



TUTORIAL REQUIREMENTS:

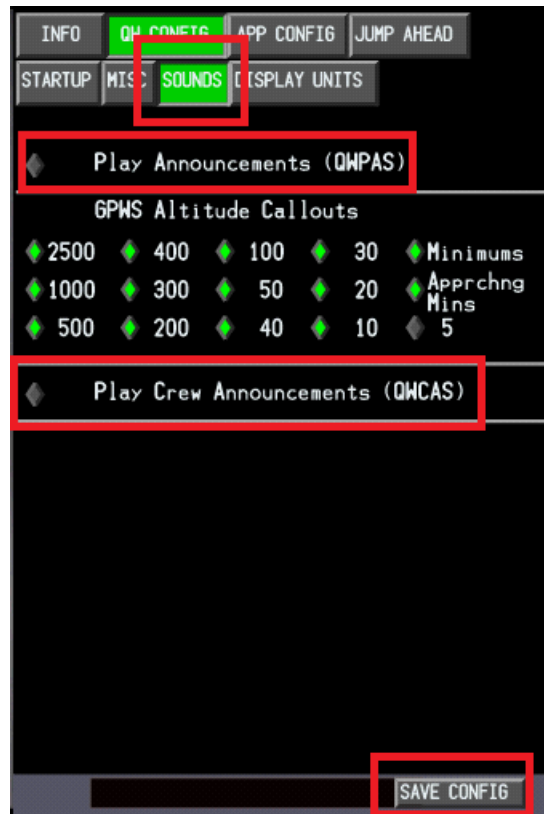
- FS2Crew for the QualityWings 787 available at <https://www.fs2crew.com/>
- If using Voice Control, a microphone. If not using Voice Control, you can use Button Control.
- For information on setting up Voice Control, please consult the FS2Crew Main OPS Manual. Note that unlike some older version of FS2Crew, your speech recognizer can be set to ENGLISH either US, UK, AU, Canada or India. You are not limited to ENGLISH US.

TUTORIAL NOTES:

- You are the Captain and the Pilot Flying.
- The computer simulates the role of the First Officer and Pilot Monitoring.
- Your commands (spoken if using Voice Control), are marked in **RED TEXT**.
- If using Button Control, using the Main and Secondary Button (See the Main OPS Manual) to action the commands described in this tutorial.
- If using VOICE CONTROL, for many of the actions/checklists to work, the MODE on the FS2Crew Main Panel must match the action/checklist you are verbalizing. You cannot, for example, call for the Shutdown Checklist while the mode indicates PREFLIGHT CHECKLIST.
- Additional voice commands are listed at the bottom of this tutorial.
- If you require support, please visit the [FS2Crew Support Forum](#) at Avsim.com.
- If you ever get stuck in a checklist, speak: "**SET AND CHECKED**".

DISABLING THE BUILT IN QW CABIN PA'S AND CREW ANNOUNCEMENTS:

- To avoid overlapping sounds between the FS2Crew flight crew and the QW 787's built in flight crew, disable **QWPAS** and **QWCAS** in the QW787 **CONFIG-SOUNDS** menu as shown below. Do not forget to click "**SAVE CONFIG**".

