**WARNING!**

This checklist has been created by Concorde enthusiast Ramón Cutanda. **I am not a real pilot and**, except from some volunteered and limited beta testing, **I have no professional relationship with FSLabs whatsoever. Therefore, this is not, by any means, an "official", "approved" or "real" checklist, either by FSLabs or British Airways.**

This checklist is **BASED ON**:

1. **FSLabs' checklists** included in their tutorials/manuals

2. **A real British Airways Concorde flying manual** (rev. 4th September 1978)

Using the aforementioned sources, **I have created this checklist according to the following criteria**.

* Making this checklist **as quick and simple to follow as possible** by **excluding checks and actions:**
	+ **For systems and items not simulated** in Concorde-X by FSLabs, such as the oxygen system or weather radar, or not included in the list of possible fails, such as light bulbs.
	+ **Performed by the VFE** (enabled by default)
	+ Only **performed during emergencies or extended checks.**
* Because this checklist is performed with the limitations of interaction of a virtual cockpit and by only one pilot, instead of a crew of 3, I have done my best **reordering the sequence** of some items to **avoid** what I considered **unnecessary panel jumps** within Concorde-X while trying to respect an adequate and logical sequence.
* I have also reordered some sequences to follow a **left-to-right** and **up-to-bottom pattern** within a same panel (as when reading), trying to make the sequences more intuitive and logical.

I don't claim this checklist is better than any other, but I find it especially useful and I simply want to share in case it may be of interest for other Concorde-X pilots.

You can find an extended version of this checklist at
<http://simulaciondevuelo.com/concorde-x-checklists>

**IMPORTANT**

**I have used this blue colour for steps that are not included either in FSLabs' or the real Concorde checklists, but that make sense for me and I like to follow.**

 **PANEL STATE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . LOADED . . . . . . . . . . . . . . . FSLabs Menu**

*If you saved the panel state at the end of your previous flight, this optional step will allow you to load Concorde-X with all the switches, knobs and other settings exactly in the same state as you left them, making this checklist more realistic and not as "boring" and predictable as the default states.*

### **COCKPIT SAFETY CHECK**

 **LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . Aft Overhead (SHIFT+3)**

* *Rotate the LIGHTNING STORM, LIGHTING GLARESHIELD and LIGHTING CENTRE CONSOLE PANEL rotary selector to the required position. Observe lighting as selected*
* *Set ROOF LIGHTS as required*
* *Set EMERG LIGHTS selector to ARM*
* *Verify ANTI-COLLISION LIGHTS switch at OFF*
* *Set NAV LIGHTS as required*

**PRESS STATIC HEATERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**ADS/ENGINE PROBE HEATERS . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify ADS 1, and ADS 2, sels at OFF and STBY SW at OFF*
* *Observe all ADS/ENGINE PROBE HEATERS lts (yellow) on after Ground Power connection*

**ENGINE ANTI-ICING . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Verify ENGINE ANTI-ICING sws OFF and IGV PRESS lts off*

**WING INTAKE ANTI-ICING TEST . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**TRANSPONDER . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . STBY . . . . . . Lower Pedestal (SHIFT+7)**

**ALT RPTC . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

### **COCKPIT PRELIMINARY PREPARATION**

**AIRCRAFT FUEL AND AIRCRAFT LOAD. . . . . . . . . . . CHECKED . . . . . . . . . . . . . . FS Labs Menu**

**GROUND POWER . . . . . . . . . . . . . . REQUEST GROUND POWER . . . . . . .** . **Ground Services Menu**

. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON (Ground power switch to close) . . . **AC Electrics (CTRL+SHIFT+7)**  *Set ground power sw to CLOSE and release.*

* ***CANCEL THE CONTINUOUS AUDIO GONG OF THE MASTER WARNING SYSTEM WITH ANY OF THE FOLLOWING THREE METHODS:***
	+ *Press CTRL+SHIFT+Z*
	+ *Push MWS CANCEL in DC Electrics panel (CTRL+SHIFT+8)*
	+ *Press the CANCEL push button on the right side of the MWS panel (above the glareshield)*

**VISOR/NOSE lever . . . . . . . . . . . . . . . . . . . AS CONFIGURATION . . . . . . . . . . . . . . . . . . . . . . Main**

*Verify that VISOR/NOSE lever position coincides with visor/nose configuration. This check prevents any uncontrolled movement of the droop nose and visor when the green hydraulic system is pressurized.*

**LANDING GEAR NORMAL lever . . . . . . . . . . . . . . . . . . . . . DOWN . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Confirm L/GEAR lever at DOWN.*
* *Observe LH SHORT, UPPER LOCKS and RH SHORT lts off, L/GEAR transit lts off and LH, NOSE, T and RH arrow lts (green) on.*

***Although no listed in either FSLabs' or BA's checklists, I find turning the Air Conditioning ON at this moment a common-sense step. Just imagine doing all the rest of the checklists in Alaska or in the Emirates inside a Concorde at ambiance temperature!***

**AIR CONDITIONING. . . . . . . . . . . . REQUEST GROUND AIR . . . . . . . . . . . . Ground Services Menu**

**BLEED VALVES (4) . . . . . . . . . . . . . . . . . . . . SHUT (GRND SUPPLY). . . . . Air Bleed (CTRL+SHIFT+3)**

**CROSS BLEED VALVES (4) . . . . . . . . . . . . . . . . . . . . . . . . . . . OPEN . . . . . . . . . . . . . . . . . . . . . . . . . .**

**COND VALVES (4) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . .**

**AIR DATA COMPUTERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . Lower Pedestal (SHIFT+7)**

* *Set ADC 1 SW to ON and verify ADC 1 rty sel at NORM.*
* *Set ADC 2 sw to ON and verify ADC 2 rty sel at NORM.*
* *IF the ADC 1 and/or ADC 2 lts (amber) on, when the flight instruments stabilise press to reset.*
* *Observe the ADC 1 and ADC 2 lts off.*

**TEMPERATURE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe no failure flags visible on temperature indicator*

**DRAIN MAST HEATER . . . . . . . . . . . . . . . . . . . . . . . . . CHECK/SET . . . . . . .Aft Overhead (SHIFT+3)**

* *Verify DRAIN MAST HTRS sels off.*
* *Observe MAST 1 MAST 2 and MAST 3 lts. off.*
* *Observe total air temperature*
	+ *IF total air temperature above 0ºC. set DRAIN MAST HTRS sels to OFF.*
	+ *IF total air temperature below 0ºC set DRAIN MAST HTRS sels to ON.*

**INS 1, 2 & 3 . . . . . . ALIGN, TEST, PRESENT POS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**INS 1, 2 & 3 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . FWD Leg (CTRL+SHIFT+1)**

* *Make sure to set the mode rty sel on MSU 1, 2 and 3 to OFF*
* *Press CTRL+I for* ***auto align****. For* ***manual alignment****, follow the next steps in grey.*

***NOTE: In both cases, the airplane must not be towed or taxied during INS alignment.***

* *Set the mode rty sel on MSU 1, 2 and 3 to STBY*
* *Open CDUS 1, 2 & 3 (SHIFT+7/8/9)*
* *Test INS circuits status:*
	+ *Press TEST switch*
	+ *Check that all INS lamps (except keyboard and clear lamps) illuminate.*
	+ *Figure eight (8) appears in all digit positions of both data displays*
	+ *Directional letters (NS) appear in the left display*
	+ *Directional letters (EW) appear in the right display*
	+ *FROM-TO indicates 88.*
	+ *Also check that INS READY NAV and BAT lights on their respective INS mode selector modules illuminate.*

*NOTE: Apart from checking the bulbs, this test will also clear INS errors when there is a difference between the coordinates of the last position registered by the INS and your current position. This is very frequent, for example, when you park the Concode-X in one airport and then you load the simulator on a different one for your next flight; or even in the same airport if you don't reload in the exact same parking spot/gate.*

* *Repeat test on each module.*

*Check INS malfunctions:*

* *Warn light on each control display module and BAT light on each mode selector module should be extinguished.*

*Load INS Field Position Data:*

* *Position data selector switch to POS.*
* *Press keyboard switch for north (N2) or south (8S) latitude as required.*
* *Press keyboard switches in sequence for present position latitude and observe correct latitude in left data display*

*NOTE: You can see your current position by pressing SHIFT+Z. Round up or down the last digit and use zeroes if necessary (For example, S27º9.59' should be typed as 2709.6)*

* *Press INSERT switch once and observe loaded LAT +/- 0.1 in left data display*
	+ *Observe INSERT light stays on*
* *Press keyboard switch for east (6E) or west (W4) longitude as required.*
* *Press keyboard switches in sequence for present position longitude and observe correct longitude in right data display.*
* *Press INSERT switch and observe insert light extinguish and new present position data*
* *Latitude and longitude+/- 0.1 appear in left and right data displays.*
* *Repeat for each INS module.*
* *Record INS 3 displayed present position on flight engineer's flight log.*
* *Cross check recorded position with listed ramp position in the Aerodrome Folder.*

**INS 1, 2&3 MSU . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ALIGN. . . FWD Leg (CTRL+SHIFT+1)**

* *Set rty sel at ALIGN, BAT lt off and READY*

*NOTE: Illumination of the BAT light (amber) on the control display modules during align mode indicates that battery power is operating normally.*

* *Repeat for MSU 2 and 3*
* *Set Data Selector to DSRTK/STS position on CDU1, 2 & 3 to check the progress of the alignment*

*NOTE: With the CDU selectors at the DSRTRK/STS position, the fifth digit in the right data indicator display the STATUS*

 *of the current INS alignment submode, known as the Accuracy Index (AI). The AI starts from 9 and decreases toward 0 as the alignment progresses. NAV lt remains off unless status 5 reached. At 5 or lower, NAV mode is permitted In NAV mode the fifth digit represents the quality of the position data. This provides an indication of the accumulated position error. The sixth digit (Mode Index) stays fixed at 5 during alignment.*

### **FLIGHT ENGINEER'S COCKPIT PREPARATION**

**COCKPIT DOOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . NORM . . . . . . . .** **Aft Overhead (SHIFT+3)**

**GRND CALL push button . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**SEAT BELT/NO SMOKING SIGN . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . .**

**THROTTLE MASTERS . . . . . . . . . . . . . . . . . . MAIN or ALTERN . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify THROTTLE MASTER sels at MAIN or ALTERN*
* *Observe sel lts off, THROT lts off.*

