELTS SIGNS AUTO
- SET WING ANTI ICE ON
- SET WING ANTI ICE OFF
- SET WING ANTI ICE AUTO
- SET NACELLE ANTI ICE ON
- SET NACELLE ANTI ICE OFF
- SET NACELLE ANTI ICE AUTO
- SET WIPERS ON
- SET WIPERS OFF

GROUND CREW COMMANDS:

- COCKPIT TO GROUND/ GROUND FLIGHT DECK
- PLEASE CONNECT THE (GPU / EXTERNAL POWER)
- PLEASE DISCONNECT THE (GPU / EXTERNAL POWER)
- PLEASE CONNECT THE AIR START (UNIT / CART)
- PLEASE DISCONNECT THE AIR START (UNIT / CART)
- PLEASE CONNECT THE AIR CONDITIONING (UNIT / CART)
- PLEASE DISCONNECT THE AIR CONDITIONING (UNIT / CART)
- PLEASE DISCONNECT THE GROUND EQUIPMENT

Note: There is a CFG option to have the GPU and AC Unit connect automatically during Gate Arrival.

Note: To communicate with the Ground Crew, your audio panel must be setup properly.

FA IN FLIGHT CONVERSATIONS

- ONE COFFEE PLEASE
- ONE TEA PLEASE
- SOME LUNCH PLEASE
- SOME DINNER PLEASE
- SOME BREAKFAST PLEASE
- ONE JUICE PLEASE
- ONE WATER PLEASE
- I WILL KEEP YOU UPDATED
- I WILL KEEP YOU IN THE LOOP
- I WILL KEEP YOU INFORMED

-MANUAL END-