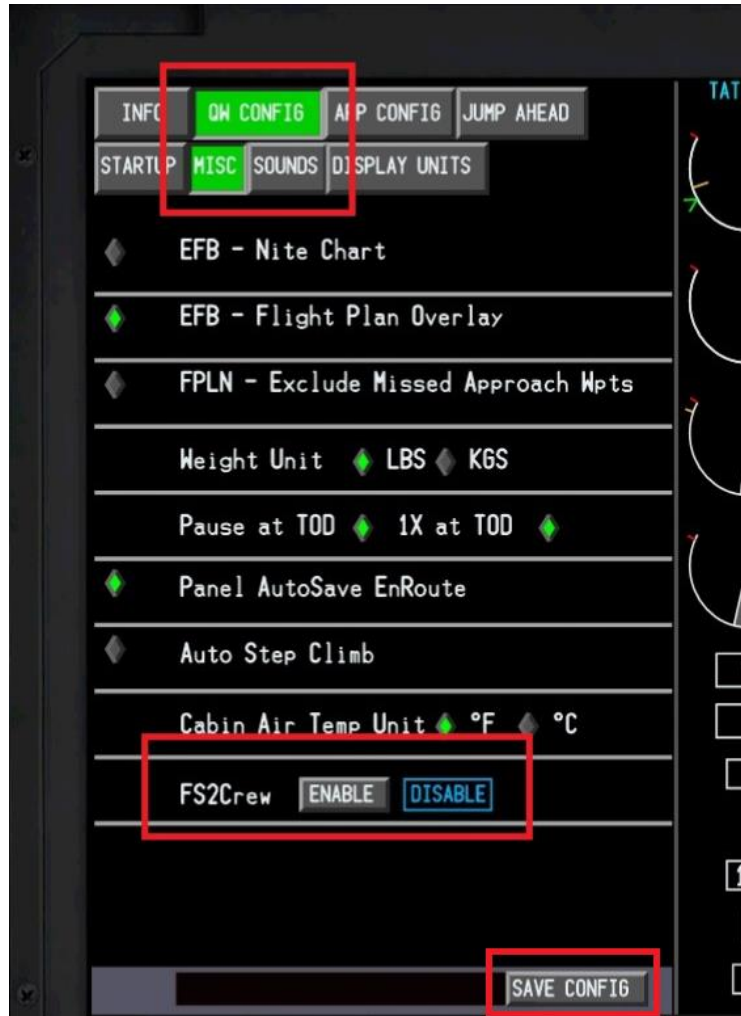


HOW TO OPEN THE FS2CREW MAIN PANEL:

- Assign a key to **AUTOFEATHER ARM/OFF** in the **FS CONTROLS ASSIGNMENTS** menu. We suggest using the "N" key.



- There is **no** stand-alone FS2Crew Config Manger in this version of FS2Crew. To “enable” FS2Crew, you must go the 787’s **LEFT FMC**. Go to **QW CONFIG->MISC** page as shown below. There you will see an **ENABLE FS2Crew** buttons. After enabling FS2Crew, you must **RESTART** the simulator for the changes to take effect.



**AFTER “ENABLING” FS2CREW VIA THE “LEFT / CAPTAIN’S SIDE FMC” AND PRESSING “SAVE CONFIG”,
RESTART THE SIMULATOR FOR THE CHANGES TO TAKE EFFECT!**

IMPORTANT! ‘ENABLING’ FS2CREW WILL ADD THE FS2CREW ENTRIES TO WHATEVER ‘PANEL.CFG’ FILE IS CURRENTLY LOADED. YOU MAY NEED TO ENABLE FS2CREW AGAIN IF YOU LOAD A 787 MODEL OR LIVERY THAT USES A DIFFERENT PANEL.CFG (SUCH AS PANEL.NORL, PANEL.LOW_VAS, ETC).

***YOU MUST USE THE CAPTAIN’S SIDE FMC TO
ENABLE FS2CREW, THEN EXIT & RELOAD FSX/P3D!***

BUTTON ASSIGNMENTS AT A GLANCE:

- The following key assignments are made in the FS Controls Menu. Note that Voice and Button share the same key assignments. That is not a mistake in the manual.

Open FS2Crew Main Panel: **AUTOFEATHER ARM/OFF** (Recommended key: “N”)

VOICE CONTROL:

Soft Mute: **PROPELLER SYNC (ON/OFF)** (Recommended key: “C”)

Hard Mute: **ALTERNATE STATIC SOURCE (ON/OFF)** (Recommended key: “V”)

BUTTON CONTROL:

Main Button: **ALTERNATE STATIC SOURCE (ON/OFF)** (Recommended key: “C”)

Secondary Button: **PROPELLER SYNC (ON/OFF)** (Recommended key: “V”)

PHASE: PREFLIGHT EVENTS RUNNING

MODE: PREFLIGHT CHECKLIST

Note: Running the Pre-Flight Events is **OPTIONAL**. You can start the Pre-Flight events routine via the PF page on the SECONDARY FS2Crew Panel.

TIME REMAINING:

- Initial: **As Captain, manually establish electrical power as desired**. If cold and dark, turn on the battery. Then turn on the APU or select the GPU and connect that power source to the aircraft busses. **The FO will NOT do this for you**. Normally in the real-world the crew would receive the aircraft in a powered state.
- FO performs his **PRELIMINARY PRE-FLIGHT PROCEDURE**.
 - Reset IRs, OFF 30secs, ON (both). (Note: There is a Config Option if you want to control the IR switches manually).
 - Turn on EFB and review database and DATALOAD messages.
 - Check Status Messages (refer to MEL for dispatch)
 - Check for unexpected Memo Messages
 - Engine Oil Levels
 - Liquid Cooling Quantity
 - Hydraulics Quantity
 - Cabin Temp/Flight Deck Temperature

