

# FS2Crew: MaddogX Reboot Edition

# MAIN OPS MANUAL

# REQUIREMENTS:

The following program requirements are in effect:

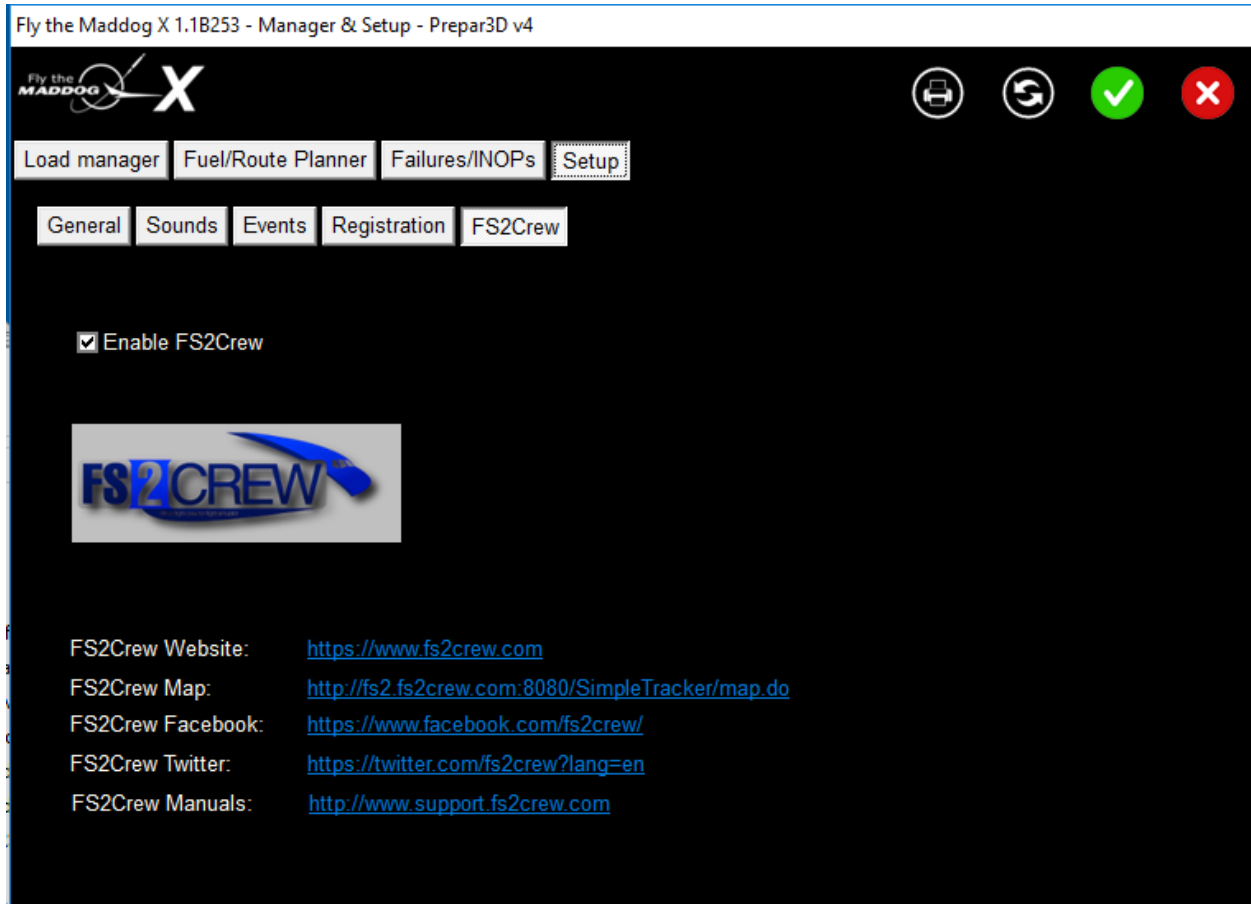
## **Operating Systems Supported:**

- Windows 7, 8, 10

## **Additional Requirements:**

- Leonardo MaddogX host aircraft (not included with FS2Crew)
- Flight Simulator X, P3D V3 or V4
- If using Voice Control: Headset or Microphone (USB headset recommended)

# ADDING FS2CREW TO THE MADDOG



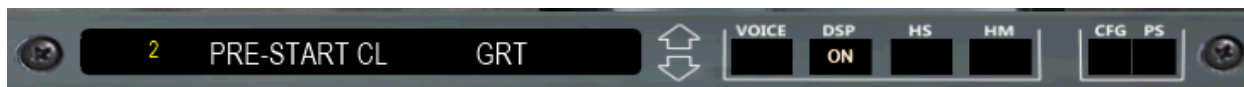
To add FS2Crew to the Maddog, open the Maddog Load Manager, and go to **SETUP** -> **FS2CREW**.

Click **“Enable FS2Crew”**.

The required FS2Crew entries should then be added the Maddog’s panel.cfg file.

# SWITCHING BETWEEN VOICE AND BUTTON CONTROL

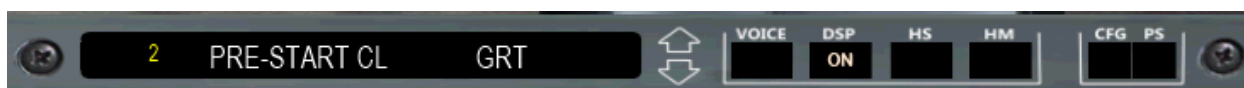
By default FS2Crew loads into **BUTTON CONTROL** mode. To enable **VOICE CONTROL** mode press the **VOICE** button on the Main Panel. To return to **BUTTON CONTROL** mode, press the **VOICE** button again.



## BUTTON CONTROL: SETTING UP THE 'MAIN' AND 'SECONDARY' BUTTONS

### MAIN BUTTON

- Used to trigger the displayed Checklist item or command shown on the LEFT side of the Main Panel. In the example below, pressing the MAIN BUTTON would trigger the PRE START CHECKLIST.
- Shares the same key assignment used for HARD MUTE in Voice Control.



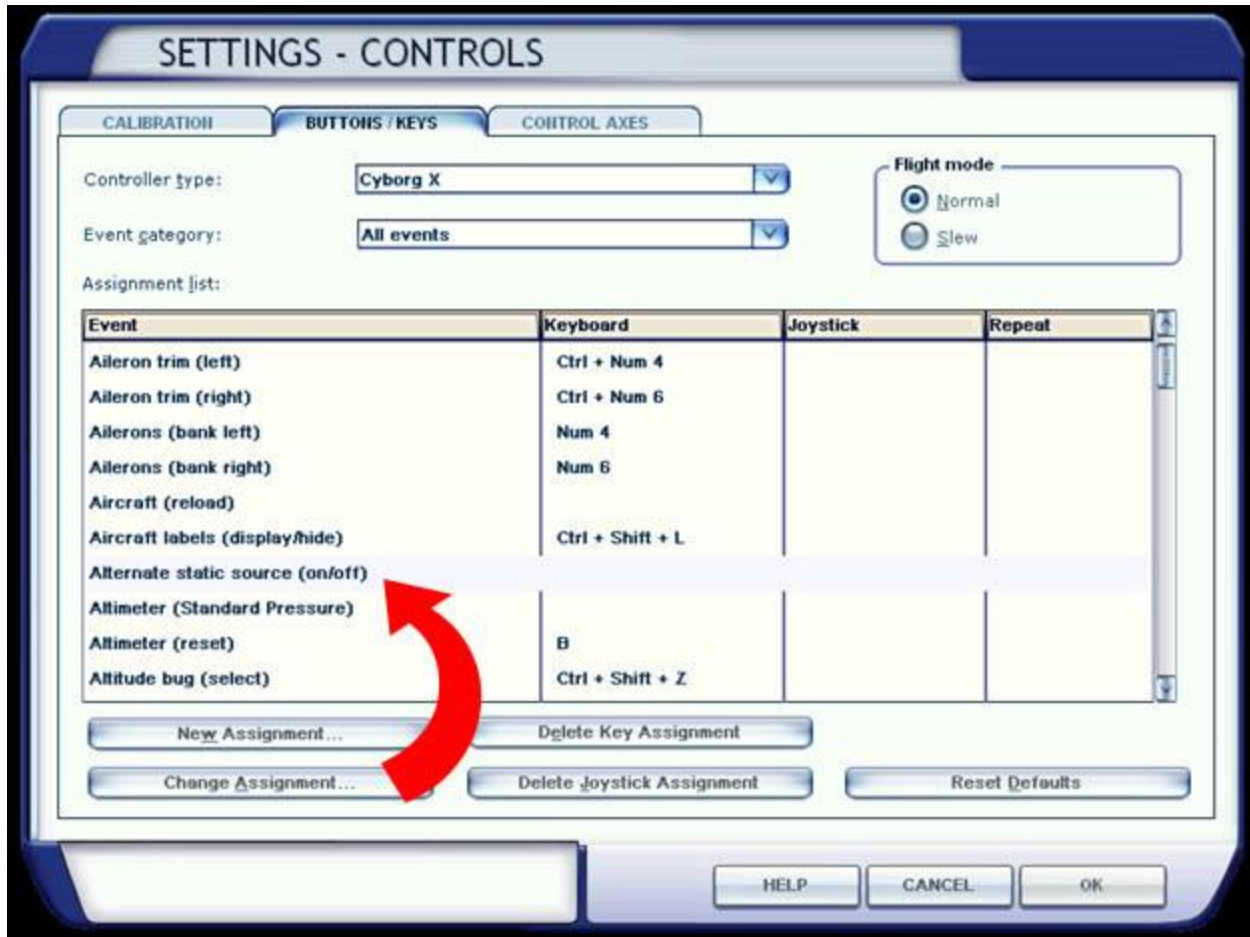
### FOR NON-ENGLISH USERS:

**GERMAN:** QUELLE FUR STATIKDRUCK (EIN/AUS)

**FRENCH:** SOURCE STATIQUE DE REMPLACEMENT (ACTIVER/DESACTIVER)

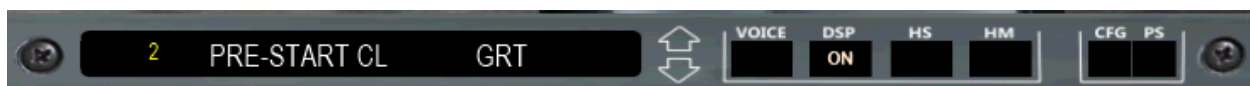
**ITALIAN:** PRESA STATICA ALTERNATIVA

**SPANISH:** FUENTE ESTATICA ALTERNATIVA



## SECONDARY BUTTON

- Used to trigger the displayed action shown on the RIGHT side of the Main Panel.
- In the example below, pressing the SECONDARY BUTTON would command the Captain (that's you) to reply GREAT.
- Shares the same key assignment used for SOFT MUTE in Voice Control.



