

FS2Crew MS ATR Edition for MSFS

MAIN OPS MANUAL

Version 1.1

REQUIREMENTS:

- ✓ Microsoft ATR for MSFS. Available via the MSFS Marketplace.
- ✓ FS2Crew MS ATR Edition. Available at: https://www.fs2crew.com

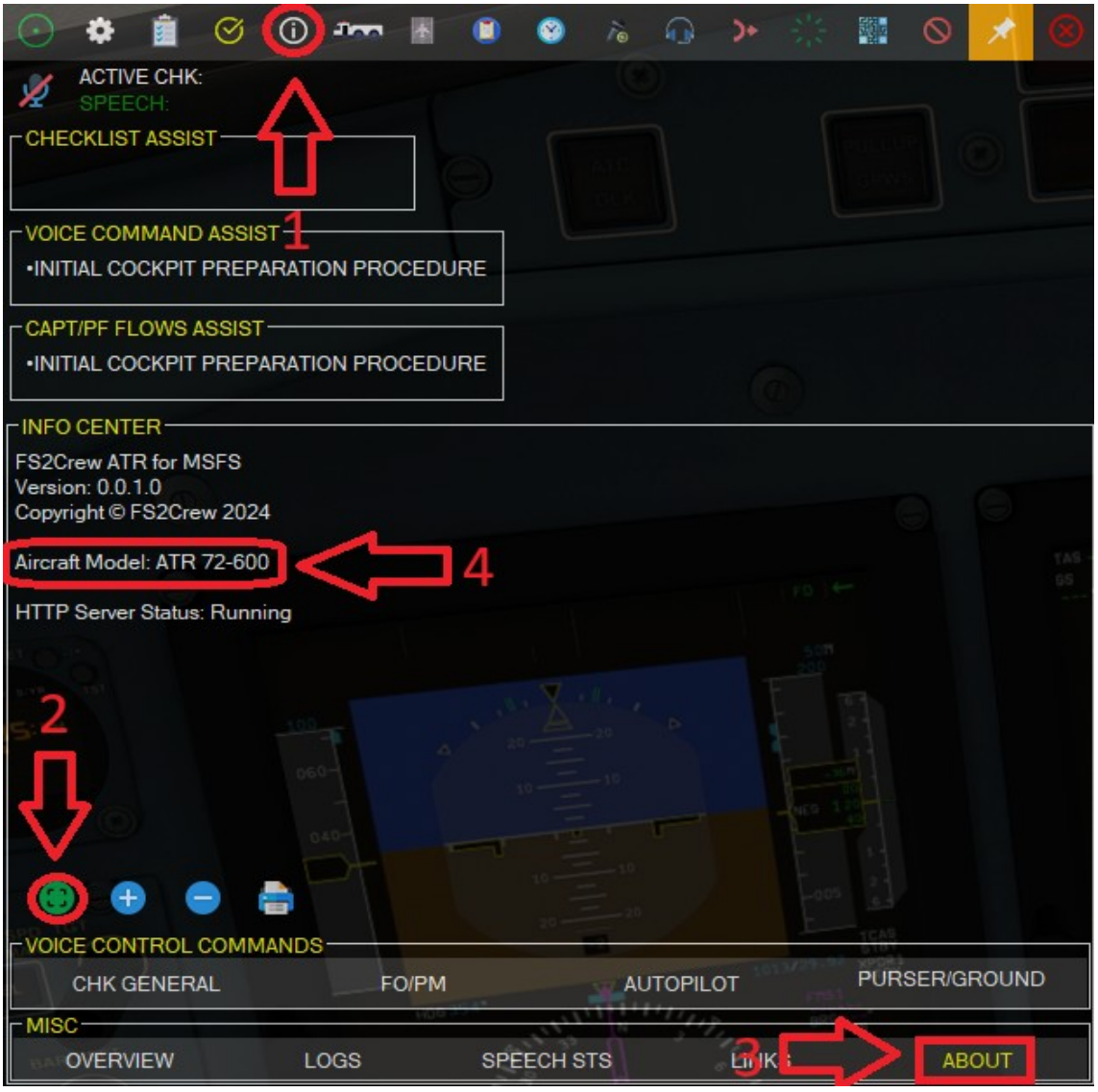
LINKS:

FS2Crew Website

FS2Crew Critical Links

VERY IMPORTANT – CONFIRM ATR RECOGNIZED AFTER LOADING FS2CREW:

- Before you start your flight, ensure that FS2CREW correctly recognizes the ATR model; otherwise, some of the checklists and procedures might not work as expected:



INTRODUCTION:

This FS2Crew edition follows a real-world airline's standard operating procedures (SOPs). This product aims to allow you to fly your MSFS ATR 42-600/72-600 in a much more realistic way using actual airline procedures regarding flows, checklists, and general crew interaction.

Two main interface modes are available: Voice Control and Button Control. An additional “Auto Respond” mode is available for Button Control users.

If you are new to FS2Crew, we **strongly suggest starting in Button Control mode until you understand the program's rhythm**.

If you have any questions or problems, please consult the FS2Crew Discord Channel. This is complex software, and we are trying to do things as realistically as possible, so do not be afraid to ask questions!

DISCLAIMER: This tutorial is only for flight simulation and does not necessarily fully reflect real-world procedures. FS2Crew is an entertainment product. It is not meant for real-world flying or training. It is not affiliated with or associated with any specific airline or company.

SETUP THE ATR:

Ensure the selection of EFB options/units is consistent with how you want to operate FS2CREW. This influences which units the Captain and FO use when calling out specific values in button control mode and what the Captain is expected to say in voice control mode.

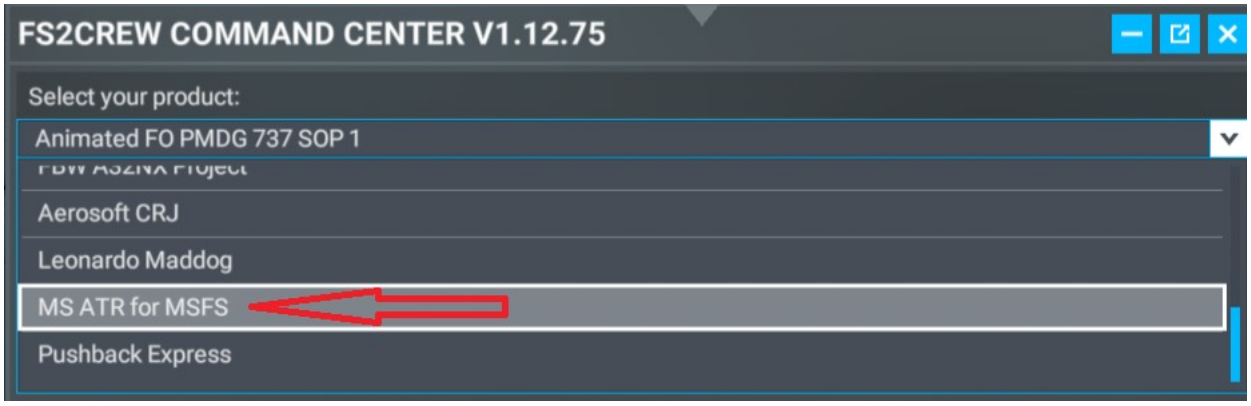


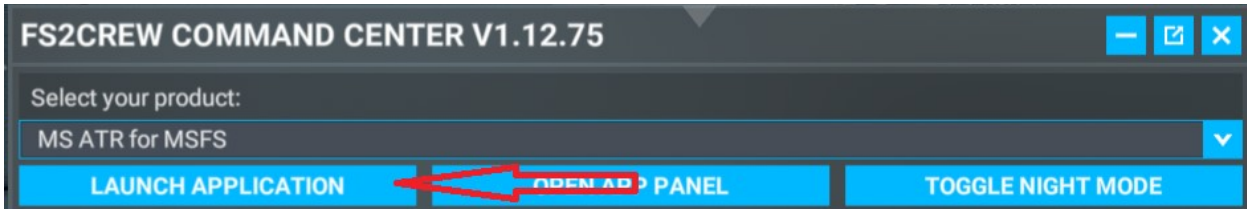
INSTALLING THE SOFTWARE:

- Download the **FS2CREW PRODUCT MANAGER** via your account or via the FS2Crew website (https://fs2crew.com/downloads/)
- Download FS2Crew for the MS ATR via the Product Manager.
- Important: The Product Manager should be run with Admin rights!
- The FS2Crew installer will run silently.
- Run MSFS and load the MS ATR host aircraft (42-600 or 72-600).
- Open the MSFS Toolbar and the FS2Crew Command Center by clicking the FS2Crew icon (the airplane nose) below.



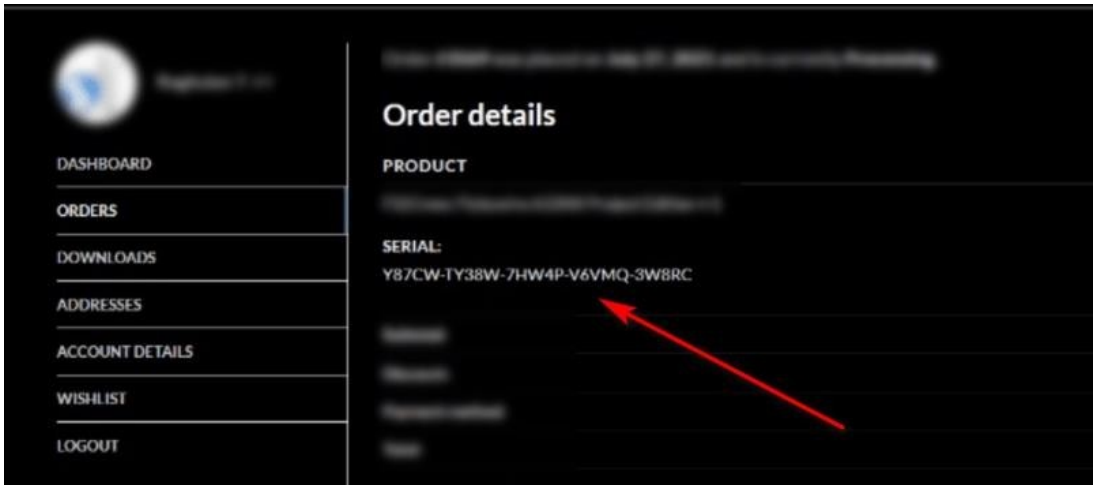
- You can drag to resize the Command Center Window.
- Select **MS ATR** in the drop-down menu and click **LAUNCH APPLICATION**.
  You may need to scroll down the product list to see FS2Crew for the MS ATR.





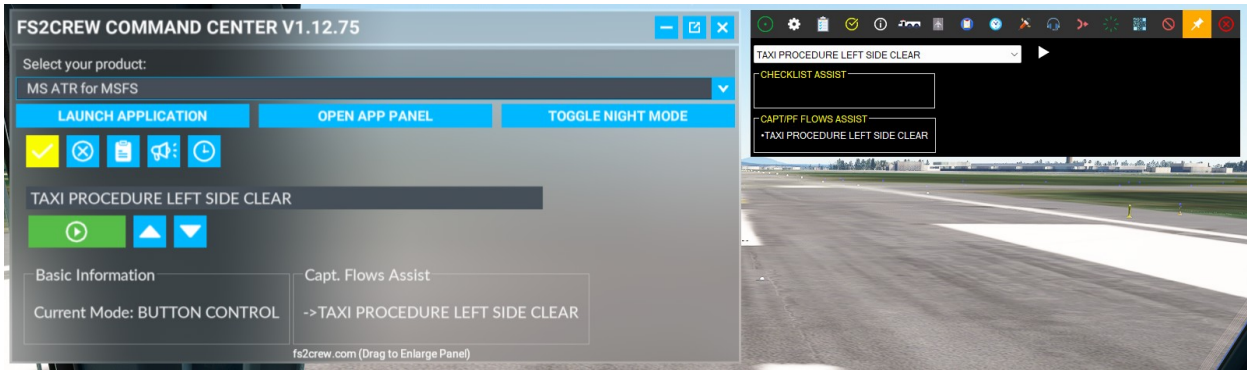
- The FS2Crew panels should appear. You will be prompted to enter your serial code if you have not activated FS2Crew for the MS ATR.