- Recirculation Fans and Electrical status (APU/Ext Power).
 - Check parking brake ON.
 - Brief Captain on status of aircraft.
-
- FO performs the **FO'S PRE-FLIGHT PROCEDURE**:
 - Tail Switch- NORM
 - Wing Switch - NORM
 - Heading REF - NORM
 - Primary Flight Control PFC - Guard closed
 - Battery - ON (check off light extinguished)
 - IFE PASS SEATS - Power On
 - CAB/UTILITY - ON
 - APU Generators - ON (verify 'Drive' lights illuminated)
 - APU - START then ON (Note: Only start APU if external power NOT connected).
 - Left HUD brightness - Set
 - L Wiper - OFF
 - Towing Panel Lights - OFF
 - Flight Deck Door Power Switch - ON
 - CCR Resets - Both Guards Closed
 - Emergency Exit Lights - Guard Closed
 - Service Interphone - OFF
 - Passenger Oxygen switch - OFF, verify ON light is extinguished.
 - Back Up Window Heat - ON
 - Primary Window Heat - ON
 - Ram Air Turbine - Light OFF
 - Left and Right Hydraulic Primary Pumps - ON
 - C1 and C2 Electric Pumps - OFF
 - Left and Right Demand Pumps - OFF
 - Seat Belts – ON (*if you are simulating refueling, set the Seatbelts off*).
 - Set Master Brightness
 - Set Panel Lights
 - Ground Test Selector to NORM (Engineers sometimes leave in ENABLE so check first)
 - APU BTL DISCHARGE light not illuminated
 - APU FIRE SWITCH - IN
 - CARGO FIRE ARM SWITCHES - OFF
 - EEC Guarded Switches - NORM displayed
 - START SELECTORS - BOTH NORM
 - FUEL JETTISON NOZZLE SWITCHES - OFF
 - FUEL TO REMAIN (Selector) - IN
 - FUEL JETTISON ARM (Selector) - OFF
 - CROSSFEED - OFF
 - FUEL PUMPS (All) - OFF (if APU is on, check the Left AFT PRESS light is extinguished)

- FUEL BALANCE SWITCH - OFF
- WING and ENGINE ANTI ICE - Both to AUTO
- Set External Lights. (BEACON OFF, NAV ON, LOGO and WING as required)
- TURN OFF, TAXI and STROBES - All OFF
- BROADBAND COMM - ON
- ELT - Guard Closed
- HUMID SWITCH - ON
- SET CARGO TEMP
- EQUIP COOLING - check AUTO
- UPPER RECIRC FAN - ON
- LOWER RECIRC FAN - OFF (-9 only. Set back to ON at Top of Climb. -9 fan is noisy)
- Flight Deck Temperature Selectors - Set as needed. (full cold turns on turbo fan)
- PACK SWITCHES - Both AUTO
- TRIM AIR - ON
- VENT SWITCHES - NORM
- OUTFLOW VALVES - AUTO
- Landing ALT Selector - IN
- Right Flight Director Switch - ON
- EFIS DSP - Set.
- ND - Select MAP
- ND Mode Selector - Set VSD ON, Terrain as required, Data ON, both VORs to ON
- Weather Radar (ND Menu selector) - verify Radar is OFF.
- PFD/MFD switch - NORM
- AIR DATA/ATT - AUTO
- All displays to mid position brightness.
- Check Flight Instruments - TCAS OFF and NO VSPD flags are shown.
- Check FMAs read - (BLANK)/ TOGA/TOGA
- AFDS - should read FLT DIR
- Landing Gear Lever - DOWN
- Alternate Gear Switch - GUARD CLOSED
- Autobrake - RTO
- EICAS - Select ENG and check for any exceedances.
- Check there is no 'VMO GEAR DOWN' memo
- Check MFD Status messages - refer to MEL if required
- CHECKLIST - RESETS - RESET ALL
- Check Oxygen mask - Set 100%.
- Set Panel Brightness - All to mid position.
- Check Emergency Torch.
- Left Tuning and Control Panel (TCP) - Check
- Left ACP - Check
- Flight Deck Door Selector - AUTO
- FIRE SWITCHES - BOTH IN (No BTL DISCH Lights)
- G/S inhibit Switch - 'Below G/S' light extinguished
- Transponder Mode - STBY
- Aural Cancel - Light Extinguished
- Centre TCP - Set
- Printer - check no FAIL or PAPER Lights shown.
- Right TCP - Set expected frequencies (clearance delivery, ground, 121.5, as required)

- Right TCP - Set HF data ON, C VHF data ON; WX radar to WX+T, Transponder to ABOVE
 - FO ACP - Set (ensure FLT interphone receiver is ON)
 - Floor Lights - As required (check for loose articles)
 - Seat - Adjust as required.
 - Rudder Pedals - Adjust
 - HUD COMBINER - DOWN (Adjust brightness)
 - Selects electronic checklist (ECL) and awaits Captain to complete his Preflight Scan.
- Captain performs the **CAPTAIN'S PRE-FLIGHT PROCEDURE**:
 - EFIS DSP - Set. Radio/ Baro mins (usually blank). FPV (as required). Set QNH to airfield.
 - Meters Selector - off (unless in China)
 - ND - Select MAP
 - ND Mode Selector - Set VSD ON, Terrain as required, Data ON, both VORs to ON
 - Left Flight Director - ON
 - EICAS transfer - PM side (in this case FO)
 - MCP Set - Autothrottle Arm Both ON. Bank Angle AUTO, Heading/Track reference as required. Altitude Increment - As required.
 - Oxygen Check and Set - ON and 100%
 - Check Emergency Torch is fitted
 - Panel Brightness all to MID POSITION
 - AIR DATA/ATT - AUTO
 - PFD/MFD - NORM
 - (verify IRs have aligned at this stage)
 - Check Flight Instruments - TCAS OFF and NO VSPD flags are shown.
 - Check FMAs read - (BLANK)/ TOGA/TOGA
 - AFDS - should read FLT DIR
 - Integrated Standby ISFD - Set local QNH
 - Speed Brake - Check Down
 - Reverse Thrust Levers - Both Down
 - Forward Thrust Levers - Closed
 - Flaps - Check Selector versus Indicator (if any doubt consult engineer)
 - Park Brake - Set (note the EICAS 'Parking Brake Set' message)
 - Stab Trim Cut Out Switches - Guard Closed
 - Fuel Control Switches - CUT OFF (check integrated fire lights aren't on)
 - Alternate Flap Control and Selector - OFF
 - Captain TCP - Set (WX Radar to WX+T, Transponder to Above, GPWS settings)
 - Captain ACP - Set (check ground frequencies as required)
 - Seat - Adjust
 - Rudder Pedals - Adjust
 - HUD Combiner - DOWN and set brightness.