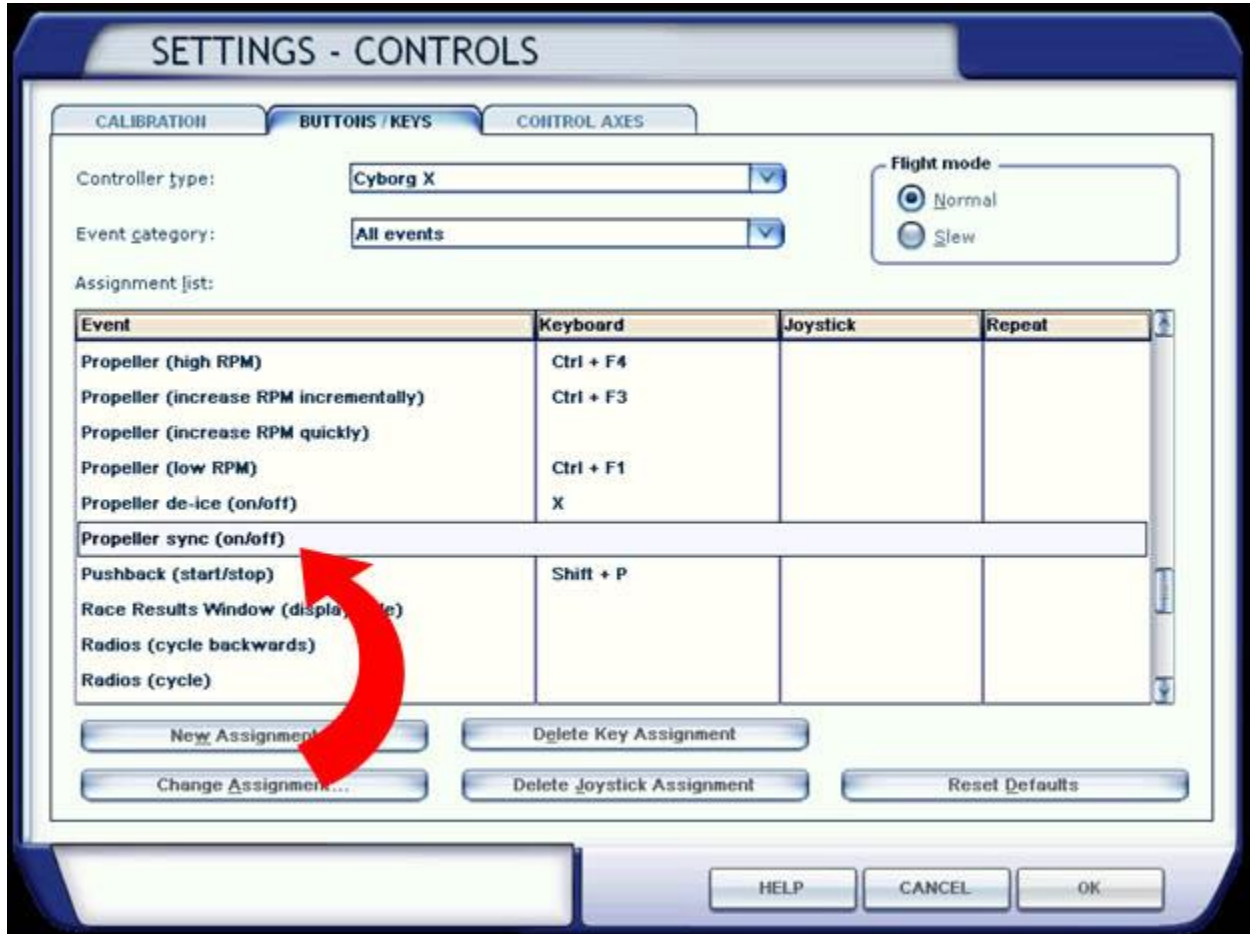
FOR NON-ENGLISH USERS:

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ITALIAN: SINCRONIZZAZIONE ELICA

SPANISH: SINCRONIZACION DE LAS HELICES



# HOW TO MAKE A FLIGHT WITH BUTTON CONTROL

Ensure the VOICE BUTTON is off.

Print out the **CAPTAIN'S FLOWS** section in this manual. That section was worded for Voice Control, but Button Control follows the exact same chain of events.

Button control is VERY SIMPLE. Just follow the Captain's Flow and use the MAIN / SECONDARY BUTTON to advance through the flight.

Note that certain items in Voice Control cannot be accomplished in Button Control (for example, calling Localizer Alive).

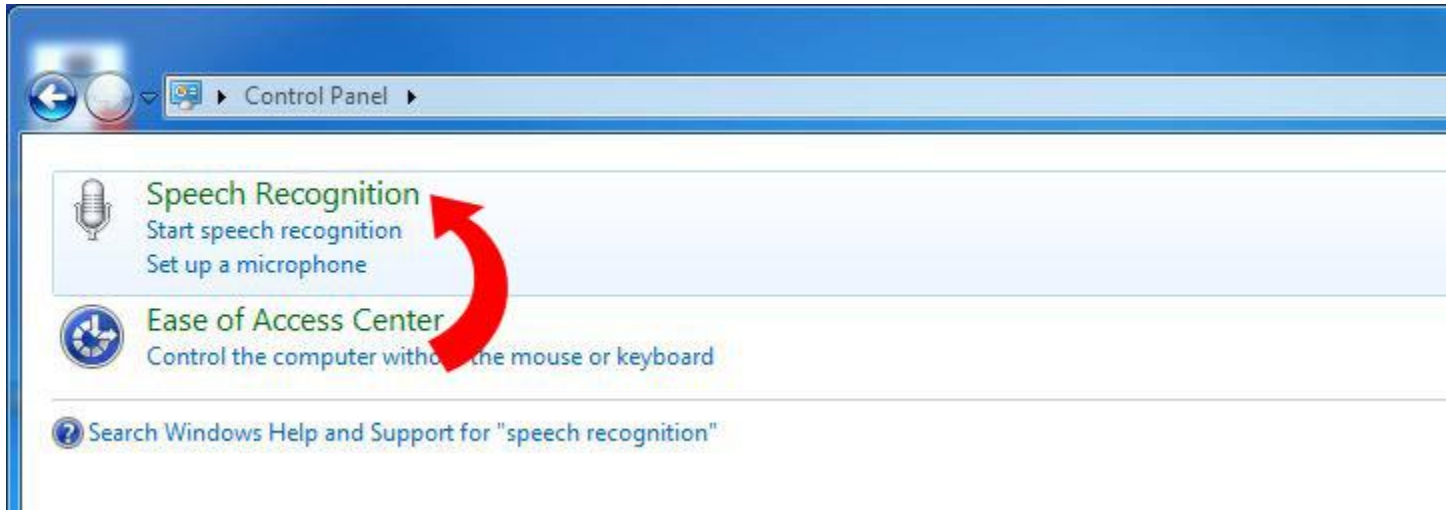
Everything you need to do is displayed on the Main Panel in abbreviated Text.

If you have any doubts or questions, just ask for help in the Support Forum.

# SPEECH RECONGITION SETUP - WINDOWS VISTA, WINDOWS 7, 8 AND 10

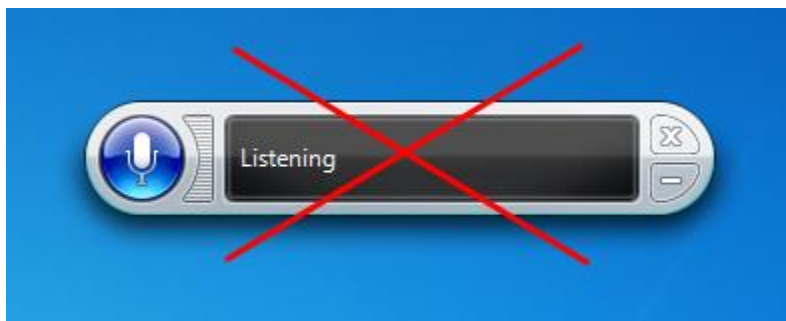
## Step 1:

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.



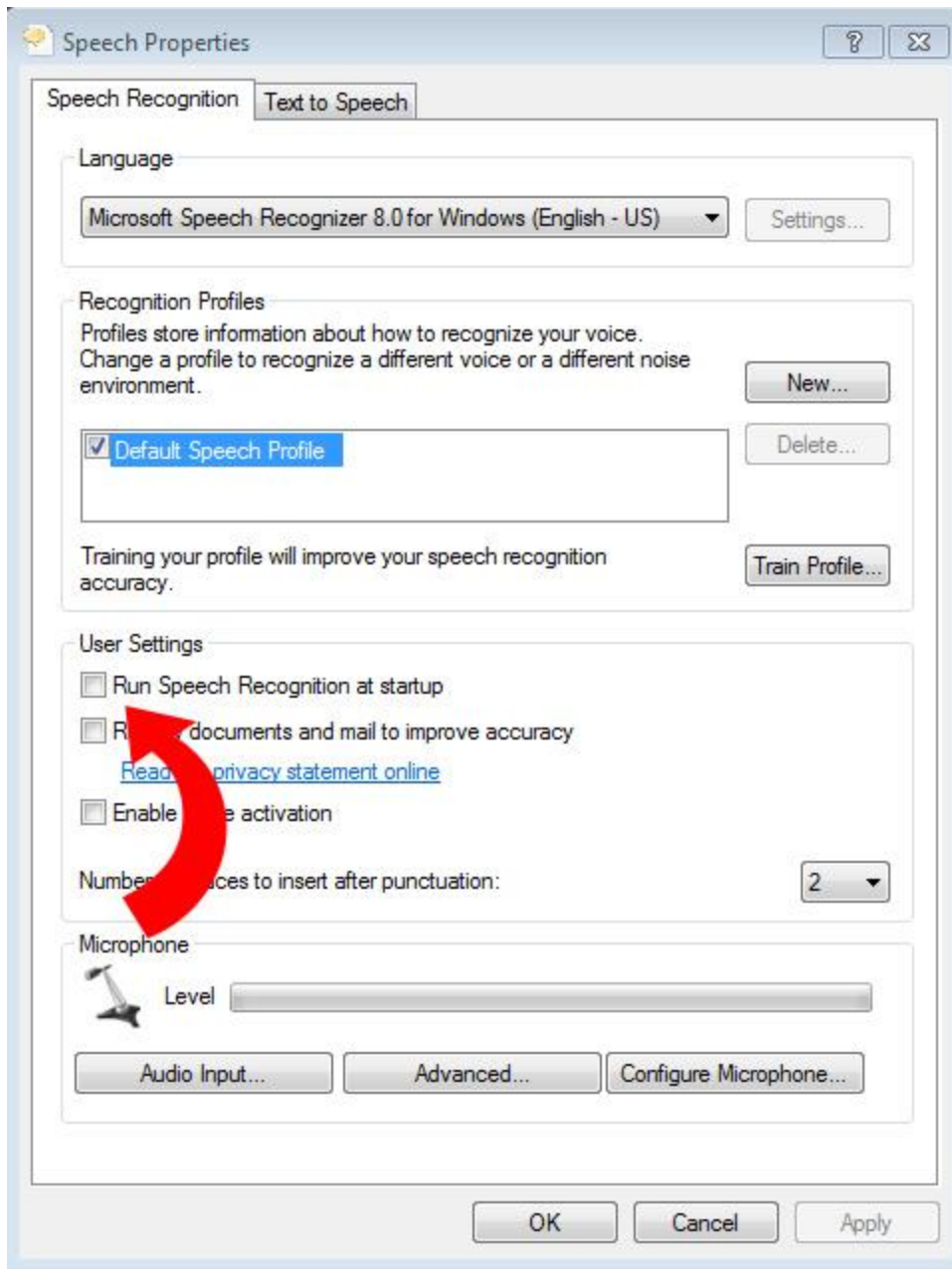
## Step 2:

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 unchecked on the **Speech Properties** -> **Speech Recognition** page, which is located in the Windows Control Panel.