- Your serial code is viewable in your online FS2Crew account or from wherever you purchased FS2Crew.



- You may drag the FS2Crew panel to a second monitor if desired. You may minimize this panel by pressing the yellow minimize icon. If the pin icon is selected, the panel will never close.

- The FS2Crew panel, viewable via the Command Center, performs many of the same functions as the main stand-alone panel. If you are using a VR headset, you would typically use this panel since it is embedded into the Tool Bar and, therefore, visible in your VR headset.
  Note, however, that the FS2Crew Config Panel is not viewable in the Command Center / MSFS Tool Bar.

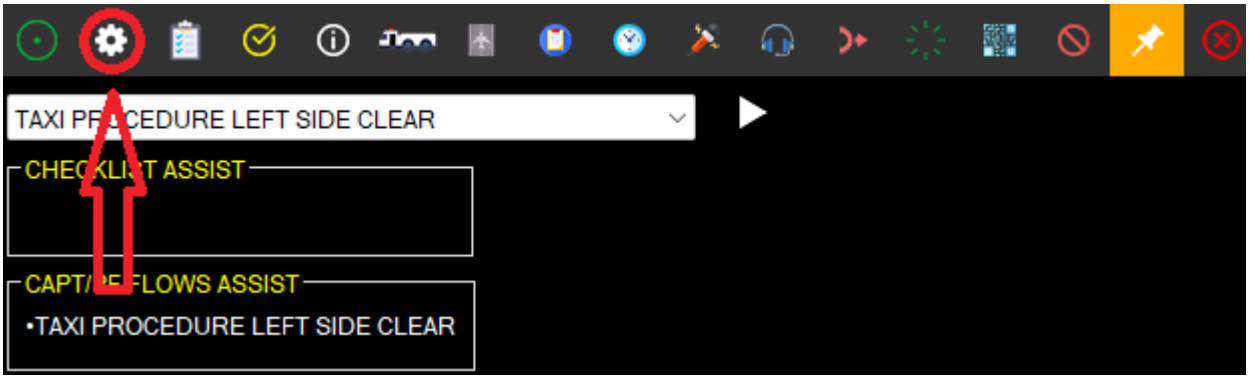


- It is possible to network the FS2Crew Panel to your mobile device. Click here to learn how.

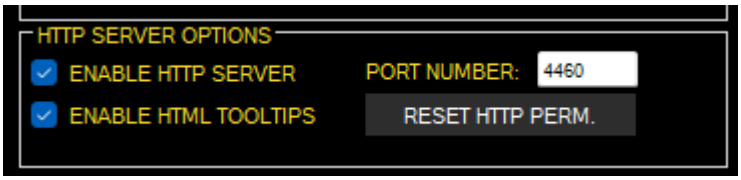
- Tooltips are associated with each button in either panel. Mouse over each button to learn more about it. The Config Panel has the option to turn tooltips on/off. If you have any questions, please post them on our Discord channel.

  IMPORTANT! IF THE PANEL IS BLANK...

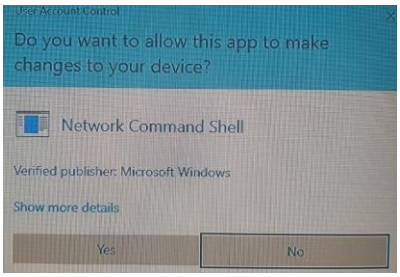
- If the panel on the left in the Tool Bar is **blank**, please ensure you have **ENABLE HTTP SERVER** checked on the FS2Crew Config Panel (GEAR ICON).



- Like other MSFS developers, FS2Crew uses an internal server to pass data between the FS2Crew Command Center and the FS2Crew main program, which runs outside the MSFS process as an external EXE. This is done via our HTTP Server. Please ensure the associated option shown below is checked. Depending on your current system privileges, it may be unchecked by default the first time you load FS2Crew.



- You will then be prompted to give the **NETWORK COMMAND SHELL** permissions to access your device. Please select YES. This panel may be hidden 'behind' the FS2Crew panel, so if you do not see it, minimize the FS2Crew panel so you can see it.



- Additional Trouble Shooting information can be found here:

  https://fs2crew.com/fs2crew-command-center-troubleshooting/

  It is essential that the FS2Crew COMMAND CENTER **auto-starts** when MSFS or Windows starts.

  If your EXE.xml file is corrupt (*and it is easy to become corrupt since multiple developers write to it),* the COMMAND CENTER will not auto-start when MSFS loads. If the EXE.XML is sufficiently corrupt, it can cause MSFS to crash on startup.

  The general solution is to delete your EXE.xml (make a backup first) and reinstall FS2Crew. FS2Crew will rebuild a fresh, new EXE.xml free of corruption (usually invalid characters).

  However, a better option is also available on the CONFIG PANEL to make the Command Center auto-start when Windows starts, thus bypassing the EXE.xml altogether.



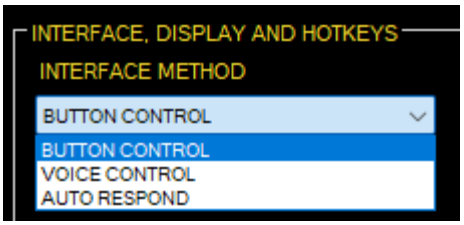
NOTES ABOUT SETUP OPTIONS:

- You can select your desired interface mode on the FS2Crew CONFIG PANEL, accessible by clicking the Gear Icon on the Main Panel (2D Panel only).

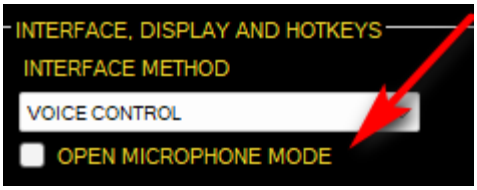
  Voice Control = Voice Control

  Button Control = Button Control

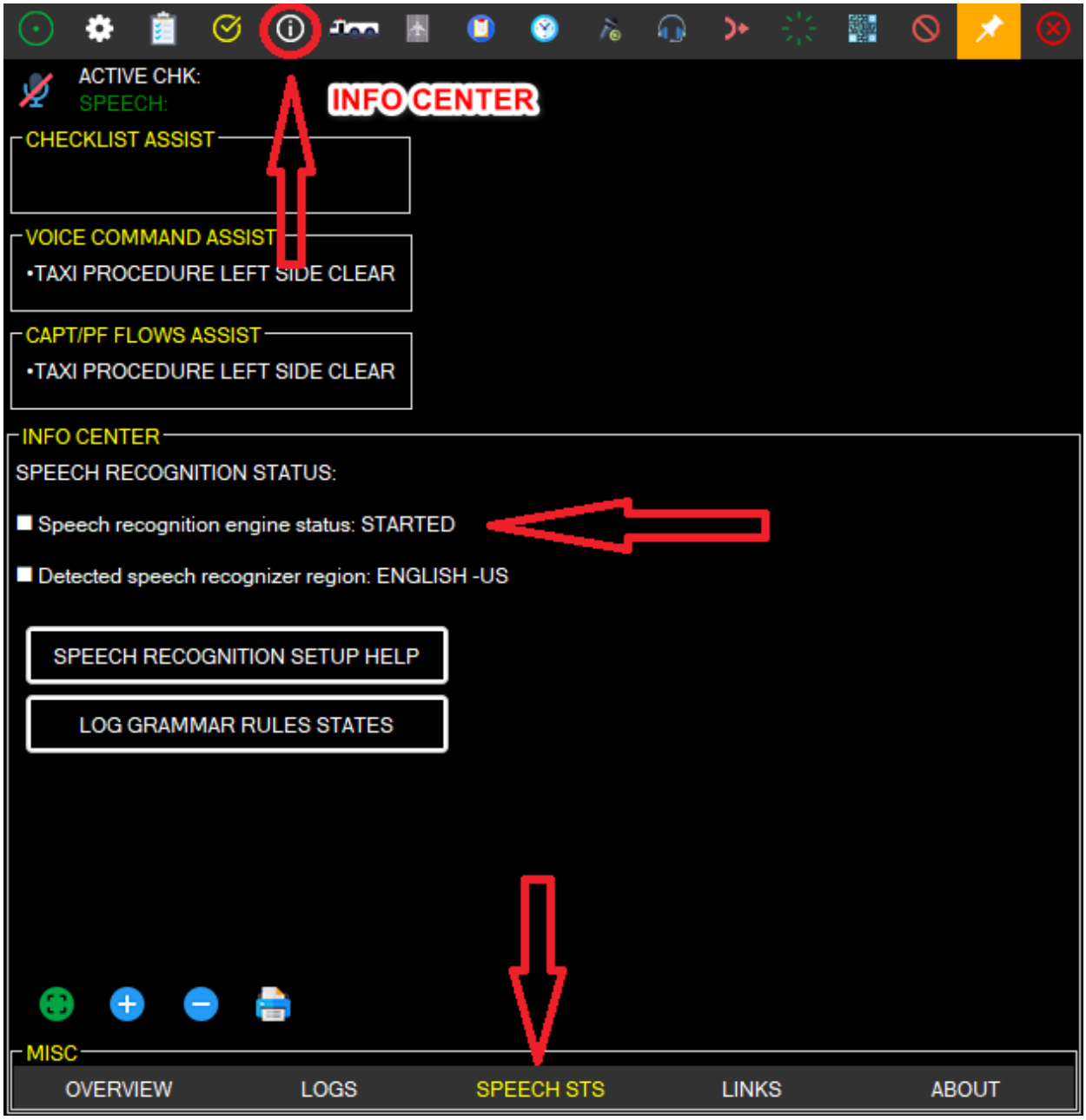
  Auto Respond = Button Control, but you do not need to manually press the Main Button to respond to each checklist item. The checklist will run through itself automatically.



If using Voice Control, we strongly recommend PUSH TO TALK mode, not OPEN MIC mode.



- If using Voice Control, you can check your speech recognition status by pressing **SPEECH STS** in the INFO CENTER.


ACTIVE CHK:
SPEECH:
INFO CENTER
CHECKLIST ASSIST
VOICE COMMAND ASSIST
•TAXI PROCEDURE LEFT SIDE CLEAR
CAPT/PF FLOWS ASSIST
•TAXI PROCEDURE LEFT SIDE CLEAR
INFO CENTER
SPEECH RECOGNITION STATUS:
Speech recognition engine status: STARTED
Detected speech recognizer region: ENGLISH -US
SPEECH RECOGNITION SETUP HELP
LOG GRAMMAR RULES STATES
MISC
OVERVIEW
LOGS
SPEECH STS
LINKS
ABOUT

THE ASSIST PANEL:

- The ASSIST panel is designed to enhance your experience with the software. It provides contextual information and guidance, reducing the need to constantly refer to the manual.

- The critical information needed to fly is displayed directly in the ASSIST panel.
  Toggle the ASSIST panel by pressing the YELLOW CHECKMARK icon located to the left of the Info Center icon.



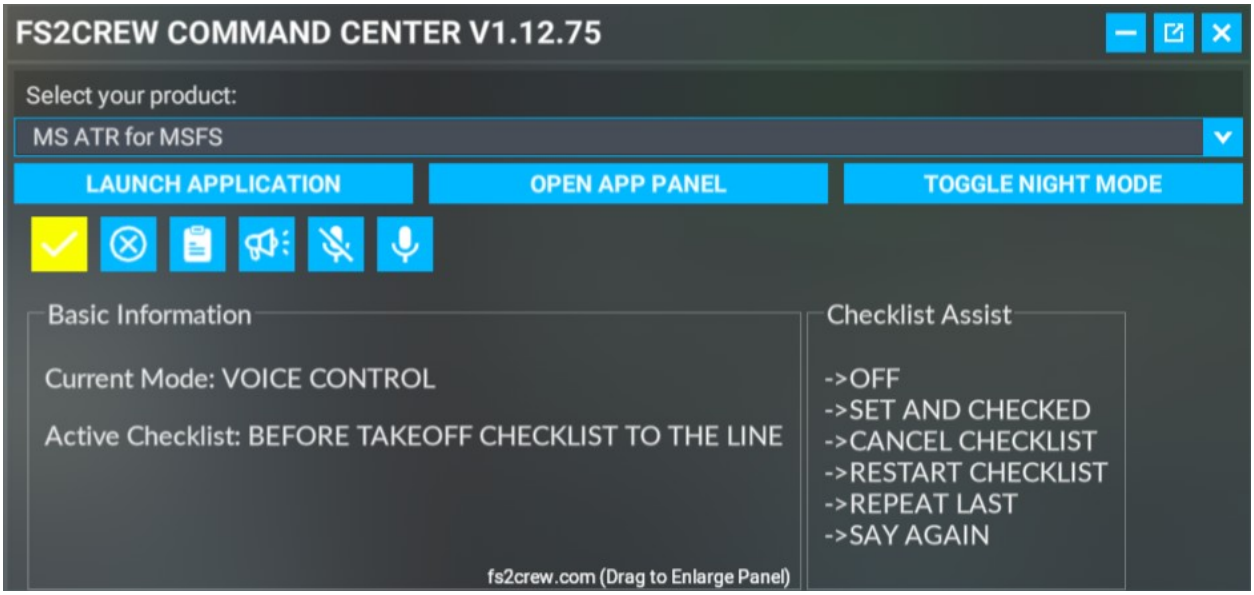
- **Checklist Assist** = Displays available responses in a Checklist.