- When the PREFLIGHT PROCEDURE is complete, Captain calls for “**PREFLIGHT CHECKLIST**”. (See the *PREFLIGHT CHECKLIST* section below for details on how to run this checklist.)
- After the Preflight checklist has been completed, the FO will go out for his walkaround and the Captain will setup the CDU and EFB.
- Captain’s **CDU SETUP**:
 - IDENT PAGE – Check.
 - DRAG/FF - Adjust as necessary. Compare with flight plan.
 - CDU POS INIT - Check time. GPS usually enters position automatically. If this doesn’t happen, get ‘GPS’ message and prompt to ‘Set Inertial Position’. Entering the Airfield code at LSK 2L just brings up a database Lat/Long to Check the GPS position.
 - RTE page 1 - Enter Origin, Destination and Flight Number. Either request route via downlink, or manually enter on page 2.
 - DEP/ARR - select runway and SID (if required, HUD takeoff)
 - Select Engine Out SID if programmed.
 - DEP/ARR - INDEX, select destination airfield (KSEA). Set STAR and landing runway.
 - PROG Page 1 - Check flight plan distance versus FMC distance (gross error check)
 - POS REF page 2 - Check RNP (ensure complies with SID requirements)
 - LEGS - check legs. LSK 6R, RTE DATA then enter winds or request via datalink.
 - RTE - RTE COPY.
 - NAV RADS - as required. If HUD Takeoff, Check ILS isn’t in PARK.
 - CDU PERFECT INIT – Set.
- Captain’s **EFB SETUP**:
 - Initialize Flight.
 - Review any Memos and/or Messages.
 - Select Terminal Charts. Set up chart clip.
 - Select Enroute, build route.
 - PERFORMANCE tab - Pre select airport, runway, intersection, and other pertinent data.
 - Pre select any MEL or CDL items.
- **+30 to + 20 Minutes**: FA asks if ready to start boarding. Allowed responses: “**YES**”, “**AFFIRMATIVE**”, “**OKAY**”, “**GO FOR IT**”, “**YES PLEASE**”.
- **+15 Minutes**: Final loadsheet arrives. Allowed responses: “**THANK YOU**”, “**OKAY THANKS**”, “**THANKS**”.
Enter the final Zero Fuel Weight into the CDU. (*Normally the pilots would cross confirm the numbers prior to entering them into the CDU, but FS2Crew cannot simulate that conversation*).
- **After Loadsheets arrives or final takeoff numbers calculated**: Captain sets V2, Runway heading and SID Altitude in MCP. Captain uses control yoke to set trim to FMC value.
- Optional: “**REQUEST ATC CLEARANCE**”. If using Button Control, the ATC options will appear on the right side of the Main Panel only if an ATC Callsign has been selected. Press the button assigned to the SECONDARY BUTTON to trigger the call.

- **+6 Minutes:** If the APU is off, and if using Voice Control, the FO will ask what you want to do with the APU. If you want it on, you can manually turn it on. If using Voice Control, you can say “**SELECT APU ON**”. If using button control, the FO will start the APU automatically.
- **+5 Minutes:** FA asks if flight deck door can be closed. Respond: “**CLEARED TO CLOSE**” or “**YES**”.
- **+4 Minutes (or as desired):** Captain runs the Departure Briefing: “**ARE YOU READY FOR THE DEPARTURE BRIEF?**” When your brief is done, speak: “**ANY QUESTIONS?**”
- **+3 Minutes:** Optional: “**REQUEST START CLEARANCE**” or “**REQUEST PUSHBACK AND START CLEARANCE**” as required.
- **+2 Minutes:** Command: “**BEFORE START PROCEDURE**” to trigger the FO to start his Before Start flow. If using Ultimate Ground Crew X, do this after you’ve been cleared to pressurize by the ground crew.
- **+1 Minutes:** Command: “**BEFORE START CHECKLIST**” and run the Before Start Checklist as described in the section below.
- **+0 Minutes:** Pushback / Engine Start. We recommend using [Ultimate Ground Crew X](#).

PHASE: PREFLIGHT

MODE: PREFLIGHT CHECKLIST

CAPT ACTIONS:

- Command: “**PREFLIGHT CHECKLIST**”.