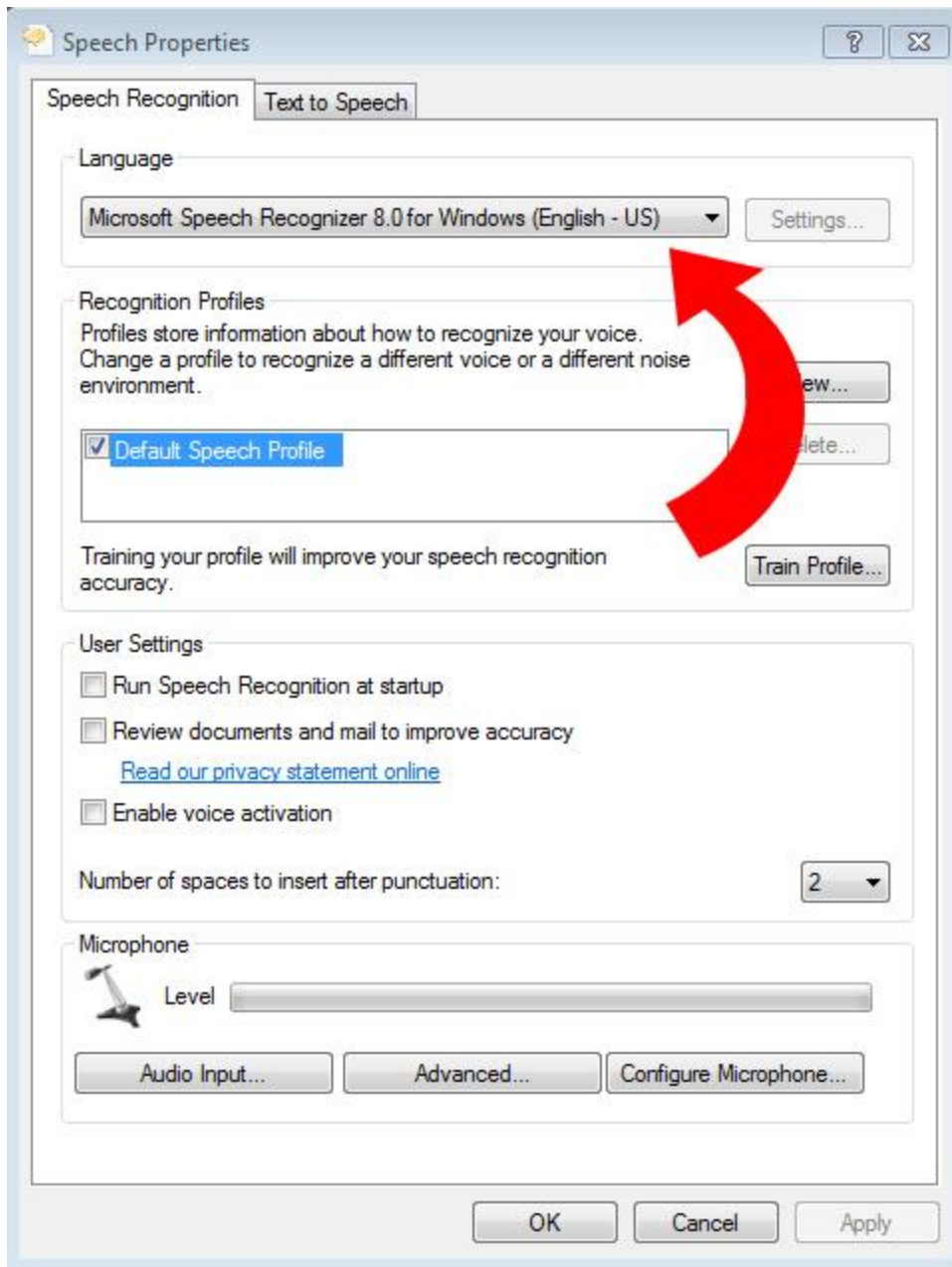
Make Sure 'Run Speech Recognition at start-up' is UNCHECKED!

**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 download the **English - US** language pack from [Microsoft](#) 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. [Click this link to learn how!](#)



[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.

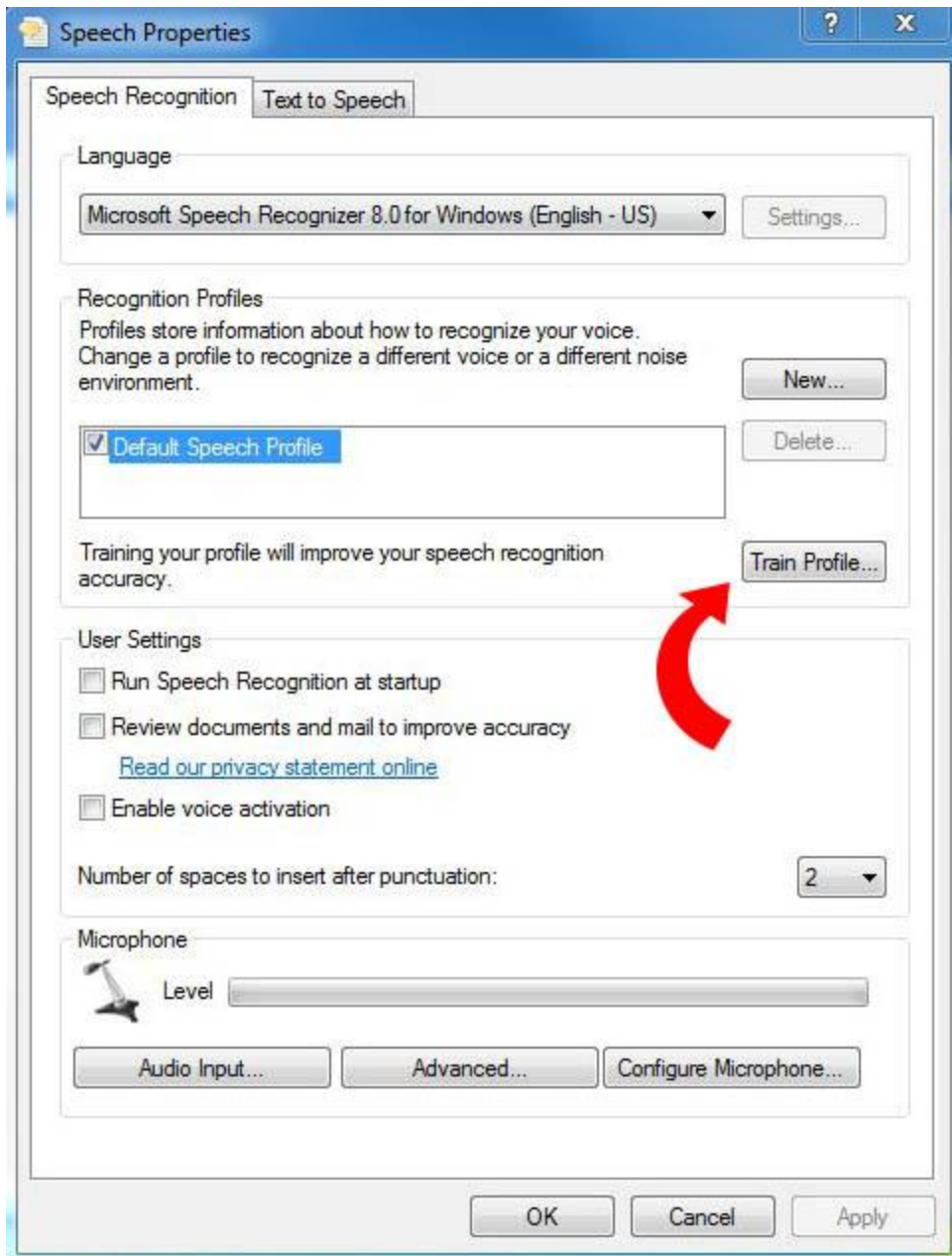
#### **Step 4:**

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.



## TIPS FOR USING VOICE CONTROL:

Voice control is not always 100 percent accurate. While speech recognition technology is getting pretty good, computers are still not as good as the human ear. And even the human ear makes mistakes.

During development, FS2Crew used Windows 10. We found the accuracy of voice recognition to be extremely good. We recommend all users upgrade to Windows 10.

Here are some tips to help improve speech recognition accuracy:

- ✓ Run the Voice Training Profile in the Microsoft Speech Recognition properties.
- ✓ Speak clearly and distinctly.
- ✓ Do not mumble or slur your words.
- ✓ Use a high-quality microphone (USB are best).
- ✓ Try to reduce ambient background noise.
- ✓ Try to speak with an American accent.

You can also try to improve voice recognition accuracy rates by using the dictation facility in Windows. Start speech recognition in Windows, open a text document and dictate a list of the words you are having trouble with. Every time the speech recognizer makes a mistake, use the "**CORRECT THAT**" voice command. This effectively trains the engine to recognize how you pronounce those words.

You may need to dictate and correct some words multiple times until recognition improves.



If you forget the required checklist response, say "**SET AND CHECKED**" to skip to the checklist item!

## SUPPORT:

The FS2Crew team works hard to provide its international user base with the friendliest and most prompt support in the business.

Please address all support issues to the [FS2Crew Support Forum](#), located at Avsim.

An Avsim membership, which is available for free, is required to post.

Please allow up to 24 hours for a response owing to international time zone differences.

You can also contact FS2Crew support by sending us a Support Ticket.

## THE WAY FS2CREW HANDLES VOICE RECOGNITION:

To improve the end-user's experience, and to ensure minimum voice command "false positives", FS2Crew has taken the following steps.

*(By "false positive" we mean an uncommanded voice command, such as "gear down", being detected by the voice recognition system and implemented, even when the user didn't say "gear down".)*

First, FS2Crew has tied many voice commands to select conditions to reduce the likelihood of a false positive from undermining your in-game experience. For example, the "gear up" command will only work under select circumstances. So even though the speech recognition system might somehow *hear* "gear up", our system helps prevent an unintentional "gear up" command from being *implemented* by your FO, for example, when you're doing the pre-flight events or when you're taxiing.

## THE AUTOPILOT AND VOICE CONTROL:

With this version of FS2Crew, you can command the FO/PNF to set the autopilot panel regardless of whether the autopilot is on or off. Note if you manually change a value on the autopilot panel, such as speed, heading, course or altitude, and then you announce what you did, the FO will not acknowledge what you've done (unlike the 737 versions). This is because FS2Crew is unable to "read" the values in the autopilot panel.