*NOTE: An intake mounted T1 (engine probe) supplies temperature information to the Main throttle control system of its own engine and to the Alternate throttle control system of the adjacent engine. Therefore,* ***it is recommended that the Main throttle control system is used for engine starting whenever all the engine temperatures are not the same.***

**AUTOTHROTTLE SWITCHES . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . .**

**HP VALVES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SHUT . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Verify HP VALVE sws at SHUT and MIs read SHUT*

**NO.1 AUTOSTABS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify that the No. 1 Autostabs will latch at the engage position. This confirms that the EMERGENCY CONTROLS push button is not in the engaged position.*
* *Set back No. 1 Autostabs to the OFF position*
* *Cancel MWS STAB*

**T/O CG switch . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . NORM . . Engine Controls (CTRL+SHIFT+2)**

*Verify that the Take-off GC switch is at NORMAL and is guarded*

**ENG 4 T/O N1 limiter switch . . . . . . . . . . . . . . . . . . . . . . . . . . NORM . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**GRD IDLE switches . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . HI . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**ENGINE CONTROL SCHEDULE . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Set the rotary selector to FLYOVER (F/O) or NORMAL.*

*NOTE: FLYOVER (F/O) is selected for noise abatement take-off and NORM if noise abatement is not required.*

* *Set the ENGINE CONTROL SCHEDULE selector to AUTO*
	+ *Observe the ENGINE CONTROL SCHEDULE LO lights (green) ON*

**SECONDARY NOZZLE . . . . . . . . . . . . . . . . . . . . . . . . . . . . .CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe SECONDARY NOZZLE instruments for condition (21º)*

**FLIGHT REV ARM . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe FLIGHT ARM OPEN lt off*

**NOZZLE ANGLE SCHEDULING UNIT TEST SELECTOR . . . NORMAL . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify NASU test selector at NORMAL*
* *Observe NOZZLE light off*

*NOTE: On Concorde-X it is sometimes ON.*

**FLIGHT INSTRUMENTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . Main**

*Observe for correct repetition of readings on pilots' panels.*

**HYDRAULIC MANAGEMENT PANEL . . . . . . . . . . . . CHECK/SET. . . . . . . . . . . Hydraulic management**

* *Set the green system pump selectors 1 and 2 and blue system pump selectors 3 and 4 to OFF*

**AC ELECTRICS PANEL . . . . . . . . . . . . . . . . . . . . . . CHECK/SET. . . . . . AC Electrics (CTRL+SHIFT+7)**

* *Verify generator selectors (4) at ON*

**DC ELECTRICS PANEL . . . . . . .. . . . . . . . . . . . . . . . CHECK/SET . . . . AC Electrics (CTRL+SHIFT+8)**

* *Verify EMERG GEN control selector at AUTO*
* *Verify WATER HTRS switch at ON*
* *Verify GEN 1&3 and GEN 2&4 GALLEYS switches at ON*

### **CAPTAIN'S COCKPIT PREPARATION**

**STEERING LIGHT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . Main**

**AUTOLAND light . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**RAD/INS switch . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . RAD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**VHF/NAV controller . . . . . . . . . . . . . . . . . . . . . . . . . CHECK/SET . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**AFCS panel . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Set initial climb altitude*
* *Verify AT1, AT2, FD1, AP1, AP2, and FD2 switches all at OFF*
* *Observe all warning lights off on both landing display indicators*

**AUTOTHROTTLE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* ***NOTE: This test only works IF you either use the panel states provided by FSLabs (Cold and Dark or ConcordeX\_Preliminary) OR if you load Concorde-X directly from the Scenario Startup Screen. If you load first a flight with the Trike/J3 Cub and engines running the test is inconsistent (does not always work)***
* *Set AT1 switch to engage*
	+ *Observe switch remains engaged, IAS HOLD pushbutton light (white) on and throttle levers move from the idle position.*
* *Set AT2 switch to engage*
	+ *Observe switch remains engaged*
* *Manually disengage AT1 and AT2*
	+ *Observe IAS HOLD pushbutton light off and AT1 light (red) flashing*
* *Press the AT instinctive disconnect pushbutton*
	+ *Observe AT light (red) off*
* *Retard throttle levers to the idle position*

**PULL UP (TERRAIN light), M/CG and TYRE lights. . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**INSTRUMENT TRANSFER SWITCHES . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify ATT switch set at ATT/INS 1, COMP 1/COMP 2 switch at COMP 1, DEV 1/DEV 2 switch at DEV 1 and NAV switch at INS 1*

*NOTE: The normal position of the captain's instrument transfer switches is to the left*

**ASI (Air Speed Indicator) . . . . . . . . . . . . . . . . . . . CHECK/SET . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify ASI mode switch at N*
* *Observe mode flag reads ADC and no failure flags visible on ASI*

**ADI (Attitude Director Indicator) . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Observe no failure flags visible on ADI*

**VSI . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Observe no failure flags visible on VSI*

**RADIO ALTIMETER . . . . . . . . . . . . . . . . . . . . . . CHECK/SET . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Observe that red fail flag is out of view*

**STANDBY HORIZON . . . . . . . . . . . . . . . . . . . . . CHECK/SET . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Observe no flag visible on standby horizon*

*NOTE: The failure warning flag disappears after power on. Allow at least 50 seconds after power on in order to have true indications*

**INCIDENCE INDICATOR . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Observe no failure flags visible on the incidence indicator*

**STANDBY ASI/MACHMETER . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Observe no failure flags visible on the Standby ASI/Machmeter indicator*

**MACHMETER . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe no failure flags visible on the Machmeter indicator*

**HSI (Horizontal Situation Indicator) . . . . . . . . . . . . . . . . . CHECK/SET . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Observe no failure flags visible on the HSI*

**FD1/FD2 switch . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .FD1 . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Set FD1/FD2 switch to FD1 and observe FD1 visible on ADI (Attitude Director Indicator)*

**ALTIMETER . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK/SET . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify, on altimeter, mode switch at N*
* *Observe mode flag reads ADC and no failure flags visible on altimeter*
* *Rotate static pressure knob to set the airfield QNH in the corresponding window and check the altimeter reads within plus or minus 35 feet of the airfield elevation*
* *Set bugs to airfield elevation and 3 engine acceleration height*

**ENGINE RATING LIGHTS . . . . . . . . . . . . . . . . .. . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe T/O light on*

**DME . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . DME . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe sensible readings*

**VOR/RMI . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . .**

*Observe no flags visible on VOR/RMI if a VOR station in range*

**SIDE SLIP . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . .** *Observe no failure flags visible on SIDE SLIP indicator*

**ADF/RMI . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe no heading failure flag visible on ADF/RMI*

**INS MONITOR LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . .**

*While aligning, observe INS 1, INS 2 and INS 3 lights on and INS COMP light off*

**CLOCK . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .SET . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Verify correct GMT set*

**C.G INDICATOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe no failure flag visible on C.G. indicator*

**AIR DATA COMPUTERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK . . . . . .Lower Pedestal (SHIFT+7)**

* *Observe ADC1 and ADC2 and TEST lights off and no failure flags visible on associated instruments*

### **FIRST OFFICER'S COCKPIT PREPARATION**

**STAB, FEEL AND TRIM PANEL . . . . . . . . . . . . . . . CHECKED . . . . . Fwd overhead panel (SHIFT+4)**

* *Verify AUTO STAB No.1 PITCH, ROLL and YAW sws at OFF*
* *Verify AUTO STAB No.2 PITCH, ROLL and YAW at OFF.*
* *Verify ARTIFICIAL FEEL No. 1 PITCH, ROLL and YAW at OFF.*
* *Verify ARTIFICIAL FEE L No,2 PITCH, ROLL and YAW at OFF.*
* *Verify ELECTRIC TRIM No. 1 and No. 2 sws at OFF.*

**FLIGHT CONTROL INVERTERS. . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Set BLUE INVERTER sel to ON*
* *Repeat actions for GREEN INVERTER.*
* *Set green and blue Control Inverter Guards*
* *Cancel MWS PFC*

**FLIGHT CONTROL SELECTION. . . . . . . . . . . . . . . . . GREEN . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify OUTER AND MIDDLE ELEVONS sel and INNER ELEVONS sel at GREEN (you need to move the switches twice)*
* *Observe MECH JAM lt (red) on*

*NOTE: The MECH JAM light is on because, with no hydraulic pressure, the elevons droop, thus introducing loads into the mechanical linkage that are sensed as a jamming of the linkage.*

* *Verify RUDDER sel at GREEN (you need to move the switch twice)*

**ANTI-STALL . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify ANTI STALL SYSTEM 1 SW at ON.*
* *Observe SYS 1 FAIL lt (amber) on.*

*NOTE: The FAIL light is on because the pitch auto-stab is off*

* *Repeat the action for ANTI STALL SYSTEM 2*

**LANDING LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .RETRACT/OFF . . . . . . . . . . . . . . . . . . . . . . . .**

**W/SHIELD DE-ICE MI** **. . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**WINDSHIELD DE-ICE . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**DV DE-MIST . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**TAXI LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .RETRACT/OFF . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify LIGHTS LANDING TAXI sws at OFF and RETRACT.*
* *Observe EXTENDED lt off.*
* *Verify LIGHTS TAXI TURN sws L and R at OFF.*

**TAKE-OFF MONITOR. . . . . . . . . . . . . . . . . . . . . . . . . . . . DISARM . . . . . . . . . . . . . . . . . . . . . . . . . Main**

*Pull T/O MONITOR control button.*

**AFCS LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . . . . . . . . . . . . . . . . . . .**

**TOTAL FUEL CONTENTS INDICATOR . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe no failure flag showing on TOTAL CONTENTS indicator and sensible readings indicated*

**WHEEL O/HEAT LIGHT . . . . . . . . . . . . . . . . . . . . . . . . CHECKED. . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe the WHEEL O/HEAT light is OFF providing the wheel brake temperature is less than 200 degrees C.*

**FLIGHT CONTROL INDICATORS . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* Observe the flight control channel Mis (8) read M.
* Observe flight control position indicator warning lts (8) off.
	+ IF any warning lts on press the RESET pb and observe all warning lts off.