FO ACTIONS:

- Only ‘open loop’ items on the Electronic Checklist are read. If an auto-detected checklist item is not in the correction position, the FO will inform you (for example, if the parking brake is not set). You then need to correct the item, then call for the checklist again.

FO: OXYGEN

CAPT: TESTED 100 PERCENT

FO: TESTED 100 PERCENT

FO: FLIGHT INSTRUMENTS

CAPT: HEADING XXX, ALTIMETER XXXX. (ALTIMETER XXXX is the trigger phrase. Say it clearly and separately from the Heading value. Do not speak this as a single phrase). Note that HEADING refers to the aircraft’s physical heading, not the heading value selected in the MCP. If you ever get stuck, speak **SET AND CHECKED**.

FO: HEADING XXX, ALTIMETER XXXX

PHASE: BEFORE ENGINE START

MODE: <BEFORE START PROCEDURE>

CAPT ACTIONS:

- Optional Command: “REQUEST PUSH AND START CLEARANCE” / “REQUEST START CLEARANCE”.
- Command: “BEFORE START PROCEDURE”.

FO ACTIONS:

- Hydraulic Pumps on
- Fuel Pumps on
- Beacon on
- Recall checked
- Transponder to XPDR

PHASE: BEFORE START

MODE: BEFORE START CHECKLIST

CAPT ACTIONS:

- Command: “BEFORE START CHECKLIST”.

FO: PASSENGER SIGNS

FO: ON

FO: MCP

CAPT: V2 XXX, HDG / TRACK XXX, ALTITUDE XXXX (Note: “ALTITUDE XXXX” is the trigger phrase. Say it distinctly from any preceding words. Pause a moment before saying ALTITUDE XXXX)

FO: TAKEOFF SPEEDS

CAPT: V1 XXX, VR XXX, V2 XXX. (V2 XXX is the trigger phrase. Say it clearly and distinctly).

FO: CDU PREFLIGHT

CAPT: COMPLETED

FO: TAXI AND TAKEOFF BRIEFING

CAPT: COMPLETED

PHASE: ENGINES START

MODE: <ENGINE START PROCEDURE>

CAPT ACTIONS:

- Ensure SECONDARY ENGINE INFORMATION is displayed on the EICAS. If you don't see the secondary engine instruments on the EICAS, press the **ENG** button shown here.



- Command: **"START RIGHT ENGINE"** / **"START LEFT ENGINE"**.
- You can start the engines in any order.
- Set associated Fuel Control switch to Run as the appropriate time. This is the Captain's job. Not the FO's!

FO ACTIONS:

- Select Engine Starter as appropriate.

PHASE: AFTER START

MODE: <AFTER START PROCEDURE>

CAPT ACTIONS:

- Command: “**FLAPS X**”. (X is the desired Takeoff Flap. Example: “FLAPS 5”. If using Button Control, the desired setting is taken from the TO FLAP entry in the FMC. If you wish to leave the flaps up for taxi due to surface contamination, speak: “**LEAVE THE FLAPS UP FOR TAXI**”. If using Button Control, leave the TO FLAP value blank in the FMC.)
- Complete flight control check silently for elevators and ailerons but call out rudder pedal movement: “**FULL LEFT RUDDER**” “**CENTER**” “**FULL RIGHT RUDDER**” ... “**CENTER**”.

FO ACTIONS:

->TRIGGER: Captain calls for Takeoff Flap.

- APU Off.
- EAI as required (always AUTO).
- Secondary Engine Instruments deselect. (Note: FS2Crew can only perform a ‘blind toggle’ of the engine display button. It’s assumed that the Secondary Engine Instruments are being displayed in the EICAS when the FO presses the MFD -ENG button).
- Recall

PHASE: BEFORE TAXI CHECKLIST

MODE: BEFORE TAXI CHECKLIST

CAPT ACTIONS:

- Command: “**BEFORE TAXI CHECKLIST**”.

FO ACTIONS:

FO: ANTI ICE

FO: AUTO

FO: RECALL

FO: CHECKED

FO: FLIGHT CONTROLS

CAPT: CHECKED

FO: GROUND EQUIPMENT

CAPT: REMOVED / CLEAR

PHASE: TAXI

MODE: BEFORE TAKEOFF CHECKLIST

CAPT ACTIONS:

- Optional Command: “REQUEST TAXI CLEARANCE”.
- Command: “TAXI AND TURNOFF LIGHTS ON”.
- Announce: “CLEAR LEFT”.

PHASE: BEFORE TAKEOFF

MODE: BEFORE TAKEOFF CHECKLIST

CAPT ACTIONS:

- Command: “BEFORE TAKEOFF CHECKLIST” when desired.
- After the FO announces the checklist complete, you also announce: “BEFORE TAKEOFF CHECKLIST COMPLETE”.

FO ACTIONS:

- Press CHKL. The checklist should be all green. Announce: “BEFORE TAKEOFF CHECKLIST COMPLETE”.