- **Voice Command Assist** = Offers a range of suggested Voice Commands. Remember, these are just suggestions. You can decide when to use them based on your judgment and the situation.

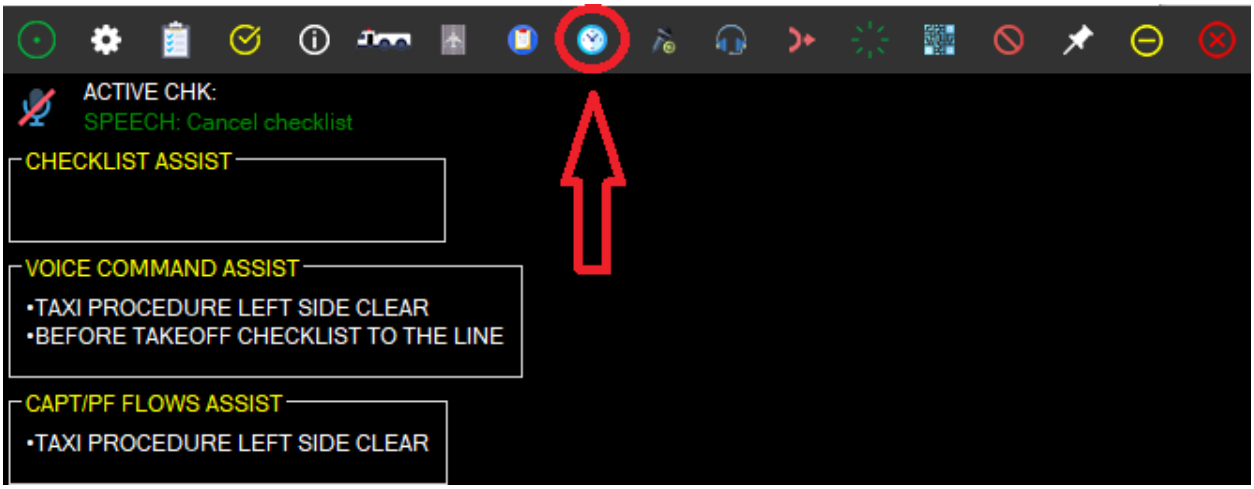
- **Capt / PF Flows Assist** = Displays suggested actions for the Captain / Pilot Flying. These actions are typically referred to as “flows/procedures.”



- If you are using VR mode, the same information can be displayed via the in-game MSFS TOOLBAR, as shown below:



PHASE: PRE-FLIGHT EVENTS



Note: Running the Pre-Flight Events is **optional. You can start the** routine by clicking the blue Clock icon.

The Clock icon, which initiates the Pre-Flight Events routine, is only visible when the engines are off. This ensures that the routine is started at the appropriate time in the flight preparation process.

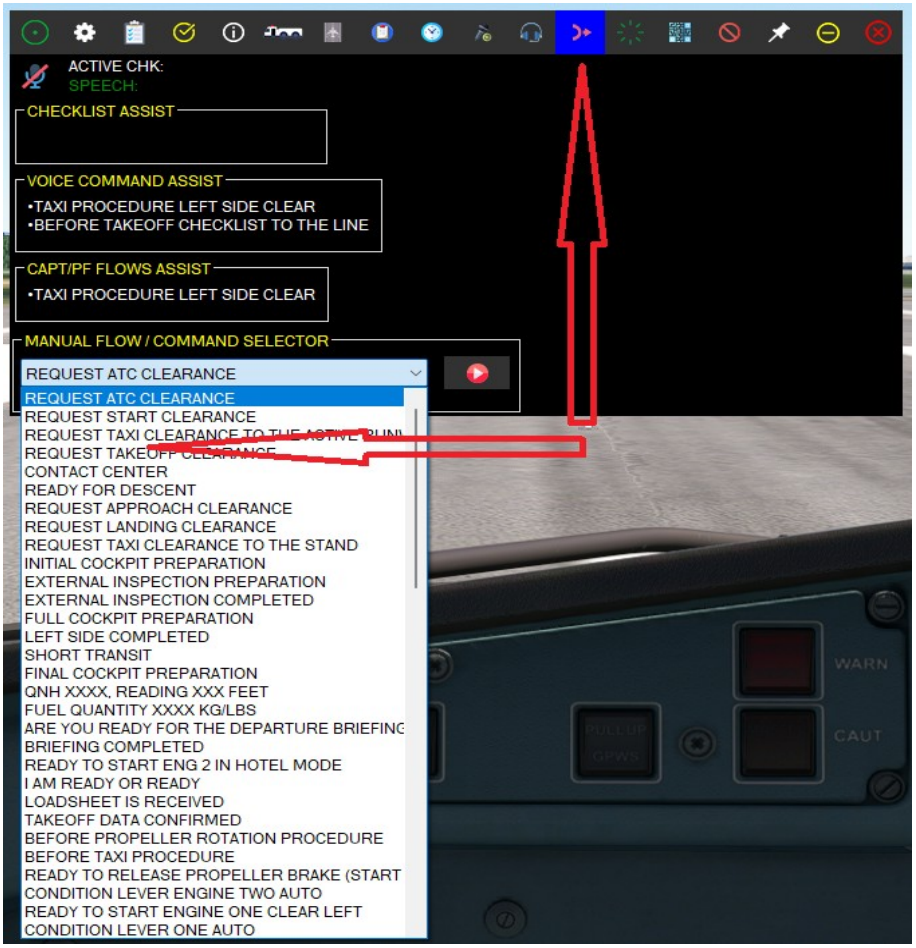
SOME SIMPLE RULES AND ADVICE

- In FS2Crew, you assume the Captain and the Pilot Flying (PF) roles. Conversely, the computer is the First Officer and Pilot Monitoring (PM). Understanding these roles is crucial for the software's effective operation.

- If the Autopilot is ON, the Flight Guidance Control Panel (FGCP, also known as the autopilot panel) falls within your (the Pilot Flying's) area of responsibility.

- If you are new to FS2Crew, start in BUTTON CONTROL mode. It is easier than learning VOICE CONTROL. Once you understand the system, then advance to VOICE CONTROL.

- If you ever miss a trigger for a flow, you can manually initiate the flow via the MANUAL FLOW SELECTOR. This feature allows you to trigger a flow or action manually.



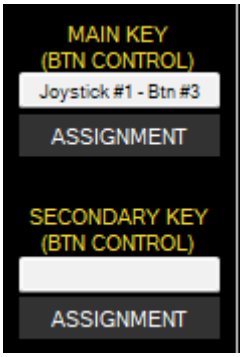
HOW TO USE BUTTON CONTROL

The flying portion of this tutorial is based around Voice Control. However, button control is like voice control, with the only difference being the method of triggering actions. In Button Control, you use buttons to initiate actions; in Voice Control, you use voice commands.

Button Control is more effortless than Voice Control since you follow a linear path.

There are two ways to fire an event in Button Control. You can click the button below directly or assign a joystick button or keyboard key to do the same thing.





You can jump to any point in the flight and start from there via the Button Control drop-down menu.

If you start from the beginning of the flight, the button control action list will auto-advance as you progress.

Some commands described in the tutorial flight are unavailable in Button Control.

As always, we are here to support you. Please get in touch with our Discord channel if you have questions or need further assistance.

RUNNING THE PRE-FLIGHT EVENTS

The Pre-Flight events are a crucial part of the flight preparation process. They are designed to simulate the tasks and procedures that must be completed before a flight. These days, quick turnarounds are the norm as airlines try to save money. Therefore, it is important not to dawdle during these events, or you will be behind the curve!

To start the Pre-Flight Events, park in a spot with the engines off and click the CLOCK icon. This icon triggers the routine, initiating the events that prepare the aircraft for flight.

(Note: When using voice control mode, you can call "Let's start setting up." to trigger the Pre-Flight events.)



NOTE: RUNNING THE PRE-FLIGHT EVENTS IS OPTIONAL!

This tutorial only covers the key points. Please consult the manuals and videos provided with the MS ATR and online for specific details. Furthermore, this tutorial assumes it is the crew's first flight of the day.

Special Note: Left-click the time remaining value directly to FAST FORWARD the PRE-FLIGHT EVENTS TIME. The time remaining value will appear where the clock icon is located!

NOTE: All times listed below are approximate. Doors are only operated if selected in the settings menu.

As soon as the pre-flight events start, the cabin door is opened, the tail prop is put in place (Note: ATR72 only), and you will be greeted by your FO (first officer).

(Note: The doors are only operated if "FS2CREW CONTROLS DOORS" is checked in the config settings.)
Ensure the gear lever is down, and the flaps lever is up.

The FO also reminds you to open the document door as soon as the cabin door is closed before departure, which is required to prevent a pressure shock.

(Note: Cockpit Com Hatch is used synonymously to describe the document door.)
(Note: If you are using GSX, FS2CREW will automatically trigger the commands to start fueling, catering, boarding, and deboarding at the times indicated in the pre-flight events description below.)

INITIAL COCKPIT PREPARATION PROCEDURE

When asked if you are ready to start the **INITIAL COCKPIT PREPARATION PROCEDURE**, respond:

"GO AHEAD / INITIAL COCKPIT PREPARATION PROCEDURE."

NOTE: The specific actions in each "procedure" are detailed at the bottom of this manual in the FLOWs section.

The FO prompts you if the DC external power is not connected. If you want external power, you must manually connect it via the EFB.

If DC external power is unavailable, the FO automatically prepares the aircraft for the **HOTEL MODE PROCEDURE**. This means the FO will configure the fuel pump, cross-feed, and run the engine two fire tests, which would typically be performed later during the **FULL COCKPIT PREPARATION PROCEDURE**. The FO will inform you when engine two can be started in Hotel Mode.

Additionally, the FO advises you as soon as the **INITIAL COCKPIT PREPARATION PROCEDURE** is completed, which is when all DU's (display units) are aligned successfully (green "T"'s are replaced by display content).

21 - 19 Minutes: The Fuel and Catering trucks arrive at the aircraft. The service door is opened.

20 - 18 Minutes: The Luggage train arrives at the aircraft. The cargo door is opened.

(Note: The doors are only operated if "FS2CREW CONTROLS DOORS" is checked in the config settings.)

20 - 15 Minutes: The FA (flight attendant) contacts the flight deck. If the cockpit door is locked, the FA knocks on the door.

(Note: Refer to SUPPLEMENTARY VOICE COMMANDS, FA COMMANDS for information on contacting the flight attendant.)

The FA opens the cockpit door and asks if boarding can be started.

Respond: "AFFIRMATIVE/ YES PLEASE/ GO FOR IT/ OKAY."

Boarding starts.

(Note: If "DISABLE FLIGHT ATTENDANT" is checked in the config settings, neither catering nor boarding will happen at the indicated times.)

EXTERNAL INSPECTION PREPARATION PROCEDURE (OPTIONAL)

Announce "I AM HEADING OUT FOR THE WALKAROUND." The FO asks if you are ready for the **EXTERNAL INSPECTION PREPARATION PROCEDURE.**

Respond: "GO AHEAD."