**AUDIO SELECTOR PANELS . . . . . . . . . . . . . . . . . . CHECKED . . . . Upper Pedestal Panel (SHIFT+6)**

**TRIM WHEELS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Verify YAW, PITCH and ROLL trims at neutral.*

**THROTTLES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Advance throttle levers (4) to fully forward and return to the idle stop.*
* *Observe no undue force is required*

**WINDSHIELD WIPERS . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify W/S WIPERS rty sels (2) at OFF*
* *Observe wipers are parked.*

*CAUTION: W/S wipers must not be operated on a dry screen but may be ground tested on a wet screen.*

**REHEAT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Verify REHEAT sels (4) at OFF.*

**VHF COM . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED. . . Lower Pedestal Pane (SHIFT+7)**

* *Set VHF 1 frequencies as required.*
* *Verify TFR sw at desired position.*
* *Observe corresponding lt (green) on.*
* *Repeat these actions for VHF 2.*

**TRANSPONDER .** **. . . . . . . . . . . . . . . . . . . . . . . . . . . CHECK/STBY. . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Verify ATC ALT RPTC SW set at 1.*

**ADF . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET/TEST. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Select the required ADF frequencies for ADF1 and ADF 2 on the ADF control unit.*
	+ *Observe sensible position of the ADF pointers on both ADF/RMI.*

### **BEFORE START CHECKLIST**

**COCKPIT PREPARATION . . . . . . . . . . . . . . . . . . . . . . COMPLETE**

**DV WINDOWS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CLOSED . . . . . . . . . . . Virtual Cockpit only**

*Verify the sliding side windows are closed and secured*

**FLIGHT CONTROL INVERTERS . . . . . . . . . . . . . . . . . . . . . . . . ON . . Forward Overhead (SHIFT+4)**

*Confirm BLUE INVERTER and GREEN INVERTER sels at ON*

**ANTI-STALL SYSTEMS . . . . . . . .. . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**RAD / INS switches . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . . . . . . . . . . . . Glareshield**

* *Confirm both RAD/INS SWS to RAD*
* *Observe on both HSI that RAD and MAG displayed.*

**NAV RADIOS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *The ADF and VOR should be tuned and checked on the facilities.*
* *Required QDM set on VOR LOC selectors and heading or track set on the HDG/TRK selector if required*

**INSTRUMENT TRANSFER switches . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . Main**

*Confirm the Captain's instrument transfer switches to the left and First Officer's instrument transfer switches to the right*

**QNH / AA / ALTIMETERS . . . . . . . . . . . . . . SET/CROSS CHECKED . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Confirm both main altimeters set to QNH & mode sws at "N"*
* *Check bugs set to airfield elevation and three engine acceleration height.*
* *Set Radio Altimeter bugs to 20' & check DH lts on.*

**BRAKES . . . . . . . . . . . . . . . . . . . . . . . . . . . . .PARK CHECKED . . . . . Main&Upper Pedestal (SHIFT+6)**

*Confirm brakes are full scale and brake control lever at PARK.*

**THROTTLES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .IDLE . . . Main&Upper Pedestal (SHIFT+7)**

**NAV LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . .Aft Overhead (SHIFT+3)**

**THROTTLE MASTER . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Confirm THROTTLE MASTER sels are at MAIN or ALTERN*

**BATTERIES. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .ON / Normal . .DC Electrics (CTRL+SHIFT+8)**

* *Set battery sels to BATT ON.*
* *Observe: BATT A and BATT B MIS show inline, BATT ISOLATE lts off and LH and RH ESS/MAIN SPLIT MIS show inline.*

*NOTE: BATT ON is selected to prevent any interruption of the D.C. supply during engine start*

**INS 1, 2 and 3 . . . . . . . . . . . . . . . . . PRESENT POSITION CHECK. . . . . ..CDU1, 2 and 3 (SHIFT+7/8/9)**

* *Set Data Selector to DSRTK/STS position on CDU1, 2 & 3*
* *Observe INS status on CDUs*

*NOTE: First digit is the NAV Mode status. The number 1 indicates the unit is in NAV mode. Fifh digit is the AI. The number will be 5 or less, depending on the accuracy of the alignment. 0 indicates most accurate alignment. The sixth digit is the MI. The number 4 indicates that DME Updating is currently active.*

* *Verify AUTO/MAN switch at AUTO.*

**INS 1, 2, and 3 ALIGMENT . . . . . . . . . . . . . . . . . . . . CHECKED . . . .Fwd leg panel (CTRL+SHIFT+1)**

* CHECK READY/NAV green light on
* Rotate the MSU knobs to the NAV position

**INS 1, 2 and 3 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . LOAD FLIGHT PLAN**

* *Press REMOTE switch light on each CDU (3).**REMOTE light will illuminate.*
* *Rotate the CDU1 Data selectors to WAY PT.*
* *Confirm the WAYPOINT/DME Selector is at 0.*
* *Click the screw in the lower left corner of CDU 1 or CDU 2 to open the Route Reader.*
* *Use the + (plus) and - (minus) buttons to select the appropriate AWC route file.*
* *Click the Route Reader’s “Load” button.*
* *The “Reading...” message displays in the window.*
* *When the file name shows again, the route file is active and loaded into the INS.*
	+ *If the file (route) contains invalid data, the message “Route error...” displays.*
* *You can view individual waypoints (1-9) with the WAYPOINT/DME selector (CDU selector WAY PT).*
* *Click the screw in the lower left corner the CDU. The Route Reader utility will close.*

**INS 1, 2 & 3 . . . . . . . . . . . . .LOADING CHECKED NAV MODE / MIX FWD Leg (CTRL+SHIFT+1)**

* *Select POS on the data selector of INS 1, 2 and 3 respectively.*
* *Read the ramp position from the Aerodrome Folder.*
* *Verify that this position is displayed on their respective INS and circle the present position written on logs.*
* *Select data selector to WAY PT and waypoint/DME selector to 1.*
* *Read from flight log the number and name of the first waypoint.*
* *Number and check this waypoint on flight logs.*
* *Read the latitude and longitude of that waypoint.*
* *Verify that displays agree with this position and circle the waypoint number on flight logs.*

*NOTE: This procedure is carried out for a minimum of the first three waypoints.*

* *Observe INS MONITOR LIGHTS (Main panel) for INS 1, INS 2 and INS 3 lights off and INS COMP light off*

**ASI BUGS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . Main**

**PITCH INDEX . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**REHEAT PLACARD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . . . . .**

**CLOCK . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Preset noise abatement time.*
	+ *Set the TIMER/CHRO switch to TIMER.*
	+ *Rotate the GMT selector from RUN to the FAST/SLOW position. The countdown value will increase in the CHRONO display.*
	+ *When the CHRONO display value reaches the required time, rotate the GMT selector to RUN.*

**FUEL FLOW . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**ENGINE (P7) . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . Secondary Engine Panel**

**TLA BUGS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . Throttle Pedestal (SHIFT+6)**

**PFDIS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . Upper Pedestal (SHIFT+6)**

**NOTE: In the original checklist the PFDIS is set at the end of the taxi checklist. But instead of doing this step while burning valuable fuel I prefer to set it now.**

* *Right-click the DTG SET switch to increase the numerical value (x 10) or left-click to decrease*
* *Right-click RESET MON/ENTER switch to convert the DTG numerical value from the set nautical miles to statute miles.*
* *The nautical miles value is replaced by the converted statute miles value.*
* *ENTER DTG light extinguishes.*

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

**LOADSHEET . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED**

**START CLEARANCE FROM ATC . . . . . . . . . . . . . . . . . OBTAIN**

**MASTER WARNING . . . . . . . . . . . . . . . . . . . . . . . RECALL/CANCEL . . . . . . . . . . . . . . . . MWS Panel**

* *Press the RECALL pb.*
	+ *Observe the master warning lights indicate the accepted systems status.*
* *Press Cancel MWS*

**ANTI-COLLISION LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . .Aft Overhead (SHIFT+3)**

**CLEARANCE TO START FROM GROUND . . . . . . . . . OBTAIN**

### **PUSHBACK CHECKLIST**

**COND (Conditioning) VALVE . . . . . . . .. . . . . . . . . . . . . . . . . OFF . . . . . Air Bleed (CTRL+SHIFT+3)**

**CROSS BLEED VALVES . . . . . . . . . . . . . . . . . . . . . . . . . . . . SHUT . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**ENGINES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . START. . . Forward Leg (CTRL+SHIFT+1)**

* *Set DEBOW sws (4) to DEBOW.*
	+ *Observe DEBOW sw lts (yellow) (4) on.*
* *For pushback departures starting order is 3 and 2 on the ramp, then 4 and 1 (cross bleed) when away from the ramp.*
	+ *Starting order without pushback is 3, 4, 2, 1.*

**ENGINE NO. 3 START**

* ***Set Ignition Selector to BOTH***
* ***Set ENG 3 START/RELIGHT sel to START.***
* *Observe*
	+ *START VALVE MI reads OPEN.*
	+ *ENGINE DEBOW SW lt off*
	+ *START PUMP lt (yellow) on - Engine Control Panel (CTRL+SHIFT+2)*
	+ *N2 rises.*
* ***When N2 is between 10-12% set HP VALVE sw to OPEN - Aft Overhead (SHIFT+3)***
* ***When N2 is at 25% observe START/RELIGHT sel returns to OFF***
* ***Set DEBOW SW to NORMAL***

**ENGINE NUMBER 2 . . . . . . . . . . . . . . . . . . . . . . . . . . . . START. . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**BRAKE FANS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . Brake Panel**

**HYDRAULICS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . Hydraulics**

* ***Set the green hydraulic system pump sels 1 and 2 and the blue hydraulic system pump sel 3 and 4 to ON***
	+ *Observe CSD lt off. (Electric Panel CTRL+SHIFT+7)*
* *Observe green, yellow and blue system contents gauges pointers indicate within green band.*

*NOTE: After engine start there is a slight drop in level in each reservoir which is caused by the filling of the accumulators.*

* *Observe pumps L/PRESS lts for ENG 2 and 3 off.*
* *Observe green, yellow and blue system pressure gauges read normal.*
* *Cancel PFC MWS*

**BLEED VALVES 2 & 3 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OPEN . . . . . Air Bleed (CTRL+SHIFT+3)**

**CROSSBLEED VALVES 2&3 . . . . . . . . . . . . . . . . . . . . . . . . OPEN . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe pressure gauge indicator approximately 20 psi.*

**GROUND EQUIPMENT . . . . . . . . . . . . . . . . . . . . . . . . . . CLEAR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**DISCONNECT GROUND EQUIPMENT . . . . . . . . . . GRND CALL . . . . . . . Aft Overhead (SHIFT+3)**