**Pilot Flying:** *"Set Speed 210"*.

*Pilot Not Flying then dials Speed 210 in the autopilot.*

**Pilot Not Flying:** *"Speed 210 Set"*.

**Pilot Flying:** *"Check"*.

**Pilot Flying:** *"Arm Altitude 5000"*.

*Pilot Not Flying then dials 5000 in the autopilot and arms it.*

**Pilot Not Flying:** *"Altitude 5000 Armed"*.

**Pilot Flying:** *"Check"*.

*Note: Autopilot commands will only work while airborne.*

**For a full list of autopilot voice commands, please consult Appendix D.**



# VOICE CONTROL: SETTING UP SOFT AND HARD MUTE

## 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.

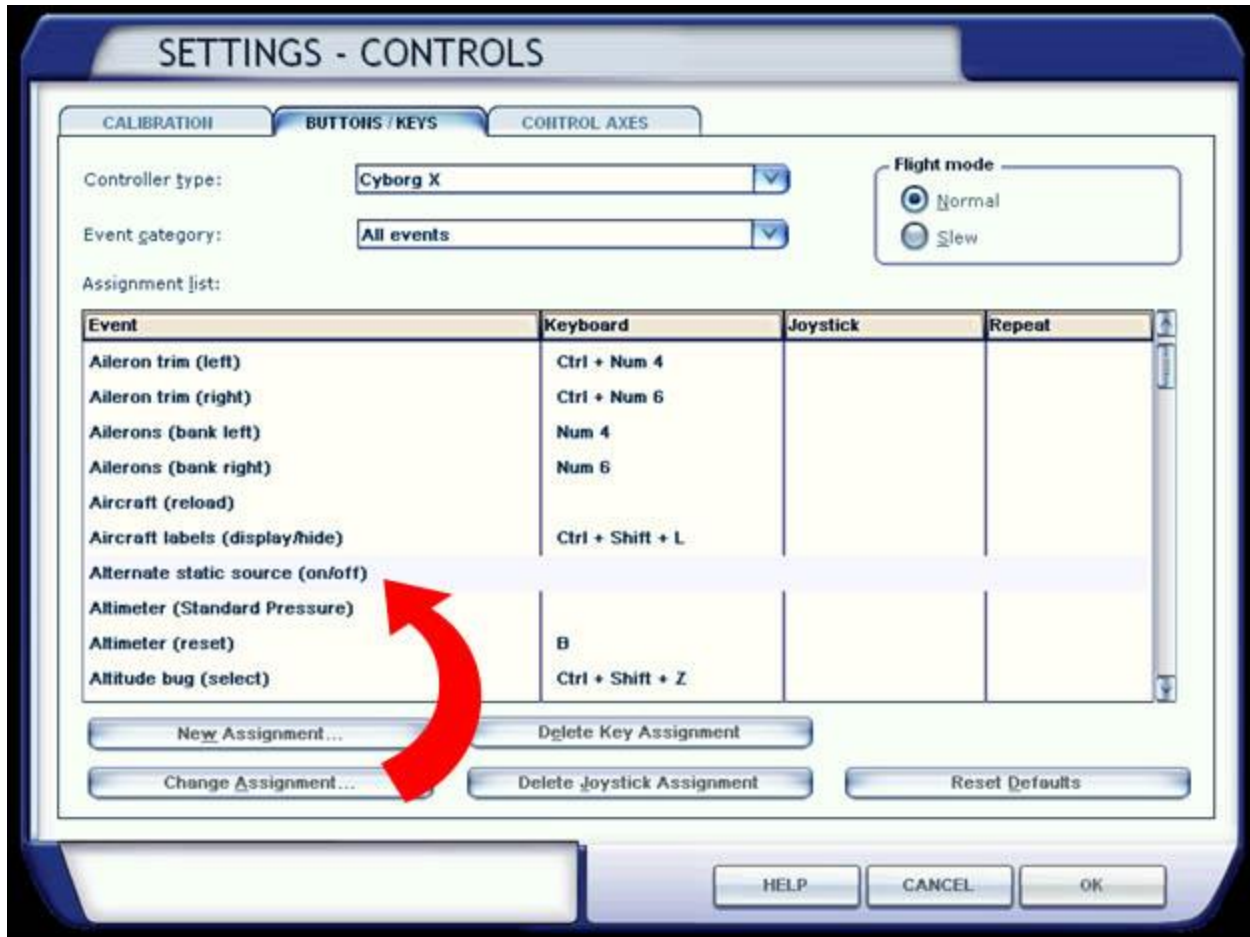
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## SOFT MUTE (VOICE CONTROL)

- Used when you only want to employ Mute *temporarily*, such as when communicating with on-line 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.
- 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!**

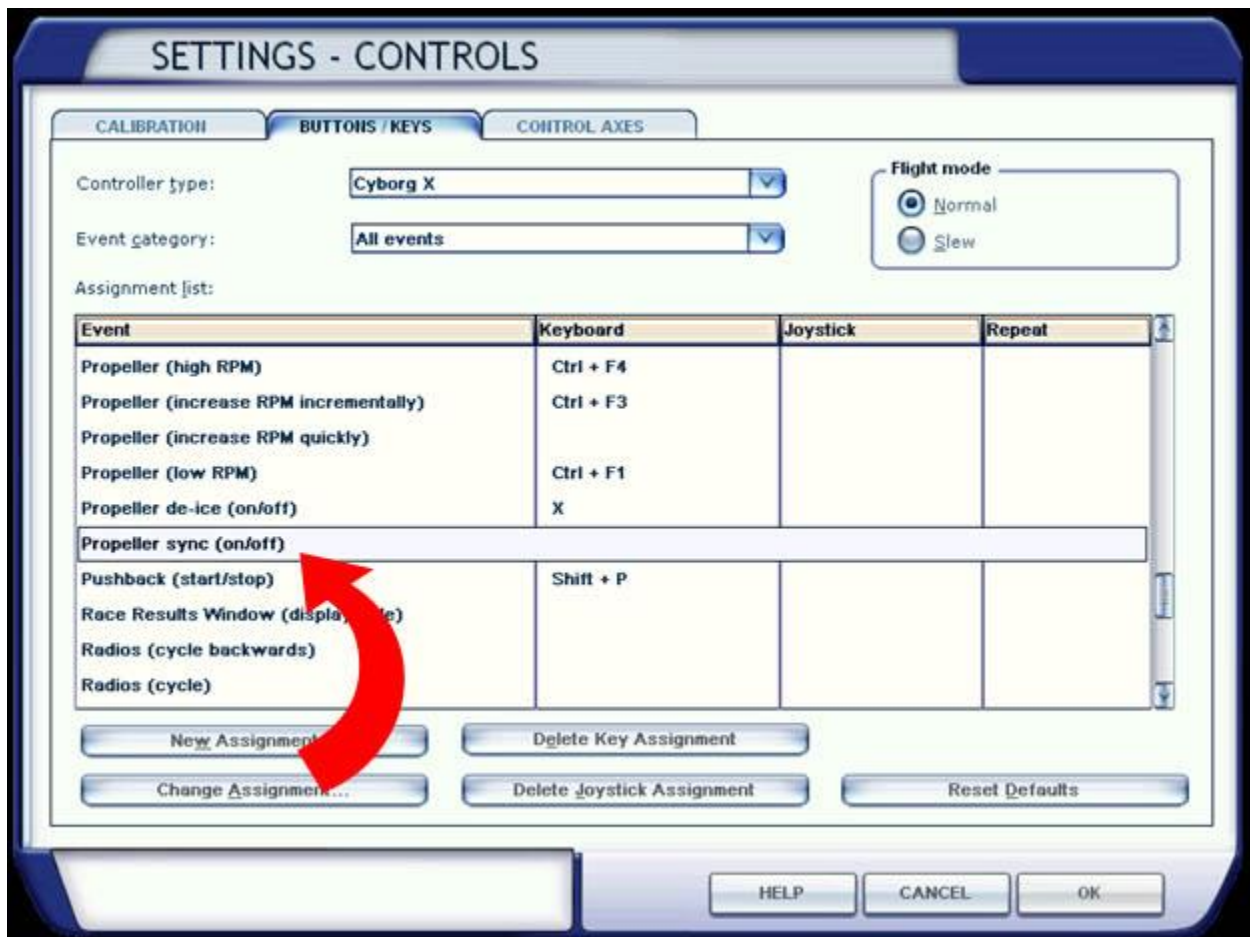
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# MADDOG SETTINGS

To avoid duplicate callouts, please disable the built in First Officer as shown below in the Maddog “Manager and Setup” Utility by unchecking “**ENABLE FIRST OFFICER CALLOUTS**”.

## FS2CREW PANEL OVERVIEW:

### OPENING AND CLOSING THE MAIN PANEL

To open the Main Panel, create 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. Most 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.

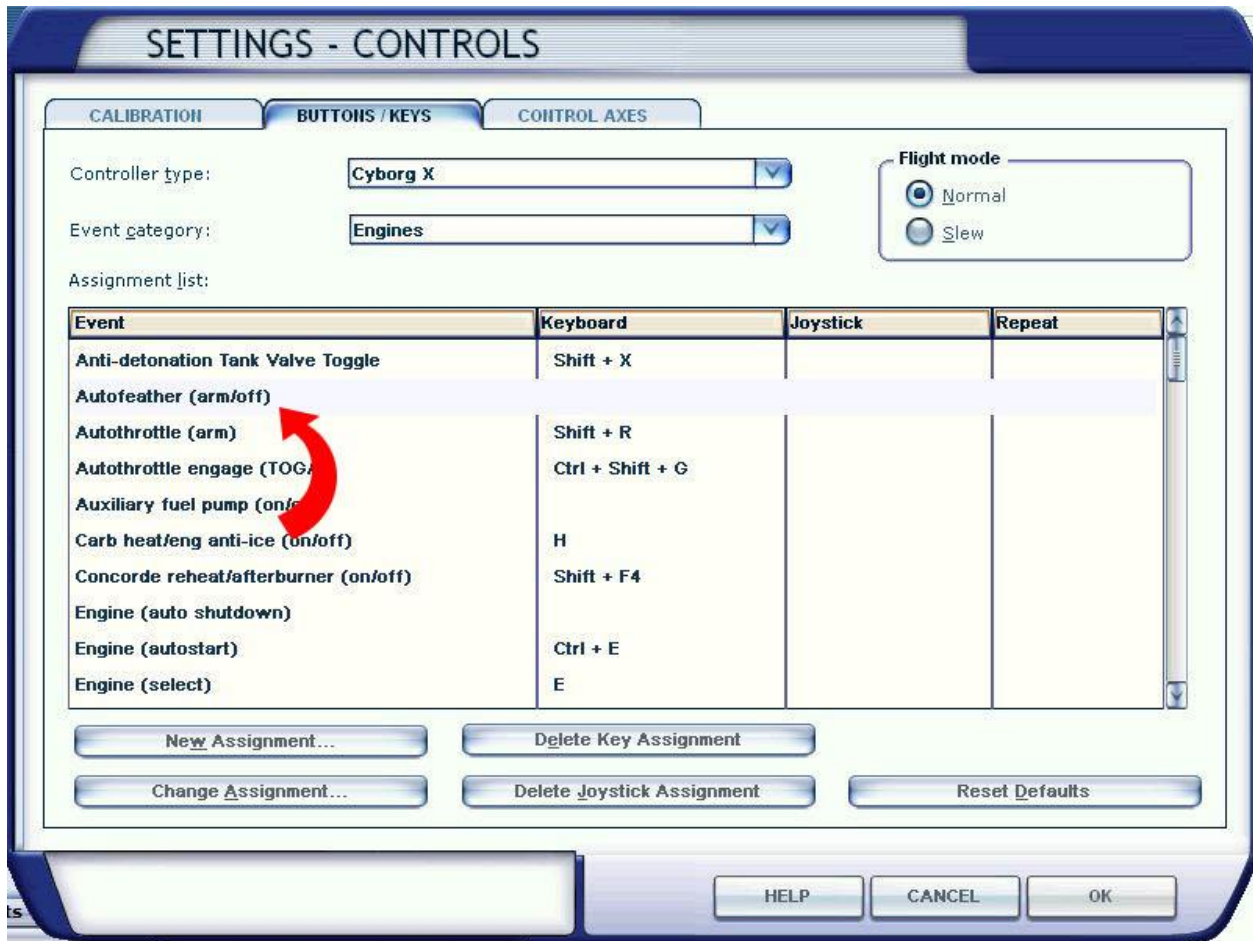
#### FOR NON-ENGLISH USERS:

**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)



**WE STRONGLY RECOMMEND USING THE "N" KEY FOR THIS ASSIGNMENT!**



**IF USING P3D V4 OR GREATER, IT MAY TAKE SEVERAL SECONDS FOR THE MAIN PANEL TO APPEAR AFTER YOU PRESS THE BUTTON!**



**FS2CREW PANEL NIGHT LIGHTING IS CONTROLLED VIA THE PANEL LIGHT SWITCH KNOB:**



**THE PANEL KNOB CONTROLS FS2CREW NIGHT LIGHTING**

## Main Panel:



### *From Left to Right:*

#### **Display Area:**

Displays current Checklist/Mode.

Numeric Value on Left = Crew Volume value.

Numeric Value on Right = Pre Flight time remaining if the Pre-Flight events are running.

M = Mute. Displayed when either:

1. *Mute key is depressed.*

When M is visible the speech recognition engine will still detect speech, but the FS2Crew FO will not act on the speech command detected. This is useful when talking to on-line ATC.

#### **Arrow:**

Cycles active Checklist/Mode.

#### **Voice:**

Toggles Speech Recognition Engine ON/OFF.

#### **DSP:**

Toggles green display bar that shows detected words ON/OFF.

#### **HS:**

Toggles Headset ON/OFF. Audio device associated with Headset must be selected on the Configuration Panel. When Headset is select to ON, the First Officer's voice will be audible through the headset.

When head is selected to OFF, First Officer's voice will be audible through your speakers.

**HM:** Enables Hard Mute. During long stretches of time when you do not anticipate making a voice command, enabling hard mute is recommended to prevent the First Officer from acting on any non-intended speech inputs.

**CFG:** Opens/Closes the CONFIGURATION PANEL.

**PS:** Opens/Closes the PANEL SWITCHER PANEL.

**RIGHT SCREW GRAPHIC:** Closes Main Panel.

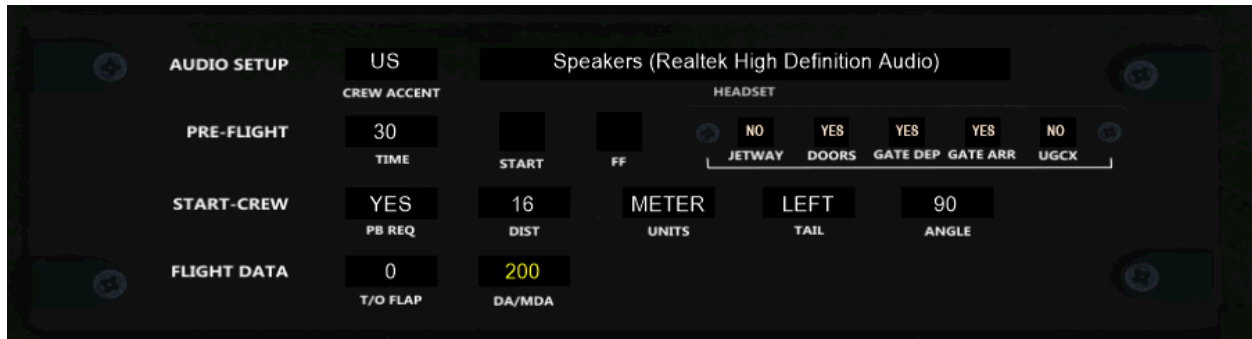
#### **NOTE: How to control the FS2Crew Volume**

Put you mouse over the INT knob on the Captain's Audio panel and scroll the mouse wheel to twist the knob. Note: Your master speaker volume in the Windows Control Panel should be set to 100 percent.





# FS2CREW CONFIGURATION PANEL OVERVIEW:



## Configuration Panel General Notes:

Use the LEFT and RIGHT mouse buttons to adjust settings:

- **Left Mouse Button:** Decrease Selection.
- **Right Mouse Button:** Increase Selection.

## Audio Setup Section:

<b>CREW REGION:</b>	Active voice set.
<b>HEADSET:</b>	Desired audio device for use with headset.
<b>RIGHT SCREW GRAPHIC:</b>	Closes Main Panel.

## Pre-Flight Section:

<b>TIME:</b>	Time remaining to departure.
<b>START:</b>	Start pre-flight events. <b>Note: Running the pre-flight events is OPTIONAL. ONLY PRESS START IF YOU WANT TO RUN THE PRE-FLIGHT EVENTS!</b>
<b>FF:</b>	Fast Forward TIME down in increments of one minute. Note: The time will also show in the Main

Panel. You can left click the value shown on the Main Panel to bring the time down fast.

**JETWAY:** If selected to YES, FS2Crew will attempt to connect/disconnect the jetway. This only works if a default jetway is available and you are in a designated parking spot.

**DOORS:** If selected to YES, FS2Crew will automatically attempt to position the outer doors. If you prefer other programs (like FsPassengers) control the doors, select NO for this option.

**GATE DEP:** If parked at a gate location and you want FS2Crew to control the jetway, select this option to YES.

**GATE ARR:** If you will be parking at a gate at the arrival airport, select YES to have FS2Crew to automatically connect the jetway.

**UGCX:** If selected to YES, the built-in pushback feature is disabled to avoid any potential conflicts with UGCX.

**Start Crew Section:**

**PB REQ:** If pushback is required, set to YES. If a pushback is not required, set to NO.

**DIST:** Pushback distance.

**UNITS:** Feet or meters for pushback distance.

**TAIL:** Left, right or straight.

**ANGLE:** Pushback tail angle.

## **Flight Data Section:**

### **T/O FLAP:**

Take off Flap. If not using an OPTIMUM (DIAL-A-FLAP) takeoff flap setting, you can change the TO Flap setting via the Left/ Right mouse button.

### **DA/MDA**

Displays the Decision Altitude / Minimum Descent Altitude.

The DA/MDA value is based on the DA/MDA bug on the Captain's altimeter, corrected for the arrival airport's landing elevation rounded down to the nearest 1000 feet. Example: Bug = 500 feet. Landing Elevation is 2300 feet. DA/MDA = 2500 feet.

In cases where the arrival airport's elevation is over 1000 feet, for FS2Crew to auto adjust the DA/MDA using the arrival airport's landing elevation, you must have an active route in the FMC. If no active route has been entered in the FMC, FS2Crew cannot read the elevation of the landing airport, and FS2Crew will then default the landing elevation to zero feet. Use the left/right mouse button/wheel to increase/decrease the DA/MDA in increments of 1000 feet.

# FS2CREW MADDOG NORMAL CHECKLIST

## Notes:

- Green text means that checklist (or portion of checklist) is read silently by the FO/PNF.
- The Before Leaving Aircraft Check is Read and Do.
- The FO will respond to many of his own challenges since he controls those switches directly and will perform them as read-and-do items (such as the hydraulic switches).
- If you get stuck, speak “**SET AND CHECKED**”.
- If a word a multi-word response is underlined, the underlined word is the TRIGGER word the speech recognition is listening for. Be sure to say that word clearly and distinctly from the other words!
- \* symbol means samples or extra notes are available.

## PRE-START CHECK (Above the Line)

Circuit Breakers	.....	Checked
L & R Bus Tie/ DC Bus X Tie	.....	Auto/Open
Emerg Power	.....	Checked/Off
Galley Power	.....	On
Cabin Alt Cntrl Wheel/Lever	.....	Auto/Valve Open
Pneum X-Feed Valve Levers	.....	Open
Cabin Press Control	.....	Set
Cockpit / Cabin Control Temp	.....	As Required
Oxygen Cyl Press	.....	Checked
Flight Recorder	.....	Checked/Set
Voice Recorder	.....	Checked
CADC/FD CMD/ EFIS SEL	.....	Norm
Eng Sync Selector	.....	Off
GPWS	.....	Checked
Anti-Skid	.....	Checked/Armed
Stall Warning	.....	Checked
Max Speed Warning	.....	Checked
Mach Trim Compensator	.....	On/Norm
Yaw Damper	.....	On
Radio Rack	.....	Fan
Air Cond Shutoff	.....	Auto
Ram Air	.....	Off

Fuel Pumps	.....	Checked
Ignition	.....	Off
Emer Lights	.....	Checked/Armed
No Smoking/Seatbelt SW	.....	On/On
Pitot Heat	.....	Checked/Off
Airfoil / Eng Anti Ice	.....	Off
Windshield Heat	.....	On
Annunciator/ Digital Lights	.....	Checked
DFGS / Nav aids	.....	Set
Flight Instruments	.....	Checked
Brake Pressure & Temp	.....	Checked
Hydraulic System	.....	Checked
Gear Lights & Aural Warning	.....	Checked
Fuel Used	.....	Reset
Engine Instruments	.....	Checked
Static Air Selector	.....	Norm
TCAS	.....	Checked
Radar	.....	Checked
Rud Hyd Control Lever	.....	Pwr
Fuel X-Feed Lever	.....	Off
Fuel Switches	.....	Checked
T/O Warning	.....	Checked
Stabilizer	.....	Checked
Spoilers	.....	Disarmed/Ret
Flaps/Slats	.....	Up / Ret

**PRE-START CHECK (Below the Line)**

Covers & Pins	.....	Removed
Aircraft Log & Documents	.....	Checked On Board
Altimeters	.....	QNH... /Set/ <u>Checked</u>
Fuel/Oil/Hyd Quantity	.....	Checked
Zero Fuel Weight	.....	Set
TRP	.....	Takeoff/ ___ Takeoff Flex
Stabilizer	.....	___Set*
Flaps Takeoff Selector	.....	Stowed
Speed Bugs	.....	Set

*\*Accepted responses for the Stab Setting: “One point 0” through to “12 point 0.” Whole numbers only, 0 through 12.*