Wait for the FO to complete the procedure. Before heading out for your walkaround, the FO asks you if the **FULL COCKPIT PREPARATION PROCEDURE** can already be started.
Respond: "GO AHEAD/FULL COCKPIT PREPARATION PROCEDURE."

While the FO performs their part of the procedure, leave the flight deck and perform a thorough walkaround.

(Note: While you are out to perform the walkaround, the FO normally actions the FULL COCKPIT PREPARATION PROCEDURE silently. If you still want to hear the callouts, activate the settings for FULL PROCEDURE CALLOUTS DURING WALKAROUND under SETTINGS/FLIGHT OPTIONS/CALLOUTS.)

EXTERNAL INSPECTION COMPLETION PROCEDURE (OPTIONAL) CONTINUED.

As soon as you have finished your walkaround, get back into the left seat.

Announce: "EXTERNAL INSPECTION COMPLETED."

Depending on whether the FO is currently busy, they will either start the **EXTERNAL INSPECTION COMPLETION PROCEDURE** or do it as soon as they are ready.

FULL COCKPIT PREPARATION PROCEDURE

If the FO has not already started this procedure, call for and run the "FULL COCKPIT PREPARATION PROCEDURE." The FO will announce once the right side of the cockpit is completed.

-CAPTAIN, LEFT SIDE

- *PEDESTAL*
  - *Release the GUST LOCK*
- *LEFT MAINTENANCE PANEL*
  - *Open console cover*
  - *Check BRAKE ACCU HYD (No indication and switch in OFF position)*
  - *Check ELEC switch in guarded position*
  - *Set WARN selector to YES*
  - *Press and hold the TEST pushbutton*
  - *Observe stick shaker*
  - *After 10 seconds observe stick pusher together with FMA label*
  - *Release TEST pushbutton*
  - *Set WARN selector to NORM FLT*
  - *Set ELEC IND selector to EXT PWR (Check DCV)*
  - *Set ELEC IND selector to GEN 2*
  - *Close the console cover*
  - *Check NWS in guarded position*
- *PEDESTAL*
  - *Engage the GUST LOCK*
- *DOCUMENT DOOR (COCKPIT COM HATCH)*
  - *Open*
- *OXYGEN MASK*
  - *Press and hold TEST lever*
  - *Observe the blinker opens for a couple of seconds and flow is audible*
  - *Release the TEST lever*
- *LEFT SWITCHING PANEL*
  - *Set READING LIGHT and CONSOLE LIGHT as required*
  - *Check no light in AUDIO 1 SELECTOR pushbutton*
  - *Check no light in CAPTAIN SWITCHING pushbutton*
  - *Check GPWS switch guarded, pushbutton in and no light*
  - *Check TERR pushbutton guarded, no light*
  - *Set CAPT LOUDSPEAKER to MAX*
- *LEFT INSTRUMENT PANEL*
  - *Check CLOCK time*
  - *Check PFD FMA, "FD" and "←" only*
  - *Check NO FLAGS on ASI, ALTIMETER and VSI*
  - *Check ATTITUDE, wings level and nose slightly down*
  - *Crosscheck EHSI and ND heading*
  - *Check MFD Memo Panel*

Announce: "LEFT SIDE COMPLETED." Please wait for the FO to complete their side. In the meantime, you can start making route-specific entries in the flight management system (FMS).

HOTEL MODE PROCEDURE (OPTIONAL)

You can contact the ground crew by pressing the **MECH** button on the overhead (please see the **GROUND CREW COMMANDS** section in the manual for additional info**).**

Announce: "WE ARE READY TO START ENGINE NUMBER TWO IN HOTEL MODE. CONFIRM SERVICE DOOR IS CLOSED AND AREA IS CLEAR."

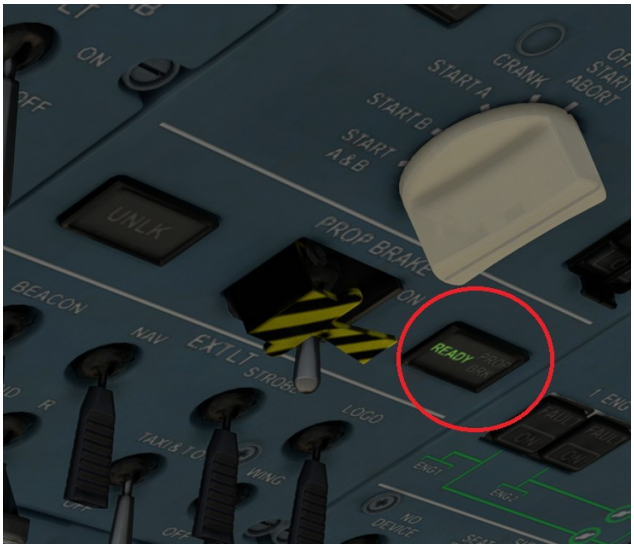
(Note: Refer to SUPPLEMENTARY VOICE COMMANDS, GROUND CREW COMMANDS for information on how to contact the ground crew.)

If the ground crew replies in the positive to your request:
Announce: "I AM READY TO START ENGINE NUMBER TWO IN HOTEL MODE."

The FO will alert you if the propeller brake is not engaged. As Captain, you are responsible for ensuring the propeller brake is engaged.

(Note: Hydraulic power must be provided via the hydraulic auxiliary pump to operate the propeller brake. Activate the HYD AUX PUMP button *next to the power levers. Once the green "READY" light illuminates the overhead, enough hydraulic pressure is available for operation. Lift the guard and move the switch into the "ON" position to activate the propeller brake.)*





The FO then asks you if you can start engine number two.

Respond: "I AM READY."

As soon as the FO announces, "STARTER ON," start the timing on your side. Once the FO announces that the NH has reached 45%, check for the starter to have switched off. Stop the timing.

Announce: "START TIME XX SECONDS."

Wait for the FO to complete the procedure.

FINAL COCKPIT PREPARATION PROCEDURE

Call for and run the "FINAL COCKPIT PREPARATION PROCEDURE."

-CAPTAIN

- *PEDESTAL*
  - *Press RCL, silence MC if any*
  - *Tune ATIS frequency*
- *PFD*
  - *Set QNH*
  - *Announce: "QNH XXXX, READING XXXX FEET."*
  - *Check that BRG 1&2 are not displayed*
- *MFD ENG PAGE*
  - *Check FUEL QUANTITY and BALANCE*
  - *Announce: "FUEL QUANTITY XXXX KILOGRAMS/POUNDS."*
- *EWD/OVERHEAD*
  - *If FUEL USED is not reset, reset it via MFD PERF*
  - *Alternative command: "RESET FUEL USED."*
  - *Check PROP BRAKE on*
- *MFD MEMO/OVERHEAD*
  - *Set NO DEVICE and SEAT BELT on*
  - *Alternative command: "SELECT NO DEVICE ON."*
  - *Alternative command: "SELECT SEATBELT ON."*
  - *Check no other lights illuminated*
- *FMS*
  - *Enter WEIGHT page ZFW, FUEL, RESERVE, MAC*
  - *Enter PERF INIT page CRZ ALT, ALTERNATE*
  - *Enter FPLN page FLT NBR, ROUTE*
  - *Check PROG page DIST and EFOB*
  - *Enter PERF APP page WIND at departure*
  - *Enter VNAV page 2/2 OAT, QNH, TA*
  - *Crosscheck destination elevation with AUTO PRESS setting*
  - *Check no amber messages on MCDU and ND*
- *FGCP*
  - *Set ALT SEL in according to the expected ATC initial climb clearance*
- *DEPARTURE BRIEFING*
  - *Announce: "ARE YOU READY FOR THE DEPARTURE BRIEFING."*
  - *Announce: "TRANSITION ALTITUDE IS XXXX FEET."*
  - *Announce: "ACCELERATION ALTITUDE IS XXXX FEET."*
  - *Announce: "BLEEDS WILL BE OFF FOR TAKEOFF." (OPTIONAL)*
  - *Announce: "(BRIEFING COMPLETED) ANY QUESTIONS."*

Call for and run the "FINAL COCKPIT PREPARATION CHECKLIST."

If you use generic ATC, instruct the FO to "REQUEST ATC CLEARANCE."

NOTE: YOU CAN ALSO PERFORM THE DEPARTURE AND ARRIVAL BRIEFINGS BY OPENING THE ASSOCIATED PANEL DEPICTED BELOW, SETTING UP THE FIELDS AND RUNNING THE BRIEF



10 - 13 Minutes: The Catering leaves the aircraft. The service door is closed.

8 - 5 Minutes: The Luggage train leaves the aircraft. The cargo door is closed.

(Note: The doors are only operated if "FS2CREW CONTROLS DOORS" is checked in the config settings.)

10 - 6 Minutes: To avoid walking through the whole aircraft cabin, the Ramp Agent knocks on the document door. Open it to receive the load sheet.



Respond: "OKAY THANKS/THANK YOU/THANKS."

3 - 1 Minutes: The FA lets you know that the tail prop is on board, that boarding is completed, and shares the final passenger and FA count. The FA asks if the cabin door can be closed.

(Note: If using SimBrief, the pax and FA count will be omitted since the required data cannot be read).

Respond: "THANKS (IT WILL BE A SHORT / LONG TAXI)/ YES / CLEARED TO CLOSE (SHORT/LONG TAXI)."

The FA closes the cockpit door, but you must lock it.

BEFORE PROPELLER ROTATION PROCEDURE

When the boarding has been completed, and all doors have been closed:

Announce: "LOADSHEET IS RECEIVED."

The FO opens the MCDU WEIGHTS page, reads the displayed data, and sets the elevator trim for takeoff.

-CAPTAIN

- *MFD PERF PAGE*
  - *Select NORMAL or ICING conditions*
  - *Confirm T/O DATA*
  - *Announce: "TAKEOFF DATA CONFIRMED."*
- *EFB*
  - *Close all remaining DOORS*
  - *Remove the TAIL PROP, WHEEL CHOCKS and EXT PWR*
- *OVERHEAD*
  - *Set BEACON LIGHT on*

Call for and run the "BEFORE PROPELLER ROTATION PROCEDURE." The items that constitute this procedure are detailed in the FO Flows section of this manual.

When that procedure is complete, call for the "BEFORE PROPELLER ROTATION CHECKLIST."

If using the generic ATC option, instruct the FO to "REQUEST STARTUP CLEARANCE."

PUSHBACK (OPTIONAL)

*(Note: You can skip this part altogether if you use any pushback solution other than the default MSFS pushback or GSX. Perform the pushback and, once completed, move on to the following procedure in sequence, the **BEFORE TAXI PROCEDURE**. The same applies to you if you only need to taxi out without pushback, stand conditions permitting.)*

(Note: Refer to SUPPLEMENTARY VOICE COMMANDS, GROUND CREW COMMANDS for information on how to contact the ground crew.)

Announce: "WE ARE READY FOR PUSHBACK."

*(Note: If GSX performs the pushback, the rest of the procedure and the following ground crew communication must be handled via its menu. Make sure to remove the WHEEL CHOCKS via the EFB, as otherwise, GSX will not start the pushback even though you have disengaged the parking brake. Refer to SUPPLEMENTARY VOICE COMMANDS, GSX INTEGRATION, for further information. The rest of this procedure does not apply. Move on to the following procedure in sequence, the **BEFORE TAXI PROCEDURE**.)*

The default MSFS pushback tug performs the pushback in a straight manner.

The ground crew removes all external equipment and connects the pushback tug.

Release the parking brake.
Announce: “PARKING BRAKE AND NOSEWHEEL STEERING ARE OFF.”

Pushback commences. You may also start the engines as soon as you are advised.

As soon as you are comfortable with the aircraft position:

Command: “PLEASE STOP THE PUSHBACK.”

Set the parking brake.
Announce: “PARKING BRAKE IS SET.”

As soon as you have two good engine starts:
Announce: “READY TO TAXI YOU MAY DISCONNECT.”

BEFORE TAXI PROCEDURE (ENGINE START)

Announce: "BEFORE TAXI PROCEDURE."

If the propeller brake is in use during hotel mode:

Before releasing the propeller brake, you must inform the ground crew of your intentions:
Announce: "ARE WE CLEARED TO RELEASE THE PROPELLER BRAKE?"

