Phoenix Simulation Software
Concorde

TUTORIAL FLIGHT
LFPG to KJFK

REV 02 SEQ 001

Aérospatiale
Concorde
Flight Tutorial
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INTRODUCTION

This tutorial details a flight from Charles De Gaulle Airport, Paris to Kennedy International, New York.

The flight details are based on real life operating procedures as outlined in the British Airways Concorde Flight Manual.

This basic tutorial utilizes the Virtual Flight Engineer to control systems and fuel transfer. It also uses the default FS flight planner to control navigation. This reduces the workload placed on you as a solo virtual pilot.

The PSS Concorde contains the following panels:

- MAIN PANEL
- MAIN ZOOM PANEL
- THRUST QUADRANT
- LOWER OVERHEAD
- UPPER OVERHEAD
- SIDE ENGINEER’S CONSOLE with 8 SUB-PANELS
- INS CDU
- AUTOPILOT DATUM CONTROLLER

The entire flight takes about 3 1/2 hrs with the option to start at various locations of your choosing via pre-saved flights.

Hope you have an enjoyable flight!
PRE-SAVED FLIGHTS INSTALLATION

Note!
Only the first flight PSSconcorde_1 is included
Other flights must be saved as you go and can be used to repeat the flights
This is due to limitations in the way FS saves, reloads flights and plans

The tutorial download includes the pre-saved flight file

PSSconcorde_1.flt

Place this file in the folder
(or similar folder for non-english versions)
C:\Documents and Settings\UserName\Flight Simulator Files\

Place the file
PSSconcorde_1.sav
in the folder
\PSS\Concorde\

FS9 FLIGHT PLANNER FILE

also included are the files:

PSSconcorde_1.pln
this is for the FS planner, place it in the folder
C:\Documents and Settings\UserName\My Documents\Flight Simulator Files\

FS NAVIGATOR FLIGHT FILE

PSSconcorde_1.fsn
this is for FS Navigator, place it in the folder
FS9\Modules\FS Navigator\Plan\
PANEL CONFIG SETUP

click Start, Programs, Phoenix,,Concorde,,PanelConfig

under 'Startup'

click on 'Start with Cold and Dark Cockpit'

under 'Commands'

click on 'Autopilot Instinctive Disconnect Button'

under Keyboard Shortcut

select CTRL and Z

click on 'Autothrottle Instinctive Disconnect Button'

under Keyboard Shortcut

select CTRL and T

click 'Assign'

click OK
PANEL CLICK SPOTS

click spots can used to open/close the various panels
SIDE CONSOLE SUB-PANELS

1. Pressurization + Engines 1
2. Engines 2
3. Bleed Air + Conditioning
4. Fuel Management 1 + Cooling
5. Fuel Management 2
6. Hydraulic Management
7. Electrical Generating Control 1
8. Electrical Generating Control 2
GETTING STARTED

start FS2004

from the 'Create a Flight' menu select

PSSconcorde_1

the PSS Concorde will be positioned at LFPG, gate A16,

after a few seconds the panel will reset to 'Cold and Dark'

Note!
If a flight doesn’t load properly, try re loading the flight
COCKPIT SAFETY CHECK

using the click spots

1. to open the Side Console panel, click in area 1
2. to open the Fuel Management 2 sub-panel, right click on area 2
COCKPIT SAFETY CHECK
complete the following Safety checks

**Trim Trans Auto Master**

verify TRIM TRANS AUTO MASTER switch at OFF and GUARDED

NOTE!
Switches can be un-guarded/guarded by placing the mouse pointer over the switch and right clicking

**TANK 11 INLET VALVES**

set TANK 11 INLET VALVES MAIN switches 1 and 2 to AUTO

confirm OVERRIDE switches 1 and 2 at OFF

close the Fuel Management 2 sub-panel by right clicking on the sub-panel

open the Fuel Management 1 + Cooling sub-panel by right clicking on then sub-panel, it is the one above Fuel Management 2

**STANDBY INLET VALVES**

verify STANDBY INLET VALVES switches all at SHUT

**TRIM PIPE DRAIN**

verify TRIM PIPE DRAIN switch at SHUT

**JETTISON PANEL COVER**

verify the JETTISON PANEL transparent cover is closed and all switches are OFF

the cover can be open/closed by placing the mouse in the
centre of the cover and right clicking

close the Fuel Management 1 + Cooling sub-panel

close the Side Console panel

open the Centre Console panel
(the click spot is at the lower right corner of the main panel)

**TRANSPONDER**

verify ATC MODE selector switch at STBY

**NOSE AND VISOR STBY CONTROL**

verify Nose and Visor STBY control is OFF and GUARDED

Note!
guarded switches can be un-guarded by placing the mouse over the guard and right clicking

close the Centre Console

at the Main panel

**L/GEAR NORMAL LEVER**

verify L/GEAR lever at DOWN

**VISOR/NOSE LEVER**

verify that visor/nose lever position
coincides with visor/nose configuration
the Visor should be at VIS/0
the Overhead panel is divided into 2 sections
LOWER and UPPER

open the Overhead panel using the click spot
(the click spot is at the top of the centre window post)

open the Upper Overhead panel using the click spot
(the click spot is at the top of the lower overhead)

Note!
bar switches can be toggled to set multiple switches on/off in one click, place the mouse over the lower bar and click same to set the 4 switches in one click

2 way sws can be toggled using mouse clicks

3 way sws can be toggled using either mouse clicks or the mouse wheel

AUTO IGNITION
verify AUTO IGNITION switches at OFF

WING AND INTAKE ANTI-ICING TEST
verify WING & INTAKE ANTI-ICING TEST rotary switch at OFF