PHASE: RUNWAY ENTRY

MODE: <RUNWAY ENTRY PROCEDURE>

CAPT ACTIONS:

- Optional Command: “REQUEST TAKEOFF CLEARANCE”.
- Command: “RUNWAY ENTRY PROCEDURE”.

FO ACTIONS:

->TRIGGER: Captain commands “RUNWAY ENTRY PROCEDURE”.

- Cabin Chime
- Landing Lights on
- Strobes on
- Transponder TARA

PHASE: TAKEOFF ROLL

MODE: <TAKEOFF ROLL>

CAPT ACTIONS:

- Announce: “TAKEOFF”.
- Advanced thrust lever to approximately 50% N1 or 20 TPR.
- After engines stabilized, press TOGA. Announce FMA: “THRUST REF”.

FO ACTIONS:

- After engines stabilized, announce: “STABILIZED”.
- Announce: “THRUST SET”.
- Announce: “80 KNOTS”, “V1” and “ROTATE”.

NOTES:

The FO’s V1 and Rotate calls are derived from the V1 and VR speeds entered in the FMC.

REJECTED TAKEOFF SUB PROCEDURE:

CAPT ACTIONS:

Announce: “STOP!”

When aircraft stops, you have two options:

If you want to taxi back to the runway for another takeoff, announce:

“LET’S TAXI BACK TO THE RUNWAY”

If you want to return the gate, announce:

“LET’S RETURN TO THE GATE”

PHASE: CLIMB OUT

MODES: <INITIAL CLIMB> and <FLAP RETRACTION>>

CAPT ACTIONS:

- Command: **“GEAR UP”**.
- Command: **“FLAPS 5”**, **“FLAPS 1”**, **“FLAPS UP”**.

CAPT FMA SAMPLE CALLOUTS:

- **“AUTOPILOT”** (Reference to the AP on the PF after selecting Autopilot On).
- **“LNAV”**
- **“VNAV SPEED”**.

FO ACTIONS:

- Announce **“CLIMB THRUST”** at thrust reduction altitude.
- After flaps up, press CHKL and run the AFTER TAKEOFF CHECKLIST. Announce **“AFTER TAKEOFF CHECKLIST COMPLETE”**.

NOTES:

Many of the 787’s checklists do not need to be individually called for by the Captain. This is different from what you may be used to with other FS2Crew’s, but it’s the way they do it at the airline we modeled. The FO will run many of the checklists by himself at the appropriate time.

PHASE: CLIMBING THROUGH 10,000 (OR WHEN DESIRED)

CAPT ACTIONS:

- Command: “**LIGHTS OFF**”. (NOTE: A Config Option is available if you want the FO to set the lights automatically at 10 or 18,000 feet).
- Command: **SEAT BELTS SIGNS OFF**”.

FO ACTIONS:

- Silently carry out instructions.

PHASE: PASSING FL100, FL200 AND FL300

CAPT ACTIONS:

- Every 10,000 feet, perform a simple altimeter check.
- Announce: “**ALTIMETERS**”. The FO will respond FL300, FL200 or FL100.

FO ACTIONS:

- For the ALTIMETERS cross check, reply: “FL 100”, “FL 200”, “FL 300” as appropriate.

NOTE: The FO will only reply FL100, 200 or 300 based on your altitude, so ensure you speak “ALTIMETERS” at exactly FL100, 200 or 300.

PHASE: AT TRANSITION ALTITUDE

CAPT ACTIONS:

- Command: “**SET STANDARD**” AND press STD button on Captain’s EFIS panel.

FO ACTIONS:

- Reply: “STANDARD SET AND CROSSCHECK”.

PHASE: CRUISE

MODE: <DESCENT CHECKLIST>

CAPT ACTIONS:

- At level off, announce FMA: “**SPEED VNAV PATH**”.
- Optional Command: “**SELECT LOWER RECIRC FAN ON**”.
- When ready to setup the aircraft for the arrival, speak: “**YOU HAVE CONTROL.**”
- Captain sets up the aircraft the arrival:
 - Setup FMC for Arrival (including selecting VREF and landing flap).
 - Set Autobrake (3 is standard).
- Approach Brief: “**ARE YOU READY FOR THE APPROACH BRIEF? / READY FOR THE APPROACH BRIEF?**”
- Complete Brief: “**ANY QUESTIONS?**” (Hint, if conducting the brief in Voice Control, engage HARD MUTE at the same time to avoid false speech command detection. If desired, you can run the brief via the APPROACH BRIEFING PAGE on the SECONDARY PANEL).
- Re-take control of the aircraft: “**I HAVE CONTROL**”.
- If you wish to communicate with the FA, press the **CAB** button on Captain’s communication panel as shown below. Then select **DOOR 1/2** or **GALLEY FWD**. Select END CALL when finished.
- If you wish to make a PA, select **PA CALL**. In Button Control, the PA screen will auto appear. You must select **END CALL** when complete.