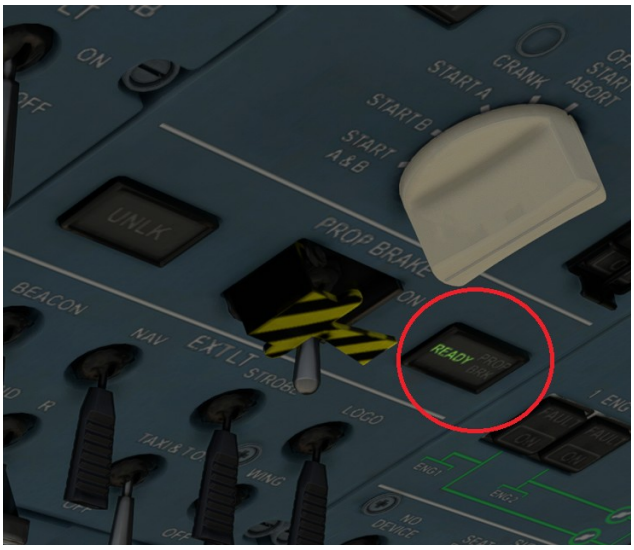
(Note: Refer to SUPPLEMENTARY VOICE COMMANDS, GROUND CREW COMMANDS for information on how to contact the ground crew.)
Announce: "READY TO RELEASE PROPELLER BRAKE CONFIRM RIGHT SIDE CLEAR."

Release the propeller brake and wait until the FO has called out "ROTATION."

(Note: Hydraulic power must be provided via the hydraulic auxiliary pump to operate the propeller brake. Activate the HYD AUX PUMP button *next to the power levers. Once the green "READY" light illuminates the overhead, enough hydraulic pressure is available for operation. Lift the guard and move the switch into the "OFF" position to deactivate the propeller brake.)*



If



the propeller brake is not in use:

Announce: "READY TO START ENGINE TWO CONFIRM RIGHT SIDE CLEAR."

Command: "CONDITION LEVER TWO AUTO."

The FO completes the start of engine number two and sets the FLAPS to the takeoff setting of 15°.
Announce: "READY TO START ENGINE ONE CLEAR ON THE LEFT."

As soon as the FO announces, "STARTER ON," start the timing on your side. Once the FO announces that the NH has reached 45%, check for the starter to have switched off. Stop the timing.

Announce: "START TIME XX SECONDS."

Wait until the FO has called out, "NP STABILIZED."

Command: "CONDITION LEVER ONE AUTO."

Monitor the FO completing the engine start procedure.

As soon as you have two good engine starts, contact the ground crew:
Announce: "READY TO TAXI YOU MAY REMOVE THE CHOCKS AND DISCONNECT."

(Note: Refer to SUPPLEMENTARY VOICE COMMANDS, GROUND CREW COMMANDS for information on how to contact the ground crew.)
Call for the "BEFORE TAXI CHECKLIST."

TAXI PROCEDURE

If using the generic ATC, instruct the FO to "REQUEST TAXI CLEARANCE TO THE ACTIVE RUNWAY."

Announce: "TAXI PROCEDURE LEFT SIDE CLEAR."

Command: "SET TAXI LIGHT ON" unless you want to set it yourself.

Release the parking brake and start the taxi.

Check the brakes are working as intended for you.

Announce: "YOUR BRAKES." The FO checks the brakes are working as intended.

Announce: "EMERGENCY BRAKE." Check the emergency brake.

Announce the FMA state: "FMA SET."

Call for the "TAXI CHECKLIST."

The FA will contact the flight deck during taxi to inform you that the cabin has been secured for takeoff.

(Note: Refer to SUPPLEMENTARY VOICE COMMANDS, FA COMMANDS for information on contacting the flight attendant.)

BEFORE TAKEOFF PROCEDURE

Announce: "BEFORE TAKEOFF PROCEDURE."

-CAPTAIN

- *MCDU PERF TAKEOFF PAGE*
  - *SELECT*
  - *Announce: "ARE YOU READY FOR THE TAKEOFF BRIEFING" (OPTIONAL).*

(Note: In voice control mode, the call for the takeoff briefing only needs to be made if the acceleration altitude has not already been briefed during the departure briefing.

  - *Announce: "ACCELERATION ALTITUDE IS XXXX FEET."*
  - *Announce: "(BRIEFING COMPLETED) ANY QUESTIONS."*

- *FLIGHT CONTROLS*
  - *Apply FULL LEFT and RIGHT RUDDER*
  - *Command: "GUST LOCK OFF."*
  - *Apply FULL LEFT AILERON, check visual SPOILER deployment (wait for FO to call "Greenlight")*
  - *Apply FULL RIGHT AILERON, and check the green SPOILER indication (wait for FO to call "Right aileron and spoiler.")*
  - *Apply FULL FORWARD and AFT ELEVATOR*

- *PEDESTAL*
  - *Press RCL*

- *MFD ND*
  - *Set ARC mode, 20 NM range*
  - *Set VCP NAV*

- *OVERHEAD*
  - *Set STROBE LIGHTS on*
    Alternative command: "SET STROBE LIGHTS ON."
  - *Set LANDING LIGHTS on*
    Alternative command: "SET LANDING LIGHTS ON."

Call for and run the "BEFORE TAKEOFF CHECKLIST TO THE LINE.

If using the generic ATC, instruct the FO to "REQUEST TAKEOFF CLEARANCE."

-CAPTAIN

- *FGCP*
  - *Once aligned with the runway heading and stopped*
  - *Press HDG pushbutton (HDG SYNC), if not done by the FO*

Call for and run the "BEFORE TAKEOFF CHECKLIST BELOW THE LINE."

TAKEOFF

Announce: "TAKEOFF AT TIME HH:mm."

(Note: example for HH:mm: "one seven one five" for 17:15)

Advance PLs (Power Levers) into the NOTCH.

Announce: "POWER LEVERS SET."

The FO tries to keep the ailerons into the wind.

Once FO announces "70 KNOTS," IAS, announce: "MY CONTROL/I HAVE CONTROL."

The FO lets go of the ailerons.

Once the FO announces "ROTATE," rotate the aircraft.

Once the FO announces "POSITIVE CLIMB," command: "GEAR UP."

REJECTED TAKEOFF (OPTIONAL)

Announce: "STOP STOP." or "REJECT REJECT."

If needed, move the PLs into ground idle or below for reverse thrust, and brake the aircraft at least until taxi speed. If possible, evacuate the runway.

The FO takes control of the ailerons and makes appropriate calls into the cabin via the PA system.

If using generic ATC, the FO will automatically make the appropriate call to ATC as part of their procedure.

You can now either re-run the BEFORE TAKEOFF PROCEDURE if you want to try the takeoff again or return to stand and continue with the PARKING PROCEDURE.

CLIMB PROCEDURE

Once the FO announces “FLAPS SPEED,” command: “(SET / SELECT) FLAPS ZERO.”

If desired, engage the autopilot.

Alternative command: “ENGAGE AUTOPILOT.”

The FO announces “ACCELERATION ALTITUDE” if adequately briefed.

Announce: “CLIMB PROCEDURE.”

Call for and run the “AFTER TAKEOFF CHECKLIST.”

The FO announces “TRANSITION ALTITUDE” if adequately briefed.

Command: “SET ALTIMETER STANDARD.”

Announce: “PASSING FLIGHT LEVEL XX NOW.”

Passing 10,000 feet, the FO announces, “FLIGHT LEVEL 100”.

Announce: “FLIGHT LEVEL ONE HUNDRED PROCEDURE.”

CRUISE PROCEDURE

If using generic ATC, instruct the FO to "CONTACT CENTER / RADAR" as required.
Announce: "CRUISE PROCEDURE."

During the cruise, monitor the flight progress and make sure that the SEATBELT SIGNS are switched back on should turbulence occur. You can also chime for the FA to get you something to drink or eat or to give a briefing regarding the flight's progress.

Start the approach preparations once close to your destination, approximately 10 minutes or 40 NM out from the TOD (top of descent).
-CAPTAIN

- *FMS*
  - *Query arrival weather and check relevant approach charts*
  - *Enter and double check FPLN page arrival routing*
  - *Enter PERF APP page wind*
  - *Enter VNAV page temperature and QNH*
- *PEDESTAL/FGCP (If shooting an ILS, VOR or LOC approach)*
  - *Set NAV 1&2 frequencies*
  - *Center the HDG bug*
  - *Select HDG mode*
  - *Select V/ILS 1*
  - *Set required CRS 1*
  - *Announce: "SET COURSE XXX."*
  - *Select FM1*
  - *Select NAV mode (LNAV)*
  - *Set BRG 1&2 to VOR/DME*
- *PEDESTAL/FGCP (If shooting an NDB approach)*
  - *Set ADF 1&2 frequencies*
  - *Set BRG 1&2 to ADF*
- *PFD*
  - *Set DH/MDA depending on if you are flying an ILS CAT II approach or not*
- *APPROACH BRIEFING*
  - *Announce: "ARE YOU READY FOR THE APPROACH BRIEFING."*
  - *Announce: "TRANSITION LEVEL IS XXX."*
  - *Announce: "WE WILL BE PERFORMING AN*
  - *ILS (CATEGORY TWO)/LOCALIZER/BACKCOURSE/VOR/NDB/LNAV/LNAV VNAV/VISUAL approach."*
  - *Announce: "THE FREQUENCY WILL BE XXX.XX."*
  - *Announce: "THE INBOUND COURSE WILL BE XXX."*
  - *Announce: "THE ALTITUDE AT THE FINAL APPROACH FIX WILL BE XXXX FEET."*
  - *Announce: "THE MINIMUM ALTITUDE WILL BE XXXX FEET." (DH/MDA)*
    Altitude reference (AGL or MSL) depends on if ILS CAT II approach is chosen
  - *Announce: "THE MISSED APPROACH ALTITUDE WILL BE XXXX FEET."*
  - *Announce: "THE FLAPS SETTING FOR LANDING WILL BE XX." (ATR 42 ONLY)*
  - *Announce: "(BRIEFING COMPLETED) ANY QUESTIONS."*

DESCENT

If using the generic ATC, instruct the FO to "TELL RADAR / CENTER WE ARE READY FOR DESCENT."

Call for and run the "DESCENT CHECKLIST."

The FO announces "10000 FEET".

Announce: "ONE ZERO THOUSAND FEET PROCEDURE."

The FO announces "TRANSITION LEVEL" if adequately briefed.

Set local QNH:

Announce: "SET QNH XXXX."

Announce: "PASSING XXXX FEET..... NOW."

Sometime during the descent, the FA will contact the flight deck to inform you that the cabin is secured for landing.

(Note: Refer to SUPPLEMENTARY VOICE COMMANDS, FA COMMANDS for information on contacting the flight attendant.)

APPROACH

If shooting an ILS/LOC/VOR/BC approach and if briefed properly, command: "SETUP APPROACH NAVIGATION ON YOUR SIDE."

Call for and run the "APPROACH CHECKLIST.

If you use generic ATC, instruct the FO to "REQUEST APPROACH CLEARANCE" if desired.

When established on the final approach and if briefed properly:

Command: "SET MISSED APPROACH ALTITUDE."

If required, instruct the FO to "REQUEST LANDING CLEARANCE PLEASE."

Speed permitting:

Command: "(SET / SELECT) FLAPS 15."

Command: "GEAR DOWN."

Command: "(SET / SELECT) FLAPS 30." (25 or 35 for ATR 42-600)

Call for and run the "BEFORE LANDING CHECKLIST."

At stabilization height, the FO announces either "STABILIZED" or "GO AROUND".

(Note: The stabilization height is determined by the chosen approach type and can either be 500 ft AGL for a visual or 1000 ft AGL for all other approaches. For an approach to be stabilized, the flaps must be in landing configuration and the landing gear down. In addition, for any horizontally and vertically guided approach (e.g., ILS), the PFD deviation diamonds should be centered at this point.

Announce either: "CONTINUE." or "GO AROUND."

At minimums and if the runway is in sight:

Announce: "CONTINUE."

LANDING

Command: "AUTOPILOT OFF."

Command: "YAW DAMPER OFF."

Once FO announces "70 KNOTS" IAS after touchdown, announce: "MY CONTROL/I HAVE CONTROL."