*Left-click on GRND CALL and wait for the orange light to go off to confirm Ground Power and Air have been disconnected.*

**- - - - - - - - PUSHBACK - - - - - - - -**

**CROSSBLEED VALVES 1 & 4 . . . . . . . . . . . . . . . . . . . . . . . . OPEN . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe pressure gauge indicator approximately 20 psi.*

*Start 4 and 1 using Cross bleed start procedure.*

*NOTE: Satisfactory bleed pressure (25-30 psi) is normally obtained with engine at high idle.*

**NOs 4 & 1 ENGINES. . . . . . . . . . . . . . . . . . . . . . . START . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**IGNITION. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . Forward Leg (CTRL+SHIFT+1)**

* *Set ignition rty sel to OFF.*

**SECONDARY NOZZLE . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . Engine Controls (CTRL+SHIFT+2)**

*Observe SECONDARY NOZZLE instruments indicate 18-24 deg.*

**ENG 1-4 & ENG 2-3 IDLE switches . . . . . . . LOW . . . . . . . . . . . . . .Engine Controls (CTRL+SHIFT+2)**

**NOTE: This helps reducing the fuel consumption during taxi**

**BLEED VALVES 1 & 4 . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OPEN . . . . . Air Bleed (CTRL+SHIFT+3)**

**CROSSBLEED VALVES (4) . . . . . . . . . . . . . . . . . . . . . . . . .SHUT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**COND VALVES (4) . . . . . . . .. . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe*

* *MI in line within 30 secs*
* *Mass flow satisfactory (Green arc) -* ***Temperature Panel***

### **AFTER START CHECKLIST**

**FLIGHT CONTROLS AFCS AND TRIMS. . . . . . . . . . . . . . CHECKED. . . Forward Overhead (SHIFT+4)**

* *Observe on the flight control position indicator Main Panel:*
	+ *elevons and rudders inline.*
	+ *flight control channel MIs read M.*
* *Press to cancel the MECH JAM light (red)*
	+ *Observe MECH JAM lt off.*
	+ *NOTE: The MECH JAM light has remained locked on, even though the elevons have moved to an aligned position.*

***TRIMS***

* *Set ELECTRIC TRIM 2 switch to engage*
	+ *Observe sw remains engaged*
	+ *NOTE: The ELECTRIC TRIM No. 2 is engaged first because the subsequent engagement of ELECTRIC TRIM No. 1 will check the priority of system 1 over system 2.*
* *Set ELECTRIC TRIM 1 switch to engage.*
	+ *Observe sw remains engaged*

**FLIGHT CONTROLS ELECTRICAL CHANNELS AND AFCS**

* *Check the O & M ELEVONS selectors, the IN ELEVONS selector & RUDDER selector to GREEN.*
	+ *Observe on the FCPI channel MIs (8) read M*
* *Press the RESET pbs for O & M ELEVONS, IN ELEVONS & RUDDER.*
	+ *Observe the O & M ELEVONS, IN ELEVONS & RUDDER selector moving to BLUE*
	+ *Observe the FCPI channel MIs (8) read B*
* *Check AUTO STAB No. 1 PITCH and ROLL SWS at OFF.*
	+ *Observe ANTI STALL SYST 1 FAIL lt (amber) on.*
* *Verify the AUTOPILOT TURN knob is centred*
* *Set No. 1 AP sw to engage*
	+ *Observe sw remains engaged AP lt (green), PITCH HOLD pb lt (white) and HDG HOLD pb lt (white) on.*
* *Set AP 2 sw to engage*
	+ *Observe sw remains engaged, AP 2 lt (green) on, AP 1 sw drops to OFF and AP 1 lt off.*
	+ *Manually disconnect AP 2*
		- *Observe warning sound (cavalry charge) and instinctive disconnect pushbutton light (red) flashing*
		- *Press instinctive disconnect pushbutton and observe light (red) off*

**STAB & FEEL . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .ENGAGED . . Forward Overhead (SHIFT+4)**

* *Set AUTO STAB No. 1 PITCH, ROLL and YAW sws to engage.*
	+ *Observe sws remain engaged.*
* *Set AUTO STAB No. 2 PITCH, ROLL and YAW sws to engage.*
	+ *Observe sws remain engaged.*
* *Set ARTIFICIAL FEEL No. 1 PITCH ROLL and YAW sws to engage.*
	+ *Observe sws remain engaged.*
* *Set ARTIFICIAL FEEL No. 2 PITCH, ROLL and YAW sws to engage.*
	+ *Observe sws remain engaged.*

**ENG ANTI-ICE / ENG SCHEDULE . . . . . . . . . . . . . . AS REQUIRED . . . . . . .Aft Overhead (SHIFT+3)**

*Engine anti-ice must be selected ON after engine start and left on for taxy and take-off whenever the ambient temperature is below +3°C and visibility less than 1000 metres*

**BRAKE FANS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . Brake Control**

**HYDRAULICS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . Hydraulics**

* *Observe green, yellow and blue system contents gauges pointers indicate within green band.*

*NOTE: After engine start there is a slight drop in level in each reservoir which is caused by the filling of the accumulators.*

* *Observe pumps L/PRESS lts off.*
* *Observe green, yellow and blue system pressure gauges read normal.*

**ELECTRICS . . . . . . . . . . . . . . . . . . CHECKED:****GROUND BYPASS. . . AC Electrics (CTRL+SHIFT+8)**

* *Set EMERG GEN sel to GROUND BYPASS*
	+ *Observe SELECTED lt off.*

**GROUND EQUIPMENT . . . . . . . . . . . . . . . . . . . . . . . . . . . . .CLEAR**

### **TAXI CHECKLIST**

**VISOR / NOSE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . DOWN / 5 DEG . . . . . . . . . . . . . . . . . . . . . . Main**

**BRAKES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED / NORM . . . . . . . . . . . . . . . . . . . . . . . . . .**

**LANDING/TAXI/TAXI TURN LIGHTS . . . . . . . . . . . . AS REQUIRED . . Forward Overhead (SHIFT+4)**

**TRANSPARENCY DE-ICE, DEMIST . . . . . . . . . . . . . . . . . . . . . . ON . . Forward Overhead (SHIFT+4)**

* *Set W/SHIELD DE-ICE sels (2) to HI or LOW.*
	+ *Observe O/HEAT lts (2) off.*
* *Set VISOR DE-ICE sws (2) to ON*
	+ *Observe O/HEAT lts (2) off.*

*NOTE: The visor heater operates only when the visor is locked up.*

* + *Set DV DE-MIST sws (2) to ON*
	+ *Observe O/HEAT lts (2) off.*

**FLIGHT INSTRUMENTS. . . . . . . . . . . . . . . . . . . CHKD / NO FLAGS . . . . . . . . . . . . . . . . . . . . . . Main**

**FLIGHT CONTROLS / EFC. . . . . . . . . . . . . CHECKED / LIGHT OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**TRIMS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . Upper Pedestal (SHIFT+6)**

* *Set pitch to required take-off setting.*
* *Verify that roll and yaw trims are set at neutral.*
* *Confirm elevon and rudder positions on F.C.P.I.*

**THROTTLE MASTER . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED. . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Set all Throttle Master sws to the other selection.*
* *Observe*
	+ *all THROT lts off*
	+ *all engines stable*
* *Set all Throttle Master sws back to original selection.*

**DRAIN MAST HEATER . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . .**

**PRESS STATIC HEATERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . .**

**ADS & STBY HEATERS . . . . . . . . . . . . . . . . . . . . . . . .Tt INHIB / ON . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Set ADS/ENGINE PROBE HEATERS sels (2) to TT INHIB. STBY SW ON.*

*NOTE: Tt INHIB is selected when the aircraft is on the ground to avoid an overheat condition that could cause false total temperature gauge readings or false TMO warnings.*

* *Observe ADS/ENGINE PROBE HEATERS lts (15) off.*

*NOTE: At Tt INHIB the Tt lights (2) will be on (yellow) if the temperature is below plus 15 deg c.*

**ENGINE CONTROL SCHEDULE . . . . . . . . . . . . . . . . . . CHECKED . . Engine Control (CTRL+SHIFT+2)**

*Confirm ENGINE CONTROL SCHEDULE sel at AUTO and rty sel at FLYOVER (F/0) or NORMAL*

**ENG. 4 T/O N1 Limiter . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 88% . . . . . . . . . . . . . . . . . . . . . . . . .**

**AIR CONDITIONING . . . . . . . . . . . . . . . . . . . . . . . CHECKED / SET . . . . . . Air Bleed (CTRL+SHIFT+3)**

* *Observe BLEED VALVES Mis (4) show inline, bleed pressure gauges (4) indicating approximately 20 psi.*
* *Observe COND VALVE Mis (4) show inline.*
* *Observe JET PUMP Mis (4) show inline.*

**Temperature Control . . . . . . . . . . . . . . . . . . . . . . CHECKED / SET . . . . . . . . . . . . . . . . . Temp Control**

* *Observe on TEMPERATURE CONTROL panel MASS FLOW gauges (4) in the green band*

**TAKE-OFF CG switch . . . . . . . . . . . . . . . . . . . . . . . . . . . . .AS REQD . . .Engine Ctrl (CTRL+SHIFT+2)**

* *Set the switch to NORMAL if the T/O CG is 53.5%.*
* *Set the switch to 54% if the T/O CG is 54% and check AFT limit moves 0.5% rearward.*

**C.G. POSITION. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . Main or Lower Fuel**

* Check that the CG position is correct for take-off
* Observe the MWS M/CG lt off
* CAUTION: TAKE-OFF MUST NOT BE ATTEMPTED WITH A M/CG LIGHT (RED) ON.