**BEFORE START CHECK**

Parking Brakes	.....	Set/Released
Doors	.....	Closed*
Start-up & Pushback Clrnce	.....	Approved
Pneum X-Feed Valve Levers	.....	Open
Aux & Trans Hyd Pumps	.....	As Required
Anti-Collision Light	.....	On
Air Cond Supply	.....	Off
Fuel Pumps	.....	On
Galley Power	.....	Off
Ignition	.....	Both
Transponder	.....	Set to ALT OFF
Pneum Press	.....	Checked

*\*If the doors are open the FO will inform you. You will need to close the doors. The doors should close automatically around the plus 4-minute mark, but if they don't you will need to ask the FA to close the doors by making a PA announcement. Please see the section detailing the list of available P.As.'s. After the doors have been closed, you will need to run the Before Start Checklist again by saying "START AGAIN".*

**AFTER ENGINE START CHECK**

Ignition	.....	Off
Electrical Loads	.....	Checked
Air Cond Supply	.....	Auto
Galley Power	.....	On
Ice Protection Panel	.....	Off/ Eng anti ice on/ Both on
Pneumatic X-Feed Valve	.....	Closed/Open
Flight Controls	.....	Flt Cntrls Check Completed
Hyd Pumps & Press	.....	<u>Checked</u> /Hi/On*
Annunciator Panel	.....	Checked
Ground Equipment	.....	Removed
All Clear Signal	.....	Received
Flaps Slats	.....	Set

**Notes:**

*\* FO will set the Hyd Pumps. You need to confirm this by saying "CHECKED" to advance to the next checklist item.*

**TAXI CHECK**

Fuel Heat	.....	Not required/ On / Off
Flaps & Slats	.....	___ Degrees Takeoff *
EPR Bugs & TRP	.....	Set and Checked*
Takeoff Speeds	.....	No Changes, Verified*
TO Briefing	.....	Performed
ATC/DFGS/Nav aids	.....	Set and Checked
FMS	.....	Pre-Flight Completed
APU Air/Master SW	.....	Both Off/ Air Off
Brake Temp & Pressure	.....	Checked

**\*Accepted Responses:**  
*XX degrees takeoff*

*For EPR you can also say “Takeoff - Auto” or “Takeoff Flex - Off”*

*For takeoff speeds you can also just say “Verified.”*

**LINE UP CHECK**

Cabin	.....	Secured
Windows	.....	Left Side Closed
Annunciator Panel	.....	Checked
Ignition	.....	Set to A/B/Both*
Air Cond Supply	.....	Auto/ Manual
Transponder	.....	TARA*
Takeoff Clearance	.....	Received*

**Notes:**

*\*You can also simple use “Alpha” or “Bravo” for the IGNITION challenges.*

*\*FO answers own challenge, just like he does with Hydraulics.*

*\*You can say “TO GO” or “TO COME”. After the takeoff clearance has been received, you can close the checklist by saying: “TAKEOFF CLEARANCE RECEIVED.”*

**CLIMB CHECK**

ART	.....	Auto
Gear	.....	Up

Flaps/Slats	.....	Up / Retracted
Autospoilers/ABS	.....	Off / Disarmed
Flaps TO Selector	.....	STOW
Trans & Aux Hyd Pumps	.....	Off
Pressurization	.....	Checked
Ignition	.....	Set
Fuel Pumps	.....	As Required
Seatbelts	.....	On / Off/ Auto

**DESCENT CHECK**

Pressurization	.....	Set
Fuel Pumps	.....	Set
Hydraulic Pumps	.....	Hi / On
Fuel Quantity	.....	Checked
Approach Briefing	.....	Performed
Landing Data	.....	Set

**Note:**

*For the Fuel Quantity challenge, you can say “XXXX POUNDS /TONS / KILOGRAMS”.*

**APPROACH CHECK**

Navigation	.....	Set
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**FINAL CHECK**

Gear	.....	Down
Ignition	.....	Set to A /B/Both
Autospoilers & Autobrakes	.....	Armed
Flaps & Slats	.....	Flaps ___ land
Landing Clearance	.....	Received*

**Note:**

*You can say “TO GO” or “TO COME”. After the landing clearance has been received, you can close the checklist by saying: “LANDING CLEARANCE RECEIVED.”*



## AFTER LANDING CHECK

Spoiler/ ABS	.....	Ret & Off
Flaps/ Slats	.....	15 Degrees TO
Pneum X-Feed	.....	Open
Xpdr	.....	ALT OFF
Radar	.....	Off
Air Cond Supply	.....	As Required
APU	.....	As Required

## PARKING CHECK

Parking Brakes	.....	Set
Flaps/Slats	.....	Retracted
APU/EXT Power	.....	Established
Fuel Levers	.....	Off
Anti-Collision	.....	Off
Hyd Pumps	.....	Off
Seat Belt SW	.....	Off
Ice Protection Panel	.....	Off
Xpdr	.....	Standby

## BEFORE LEAVING AIRCRAFT CHECK

Emergency Lights	.....	Off
Air Cond	.....	Off
Galley Pwr	.....	Off
Windshield A-Ice & A-Fog	.....	Off
Pitot Heat	.....	Off
Lights/Screens	.....	Off
APU	.....	Off
Batt SW	.....	Off

# CREW FLOWS

## CAPTAIN/PILOT FLYING:

### Pre-Start Procedure

1. Parking brake on.
2. Battery switch on and lock.
3. Perform fire loop tests.
4. Connect External Power and put EXT power on the buses. If EXT power is not available, use the APU.
5. After starting APU, set APU Air Switch to ON, check air pressure in the center duct, open the right PNEU-X-FEED. Next, set the Right Air Cond Supply to AUTO.
6. If Start Pump was ON, set the Right Aft Fuel Pump to ON and set the Start Pump to Off.
7. POS/STROBE light to BOTH and WING/NACL lights to ON.
8. **ONLY AFTER APU/EXTERNAL POWER IS ESTABLISHED, PRESS "START" ON THE FS2CREW CONFIGURATION PANEL. That is CRITICAL!!!**
9. Cage Standby Attitude Indicator
10. Perform Emergency Light test with FA.
11. Setup Flight Data Recorder Panel.
12. Perform External Walk Around.
13. Setup FMS and flight control panel.
14. Rotate Bank Angle Limit to 15°.

**After FO's Pre-Flight Procedure Complete (This procedure is complete when an \* symbol appears to the right of PRE-START (B) )**

1. Set Speed Bugs according to Speed Booklet.
2. Brief the FO for the departure:

**"ARE YOU READY FOR THE DEPARTURE BRIEF?"**

**"ANY QUESTIONS?"**

### **+5 Minutes**

1. Enter ZFW in FMS PERF Page.
2. Set values in flap setting and CG windows.
3. Set stabilizer trim.
4. APU should be on by this point. Make sure APU air is selected.

### **+4 Minutes**

1. Seatbelt sign to ON
2. Call for **“PRE-START CHECK BELOW THE LINE”**

### **+1 Minute after the Load Sheet Arrives**

1. Call for **“BEFORE START CHECK”**

## **Before Engine Start**

1. After responding to the “PUSHBACK AND START” challenge in Before Start checklist, the FO will this perform his Before Engine Start flow and complete the remaining section of the checklist silently.

## **Start Crew and Pushback**

1. See Dialogues section in Manual for required Speech Phraseology.

## **Engine Start**

1. Double check sufficient pneumatic pressure available for engine start is above 36 psi, as per the graphic shown here:



2. Call: **“START RIGHT ENGINE”**.
3. Start timer.

4. When FO calls “FUEL ON” at approx. 22 percent N2, move the fuel lever to ON, announce “FUEL ON”, and take the time.

When right engine stabilized:

1. Set Engine Anti Ice to on if required.
2. Reset timer.
3. Call “START LEFT ENGINE” and repeat the same procedure.

To abort the start, call “ABORT START”. The FO will release the Start Switches. If the fuel levers are on, the FO will hold the Start Switches for 30 seconds before releasing them.

#### Notes:

*FO will not allow engine start until the doors have been closed.*

*Make sure that your Maddog is configured properly for an engine start. If you call for engine start and nothing happens, check your setup!*

#### After Engine Start

1. Galley Power ON.
2. Check Electrical Loads (AC and DC) in limits.
3. Set air conditioning supply switches to AUTO.
4. Ignition as required.
5. Call for “AFTER ENGINE START CHECK” or “AFTER START CHECK”.
6. When FO calls for the “FLIGHT CONTROLS” challenge, check the flight controls:
  - AILERONS: “LEFT... SPOILER DEPLOYED”
  - AILERONS: “RIGHT...SPOILER DEPLOYED”
  - ELEVATOR FORWARD: “ELEVATOR POWER ON” \*
  - PEDALS: “PEDALS”
  - When done call: “FLIGHT CONTROLS CHECK COMPLETED”.

\*When elevator is in full aft position, “Elevator Power” will not be displayed”.

## Taxi

1. Call “**WE ARE CLEAR ON THE LEFT**”.
2. Set Landing Lights/Nose Light to EXT OFF/DIM.
3. Calls “**TAXI CHECK**” when in a clear area.
4. Leave APU on (or turn APU Air/APU Master OFF as desired) during APU challenge.
5. Press TOGA button on throttle (**Keyboard shortcut: CTRL SHIFT G**) and check FMA showing TAKE OFF/TAKE OFF.
6. Briefly flick the throttles to max and then return to idle to check for any takeoff warnings.

## Lining Up

1. Announce: “**CABIN CREW BE SEATED FOR TAKEOFF**” or “**CABIN CREW SEATS FOR TAKEOFF**”.

DO NOT FORGET TO MAKE THAT PA AS IT IS THE TRIGGER FOR THE FO TO PERFORM HIS LINE-UP FLOW!!!!

2. Ignition as required.
3. Set Landing Lights to EXT ON.
4. Switch on Weather Radar.
5. Call “**LINE-UP CHECK**”.
6. When cleared for Takeoff:
  - i) Nose lights to BRIGHT.
  - ii) Cycle seatbelt switch.
  - iii) Ask FO: “**READY?**” ← **DO NOT FORGET THIS CALL, ESPECIALLY ON A THRU-FLIGHT!!!!!!**
  - iv) When FO answers ‘Yes’, start timing. Timing means to turn on the clock to show flight time, not chrono.

## Takeoff

1. Announce: “**TAKEOFF**”.
2. Advance throttles to 1.40 EPR, then switch Autothrottle to ON

## Climb

1. After PNF calls “Positive Rate” call “**GEAR UP**” and select Landing Lights/Nose Light to RET OFF/OFF.
2. At 400 feet call “**ARM NAVIGATION**” or “**ENGAGE HEADING SELECT**”.
3. At 1500 feet call “**SELECT CLIMB POWER**”.
4. At 3000 feet call “**ENGAGE VNAV**” or “**ENGAGE IAS**”
5. Regardless of takeoff flap used, you will always skip directly to: “**FLAPS UP**” and then “**SLATS RETRACT**”. You will not retract the flaps in stages.
6. When slats retracted, call “**CLIMB CHECK**”.
7. Rotate Bank Angle Limit to 25°.
8. Switch seatbelt to OFF (conditions permitting) when FO/PNF calls for the “SEATBELTS” challenge and announce what you’ve done.
9. If Speed and Vertical Speed or IAS/MACH is used during the climb, transition from IAS to Mach reference happens at approx. FL270.
10. PNF Disarms autobrake.