PHASE: AFTER THE APPROACH BRIEF AND BEFORE THE TOP OF DESCENT

MODE: DESCENT CHECKLIST

CAPT ACTIONS:

- Command: “**DESCENT CHECKLIST**”.

FO ACTIONS:

- Deselects lower recirc fan (-9 model only)
- Press RECALL and run the **DESCENT CHECKLIST**.

FO: RECALL

CAPT: **CHECKED**

FO: NOTES

CAPT: NO NOTES / CHECKED

FO: AUTOBRAKE

CAPT: X (EXAMPLE: ONE, TWO, THREE, MAX AUTOBRAKE, DISARMED).

FO: LANDING DATA

CAPT: VREFXX XXX, MINIMA XXX FEET

EXAMPLE: "VREF30 140, MINIMA 240 FEET"

NOTE: TRIGGER PHRASE IS "XXX FEET". TRIGGER PHRASE MUST BE SPOKEN CLEARLY AND DISTINCTLY FROM ANY OTHER WORDS. YOU MAY NEED TO PAUSE A SECOND TO ENSURE THE PHRASE IS DETECTED AS A DISTINCT PHRASE).

FO: VREF30 140, MINIMA XXX FEET

FO: APPROACH BRIEFING

CAPT: COMPLETED

PHASE: PASSING FL300, FL200 AND FL100

CAPT ACTIONS:

- Every 10,000 feet perform a simple altimeter check.
- Announce: "**ALTIMETERS**". The FO will respond FL300, FL200 or FL100.

FO ACTIONS:

- For the ALTIMETERS cross check, reply: "FL 300", "FL 200", "FL 100" as appropriate.

PHASE: DESCENDING THROUGH 20,000 (OR WHEN DESIRED)

CAPT ACTIONS:

- Command: “SEAT BELT SIGNS ON”.

PHASE: AT TRANSITION LEVEL

MODE: APPROACH CHECKLIST

CAPT ACTIONS:

- Command: “TRANSITION SET ALTIMETER XXXX”. Example: “TRANSITION ALTITUDE SET ALTIMETER TWO EIGHT NINE TWO”. NOTE: Press “B” on your keyboard to set local pressure. This is the only way the FO’s altimeter can also be updated.
- Command: “APPROACH CHECKLIST”.
- For the altimeters challenge, example syntax: “2 9 9 2 SET”. Do NOT forget to include SET after the numbers.

FO ACTIONS:

- Announce: “APPROACH CHECKLIST COMPLETE”.

PHASE: DESCENDING THROUGH 10,000 (OR WHEN DESIRED)

CAPT ACTIONS:

- Command: “LANDING AND TURN OFF LIGHTS ON”.

PHASE: LANDING

MODE: LANDING CHECKLIST

CAPT ACTIONS:

- Extend flaps on schedule. Example: “**FLAPS 1**”, “**FLAPS 30**”.
- Announce the FMA: “**LOC AND GLIDE SLOPE ARMED**”, “**LOC CAPTURE**”, “**GLIDESLOPE CAPTURE**”.
- Command: “**GEAR DOWN**” and arm speed Brake at Flap 20.
- When landing flap selected, command: “**LANDING CHECKLIST**”.
- After FO speaks “**LANDING CHECKLIST COMPLETE**”, Captain also announces: “**LANDING CHECKLIST COMPLETE**”.

FO ACTIONS:

- Run checklist. All items should normally be in green and are therefore not announced.

PHASE: GO AROUND

CAPT ACTIONS:

- If go around is required, command: “**GO AROUND FLAPS 20**” or “**GO AROUND**”.
- Follow standard climb actions and procedures.

PHASE: FINAL

MODE: <FINAL>

CAPT ACTIONS:

- Announce “**CHECK**” for the PLUS ONE 100 AND MINIMUMS auto callouts.

PHASE: ROLLOUT

MODE: <ROLLOUT>

CAPT ACTIONS:

- Reverse thrust as required.

FO ACTIONS:

- Announce Reverses and Speed Brake position. Example: "SPEED BRAKES UP, REVERSES NORMAL".
- Announce: "60 KNOTS".

PHASE: AFTER LANDING

MODE: <AFTER LANDING PROCEDURE>

CAPT ACTIONS:

- Speed Brake stow.
- HUD stow.

FO ACTIONS:

->TRIGGER: Speed brake stowed. Descent Mode Active. Checklist Mode: <AFTER LANDING PROCEDURE>. Ground speed < 25 knots.

- HUD stow.
- Landing Lights off.
- Taxi Light on.
- Strobe Lights off.
- Weather Radar (both) off.
- Transponder Mode XPDR.
- APU Start.
- Anti Ice as required.
- Flaps Up.

PHASE: PRIOR TO GATE ARRIVAL

MODE: <PARKING>

CAPT ACTIONS:

- Command: “**TAXI AND TURNOFF LIGHT OFF DOORS TO MANUAL**”.
- If desired, “**DOORS TO MANUAL**” can be omitted from the above phrase.