**ANTI-SKID ‘R’ lights / TYRE lights . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . Main**

* *When taxiing above 10 kts, observe all R lights remain off during gentle braking and when rolling freely*

**PFDIS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . Upper Pedestal (SHIFT+6)**

* *Right-click the DTG SET switch to increase the numerical value (x 10)*
* *Right-click RESET MON/ENTER switch to convert the DTG numerical value from the set nautical miles to statute miles.*
* *The nautical miles value is replaced by the converted statute miles value.*
* *ENTER DTG light extinguishes.*

### **BEFORE TAKE-OFF**

**CABIN CREW (STEWARD) CALL . . . . . . . . . . . . . . . . .3 PRESSES . . . . . . .Aft Overhead (SHIFT+3)**

**LANDING LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . Forward Overhead (SHIFT+4)**

* *For every take-off, set the TAXI-TURN lts sws to ON.*
	+ *IF ... main landing lights required, set LIGHTS MAIN LANDING SWS to EXTEND and ON and observe EXTENDED lt is on.*

*NOTE: The main landing lights provide sufficient illumination but if more light is required the LAND TAXI lights may be used. Some buffet may be experienced with these lights extended in flight.*

**TRANSPONDER. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . Lower Pedestal (SHIFT+7)**

**WHEEL O/HEAT LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . Main**

* *Observe the WHEEL 0/HEAT lt is off.*

*CAUTION: TAKE OFF MUST NOT BE ATTEMPTED WITH WHEEL 0/HEAT LIGHT ON.*

**BRAKES OVERLOAD MI . . . . . . . . . . . . . . . . . . . . . . . . . . . . BLACK . . . . . . . . . . . . . . . . . . . . . . . . . .**

*CAUTION: IF THE OVERLOAD MI IS SHOWING A CLOVERLEAF PATTERN THE ANTI-SKID R LIGHTS MUST BE CAREFULLY MONITORED DURING THE TAKE OFF ROLL. IF AT 10 KNOTS THE R LIGHT (WHITE) IS ON, THE TAKE-OFF MUST BE ABANDONED*

**GROUND IDLE switches . . . . . . . . . . . . . . . . . HI . . . . . . . . . . . . . .Engine Controls (CTRL+SHIFT+2)**

**MASTER WARNING . . . . . . . . . . . . . . . . . . . . . . RECALL / INHIBIT . . . . . . . . . . . . . . . . . . . MWS Panel**

* *Press the RECALL pb.*
	+ *Observe the master warning lights indicate the accepted system status.*
* *Press the INHIBIT pb.*
	+ *Observe the INHIBIT lts (2) (amber) on.*
		- *IF INHIBIT lts off Brief for take-off with inhibit function inoperative.*

**T/O MONITOR. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ARMED . . . . . . . . . . . . . . . . . . . . . . Main**

**REHEAT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . Upper Pedestal (SHIFT+6)**

* *Set REHEAT sels (4) to RHT using the gang bar (SHIFT+F4)*
* *Observe REHEAT selected lts (4) (white) on*

**PITCH INDEX . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . Main**

**FLIGHT DIRECTORS . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**- - - - TAKE-OFF - - - -**

*On “3,” the ELAPS timer is set to RUN. Release brakes.*

*• On “NOW,” the CHRO button on is pressed to start the countdown timer and the throttles are slammed forward.*

### **AFTER TAKE-OFF CHECKLIST**

**LANDING GEAR . . . . . . . . . . . . . . . . . .UP, LIGHTS OFF, NEUTRAL . . . . . . . . . . . . . . . . . . Main (G)**

* *Set L/GEAR lever to UP*
	+ *Observe landing gear position indication lts go off at the end of the retraction sequence.*
* *Set L/GEAR lever to NEUTRAL*
	+ *Observe landing gear position indication lts off.*

**LANDING LIGHTS. . . . . . . . . . . . . . . . . . . . . . . . . . OFF / RETRACT . . . . . Fwd Overhead (SHIFT+4)**

* *Confirm*
	+ *landing lights off and retracted and Extended light off*
	+ *landing taxi lights off and retracted and Extended light off*

**MASTER WARNING . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . RECALL . . . . . . . . . . . . . . . . . MWS Panel**

* *Press the RECALL pb.*
	+ *Observe the INHIBIT lts (2) off; the master warning lights indicate the accepted system status.*

*NOTE: This will indicate any faults that occurred while the system was inhibited and which still exist.*

**ADS & STBY HEATERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . .Aft Overhead (SHIFT+3)**

* *Set ADS 1 and ADS 2 sels (2) ON and Observe ADS/ENGINE PROBE HEATERS lts (15) off.*

*CAUTION: THE ADS 1 AND ADS 2 SELECTORS MUST NOT BE SELECTED TO OFF DURING FLIGHT*

**NO SMOKING SIGNS . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**NOSE / VISOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . UP / LOCKED . . . . . . . . . . . . . . . . . . . . . . Main**

* *Set VISOR/NOSE lever to UP.*
	+ *Observe NOSE MI reads UP, VISOR MI reads UP and unlock lt off.*

**ALTIMETERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET ALL . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Set subscale to required setting.*

**CLIMB POWER**

**If Noise Abatement is required, at the end of the countdown:**

* *Set REHEAT sels (4) to OFF using the gang bar (SHIFT+F4)*
* *Set TLA as required for noise abatement*

|  |  |
| --- | --- |
| Altitude | N2 |
| 3000 | 93% |
| 4000 | 95% |
| 5000 | 97% |
| 6000 | 99% |
| 7000 | 101% |
| 8000 | CLB PWR |

### **At M 0.7 CLIMB CHECKLIST**

**TAKE-OFF CG switch . . . . . . . . . . . . . . . . . . . . . . . . . . . . . NORMAL . . .Engine Ctrl (CTRL+SHIFT+2)**

*Verify that the switch is at NORMAL and set the guard.*

**BRAKE FANS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . Brake Control**

**ENGINE CONTROL SCHEDULE . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . . . . . . . . . . . . . . . .**

* *Set or leave it at Flyover during full subsonic flights or subsonic steps. Set to NORMAL for transonic acceleration.*

*NOTE: Make sure HI schedule lights are on and correct response on N1 and Area gauges.*

**FLIGHT DECK DOOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . NORMAL . . . . . . . Aft Overhead (SHIFT+3)**

**SEAT BELT SIGNS . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . .. . . . . . . . . . . . . . . . . . . . .**

**TAXI TURN LTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . Forward Overhead (SHIFT+4)**

### **SUBSONIC CLIMB**

* *Set the desired altitude*
* *Climb at VMO if the climb is to be continued to supersonic speeds or climb at VMO and then 0.93 if the climb is to a subsonic flight level.*
* *\*Rearward trim transfer should begin at Mach 0.70. When climbing to Subsonic Cruise, rearward trim transfer should be stopped at 55% CG or if the acceleration is interrupted below Mach 1.00.*

### **SUBSONIC CRUISE**

* *If subsonic cruise is required, set VMO and engage AT1 and AT2 to level off and engage ATs at the selected altitude.*
* *The subsonic cruise is carried out at Mach 0.95.*
* *The optimum flight level for subsonic cruise varies considerably with the aircraft weight. The recommended procedure is to fly with a CG position of 55% which may give an elevon deflection of 2 to 2.5° down. This deflection is acceptable because the CG position is considered more important than the elevon deflection.*
	+ *At heavy weights, as for example following a maximum weight take-off, the optimum subsonic flight level for specific range is initially FL250*
	+ *At maximum landing weight the optimum level is about FL370.*
	+ *Any increase in subsonic cruise flight level above the optimum will have an adverse effect on specific range. As height is increased above the optimum, the IAS at Mach 0.95 can fall progressively below the minimum drag speed for the weight. Drag can thus become more penalising until height cannot be maintained at subsonic speeds.*
* *Regardless of weight it can be seen from the Flight Envelope that above 41,000 feet the IAS equivalent to Mach 0.95 is prohibited by VLA (Lowest Authorised Speed).*

*CAUTION: At heavy weight a large power increase may be required to regain speed following inadvertent deceleration to speeds below about 300 knots. If climb power is insufficient, reheat should be used and if necessary, the aircraft should be descended to increase the speed to the lesser of VMO or M = 0.95. The desired level should then be regained by climbing at VMO*

* *Engine control schedule should be selected to 'flyover' above Mach 0.8 for optimum performance.*
* *For INS DME UPDATE check SUPERSONIC CRUISE*

### **TRANSONIC CHECKLIST**

**ENGINE CONTROL SCHEDULE . . . . . . . . . . . . . . . . . . . NORM . . . . . Engine Ctrl (CTRL+SHIFT+2)**

**SECONDARY NOZZLES . . . . . . . . . . . . . . . . . . . . . . . . . . <15 DEG . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Observe the SECONDARY NOZZLE instrument indicates less than 15 deg.*
* *NOTES: Supersonic flight is permitted with bucket angles of up to 21°. See Cruise Control Manual for penalty.*

*Reheat must not be selected on any engine indicating a Secondary Nozzle angle greater than 15 degrees.*

**TRANSONIC ACCELERATION . . . . . . . . . . . . . . . . . . . . . . . . . SET. . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *If engaged, disengage AT1 and AT2 (SHIFT+R X2). The AT light (W & L Display) will flash. Press to extinguish.*
* *Select PITCH HOLD on the AFCS.*
* *Pitch the aircraft up to 7° to 10°. You can use the AP DATUM adjustment or the keys on the numeric keypad (NUM LOCK OFF) to pitch the nose of the aircraft to 7 to 10°.*
* *Make sure you keep the aircraft at VMO (400kts) during the whole acceleration period. Adjust PITCH as required.*

**REHEAT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . Upper Pedestal (SHIFT+6)**

* *Advance throttle levers fully.*
* *Select Reheats in symmetric pairs - selected lights on (CTRL+F4 twice)*
* *Observe fuel flow increase, FT flags appear and area increase: Con lights off, MID schedule lights on.*

*NOTE: Two reheats are the minimum required for transonic acceleration, however due note must be taken of additional fuel usage with one or two reheats failed.*

* + *If the total temperature exceeds approx. 80ºC before reheat is selected off, the engine will automatically return to the dry climb values of N2 N1 and EGT but the reheat system will continue to function normally.*

**CHRONO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . START . . . . . . . . . . . . . . . . . . . . . . . Main**

### **At M 1.0**

**PRESS STATIC HEATERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . .Aft Overhead (SHIFT+3)**

*NOTE: The pressurisation static vent heaters should not be operated in supersonic flight as there is a risk of heater damage.*

**ENGINE ANTI-ICE. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe IGV PRESS lights off.*

**WING & INTAKE ANTI-ICING . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**TRANSPARENCY DE-ICE, DEMIST. . . . . . . . . . . . . . . . . . . . . . OFF . . Forward Overhead (SHIFT+4)**

*Verify W/SHIELD DE-ICE sels OFF, VISOR DE-ICE sws OFF, DV DE-MIST sws OFF*

**MAX CLIMB . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . Glareshield**

*Once you’re through Mach 1 (M1.03), select MAX CLIMB on the AFCS.*

### **At M 1.1**

**SECONDARY NOZZLES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 0-5 . . .Engine Ctrl (CTRL+SHIFT+2)**

*Observe SECONDARY NOZZLE instruments indicate 0-5 deg. For continued supersonic flight with bucket angles between 0º and 27º see Cruise Control Manual section 5 for fuel penalty.*