The FO announces, "MY YOKE," keeping the ailerons into the wind.

The *CPT* uses the tiller and rudder to maintain *runway* direction.

GO AROUND (OPTIONAL)

In case a go-around is needed:

Announce: "GO AROUND SET POWER FLAPS ONE NOTCH."

If using generic ATC, the FO will automatically make the appropriate call to ATC as part of their procedure.

Then, continue with the standard climb procedure segment. You can either re-brief for another approach to the same airport or continue to your alternate with another cruise, descent, and landing procedure segment.

As soon as you want to take another approach, make sure you at least call for the approach checklist again, as this will prime the FO accordingly.

AFTER LANDING PROCEDURE

Set STROBE LIGHTS off or ask the FO to set the flights for you with the command:

"SET STROBE LIGHTS OFF."

Set LANDING LIGHTS off.

Alternative command: "SET LANDING LIGHTS OFF."

Announce: "AFTER LANDING PROCEDURE."

Be aware that part of this procedure is a two-minute engine remarkable down period. You can observe the FO waiting until that time has elapsed on their clock.

(Note: The "AFTER LANDING CHECKLIST" is actioned silently by the FO as part of the procedure. The checklist is only considered complete after engine number one has been shut down, either for a single-engine taxi or after arrival at the stand.)

As required, instruct the FO to "REQUEST TAXI CLEARANCE TO THE STAND PLEASE."

If you want to operate a single-engine taxi, follow the first two commands of the PARKING procedure below. Before taxiing into the stand, switch off the Taxi and TO light.

PARKING PROCEDURE

Command: "CONDITION LEVER ONE FEATHER."

Be aware that part of this procedure is a 30-second engine cooldown period. You can observe the FO waits until the time has elapsed on their clock.

Command: "CONDITION LEVER ENGINE ONE FUEL SHUTOFF."

Command: "PARKING BRAKE. SET CONDITION LEVER ENGINE TWO FEATHER."

Set the parking brake. Engage the propeller brake. Switch off the beacon.

Call for the "PARKING CHECKLIST."

The cabin doors are opened (if operated by FS2CREW), and deboarding commences.

If you want to continue with another leg, you can do so:

Announce: "SHORT TRANSIT CHECK."

And then cycle back to the "FINAL COCKPIT PREPARATION PROCEDURE."

You can also shut down engine number two completely:

Command: "CONDITION LEVER ENGINE TWO FUEL SHUTOFF."

LEAVING THE AIRCRAFT PROCEDURE

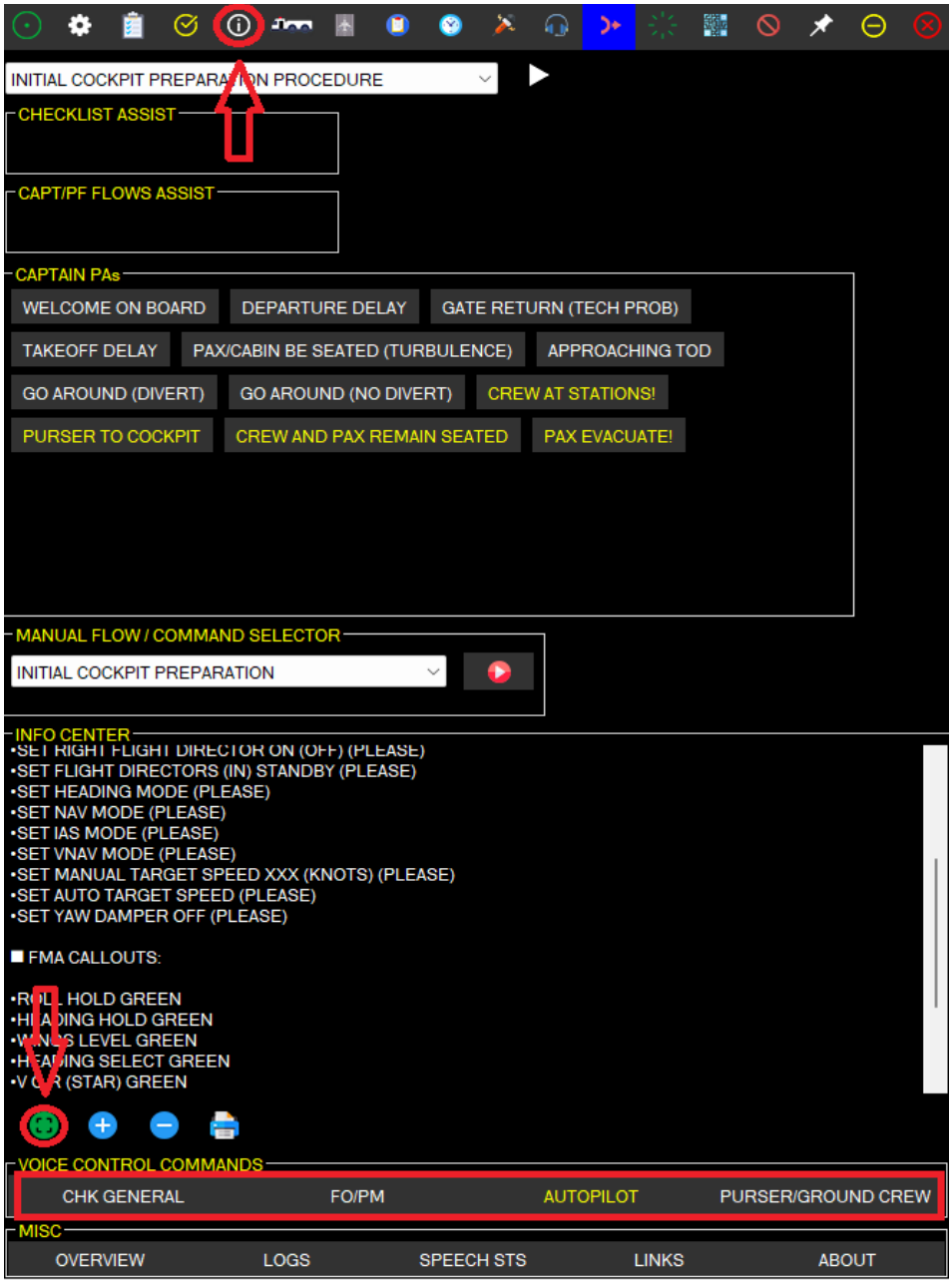
Announce: "LEAVING THE AIRCRAFT PROCEDURE."

Call for the "LEAVING THE AIRCRAFT CHECKLIST."

SUPPLEMENTARY VOICE COMMANDS

GENERAL COMMANDS:

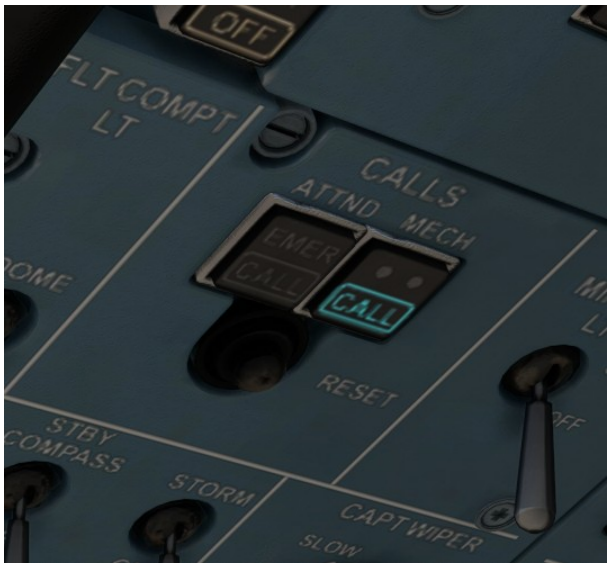
Note: Open and collapse the Info Center to learn about the available voice commands.



GROUND CREW COMMANDS:

Note: Press the MECH Call button on the overhead to call the ground crew.

After some time, the ground crew will contact the flight deck via the interphone. As soon as they arrive, this is made known to you via the illuminated MECH CALL button on the overhead and a repeated CHIME sound.



Ensure that ACP is in the correct state to hear and talk with the ground crew. Also, remember to reset the MECH CALL light on the overhead after establishing contact.

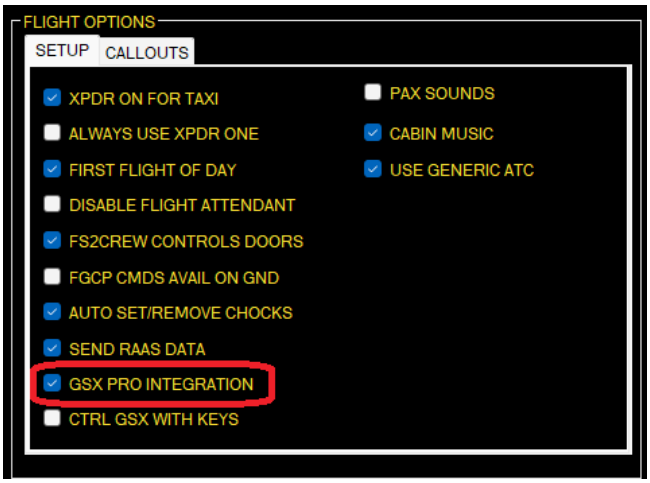


Note: YOU MUST USE THE CAPTAIN'S ACP (AUDIO CONTROL PANEL).

COMMANDS:

- COCKPIT TO GROUND/ GROUND FLIGHT DECK
- PLEASE CONNECT THE (GPU / EXTERNAL POWER)
- PLEASE DISCONNECT THE (GPU / EXTERNAL POWER)
- PLEASE SET THE CHOCKS
- PLEASE REMOVE THE CHOCKS
- PLEASE DISCONNECT THE GROUND EQUIPMENT
- READY TO START ENGINE NUMBER TWO IN HOTEL MODE CONFIRM SERVICE DOOR IS CLOSED AND AREA IS CLEAR
- ARE WE CLEARED TO RELEASE THE PROPELLER BRAKE
- READY FOR PUSHBACK
- READY TO TAXI YOU MAY (REMOVE THE CHOCKS AND) DISCONNECT

GSX INTEGRATION:
To enable the GSX integration, you need to check the following option in the config panel:



(Note: Make sure your GSX is set up correctly and works with the ATR without FS2CREW running, especially if you discover problems with ATR and GSX operation in conjunction with FS2CREW.)

Once enabled, F2Crew can request different GSX services during the FS2Crew Pre-Flight phase. FS2Crew automatically calls the following services: catering, Fuel, and Boarding.

Under Voice Control mode, additional commands are designed to be used when you are not using the FS2Crew Pre-Flight phase, so you can verbally (manually) request any of the previously mentioned GSX services. These are the commands:

- Request boarding, please.
- Request refueling, please.
- Request catering please.
- Engines off/running request deicing only one/two steps.
- We can start the boarding now.
- Cockpit to ground, we are ready for pushback.
- Cockpit to ground, good start confirmed; please disconnect.
- Cockpit to ground, stop here, please disconnect.

(Note: The following commands do not apply to the ATR from an operational standpoint. They are still callable, though, for consistency across the whole FS2CREW product line.)

- Connect/release the jetway, please.
- Connect/release the stairs please.

Additionally, there are these voice commands you can use at any time to control the GSX menu via voice commands:

- Toggle GSX menu please.

- Select GSX option (1…8). e.g., “Select GSX option one.” Or “Select GSX option eight.”

FA COMMANDS:

Note: To call the FA, press the FA Call button on the overhead until you hear the double chime.

The FA (flight attendant) first tries to contact the flight deck via the interphone. This is made known to you via the illuminated ATTND CALL button on the overhead and a repeated CHIME sound.



Ensure the ACP is correctly set up when hearing and talking with the FA. Also, remember to reset the ATTND CALL light on the overhead after establishing contact.



Note: YOU MUST USE THE CAPTAIN'S ACP (AUDIO CONTROL PANEL).

Depending on the conversation, she might move to the flight deck next.

If the cockpit door is locked, you will be notified by knocking.

Open the door by moving the spring-loaded COCKPIT DOOR switch on the pedestal to OPEN.



COMMANDS:

- 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

FMA CALLOUTS:

Note: If ENABLE FMA DETECTION is activated in the GENERAL OPTIONS, the FO monitors FMA changes and calls them out if you do not do so yourself.