## Altimeter Check (When cleared to a Flight Level)

1. Announce: “**TRANSITION... PASSING FLIGHT LEVEL\_\_\_\_... NOW**”
2. Trigger word is “**NOW**”.
3. Say NOW when passing the Flight Level mentioned.
4. “TRANSITION” is the trigger word used by the FO to set 2992/1013 on his altimeter. *Make sure “TRANSITION” is pronounced distinctly and separately from the other words!*

## Passing 10,000 / FL100

1. Cross check altimeters.
2. Set the Seatbelts as required (or ask the FO to set the seatbelts if desired).

## Cruise

1. Make a PA announcement if desired. Note that in FS2Crew there are no pre-canned PA announcements. You will need to make your own.
2. Set power on TRP to Cruise (CR).

## Just Prior to Top of Descent

1. Transponder to BELOW.
2. Brief for the approach, ask if there are any questions, and respond either “YES” or “NO” to the Autoland question.
3. Confirm the Decision Altitude for the approach in the FS2Crew Configuration Panel. Remember to use the DH bug on the Captain’s altimeter.
4. Call “DESCENT CHECK”.

## Altimeter Check (When cleared to an Altitude below the Transition Level)

1. Announce: “TRANSITION.... ALTIMETERS \_\_\_\_\_, PASSING \_\_\_\_\_ FEET... NOW”
2. Trigger word is NOW.
3. Say **NOW** when passing the altitude mentioned.
4. “TRANSITION” is the trigger word used by the FO to set the local alt setting on his altimeter.

## Passing 10,000 / FL100

1. Seatbelt signs on.

## Approach

1. Setup Nav Radios for the approach.
2. Call “**APPROACH CHECK**”.

## Landing (On Final)

1. Ignition as required.
2. Ask FO/PNF to set NAV 1 Frequency and NAV 1 OBS on NAV 2 using the following commands:

“**SET ILS ON NAV 2**”

“**SET LOCALISER ON NAV 2**”

“**SET VOR ON NAV 2**”

3. Call: “**LOCALISER CAPTURE**” AND “**GLIDESLOPE CAPTURE**” as appropriate.
4. Landing lights/Nose lights to EXT ON/DIM when passing the outer marker or at 4DME.
5. Rotate Bank Angle Limit to 15°.
6. Nose landing light to ON after landing clearance received.
7. Call “**FINAL CHECK**” when final landing flap selected.
8. If landing clearance has not been received during the LANDING CLEARANCE challenge, respond with “**TO GO**” OR “**TO COME**”. Close the checklist by announcing: “**LANDING CLEARANCE RECEIVED**” when landing clearance received.

## After Landing

1. Call “**AFTER LANDING CHECK**” or “**AFTER LANDING CHECK WITHOUT APU**” if APU not to be used.
2. Landing lights/Nose lights to EXT OFF/DIM



## Pre-Shutdown

1. Call “**FLAPS AND SLATS**” when entering gate/stand position. The FO will set the flaps/slats to up.
2. Landing lights/Nose lights to RET OFF/OFF
3. IF APU NOT RUNNING: Connect external power and put external power on the buses IF you asked the FO to perform the After-Landing check WITHOUT turning the APU. See Maddog manual for info on how to connect external power.
4. Shutdown both engines (position the fuel levers to OFF).
5. When engines shutdown, seat belt signs to OFF.
6. Call “**PARKING CHECK**”.

# FIRST OFFICER/PILOT MONITORING:

## Pre-Flight Main Procedure

1. PFD's on.
2. ND's on.
3. Annunciator lights test.
4. Flight Director's on.
5. EFIS Test.
6. Autoland availability test.
7. Trim test.
8. Engine sync selector off.
9. Galley power on.
10. Fuel pump switch test.
11. No Smoking on.
12. Pitot heater test.
13. Windshield heat on.
14. Pneumatic X-Feeds open.
15. GPWS test.
16. Windshear test.
17. Anti Skid test.
18. Stall test.
19. Overspeed test.
20. Yaw damper on.
21. Ice FOD test.
22. TCAS test.
23. Set Xponder to above.
24. Takeoff warning test.
25. Hydraulic pump test.
26. Gear test.
27. Wx radar test.
28. Set altimeters.
29. TRP test.
30. TRP to Takeoff\*
31. ADF test.
32. ZFW test.
33. Show ZFW.

*\*FS2Crew assumes you will be using full takeoff thrust, so the FO will set TRP to TAKEOFF. However, if you wish to enter an assume temp for a reduced thrust takeoff, you will need to do so manually.*

## **Before Engine Start**

*Trigger -> Speech Command: **"APPROVED"** after START UP CLEARANCE challenge in Before Start Checklist.*

1. Pneumatic X-Feed valve levers open.
2. Aux & Trans Hyd Pumps on.
3. Anti-collision lights to on.
4. Air cond supply both off.
5. Fuel pumps switches on.
6. Ignition Both.
7. Galley Power Off.
8. Transponder to ALT OFF.
9. Checks pneumatic pressure at least 36 PSI.
10. Announces: **"BEFORE START CHECK COMPLETE, READY FOR ENGINE START"**.

## **Engine Start**

1. Takes time and engages respective engine start switch when command to start the left/right engine.
2. Checks pneumatic pressure.
3. When RIGHT/LEFT START VALVE OPEN annunciation comes on, calls **"RIGHT/LEFT START VALVE OPEN"**.
4. Subsequent calls: **"N2"**, **"OIL PRESSURE"**, **"N1"**, **"FUEL FLOW,"** **"EGT"**.
5. Release start switch around 40% N1 when Engine generator automatically switched to the electrical bus.
6. Announce: **"RIGHT/LEFT START VALVE CLOSED"**.
7. When engine parameters start to stabilize call: **"STABILIZING"** and resets timer.

## After Engine Start

*Trigger -> When both engines stabilized.*

1. Engine generator volts and frequencies correct.
2. Engine Ignition off.
3. Set CAPT Pitot Heater.
4. Checks Hydraulic pumps and switches are all HI/ON.

### Notes:

*1. The FO will position the pneumatic cross feed levers as per your response to the Pneumatic Cross Feed levers challenge during the After Engine Start Checklist.*

## Taxi

*Trigger -> Capt calling **"WE'RE CLEAR TO THE LEFT"** OR **"CLEAR ON THE LEFT"**.*

1. Flood lights ON.
2. Wing/Nacelle Lights ON.

### Notes:

*1. The FO will position the fuel heat switch during the Fuel Heat challenge as per your response. The fuel heat switch is a momentary toggle switch. You will not be able to see it move on the overhead panel, but the signal is being sent to the aircraft should you command the FO to set it to the on position.*

## Lining Up

*Trigger -> Capt PA **"CABIN CREW BE SEATED FOR TAKE OFF"**.*

1. Strobes ON.
2. Xpndr to TARA.
3. Arm autospoilers and autobrake.

## **Climb Check**

*Trigger -> Capt calling “CLIMB CHECK”.*

1. ART to Auto.
2. Ignition OFF.
3. Disarm autospoilers and autobrake.
4. Flaps TO selector STOWED.
5. Eng Hyd Pumps to LOW. Aux & Xfer Hyd Pumps to OFF.
6. Engine Sync to N1.
7. Centre Fuel Pumps on (if required).
8. Reads checklist silently except for last time: “SEATBELTS”.

## **20,000 Feet in Climb**

1. Flood, Logo and Wing Nacelle lights OFF.

## **Cruise**

1. No associated flows.

## **Descent**

*Trigger -> Capt calling “DESCENT CHECK”.*

1. Eng hyd pumps to HI and Aux & Xfer pumps to ON.

## **20,000 Feet in Descent**

1. Flood, logo and Wing Nacelle lights ON.

## Approach

Trigger -> Capt calling "**APPROACH CHECK**".

1. Engine Sync to off.

## Landing

Trigger -> Capt calling "**FINAL CHECK**".

1. Gear down call: Push GA on TRP and arm spoiler.
2. Arm autospoiler and autobrakes.

## After Landing

Trigger -> Capt calling "**AFTER LANDING CHECK**" or "**AFTER LANDING CHECK WITHOUT APU**".

1. Timer stopped.
2. Retract spoilers and disarm autobrake.
3. Flaps to 15.
4. Open Pneum X-Feed.
5. Sets Xpdr to ALT OFF.
6. Weather Radar to off.
7. Left Air Con supply to off.
8. Starts APU\*
9. Reads checklist silently.

*\*Only if "After Landing Check" vocalized.*

## Pre-Shutdown

Trigger -> Parking Brake Set

1. Connect APU to the buses\*

*\*Only if regular After Landing Flow used (APU turned on)*

## Shutdown

*Trigger -> Engine Fuel Levers to Cut-Off.*

1. Anti Collision light to off.

*Trigger -> Capt calling "**PARKING CHECK**".*

1. Fuel pumps off (Except Right AFT when APU running).
2. Hydraulic pumps off.

# SPEECH DIALOGUES

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**Alternative accepted voice commands/phrases are indicated with the “O” symbol.**

---

## **Conversation with Refueler during pre-flight when asking if fuel load is okay:**

- Yes
  - Yes, it is
- No

## **Conversations with gate agents and cabin crew during Pre-Flight events:**

- Thank you
  - Thanks

## **Start Crew**

### **Pushback Required**

- Cockpit to ground
  - Ground from cockpit
- We’re ready for the pushback and engine start
  - We’ve been cleared for pushback and engine start
  - We are now cleared for pushback and start
  - Cleared for pushback and engine start
- Brakes released
- Brakes set
- Thanks for the guidance
  - Good bye
  - See ya



*\*You can stop the pushback by saying “STOP PUSHBACK”.*

### **Pushback NOT Required (Engine Start Only)**

- Cockpit to Ground
  - Ground from Cockpit
- We're ready
  - We are ready
- You can disconnect now
  - You are cleared to disconnect

### **Ground Crew to Close the Cargo Doors**

- Cockpit to Ground
  - Close the cargo doors please

**Calling the FA – Asking to bring something to the cockpit after you pressed the FA call button on the overhead.**

- One coffee please
- One tea please
- A coffee and a tea please
- Some lunch please
- Some dinner please
- Some breakfast please
- One juice please
- One water please

**Calling the FA – Reporting something**

- I will keep you updated
  - I'll keep you updated
- I will keep you in the loop
  - I'll keep you in the loop
- I'll keep you informed
  - I will keep you informed

*Note: You need to end your statement with one of the phrases above as they are the trigger phrase that the speech recognition engine is looking for to trigger the FA's response.*

**Example:**

“We’re going to have to divert to Chicago because New York is closed. I’ll keep you in the loop”.