### **At M 1.3**

**INTAKES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . .Air Intakes (CTRL+SHIFT+4)**

*Observe ramp position moves to approximately 10% to 20%*

### **At M 1.7 or 15 min since reheat**

**\*REHEAT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED/OFF. . . . . . . Upper Pedestal (SHIFT+6)**

*Confirm that the VFE has set reheats OFF*

**CHRONO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . STOP/RESET . . . . . . . . . . . . . . . . . . . . . . . Main**

**AFCS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . Glareshield**

* *Dial 60000 feet*
* *Select ALT ACQ*
* *Engage AT1*

*Confirm that the same system AP, AT and FD are selected i.e. No.1 AP, No.1 AT and No.1 FD.*

### **At FL500 / Mach 2.0**

**AT1 & MAX CLIMB/MAX CRUISE/MACH HOLD . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . Glareshield**

### **SUPERSONIC CRUISE**

**INS DME UPDATE . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED. . . . . . . . . . . . . . . . . . . . . . . . . . . . .** *No. 1 DME provides data to No.1 INS and No.2 DME provides data to No.2 INS.*

* *Rotate the Data Selector to WAY PT.*
* *Right-click the keypad 7 then right-click the keypad 9. This puts the INS into DME updating mode.*
* *Select a waypoint number to store the DME station using the waypoint selector wheel.*
* *Enter the Lat and Long for the DME station and click INSERT.*
* *Right-click the keypad 3 then right-click the keypad 9. This shows the altitude of the DME station.*
* *Press the keypad 2 (N). Round up or down the DME station altitude in thousands of feet up to 9,000. For example, for an altitude of 2,600 ft, press keypad 3.*
* *Press the WY PT CHG button.*
* *Select the waypoint number on the keypad used to store the DME station and press INSERT.*
* *Rotate Data Selector switch to POS. The orange RNAV light will come on within a couple of seconds.*

*NOTE: The RNAV light will be on only while DME up-dating is taking place. When INS 1 or INS 2 is receiving DME data it will pass the data to the other two systems. If these systems are in Mix mode (MI=4), they will independently perform the DME update function.*

*NOTE: Tuning both VHF NAV on the same frequency will not improve the single DME updating both in efficiency and velocity. The most efficient method being to dual DME update with one DME on your track and the other at least 15nm off track.*

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### **TEMPERATURE REFENCE TABLES**

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TEMPERATURE **Warmer than ISA -10°C**

|  |  |  |  |
| --- | --- | --- | --- |
| **FLIGHT LEVEL** | **FUEL (KG)** | **TIME (MIN)** | **DISTANCE COVERED NM** |
| **40 KT TAIL** | **ZERO WIND** | **40 KT HEAD** |
| 600 | 2.10 | 20.3 | 233 | 220 | 206 |
| 590 | 2.04 | 19.9 | 227 | 213 | 200 |
| 570 | 1.94 | 19.2 | 215 | 202 | 189 |
| 550 | 1.88 | 18.7 | 207 | 194 | 182 |
| 530 | 1.85 | 18.3 | 199 | 187 | 175 |
| 510 | 1.82 | 17.9 | 193 | 181 | 169 |
| 490 | 1.76 | 17.2 | 183 | 171 | 160 |
| 470 | 1.67 | 16.4 | 170 | 159 | 148 |
| The highlighted area includes deceleration fromcruise to 350 knots |
| 550 | 1.38 | 15.6 | 152 | 141 | 131 |
| 530 | 1.33 | 15.0 | 144 | 134 | 124 |
| 510 | 1.27 | 14.5 | 136 | 126 | 117 |
| 490 | 1.21 | 14.0 | 129 | 119 | 110 |
| 470 | 1.15 | 13.4 | 121 | 113 | 104 |
| 450 | 1.09 | 12.9 | 115 | 106 | 97 |
| 430 | 1.02 | 12.3 | 108 | 100 | 91 |
| 410 | 0.97 | 11.7 | 101 | 94 | 86 |
| 390 | 0.91 | 11.2 | 95 | 88 | 80 |
| 370 | 0.85 | 10.7 | 89 | 82 | 75 |
| 350 | 0.80 | 10.1 | 84 | 77 | 70 |
| 330 | 0.76 | 9.7 | 79 | 73 | 66 |
| 310 | 0.72 | 9.2 | 73 | 67 | 61 |
| 290 | 0.67 | 8.5 | 67 | 62 | 56 |
| 270 | 0.62 | 7.9 | 62 | 56 | 51 |
| 250 | 0.57 | 7.2 | 56 | 51 | 46 |
| 230 | 0.52 | 6.6 | 50 | 46 | 42 |
| 210 | 0.47 | 6.0 | 45 | 41 | 37 |
| 190 | 0.42 | 5.4 | 40 | 36 | 32 |
| 170 | 0.37 | 4.8 | 35 | 31 | 28 |
| 150 | 0.33 | 4.1 | 30 | 27 | 24 |
| 130 | 0.28 | 3.6 | 25 | 23 | 20 |
| 110 | 0.23 | 3.0 | 21 | 19 | 17 |
| 90 | 0.19 | 2.4 | 16 | 15 | 13 |
| 70 | 0.14 | 1.8 | 12 | 12 | 10 |
| 50 | 0.10 | 1.3 | 8 | 8 | 7 |
| 30 | 0.05 | 0.7 | 4 | 4 | 3 |

TEMPERATURE **Colder than ISA -10°C**

|  |  |  |  |
| --- | --- | --- | --- |
| **FLIGHT LEVEL** | **FUEL (KG)** | **TIME (MIN)** | **DISTANCE COVERED NM** |
| **40 KT TAIL** | **ZERO WIND** | **40 KT HEAD** |
| 600 | 1.99 | 20.0 | 216 | 203 | 189 |
| 590 | 1.97 | 19.9 | 214 | 200 | 187 |
| 570 | 1.97 | 19.6 | 210 | 197 | 183 |
| 550 | 1.97 | 19.3 | 205 | 192 | 179 |
| 530 | 1.98 | 19.0 | 200 | 188 | 175 |
| 510 | 1.99 | 18.7 | 196 | 183 | 171 |
|  |  |  |  |  |  |
| 490 | 2.02 | 18.3 | 190 | 178 | 165 |
| 470 | 2.00 | 17.7 | 180 | 169 | 157 |
| The highlighted area includes deceleration fromcruise to 350 knots |
| 550 | 1.41 | 15.8 | 147 | 137 | 126 |
| 530 | 1.35 | 15.2 | 139 | 129 | 119 |
| 510 | 1.28 | 14.6 | 131 | 121 | 111 |
| 490 | 1.22 | 14.0 | 123 | 114 | 104 |
| 470 | 1.15 | 13.4 | 116 | 107 | 98 |
| 450 | 1.09 | 12.8 | 109 | 101 | 92 |
| 430 | 1.03 | 12.2 | 103 | 94 | 86 |
| 410 | 0.97 | 11.7 | 96 | 88 | 81 |
| 390 | 0.90 | 11.1 | 90 | 82 | 75 |
| 370 | 0.84 | 10.5 | 84 | 77 | 70 |
| 350 | 0.79 | 10.0 | 79 | 72 | 65 |
| 330 | 0.75 | 9.5 | 74 | 68 | 62 |
| 310 | 0.70 | 8.9 | 69 | 63 | 57 |
| 290 | 0.66 | 8.3 | 63 | 58 | 52 |
| 270 | 0.61 | 7.7 | 58 | 53 | 48 |
| 250 | 0.56 | 7.1 | 53 | 48 | 43 |
| 230 | 0.51 | 6.5 | 47 | 43 | 39 |
| 210 | 0.46 | 5.9 | 42 | 38 | 34 |
| 190 | 0.41 | 5.3 | 37 | 34 | 30 |
| 170 | 0.37 | 4.7 | 32 | 29 | 26 |
| 150 | 0.32 | 4.1 | 28 | 25 | 22 |
| 130 | 0.27 | 3.5 | 23 | 21 | 19 |
| 110 | 0.23 | 2.9 | 19 | 17 | 15 |
| 90 | 0.18 | 2.3 | 15 | 14 | 12 |
| 70 | 0.14 | 1.8 | 12 | 10 | 9 |
| 50 | 0.10 | 1.2 | 8 | 7 | 6 |
| 30 | 0.05 | 0.7 | 4 | 4 | 3 |

**DECELERATION & DESCENT CHECKLIST**

**SAFEFY HEIGHT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . . . .**

*Check the safety height for each leg of the descent and ensure that adequate terrain clearance is maintained at all times.*

**ASI BUGS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET . . . . . . . . . . . . . . . . . . . . . . Main**

**ALT HOLD . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET. . . . . . . . . . . . . . . . . . Glareshield**

**DESCEND ALTITUDE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET. . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**- - - - - AT DECELERATION POINT - - - - - -**

**WARNING & LANDING DISPLAY. . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . Main**

* *Press and hold the Captains Warning & Landing Display TEST push button.*
	+ ***VERY IMPORTANT****:* ***If this test is not performed, the VFE \*WILL NOT\* set the TLA as required.***
	+ *While at supersonic cruise* ***you can manually set the desired TLA*** *using the mouse scroll wheel at the sides of the Throttle in the 2D panel (SHIFT+6) and then activate using CTRL+F5*
	+ *Observe AP light (red), AT light (red), ILS boundaries exceedance warnings (white), aircraft symbol (amber) and LAND 2 and LAND 3 lts (green) and DH lt (amber) on.*
	+ *Observe brief audio warning (cavalry charge) and AUTOLAND lt (red) on*
	+ *Release TEST pb*
* *Within 10 minutes Press F2 key command at the deceleration point. AT1 disengages and the VFE will slowly close the throttles to 18°TLA (75%)*
* *At 360 knots engage ALT ACQ and at 350 knots select IAS HOLD*
* *After engaging IAS HOLD remember to select ALT ACQ again*

**THROTTLES (TLA) . . . . . . . . . . . . . . . . . . . . . . . . . . 18°/24º . . . . . . . . . . . . . Upper Pedestal (SHIFT+6)**