- ROLL HOLD GREEN
- HEADING HOLD GREEN
- WINGS LEVEL GREEN
- HEADING SELECT GREEN
- V O R STAR GREEN
- V O R GREEN
- L O C STAR GREEN
- L O C GREEN
- B C STAR GREEN
- B C GREEN
- L NAV GREEN
- STICK PUSHER GREEN
- PITCH HOLD GREEN
- I A S GREEN
- V S GREEN
- ALT STAR GREEN
- ALT GREEN
- G S STAR GREEN
- G S GREEN
- G A GREEN
- V NAV I A S GREEN
- V NAV ALT STAR GREEN
- V NAV ALT GREEN
- V NAV V S GREEN
- V NAV PATH GREEN
- V F P GREEN

SUPPLEMENTARY INFO/ PROCEDURES/CHECKLISTS

CABIN PA TRIGGERS:

Note: To hear the PAs, the Captain's PA audio volume selector on the ACP must be on full volume, OR the cockpit AND cabin/cargo hold compartment doors must be opened.



WELCOME PA: Triggered once, shortly before boarding has been finished.

TAXI PA: Triggered once the boarding has been completed and the doors have been closed.

MEAL PA: Triggered once during climb out.

TURBULENCE PA: Triggered on the cruise when the SEATBELT SIGNS were switched on.

DESCENT PA: Triggered once during descent

LANDING PA: Triggered once, shortly before landing

TAXI GATE PA: Triggered once during landing rollout.

NOTE: You can swap the Cabin PAs for your audio files if the format and file name remain the same.

Cabin PAs are located in this folder:

C:\Program Files (x86)\FS2Crew MSATR for MSFS\bin\Audio\FA

CREW FLOWS:

FIRST OFFICER'S INITIAL COCKPIT PREPARATION PROCEDURE:

■ **SITUATION: CREW ENTERS THE AIRCRAFT ON THE FIRST FLIGHT OF THE DAY**

■ **TRIGGER: CPT/PF CALLS FOR "INITIAL COCKPIT PREPARATION PROCEDURE"**

•EMER EQUIPMENT: CHECK

•GEAR PINS & COVERS: ON BOARD

•DOCUMENTATION: ON BOARD

•ALL CIRCUIT BREAKERS: CHECK

•BRAKE HANDLE: PARKING

•PL 1 & 2: CHECK GI

•GUST LOCK: CHECK ON

•CL 1 & 2: CHECK GI: CHECK FUEL S.O.

•FLAPS LEVER & INDICATOR: CHECK CONSISTENCY

•LANDING GEAR LEVER: CHECK DOWN

•EEC 1 & 2: CHECK PRESSED IN

•WIPERS: OFF

•BATTERY: ON

•MFC: MONITOR AUTOTEST

•EMER BUS & ESS BUS: CHECK ARROWS ON

•UNDV LIGHT: CHECK OFF

•NAV LIGHTS: ON

•AVIONIC INITIALIZATION: CHECK

•EXT PWR: CHECK AVAIL LIGHT

•EXT PWR: PRESS

•IESI: CHECK ALIGNMENT

•AVIONIC INITIALISATION TEST: CHECK

FIRST OFFICER'S EXTERNAL INSPECTION PREPARATION PROCEDURE:

■ **SITUATION: AFTER THE INITIAL COCKPIT PREPARATION PROCEDURE HAS BEEN COMPLETED**

■ **TRIGGER: CPT/PF STATES: "I AM HEADING OUT FOR THE WALKAROUND"**

•NO WHITE LIGHTS EXCEPT PROBE HTG & FUEL PUMPS: CHECK

•HYD AUX PUMP: PRESS

•HYD X FEED: ON THEN OFF

•BEACON, LOGO, WING LIGHTS: ON

•EMER EXIT LT SW: ARM

FIRST OFFICER'S EXTERNAL INSPECTION COMPLETION PROCEDURE:

■ **SITUATION: AFTER THE CPT HAS COMPLETED THE WALKAROUND AND IS BACK IN THEIR SEAT**

■ **TRIGGER: CPT/PF STATES "THE EXTERNAL INSPECTION IS COMPLETED"**

•BEACON & WING LIGHTS: OFF

•LOGO LIGHTS: AS REQD

•ANN LT: TEST

FIRST OFFICER'S FULL COCKPIT PREPARATION PROCEDURE:

■ **SITUATION: AFTER THE INITIAL COCKPIT PREPARATION PROCEDURE HAS BEEN COMPLETED**

■ **TRIGGER: CPT/PF CALLS FOR "FULL COCKPIT PREPARATION PROCEDURE"**

•DOME LIGHTS: AS REQD

•STBY COMPASS LIGHT: OFF

•STORM LIGHT: OFF

•SELCAL LIGHT: OFF

•MIN CAB LIGHT: AS REQD

•FUEL PUMPS & X-FEED: TEST

•DOORS: TEST

•ENG 1 FIRE: TEST

•EXTERIOR LIGHTS: AS REQD

•PROP BRK: ENGAGED

•ENG START SELECTOR: OFF & START ABORT

•MAIN ELEC PWR MFD SD PAGE: CHECK

•CVR & SSFDR: TEST

•SIGNS PANEL: ON

•EMER EXIT LT TOGGLE SW: ARM

•DE-/ANTI-ICING: OFF

•PROBES HEATING: OFF

•WINDSHIELD HEATING: ON

•AC WILD ELEC PWR: CHECK

•HYD PWR: CHECK

•EMER LOC XMTR: CHECK GUARDED

•ANNUNCIATOR LIGHT: AS RQRD

•AIR BLEED/COMPT TEMP: CHECK

•RECIRC FAN 1&2: ON

•OVBD VALVE: AUTO/GUARDED

•OXYGEN PANEL: CHECK

•CMPT SMK PANEL: TEST

•ENG 2 FIRE: TEST

•ATPCS STATIC TEST: PERFORM

•MIP/PED/OVHD/FLOOD LT: AS RQRD

•ACARS: CHECK

•HF: CHECK

•TRIMS: TEST

•IDLE GATE: CHECK

•EMER AUDIO CANCEL: CHECK GUARDED

•GUST LOCK LEVER: ON

•FLAPS: 0°

•VCP: COM, SURV, NAV: SET/CHECK

•CDLS: TEST

•RADAR: TEST

•MCDU BRT: AS RQRD

•STICK PUSHER/SHAKER: PRESSED IN & GUARDED

•APM: TEST

•PEC 1&2: PRESSED IN/NO LIGHT

•PWR MGT: TO

•IESI: CHECK NO FLAG

•TRIMS AND FLAPS INDICATIONS: CHECK

•ENG TQ, RTO TQ, TO TQ, NP, ITT: CHECK

•TAT/SAT: CHECK

•FUEL USED: RESET

•EEC 1&2: PRESSED IN/NO LIGHT

•ATPCS: PRESSED IN/NO LIGHT

•DITCH: GUARDED/NO LIGHT

•CAB PRESS MODE SEL: PRESSED IN

•CAB PRESS RATE KNOB: NORM

•AUTO PRESS PANEL: TEST & SET

•DESCENT RATE: NORM

•AUTO PRESS DUMP: GUARDED/NO LIGHT

•ANTI SKID: PRESSED IN/NO-FAULT

•LDG GEAR LEVER: DOWN

•GPWS P/B TEST: PERFORM

•FGCP: INITIAL SETTING

FIRST OFFICER'S SHORT TRANSIT CHECK:

■ **SITUATION: DURING TURNAROUND INSTEAD OF THE FULL COCKPIT PREPARATION PROCEDURE**

■ **TRIGGER: CPT/PF CALLS OUT FOR "SHORT TRANSIT CHECK"**

•ENG FIRE 1: TEST

•CVR: TEST

•ENG FIRE 2: TEST

•ATPCS STATIC TEST: PERFORM

•TRIMS: TEST

•FGCP: INITIAL SETTING

FIRST OFFICER'S FINAL COCKPIT PREPARATION PROCEDURE:

■ **SITUATION: AFTER THE CPT/PF HAS DONE THE INITIAL ROUTE SETUP IN THE FMS**

■ **TRIGGER: CPT/PF CALLS FOR "FINAL COCKPIT PREPARATION PROCEDURE"**

•PEDALS: ADJUST AND LOCK

•HEADSET: SET

•COMMUNICATION: ESTABLISHED

•COMS: SET

•ATIS: OBTAIN

•ALTIMETER: SET AND CHECK

•SPS: UPDATE WITH ATIS

•NAVAIDS: AUTOTUNE SET

•BRG1 & BRG2: NOT DISPLAYED

•FPLN: X-CHECK

•LDG ELEVATION: SET

•ALL INSERTIONS: X-CHECK

•BARO: SET AND CHECKED

•DEPARTURE BRIEFING: ACKNOWLEDGE

FIRST OFFICER'S HOTEL MODE PROCEDURE:

■ **SITUATION: CPT/PF IS READY TO START ENGINE TWO IN HOTEL MODE FOR AIR AND ELECTRIC SUPPLY**

■ **TRIGGER: CPT/PF STATES, "READY TO START ENGINE TWO IN HOTEL MODE."**

•SERVICE DOOR: CLOSED

•FUEL PUMP 2: ON

•WING LIGHTS: ON

•PROP BRAKE SWITCH: ON

•RIGHT SIDE AREA: CHECK CLEAR

•ENG START SELECTOR: AS RQRD

•START 2 P/B: PRESS

•NH: MONITOR

•CL 2: FEATHER

•TIMING: START

•ITT MAX: ANNOUNCE

•ENG START SELECTOR: OFF/START ABORT

•EXT PWR: OFF

•DC GEN 2 FAULT LIGHT: OFF

•DC BTC: CLOSED

•BLEED 2 FAULT LIGHT: CHECK OFF

•X VALVE OPEN LIGHT: CHECK ON

•PACK 12 FAULT LIGHT: CHECK OFF

•PL2: ADJUST AS REQUIRED

FIRST OFFICER'S BEFORE PROPELLER ROTATION PROCEDURE:

■ **SITUATION: AFTER THE GROUND CREW HAS HANDED THE LOAD SHEET THROUGH THE DOCUMENT DOOR THE CPT/PF HAS ENTERED THE FINAL WEIGHT VALUES INTO THE FMS AND BOARDING IS COMPLETED**

■ **TRIGGER: CPT/PF STATES "LOADSHEET IS RECEIVED"**

•MCDU WEIGHT PAGE: SELECT

•WEIGHT VALUES: READOUT

•PITCH TRIM: SET AND READOUT

•T/O DATA CONFIRMED: CHECK

•BOARDING COMPLETED: ANNOUNCE

•DOORS: CHECK CLOSED

•BEACON: CHECK ON

FIRST OFFICER'S BEFORE TAXI PROCEDURE:

■ **SITUATION: CPT IS READY TO START THE ENGINES IN PREPARATION FOR TAXI**

■ **TRIGGER: CPT CALLS FOR "BEFORE TAXI PROCEDURE"**

•ENG 2 START: CALLOUT VALUES

•CL 2: AUTO

•ENG 2 START: CALLOUT VALUES

•PROBES HEATING: ON

•ANTI ICING: AS REQUIRED

•ANTISKID: TEST

•FLAPS LEVER: 15°

•FLAPS: MONITOR EXTENSION

•ENG 1 START: CALLOUT VALUES

•CL 1: AUTO

•ENG 1 START: CALLOUT VALUES

•OVERHEAD PANEL: NO LIGHTS

•SD PAGES: CHECK NO FAULTS

•ATC CLEARANCE: OBTAIN

•XPDR: ON

•TCAS: AUTO

•FGCP: SET

•GROUND CREW: INSIGHT

FIRST OFFICER'S TAXI PROCEDURE:

■ **SITUATION: CPT IS READY TO TAXI**

■ **TRIGGER: CPT CALLS FOR "TAXI PROCEDURE LEFT SIDE CLEAR"**

•OUTSIDE AREA: CHECK CLEAR

•BLOCK TIME: NOTE

•ELAPSED TIME: ON

•TAXI & TO LIGHT: ON

•ATC CLEARANCE: OBTAIN

•BRAKES: CHECK

•T/O CONFIG TEST: PERFORM

•FMA: CHECK

FIRST OFFICER'S BEFORE TAKEOFF PROCEDURE:

■ **SITUATION: CPT/PF IS READY TO PREPARE THE AIRCRAFT FOR TAKEOFF**

■ **TRIGGER: CPT/PF CALLS FOR THE "BEFORE TAKEOFF PROCEDURE"**

•TAKEOFF BRIEFING: ACKNOWLEDGE

•GUST LOCK: OFF

•RIGHT AILERON AND SPOILER: CALLOUT

•BLUE LIGHT: CALLOUT

•TRANSPONDER: ON

•TCAS: AUTO & ABOVE

•MFD: ND ARC, RANGE 20

•VCP: COM

•MCDU: FPLN

FIRST OFFICER'S TAKEOFF PROCEDURE:

■ **SITUATION: ON THE RUNWAY WITH THE BEFORE-TAKEOFF CHECKLIST AND PROCEDURE COMPLETED**

■ **TRIGGER: CPT/PF STATES TAKEOFF AT TIME HH:mm**

•MONITOR PL: SET NOTCH

•ATCPS ARM: ANNOUNCE

•TO TQ: ANNOUNCE

•70 KNOTS: ANNOUNCE

•V1/VR: ANNOUNCE

FIRST OFFICER'S REJECTED TAKEOFF PROCEDURE:

■ **SITUATION: ON THE RUNWAY DURING THE TAKEOFF ROLL**

■ **TRIGGER: CPT/PF ANNOUNCING "STOP STOP" OR "REJECT REJECT"**

•CONFIRMATION: ANNOUNCE

•AILERONS: CONTROL

•DECELERATION: MONITOR

•ATC: NOTIFY

•PA: PERFORM

FIRST OFFICER'S CLIMB PROCEDURE:

■ **SITUATION: DURING THE INITIAL CLIMB, AS SOON AS FO/PM HAS CALLED OUT ACCELERATION ALTITUDE**

■ **TRIGGER: CPT/PF CALLS FOR "CLIMB PROCEDURE"**

•PWR MGMT: TAKEOFF

•TAXI & TO LIGHT: OFF

•BLEEDS: ON

FIRST OFFICER'S CRUISE PROCEDURE:

■ **SITUATION: AS SOON AS THE CRUISING ALTITUDE HAS BEEN REACHED**

■ **TRIGGER: CPT/PF CALLS FOR "CRUISE PROCEDURE"**

•PWR MGMT: CRUISE

•MFD SD ENG: CHECK

FIRST OFFICER'S GO-AROUND PROCEDURE:

■ **TRIGGER: CPT/PF CALLS FOR "GO AROUND SET POWER FLAPS ONE NOTCH"**

•FLAPS LEVER: RETRACT ONE NOTCH

•PL 12: CHECK AND ADJUST

•FLAPS: ANNOUNCE POSITION

•FMA: CHECK

FIRST OFFICER'S AFTER LANDING PROCEDURE:

■ **SITUATION: AS SOON AS THE RUNWAY HAS BEEN VACATED**

■ **TRIGGER: CPT/PF CALLS FOR AFTER LANDING PROCEDURE**

•FLAPS LEVER: ZERO

•GUST LOCK LEVER: ENGAGE

•FLIGHT CONTROLS: CHECK LOCKED

•TIMING 2 MIN: START

•XPDR: AS REQUIRED

•SYSTEM PAGE: SET

•TRIMS: RESET

•WEATHER RADAR: STBY

•FGCP: STBY

•DE/ANTI-ICING: OFF

•PROBES HEATING: OFF

FIRST OFFICER'S PARKING PROCEDURE:

■ **SITUATION: FOR SINGLE-ENGINE TAXI IN OR AFTER ARRIVAL AT THE STAND**

■ **TRIGGER: CPT CALLS FOR "CONDITION LEVER ENGINE ONE FEATHER"**

•CL 1: FEATHER

•CHRONO: START

•ACW BTC: CONFIRM CLOSED

•HYD PRESS: CHECKED

•AFTER 30 SECONDS: ANNOUNCE

•CL 1: FUEL SHUTOFF

•DC BTC: CONFIRM CLOSED

•XPDR: STBY

•CL 2: FEATHER

•NP STABILIZED: ANNOUNCE

•PROP 2: CHECK STOPPED

•CL 2: FUEL SHUTOFF

FIRST OFFICER'S LEAVING THE AIRCRAFT PROCEDURE:

■ SITUATION: THE CREW HAS COMPLETED THEIR ROTATION AND WILL LEAVE THE AIRCRAFT IN COLD AND DARK

■ TRIGGER: CPT/PF CALLS FOR "LEAVING THE AIRCRAFT PROCEDURE"

- OXYGEN MAIN SUPPLY: OFF
- EMER EXIT LT: DISARM
- LOGO LIGHT: OFF
- WEATHER RADAR: OFF
- WITH GPU
- FUEL PUMP 1&2: OFF
- DC EXT PWR: OFF
- BATTERY: OFF
- WITHOUT GPU
- CL 2: FUEL SHUTOFF
- WING LIGHT: OFF
- FUEL PUMP 1&2: OFF
- BATTERY: OFF
- PARKING BRAKE: AS REQUIRED

FINAL COCKPIT PREPARATION CHECKLIST:

FO / CPT

"Final cockpit preparation checklist."

"Parking brake." - "Engaged. Pressure check."

"Altimeters." - "Set and checked." or "Q N H XXXX, XXXX feet, set and checked."

"Landing elevation." - "Set." or "XXXX feet, set."

"FMS, com, nav." - "Set."

"Fuel quantity. FOB." - "Checked." or "XXXX kilograms/pounds, checked."

"Engine fuel used." - "Reset."

"Memo panel." - "Checked."

"Power management." - "Take-off" or "TO."

"Final cockpit preparation checklist completed."

BEFORE PROPELLER ROTATION CHECKLIST:

FO / CPT

"Before propeller rotation checklist."

"CDLS." - "On"

"FMS and take-off data." - "Confirmed."

"Trims." - "Set."

"Tail prop." - "On board."

"Doors." - "Closed."

"Seat belts." - "On."

"Beacon." - "On."

"Before propeller rotation checklist completed."

BEFORE TAXI CHECKLIST:

FO / CPT

"Before taxi checklist."

"Flight warning system." - "Recall."

"Propeller brake." - "Off."

"Cockpit com hatch." - "Closed."

"CL one and two." - "Auto."

"Anti-icing." - "On" or "Off."

"TRU." - "On" or "Off."

"Anti-skid test." - "Performed."

"Flaps." - "15."

"Nose wheel steering." - "On."

"Before taxi checklist completed."

TAXI CHECKLIST:

FO / CPT

"Taxi checklist."

"Taxi and take-off lights." - "On."

"Brakes." - "Checked."

"FGCP, FMA." - "Checked."

"Take-off config test." - "Performed."

"Taxi checklist completed."

BEFORE TAKEOFF CHECKLIST TO THE LINE:

FO / CPT

“Before takeoff checklist.”

“Takeoff briefing.” - “Performed.”

“Gust lock.” - “Off.”

“Flight controls.” - “Checked.”

“Transponder, TCAS.” - “Checked.” or “Alt, above.”

“Airflow.” - “Normal”

“Before take-off checklist completed to the line.”

BEFORE TAKEOFF CHECKLIST BELOW THE LINE:

FO / CPT

“Cabin crew.” - “Advised.”

“Engine bleed.” - “On” or “Off.”

“External lights.” - “On.”

“Lateral FD bar.” - “Centered.”

“Rudder cam.” - “Centered.”

“Before takeoff checklist completed.”

AFTER TAKEOFF CHECKLIST:

FO / CPT

"After takeoff checklist."

"Landing gear." - "Up."

"Flaps." - "Zero."

"Power management, NP." - "Climb and checked." or "Climb eighty-two." or "Climb eight-two."

"Engine bleed." - "On."

"Taxi and take-off lights." - "Off."

When altimeters are not set to STD:

"Checklist completed to the line."

When altimeters are set to STD:

"Altimeters." - "Standard and checked."

"After take-off checklist completed."

DESCENT CHECKLIST:

FO / CPT

"Descent checklist."

"Flight warning system." - "Recalled." or "No status."

"Landing elevation." - "Checked." or "XXXX feet, checked."

"FMS, NAV, performance." - "Set and checked."

"DH, MDA." - "Set and checked." or "XXXX feet, set and checked."

"Arrival briefing." - "Performed."

"Descent checklist completed."

APPROACH CHECKLIST:

FO / CPT

"Approach checklist."

"Seat belts." - "On."

"Landing lights." - "On."

"Altimeters." - "QNH XXXX, set and checked."

"Cabin altitude." - "Checked."

"Approach checklist completed."

BEFORE LANDING CHECKLIST:

FO / CPT

"Before landing checklist."

"Cabin crew." - "Advised."

"Landing gear." - "Three green."

"Flaps." - "30." or "25." or "35."

"Power management." - "TO." or "Take-off."

"TLU low speed." - "Check."

"Icing AOA light." - "On." or "Off."

"External lights." - "On."

"Before landing checklist completed."

AFTER LANDING CHECKLIST:

FO / CPT

"After landing checklist."

"Radar, standby."

"Flight controls, locked."

"Flaps, zero."

"Trims, reset."

"Landing and strobe lights, off."

"Anti-icing, de-icing, off."

"Probes heating, off."

After 2 minutes, "2 minutes."

"CL 1 feather." - "Feather."

After 30 seconds, "30 seconds."

"CL 1 fuel shut-off." - "Fuel shut off.

After landing checklist completed."

PARKING CHECKLIST:

FO / CPT

"Parking checklist."

"Parking brake." - "Engaged."

"Taxi and take-off lights." - "Off."

"CL 2." - "Feather."

"Propeller brake." - "On."

"Beacon." - "Off."

"Transponder." - "Standby."

"Tail prop." - "On position." or "In position."

"Seat belts." - "Off."

"Parking checklist completed."

LEAVING THE AIRCRAFT CHECKLIST:

FO / CPT

"Leaving the aircraft checklist."

"Oxygen main supply." - "Off."

"Ice and rain protection." - "Off."

"External lights." - "Off."

"Emergency exit light." - "Disarmed."

"Radar." - "Off."

"CL 2." - "Fuel shut-off."

"Fuel pumps 1 and 2." - "Off."

"CDLS." - "Off."

"External power." - "Off."

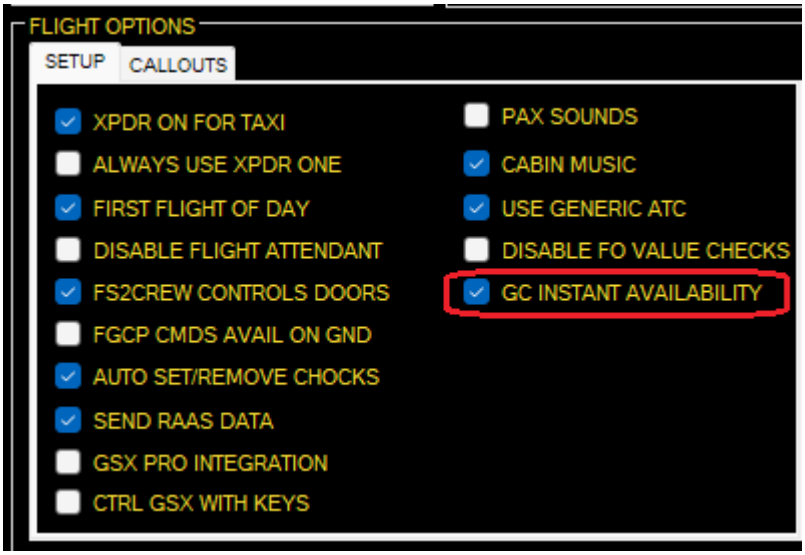
"Battery." - "Off."

"Leaving the aircraft checklist complete."

CHANGE LOG:

V1.1 – 06/17/24

- fixed: repeated FO „transition altitude“ callout at 18000 feet
- fixed: FO not switching on yaw damper on CPT gear up command
- feature: option „GC INSTANT AVAILABILITY“ to instantaneously call the ground crew to the intercom pressing the MECH HORN button on the overhead



V1.0 – 06/09/24

- initial release

-MANUAL END-