**Conversation with Engineer while at the gate at the arrival airport. Engineer will initiate contact. You will hear a chime sound when the engineer contacts you.**

- Go ahead
  - Yes

# GENERAL VOICE COMMANDS

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Alternative accepted voice commands/phrases are indicated with the “O” symbol.

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## Checklist General

- Set and Checked (in case you forget the required response)
- Repeat Last (repeat last checklist item)
- Say Last (repeat last checklist item)

## Restarting Checklist

- Start again
  - Let’s start again
  - Restart the Checklist
  - Let’s restart the checklist
  - Let’s restart the checklist from the beginning

## PAs for the Cabin Crew

- Cabin crew retract aft stairway
- Cabin crew extend aft stairway
- Cabin crew close doors and arm slides
- Cabin crew disarm slides and open doors

### **Note:**

*Generally the cabin crew will automatically open and close the doors, but should they not you can instruct them to do it manually using the PAs for the Cabin Crew listed above. Note that because FS2Crew cannot “read” the position of most of the doors, these commands will result in the associated door being blindly toggled regardless of its position.*

## Autopilot Commands

- Autopilot on/ off
- Autothrottle on/off
- Arm navigation
- Engage heading hold
- Engage heading select
- Select climb power
- Engage VNAV
- Engage ALT Hold/ Altitude hold
- Set Heading\_\_\_\_\_
- Set Speed \_\_\_\_\_
- Set \_\_\_\_\_ on my side/ on your side (This is for NAV1/NAV2)\*
- Set Course on my side \_\_\_\_\_ / Set Course on your side \_\_\_\_\_
- Set Mach \_\_\_\_\_
- Set IAS\_\_\_\_\_\*
- Arm Flight Level\_\_\_\_\_ (Make sure Flight Level pronounced\* distinctly)

*Use “ZERO” not “Oh” for Flight Levels:*

*Example: Flight Level Three Three Zero*

- Arm Altitude\_\_\_\_\_
- Set Mach Point\_\_\_\_\_
- Set Vertical speed down \_\_\_\_\_ (max 3900)
- Set Vertical speed up \_\_\_\_\_ (max 3900)
- Engage I A S
- Engage Mach
- Engage EPR Limit
- Engage Mach Select
- Engage Speed Select
- Flight Director On/Off
- Engage Vertical Speed
- Arm VOR /Arm Localiser / Arm ILS
- Engage FMS Override
- Arm Autoland
- Engage Turbulence
- Set (or select) MCT / Set (or Select)Maximum Continuous Thrust
- Set (or select) Cruise Power

\*Example: “Set 1 0 7 point 6 5 on my side”. That’ll set 107.65 in NAV1.

\*Also accepted: “Arm Flight Level One Hundred/ Two Hundred/ Three Hundred”/

*\*Regarding SET IAS \_\_\_\_\_. IMPORTANT: IAS (PITCHMODE) MUST BE ENGAGED BEFORE MAKING THIS COMMAND. YOU CAN USE THE COMMAND 'ENGAGE IAS' TO SET THE MODE TO IAS.*

### **Misc Commands**

- Set XXX point XX on Comm 1 / 2
- Set XXX point XX on Standby Comm 1 / 2
- Set XXX point XX on Nav 1 / 2
- Set XXXX on the Transponder
- Slats Extend/ Slats Retract
- Flaps up
- Flaps 11 (or flaps one one)
- Flaps 15 (or flaps one five)
- Flaps 28 (or flaps two eight)
- Flaps 40 (or flaps four zero)
- Start left engine/ Start right engine
- Gear down/ Gear up
- Set Seatbelts On/Off/Auto
- Wiper on/ wiper off/ wiper to park
- Engine anti ice on/off
- You have control
- Set ILS on NAV 2
- Set Localiser on NAV 2
- Set VOR on NAV 2
- I have control
- Air foil ice protection on/off\*
- Tail ice protection on
- Give me some hydraulic pressure please
  - Hydraulic pressure please
  - Can you switch on the hydraulics
  - Give me some hydraulics

### **Announcing Flight Mode Changes**

- Nav Capture/ Navigation Capture
- VNAV Capture
- VOR Capture
- Altitude Capture
- Glideslope Capture/ Localiser Capture

### **Briefings**

- Are you ready for the Departure Brief/ Approach Brief?
- Any questions?

## Responses to FO asking how you are

- Great, wonderful, fantastic, I'm okay, I'm fine, I'm okay, I'm all right, not bad, good, fine, awesome, super
- Bad, terrible, horrible

## FIRST OFFICER TAKEOFFS

1. Perform the line-up check just as you would for a regular takeoff.
2. **Press the TOGA button (CTRL SHIFT G)**
3. Manually advance the throttles to about 1.40 EPR, then switch the Autothrottle On, then call **"TAKEOFF YOU HAVE CONTROL"** or **"TAKEOFF YOUR CONTROLS"**.
4. Call: **"80 KNOTS"**, **"V 1"**, **"ROTATE"** and **"V 2"**.
5. You will need to hold the centerline for the FO, so be prepared to help him out as the FO is not capable of holding the runway centerline, especially in windy conditions.
6. The FO will rotate when you call **"ROTATE"**.
7. Call: **"POSITIVE RATE"**.
8. Raise the gear when so commanded by the FO.
9. The FO will command you to set climb thrust, make selections on the autopilot, and raise the flaps and slats. The FO will also call for the climb check. You would make the same calls the FO would make as if you were the FO.
10. After you complete the CLIMB CHECK by calling out the desired position of the seatbelt switches, call **"I HAVE CONTROL"** or **"MY CONTROLS"**. It's very important that you not forget this step as it will take FS2Crew out of FO TAKEOFF MODE.
11. Resume the flight.



If the FO is not rotating when you call **"ROTATE"**, increase the null zone on your joystick control. Joystick noise can override the FO's inputs. Also, make sure the takeoff trim is set properly.

**Note:** Due to interface limitations, we cannot get the FO to follow the Flight Director Bar very well. Be prepared to step in and help the FO!

# GO-AROUNDS, REJECTED TAKEOFFS & CATII/III APPROACHES, THRU-FLIGHT PROCEDURES & ABORTED STARTS

## GO-AROUNDS:

1. To initiate a go-around, make the following voice command: “GO AROUND POWER FLAPS 15” or simply “GO AROUND POWER”.
2. Press TOGA and advance throttles to TOGA limit.

**IMPORTANT: ONLY PRESS TOGA AFTER CALLING FOR GO AROUND POWER.**

3. The PNF will call “Positive Rate” after the Go-Around has been initiated and a positive rate of climb has been established.
4. Call “GEAR UP”.
5. PNF then checks: TOGA power is set, both F/D’s are ON, sets speed to 180, Disarms autospoilers and calls “FLIGHT GUIDANCE SYSTEM SET”.
6. At 1500 feet, PF calls “SELECT CLIMB POWER”.
7. Remainder is conducted like a normal climb-out.

## REJECTED TAKEOFFS:

1. To initiate a rejected take-off (RTO), **first bring the throttles to idle**, and then make the voice command: “REJECT!” while in TAKEOFF ROLL mode. *(You need to bring the throttles to idle first as part of a fail-safe to ensure “CHECK”, which sounds like REJECT, does not accidentally put FS2Crew into RTO mode.)*
2. Apply max reverse and max braking.
3. FO will announce if the speedbrakes are not up.
4. Ensure the speedbrakes are up.
5. Subsequent callouts same as standard ROLL OUT calls.
6. Once stopped, make the following PA: “CABIN CREW AND PASSENGERS REMAIN SEATED”. Note that this PA is made for the sake of realism; this PA does not trigger any event in the simulation.
7. Retract the speedbrake when below 30 knots and the Mode will change to AFTER LANDING. The FO will perform his After Landing Flow, and the remaining procedures are the same as a regular taxi-in.
8. If you want to taxi back to the runway to try another take-off, cycle the Mode to the right only (not the left) by pressing the small round button beside the right arrow symbol on the FS2Crew Main Panel.

### **CATII/CATIII APPROACH:**

1. If doing a CATII/CATIII approach, set Decision Altitude in the FS2Crew Configuration panel to 0. The text will change to GPWS. This means that the aircraft's GPWS system, not the flight crew, will call MINIMUMS and APPROACHING MINIMUMS.
2. During the approach brief, when you ask the FO "*Any Questions?*" the FO will ask you if you want to do an Autoland. Reply YES or NO. If Yes, the autoland calls (FLARE and ALIGN) will be enabled, and the DH selector on the FS2Crew Configuration Panel will automatically change to GPWS.

### **THRU-FLIGHTS:**

1. Thru-flights are modeled. To do a thru-flight, skip to the PRE-START checklist using the Arrow buttons on the Main Panel. Continue the flight the same as if you were starting from the beginning. The FO's cockpit setup flow is abridged as certain items are not re-tested during a transit stop.
2. It's very important that during the LINE UP phase that you call "**READY?**" before applying takeoff power as that call will reset many important variables for the next leg.

### **ABORTED ENGINE STARTS:**

1. To abort the engine start, call "**ABORT START**". If the fuel levers are in cut-off, the FO will release the start switches. If the fuel-levers are in run, the FO will hold the start switches for 30 seconds before releasing them.



# QUICK SETUP TUTORIAL



**Exercise caution when RESETTING a flight. If you find that after resetting a flight the FO audio is no longer audible, shutdown Flight Simulator and reload it.**

## QUICK SETUP:

1. Open the Maddog Load Manager Utility.
2. Uncheck "Enable First Officer Callouts".
3. Click "OK" when done.
4. Go to SETUP -> FS2CREW In the Maddog Load Manager and "enable" FS2Crew. This adds FS2Crew to the Maddog's panel.cfg file.
5. Load the Maddog. We recommend NOT used saved situation files. If a saved situation file is loading by default on your setup, load the default Cessna before loading the Maddog. Loading the default Cessna first will ensure everything initializes properly.
6. If hot starts are an issue and your EGT is above ambient temperature even though the engines are off, load the Cessna first and pull its mixture to idle cutoff before loading the Maddog.
7. To open the FS2Crew Main Panel, assign a key to AUTOFEATHER ARM/OFF. Use the "N" key. If nothing happens, double check that your Maddog panel.cfgs have FS2Crew Window and Gauge entries on them.

## WHAT NEXT:

1. Print out the Checklist and Crew Flows and General Voice Commands sections from this manual. They contain all the information you will need to complete a flight. For specific questions, please consult the FS2Crew Support Forum.
2. Remember that if you want to run the pre-departure procedure, only press START on the FS2Crew Configuration Panel AFTER you have fully established AC power, either via the APU or external power. The full procedure is described below:
  - i) Perform engine fire test.
  - ii) Connect External Power and put EXT power on the buses. If EXT power is not available, use the APU.
  - iii) If using the APU, set APU Air Switch to ON, open the right PNEU-X-FEED. Next, set the Right Air Cond Supply to AUTO.
  - iv) If Start Pump was ON, set the Right Aft Fuel Pump to ON and set the Start Pump to Off.
  - v) POS/STROBE light to BOTH and WING/NACL lights to ON.
  - vi) Read and study the Checklists, Crew Flows and various Autopilot commands.  
*They are the key to understanding the simulation!*

**-MANUAL END-**