FO ACTIONS:

->TRIGGER: Command that includes DOORS TO MANUAL command issued.

- PA announcement: “CABIN CREW DOORS TO MANUAL”.

PHASE: PARKING

MODE: <PARKING>

CAPT ACTIONS:

- Set Parking Brake. Announce: “**PARK BRAKE SET TO PARK**” or “**PARKING BRAKE SET TO PARK**”.
- Confirms EICAS Messages.
- Checks APU running or configures External Power as required to ensure the aircraft has a power source when the engines are shutdown. You can ask ground to connect the GPU using the **GROUND CREW** call button on Communication panel on the center pedestal, or you can use a voice command, or you can do it manually. If you use the GPU, you must manually put the GPU on the busses through the overhead panel. The FO will not do that for you.
- Fuel Control switches cutoff.
- Flight Director off.
- Command: “**SHUTDOWN CHECKLIST**”.
- The possible responses for the PARK BRAKE challenge are: “**RELEASED**”, “**SET**”, “**SET AND CHECKED**”.

FO ACTIONS:

->TRIGGER: Both Fuel Control switches selected off. Descent Mode Active. <Parking> displayed as active mode on FS2Crew Main Panel.

- Seatbelts off.

- Hydraulic electric pumps off.
- Fuel pumps off.
- Beacon off.
- Transponder to Standby. Set 2000.
- Flight Director off.
- EFB Close flight.
- Press CHKL.

PHASE: SECURE

MODE: <SECURE PROCEDURE>

Note: FINAL FLIGHT OF THE DAY config option must be set to YES for this mode to be available.

CAPT ACTIONS:

- Command: “**SECURE PROCEDURE**”.

FO ACTIONS:

->TRIGGER: Command: “SECURE PROCEDURE”.

- APU off.
- Battery Off.
- Emergency Exit Lights Off.
- Flight Deck Door Power Off.
- Pack Switches Off.
- EFB Power Off.
- Press CHKL. Announce: “SECURE CHECKLIST COMPLETE”.

SUPPLEMENTARY VOICE COMMANDS

MISC CHECKLIST:

Note: A config option is available to disable FMA detection. The FO will respond “CHECK” when these words are detected.

- REPEAST LAST (PLEASE)
- SAY AGAIN

MCP:

Note: In real-world flying, as the PF you would only ask the Pilot Monitoring to set the MCP if the autopilot is OFF. If the Autopilot is ON, you would as the PF would set the MCP, then announce the mode change on the FMA.

- CANCEL LAST COMMAND (USED IF AUTOPILOT VALUES ‘RUN AWAY’)
- SET HEADING XXX
- SET ALTITUDE XXX
- SET MISSED APPROACH ALTITUDE XXXX
- SET FLIGHT LEVEL XXX
- SET VERTICAL SPEED UP/DOWN XXXX
- SELECT AUTOPILOT ON
- SELECT FLIGHT DIRECTORS ON / OFF
- SELECT HEADING SELECT
- SELECT HEADING HOLD
- SELECT LEVEL CHANGE
- SELECT VNAV
- SELECT LNAV
- SELECT ALT HOLD
- ARM APPROACH
- ARM LOCALISER
- ARM FINAL APPROACH COURSE

OVERHEAD:

- SELECT LOWER RECIRC FAN ON
- SELECT LOWER RECIRC FAN OFF
- SELECT WIPERS ON
- SELECT WIPERS OFF
- SELECT ENGINE ANTI ICE ON
- SELECT ENGINE ANTI ICE OFF
- SELECT ENGINE ANTI ICE AUTO
- SELECT WING ANTI ICE ON
- SELECT WING ANTI ICE OFF

- SELECT WING ANTI ICE AUTO
- SELECT STROBES ON
- SELECT STROBES OFF
- SELECT TAXI LIGHT ON
- SELECT TAXI LIGHT OFF
- SELECT APU ON
- SELECT APU OFF

FMA CALLOUTS:

Note: A config option is available to disable FMA detection. The FO will respond “CHECK” when these words are detected.

- AUTOPILOT
- LNAV
- VNAV SPEED
- VNAV PATH
- VNAV ALT
- FLIGHT PATH ANGLE
- LEVEL CHANGE SPEED
- LOC AND GLIDESLOPE ARMED
- LOC CAPTURE
- SPEED
- TOGA
- HEADING SELECT
- HEADING HOLD
- TRACK SELECT
- TRACK CAPTURE
- TRACK HOLD
- THRUST REF
- GLIDESLOPE CAPTURE
- THRUST
- FLARE
- IDLE
- LOCALISER
- ROLLOUT
- LAND 3

OVERHEAD:

- SET XXX POINT XX ON COMM 1
- SET XXX POINT XX ON COMM 2
- SET XXXX ON THE TRANSPONDER

GROUND CREW:



- GROUND FROM COCKPIT
- PLEASE CONNECT (EXTERNAL POWER / THE GPU)
- PLEASE REMOVE (EXTERNAL POWER/ THE GPU)