* *Observe the temperature deviation from ISA*
	+ *IF temperature warmer than ISA -10 degrees C retard the throttles (4) to 18 degrees*
	+ *IF temperature colder than ISA -11 degrees C retard the throttles (4) to 24 degrees*

*NOTE: The throttle lever position of 18 deg. or 24 deg. depending on temperature, is necessary to ensure adequate surge margins at speeds greater than M = 1.6.*

### **At M 1.6**

**THROTTLES (TLA) . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED 34° . . . . . Upper Pedestal (SHIFT+6)**

*NOTE: The throttle lever position of 34 deg (34%) ensures adequate air conditioning flows at speeds greater than M = 1.0.*

*NOTE: The VFE, if enabled, will move back the throttle at M1.5 instead of M1.6*

*NOTE: You can manually set the desired TLA using the mouse scroll wheel at the sides of the Throttle in the 2D panel (SHIFT+6)*

### **At M 1.3**

**INTAKES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . Air Intakes (CTRL+SHIFT+4)**

*Ramp position should go back to 0º*

### **At M 1.0**

**THROTTLES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .IDLE. . . . . . . . . Upper Pedestal (SHIFT+6)**

*NOTE: During the latter stages of the descent and subsequent approach it is possible that rapid movement of the throttles may cause transient operation of the auto ignition system. This will cause the RH IGN and LH IGN lights and the associated START PUMP light to come on momentarily.*

**PRESS STATIC HEATERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . .Aft Overhead (SHIFT+3)**

**THROTTLE MASTER switch . . . . . . . . . . . . . . OTHER SELECTION . . . . . . . . . . . . . . . . . . . . . . . . .**

*Observe all THROT lights off in the Upper Pedestal (CTRL+6)*

**TRANSPARENCY DE-ICE, DEMIST . . . . . . . . . . . . . . . . . . . . . . ON . . Forward Overhead (SHIFT+4)**

* *Set W/SHIELD DE-ICE sels (2) to LOW.*
	+ *Observe O/HEAT lts (2) off.*
* *Set VISOR DE-ICE sws (2) to ON*
	+ *Observe O/HEAT lts (2) off.*

*NOTE: The visor heater operates only when the visor is locked up.*

* + *Set DV DE-MIST sws (2) to ON*
	+ *Observe O/HEAT lts (2) off.*

**ENGINE CONTROL SCHEDULE . . . . . . . . . . . . . . . . . . CHECK . . .Engine Ctrl (CTRL+SHIFT+2)**

* + *If a subsonic leg is to be flown, rotate ENGINE CONTROL SCHEDULE sel. to FLYOVER (F/O)*
	+ *Observe correct response on N1 and Area gauges and the fours F/O lights are on.*

### **APPROACH CHECKLIST**

**FLIGHT DECK DOOR SW . . . . . . . . . . . . . . . . . . . . . . . . . . . OPEN . . . . . . . . .Aft Overhead (SHIFT+3)**

**CABIN CREW (STEWARD) CALL . . . . . . . . . . . . . . . "15 MINUTES" . . . . . . . . . . . . . . . . . . . . . . . . . .**
**EMERGENCY LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . CHECKED ARM . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**CABIN SIGNS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Set FASTEN SEAT BELT SW and the NO SMOKING SW to ON.*

**TAXI TURN LTS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . Forward Overhead (SHIFT+4)**

**ENGINE CONTROL SCHEDULE . . . . . . . . . . . . . . . . . .APPROACH . . .Engine Ctrl (CTRL+SHIFT+2)**

* *Rotate ENGINE CONTROL SCHEDULE sel to APPROACH*
	+ *Observe correct response on N1 and Area gauges and MID lts on.*

*NOTE: The MID engine control schedule is used for noise abatement during approach to touchdown.*

**BRAKE FANS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . Brake Controls**

**SSB . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . AC Electrics (SHIFT+7) BATTERIES / D.C. SPLIT switch. . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . DC Electrics (SHIFT+8)**

*The Battery selectors must be set to ESS/MAIN SPLIT for cat 3* landings

**FUEL / WEIGHT / CG . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . Main**

* *Update landing data card fuel and weight figures as required.*
* *Verify CG within the landing limits*

### **LANDING VREF SPEEDS**ZFW + Fuel Rem. = Landing WeightWhen calculating the RELAND reference speed for the data card, use a landing weight equal to take-off weight minus 3,500 kg

|  |  |  |
| --- | --- | --- |
| **DISTANCE TO TOUCHDOWN** | **RECOMMENDED SPEED** | **MAXIMUM SPEED** |
| **15-20 miles** | 250 knots | 300 knots |
| **12-14 miles** | 210 knots | 250 knots |
| **8 - 11 miles** | VREF + 30 knots (minimum 190 knots) | 210 knots |
| **5 - 7 miles** | VREF + 15 knots | VREF + 30 |
| **0 - 4 miles** | VREF | VREF MAX |
| **Visual trafﬁc pattern** | VREF + 50 | Speeds up to 250 knots may be used in a visual trafﬁc pattern in order to reduce noise and fuel consumption. |
| **ILS beam interception** | VREF + 30(minimum 190 knots) |  |

|  |  |
| --- | --- |
| LANDINGWEIGHT | VREF |
| (x1000 kg) | Knots |
| 96 | 150 |
| 98 | 152 |
| 100 | 154 |
| 102 | 155 |
| 104 | 157 |
| 106 | 158 |
| 108 | 160 |
| 110 | 161 |
| 111 | 162 |
| 115 | 165 |
| 120 | 168 |
| 125 | 172 |
| 130 | 175 |
| 135 | 179 |
| 140 | 182 |
| 145 | 185 |
| 150 | 188 |
| 155 | 191 |
| 160 | 194 |
| 165 | 197 |
| 170 | 201 |
| 175 | 204 |
| 180 | 207 |

|  |  |  |
| --- | --- | --- |
| **CONFIGURATION** | **ABNORMAL INCREMENT** | **VT MAX** |
| 3 ENGINE | 5 | 10 |
| 2 ENGINE | 7 | 17 |
| NO AUTOTHROTTLE | 7 | 17 |
| **TOTAL LOSS OF**:* ELECTRIC TRIM

OR* PITCH AUTOSTABOR
* ELECT. FLIGHT CONTROL
 | 10 | 10 |

**ASI BUGS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . UPDATE . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**VISOR / NOSE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . DOWN / 5 DEG . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Set the Visor/Nose lever to VIS/O*
* *Observe*
	+ *Visor moves downwards*
	+ *Unlock light on then off*
	+ *Visor MI reads DOWN*
	+ *5 deg Lock light is off*
* *CAUTION: THE SIMULTANEOUS SELECTION FROM VISOR UP TO NOSE 5º IS PROHIBITED IN FLIGHT UNLESS THE LIMITATION FOR NOSE AT DOWN IS OBSERVED.*
* *Set the Visor/Nose lever to 5 DEG*
* *Observe*
	+ *Nose moves downwards*
	+ *Unlock light on then off*
	+ *Nose MI reads 5 DEG*
	+ *5 deg Lock light remains off*

**ALTIMETERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET****. . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**RADIO ALTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET. . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**QNH . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SET / UPDATE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**RAD / INS switch. . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . . . . . . . . . . Glareshield**

*Observe on both HSI that RAD and MAG displayed*

**AUTOPILOT CHANGE OVER . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *With both autopilots engaged, disengage AP1 sw and observe AP1 lt off and AP2 remains engaged and operating.*
	+ *Observe on both Warning and Landing displays LAND 3 lt off and LAND 2 lt (green) on.*
* *Set AP1 sw to engage and observe AP1 lt (green) on and sw remains at engaged position.*
	+ *Observe on both Warning and Landing displays LAND 3 lt (green) on, if electrics split.*
* *NOTE: On re-engagement of AP1 it will engage in the LAND mode provided at least one flight director is engaged.*

### **LANDING CHECKLIST**

**LANDING GEAR . . . . . . . . . . . . . . . . . . . . . . . . . .DOWN 4 GREENS . . . . . . . . . . . . . . . . . . . . . Main**

* *Move the guard to the left and set the L/GEAR lever to DOWN.*
* *Observe LH, NOSE, T and RH arrow lts (green) (4) on and LH SHORT, RH SHORT, UPPER LOCKS and transit lts off at end of the lowering sequence.*

**NOSE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . DOWN & GREEN . . . . . . . . . . . . . . . . . . . . . . . . . .**

* *Set VISOR/NOSE lever to DOWN*
* *Observe 5 DEG L lt on then off, unlock lt on then off, down lt (green arrow) on, NOSE MI reads DOWN*

**CABIN CREW (STEWARD) CALL . . . . . . . . . . . . . . . 3 PRESSES . . . . . . . . .Aft Overhead (SHIFT+3)**

**LANDING/TAXI/TAXI TURN LTS. . . . . . . . . . . . . . . AS REQUIRED. . . . Forward Overhead (SHIFT+4)**

* *If lights required set LIGHTS MAIN LANDING sws (2) to ON and EXTEND (2).*
	+ *Observe EXTENDED lt (blue) on.*
* *If additional lighting required set LIGHTS LANDING TAXI sws (2) to ON and EXTEND (2)*
	+ *Observe EXTENDED lt (blue) on.*
* *NOTE: Some buffeting may be experienced with the landing/taxi lights extended in flight*

**BRAKES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED / NORMAL . . . . . Upper Pedestal (SHIFT+6)**

* *Verify the brakes lever is at NORM.*
* *Press and release brake pedals.*
	+ *Observe BRAKES FAIL lt off.*

*NOTE: This test will confirm that normal brake pressure is available.*

**ANTI-SKID. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . . . . . . . . . Main**

* *Observe brakes ANTI-SKID R lts (white) on*

*NOTE: The anti-skid system allows brake applications before touchdown if all eight release (R) lights are on.*

* + *If one R lt off on any one landing gear apply brakes only after touchdown and use with care to prevent burst tyres.*

*NOTE: NORMAL brake system can still be used with three R lights off.*

* + *If four or more R lts off, apply procedure USE OF EMERG BRAKES*

**YELLOW SYSTEM . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . Hydraulic Panel**

* Observe
	+ YELLOW hydraulic system PUMPS MIs (2) read ON
	+ YELLOW system contents and pressure normal.

**ELECTRIC TRIM . . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Note: I find much easier to hand-fly Concorde when I manually control the trim, so I like to disable the electric trim on manual landings. Of course, when disengaging the electric trim the autopilot goes off.*

### **AFTER LANDING CHECKLIST**

**MASTER WARNING . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . INHIBIT . . . . . . . . . . . . . . . . . MWS Panel**

**GRD IDLE sws . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .LOW . Engine Control (CTRL+SHIFT+2)***Set ENG 1-4 and ENG 2-3 GRD IDLE sws to LO*

**INBOARD ENGINES. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SHUT . . . . . . . Aft Overhead (SHIFT+3)**

*When clear of runway and at taxiing speed shut down inboard engines to reduce thrust, if system status permits.*

**PRESS STATIC HEATERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**ADS AND STBY HEATERS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**DRAIN MAST HEATERS. . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . . . . . . . . . . . . . . . . . . . .**

*Check the total air temperature gauge Upper Pedestal (SHIFT+6).*

*If TAT is above 0 degrees Celsius, set DRAIN MAST HTRS to OFF.*

*If TAT is below 0 degrees Celsius, set DRAIN MAST HTRS to ON*.

**WING & INTAKE ANTI-ICING . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**FLIGHT CONTROL INVERTERS.. . . . . . . . . . . . . . . . . . . . .OFF INV . . Forward Overhead (SHIFT+4)**

* *Set BLUE INVERTER sel to OFF INV and observe flight control channel MIS (8) read G.*
* *Set GREEN INVERTER sel to OFF INV and observe flight control channel Mis (8) read M.*

**LANDING/TAXI/TAXI TURN LTS. . . . . . . . . . . . . . . AS REQUIRED. . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**NOSE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 DEG . . . . . . . . . . . . . . . . . . . . . . Main**

*Observe 5 deg lt on then off, NOSE Ml reads 5 deg, unlock lt on then off, down lt off.*

**TRANSPONDER. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .STBY . . . . . Lower Pedestal (SHIFT+7)**

**SSB . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CLOSED . . . AC Electrics (CTRL+SHIFT+7)**

**BATTERY / D.C. SPLIT switches . . . . . . . . . . . . . . . . ON / NORMAL . . . . . . . DC Electrics (SHIFT+8)**

**BRAKE TEMP lights . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED . . . . . . . . . . . . . . Brake Controls**

* *Observe the BRAKES TEMP FWD and REAR lts (red) (4) are on.*
* *Press each BRAKES TEMP FWD and REAR lt in turn.*
	+ *Observe temperature when lt pressed.*

*NOTES If any reading differs significantly from the others (either above or below) the affected brake must be inspected in accordance with the Maintenance Manual instructions before the next flight. The non-illumination of a BRAKES TEMP light and an abnormally low brake temperature indicate lack of braking on that wheel.*

**BRAKE FANS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . . . . . . . . . . . . . . . . . . . . . .**

**FLIGHT DIRECTORS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . . .**

### **PARKING CHECKLIST**

**BRAKES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . PARK . . . . . Lower Pedestal (SHIFT+7)**

*Observe dual BRAKES pressure gauge indicating full scale and BRAKES EMERG lt (amber) on.*

**LANDING LIGHTS. . . . . . . . . . . . . . . . . . . . . OFF / RETRACT: OFF . . Forward Overhead (SHIFT+4)**

**EMERG GENERATOR selector . . . . . . . . . . . . . . . . . . . . . . . . AUTO . .DC Electrics (CTRL+SHIFT+8)**

*Set the Emergency Generator selector to AUTO to prevent the generator attempting to run as Engine No.1 is-shut down.*

**NOSE / VISOR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . . . . . . . . . . . . . . . . Main**

*Observe nose then visor move upwards, unlock lt on then off, NOSE MI reads UP, VISOR MI reads UP*

**BATTERIES (G-BOAG ONLY) . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . .DC Electrics (CTRL+SHIFT+8)**

**HP VALVES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SHUT . . . . . . .Aft Overhead (SHIFT+3)**

* *Retard THROTTLE LEVERS (4) to idle.*
* *Set HP VALVE 1, 2 and 3 to SHUT*
* ***IMPORTANT: Make sure ONLY ENGINE 4 IS RUNNING before requesting Ground Power***
* *Observe HP MIs SHUT, engine(s) run down.*

**GROUND POWER . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ON . . . .AC Electrics (CTRL+SHIFT+7)**

* *Request Ground Power (FSLabs Menu)*
* *Observe GRND PWR AVAILABLE lt (white) on.*
* *Set ground power sw to CLOSE and release and generator sels of live generator(s) to off*

**HP VALVE ENGINE 4. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SHUT . . . . . . .Aft Overhead (SHIFT+3)**

**THROTTLE MASTERS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**ANTI-COLLISION lights . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**FASTEN SEAT BELTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**DRAIN MAST HEATER . . . . . . . . . . . . . . . . . . . . . . . . . CHECK/SET . . . . . . . . . . . . . . . . . . . . . . . . .**

**ENGINE ANTI-ICING . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . . .**

**GROUND CONDITIONING . . . . . . . . . . . . . SHUT (GRND SUPPLY). . . . . Air Bleed (CTRL+SHIFT+3)**

* *Observe BLEED VALVES MIs (4) show crossline.*
* *Set BLEED VALVES sws (4) to shut.*
* *Observe COND VALVE MIS (4) show Crossline.*
* *Set COND VALVE sws (4) to OFF.*
* *Request ground staff connect pre-conditioned air truck*

**TRANSPARENCY DE-ICE, DEMIST . . . . . . . . . . . . . . . . . . . . . OFF. . . Forward Overhead (SHIFT+4)**

**DC Panel . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . CHECKED. . .DC Electrics (CTRL+SHIFT+8)**

* *Set both BATERIES to OFF*
* *Observe BATT ISOLATE lts (2) (amber) on, battery MIS (4) show crossline and MWS ELECT lt (amber) operates.*

**BRAKE FANS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . . . . . . . . . Brake Control**

* *Observe WHEELS O/HEAT lt*
	+ *IF WHEELS O/HEAT lt off set BRAKE FANS SW to OFF.*

**ELAPS CLOCK . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . STOP/RESET . . . . . . . . . . . . . . . . . . . . . . Main**

### **STOPOVER CHECKLIST**

This check must be performed whenever the planned turn round time is greater than 4 hours.

**AIR DATA COMPUTERS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . Lower Pedestal (SHIFT+7)**

* *Observe:*
	+ *AUTO STAB No.1 PITCH, ROLL and YAW sws at OFF*
	+ *AUTO STAB No.2 PITCH, ROLL and YAW at OFF.*
	+ *ARTIFICIAL FEEL No. 1 PITCH, ROLL and YAW at OFF.*
	+ *ARTIFICIAL FEEL No,2 PITCH, ROLL and YAW at OFF.*
	+ *ELECTRIC TRIM No. 1 and No. 2 sws at OFF.*
* *Observe flags visible on associated instruments*
* *Cancel MWS ADS*

**INS. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . FWD Leg (CTRL+SHIFT+1)**

**FLIGHT CONTROL INVERTERS . . . . . . . . . . . . . . . . . . . PWR OFF. . Forward Overhead (SHIFT+4)**

NOTE: Unlock the blue and green guards

**EMERGENCY LIGHTS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . .Aft Overhead (SHIFT+3)**

*NOTE: The OFF position is selected before normal shutdown of electrical power. This isolates the battery supplies in the lighting units and prevents the emergency lights from coming on when ground power is removed thus preventing discharge of the lighting unit batteries.*

**ROOF AND PANEL LIGHTS . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . Aft Overhead (SHIFT+3)**

**NAV LIGHT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . OFF . . . . . . . . . . . . . . . . . . . . . . . . .**

**TRANSPONDER ALT RPG SWITCH . . . . . . . . . . . . . . . . . . . . . OFF . . . . . Lower Pedestal (SHIFT+7)**

**BRAKE FANS . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . AS REQUIRED . . . . . . . . . . . . . . Brake Control**

**GROUND POWER . . . . . . . . . . . . . . . . . . . . . . . . . . . . TRIP . . . . . . . . AC Electrics (CTRL+SHIFT+7)**

* *Set ground power sw to TRIP and release.*
* *Observe GRND PWR AVAILABLE lt on and cockpit panels are electrically dead.*

**PANEL STATE . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SAVED . . . . . . . . . . . . . . . FSLabs Menu**

*This optional step will allow you to load Concorde-X in your next flight with all the switches, knobs and other settings exactly in the same state as you left them. This is way more realistic than always loading the predictable default states.*

*TIP: Use a new name for this panel state such as "LastFlight" or similar.*

**PIPER J-3 Cub /Trike . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . LOADED . . . . . . . . . . Vehicle Select Menu**

*If you want to return to your Concorde in the exact parking position or gate where you parked, then you need to save your flight. However, NEVER use a complex aircraft, such as Concorde-X, as your default flight; EVEN IF YOU DON'T LOAD THE SCENERY. Instead, before saving the scenery, load a simple aircraft such as the Piper J-3 Cub/Trike.*

**PIPER J-3 Cub /Trike . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . START ENGINE . . . . . . . . . . . . CTRL+E**

*This is a safety step to make sure Concorde load in the default state with started engines in the first place.*

**DEFAULT FLIGHT . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . SAVED . . . . . . . . . . . . Scenario -> Save**
*This will make your current airport and parking position/gate as the default Scenario, so that you can continue your next flight exactly from where you left it.*

### **VERSION HISTORY**

**v2.0.5 - 27/May/2020**

* Revised ADS/ENGINE PROBE HEATERS check during COCKPIT SAFETY CHECK
* Some minor typos fixed

**v2.0.4 - 25/May/2020**

* Added bookmarks on PDF for easier navigation
* Added an ENGINE CONTROL SCHEDULE check after supersonic deceleration in case a subsonic leg is to be flown
* Correction of CROSSBLEED BALVES 1&4 and ENGINES 4&1 START sequence order
* Improved notes in AUTOTHROTTLE test

**v2.0.3 - 30/Dec/2019**

INS DME UPDATE procedure improved by adding the altitude of the DME stations

**v2.0.2 - 30/Dec/2018**

AIR DATA COMPUTERS OFF during STOPOVER CHECKLIST revised

 **v2.0.1 - 30/Dec/2018**

Minor typos corrected.

**v2.0 - 30/Dec/2018**

As with every .0 version, it is very likely that this v2.0 checklist will contain some errors and/or typos that will need to be fixed during following revisions. Your feedback will be greatly appreciated. Thank you. <http://simulaciondevuelo.com/concorde-x-checklists>