FUEL FWD TRANS SW
verify FUEL FWD TRANS switch at NORM and GUARDED

Note!
placing the mouse over switches will display the name and status of the sw

close the UPPER Overhead panel

close the LOWER Overhead panel
this completes the Cockpit Safety check
COCKPIT PRELIMINARY PREPARATION

open the Side Console panel

open the Electrical Generating Control 1 sub-panel

GROUND SERVICE
(electrical and air)

press Ctrl+. to set PARKING BRAKE

observe GRND POWER AVAILABLE now ON

GROUND POWER

set Ground Power switch to CLOSE

close the Electrical Generating Control 1 sub-panel

open the Electrical Generating Control 2 sub-panel

set BATTERY selector switches to BATT ON

close the Electrical Generating Control 2 sub-panel
open the Fuel Management 1 + Cooling sub-panel

**EQUIPMENT BAY COOLING PANEL**

set/verify

FAN 2 sw to AUTO

FANS 1 & 3 sw to AUTO

FWD SUPPLY sw to NORM

REAR EXTRACT LH and RH sws to ON

STANDBY sw to OFF

FWD EMERGENCY RELIEF sw to SHUT

FUEL LP PROTECTION sw to ARMED (ON)

close the Fuel Management 1 + Cooling sub-panel

close the Side Console
PRELIMINARY COCKPIT CHECKLIST

all items on the checklist have now been completed
(grayed out items are not covered in this tutorial)

<table>
<thead>
<tr>
<th>TECHNICAL LOG</th>
<th>CHECK</th>
</tr>
</thead>
<tbody>
<tr>
<td>GROUND POWER</td>
<td>ON</td>
</tr>
<tr>
<td>EQUIPMENT BAY COOLING PANEL</td>
<td>CHECK/SET</td>
</tr>
<tr>
<td>OXYGEN PANEL</td>
<td>CHECK/SET</td>
</tr>
<tr>
<td>DRAIN MAST HEATERS</td>
<td>CHECK/SET</td>
</tr>
<tr>
<td>INS 1</td>
<td>SELECT ALIGN, TEST &amp; PRESENT POSITION</td>
</tr>
<tr>
<td>AIR DATA COMPUTERS</td>
<td>ON</td>
</tr>
<tr>
<td>COCKPIT EMERGENCY EQUIPMENT</td>
<td>CHECK</td>
</tr>
<tr>
<td>Fire axe, asbestos gloves,</td>
<td></td>
</tr>
<tr>
<td>portable oxygen masks and</td>
<td></td>
</tr>
<tr>
<td>Pack, life jackets (5),</td>
<td></td>
</tr>
<tr>
<td>Fire extinguisher, smoke</td>
<td></td>
</tr>
<tr>
<td>Goggles (4) and escape ropes (2)</td>
<td></td>
</tr>
<tr>
<td>DOCUMENTATION STOWAGES</td>
<td>CHECK</td>
</tr>
</tbody>
</table>
FLIGHT ENGINEERS COCKPIT PREPARATION

open the LOWER Overhead panel

at the MWS panel
press the CANCEL button
press the INHIBIT button

open the UPPER Overhead panel

starting at the top left corner

MISC SWS
(top left corner, left to right, top to bottom)

F/D DOOR sw OPEN
I/PHONE sw NORMAL
FASTEN SEAT BELTS sw ON
NO SMKG sw ON
EMERG EVAC sw ARM

SERVO CONTROL PANEL
verify BLACK and YELLOW rotary sws at NORMAL

LIGHTS
(centre section, left to right, top to bottom)
ROOF sw as required, set to OFF
EMERG sw ARM

ANTI COLN sw OFF
NAV LIGHTS sw ON
LIGHTS TEST sw to TEST, then HI

ENGINE FLIGHT RATING
verify sws (4) at CLIMB

THROTTLE MASTERS
set sws to MAIN

AUTO IGNITION
confirm 4 sws at OFF

AUTO THROTTLE
set sws (4) to ON
ENGINE RATING MODE

set sws to TAKEOFF

HP VALVES

verify 4 sws at SHUT

confirm MIs (magnetic indicators) show SHUT

RELAY JACK

verify sw at NORM

open LOWER Overhead panel

ENGINE SHUT DOWN/FIRE CONTROLS

confirm ENGINE SHUT DOWN handles 1-4 at IN position

close LOWER Overhead panel

open the Side Console panel

open the Engines 2 sub-panel

ENGINE STARTING PANEL

verify START/REFLIGHT sws 1-4 at OFF
observe START VALVE MIs read SHUT

close the Engine 2 panel

open the Pressurization + Engines 1 sub-panel

GROUND HYD CHECK OUT

verify GROUND HYD CHECK OUT rotary sw to YELLOW/YELLOW

verify PUMP 1 G-Y and 2 B-Y at OFF

CLOCK

confirm GMT time

FWD LIGHTS

set the FWD LIGHTS sw to TEST, then set at HI

observe on the forward section of the Flight Engineers panel, all warning lights on

BRAKE ACCUMULATOR

observe brakes accumulator pressure gauge reads approx 3000 PSI

BRAKE FANS

set BRAKE FANS sw to ON
CABIN PRESSURE CONTROL

for this flight will be controlled by the Virtual Flight Engineer (VFE)

ENGINE WARNING LIGHTS

Observe lights off for

ENGINE O/HEAT
START PUMP
WIND DOWN
REHEAT

NAC/WING O/HEAT
FUEL FILTER

press FUEL FILTER 1-4 to test

FUEL HEATERS

set sws 1-4 to AUTO

ENGINE RECIRCULATION VALVES

verify sws 1-4 at SHUT

TAKE-OFF CG

verify sw is at NORMAL and GUARDED

ENG 4 T/O N1 LIMITER

set sw to NORMAL

GRD IDLE

verify ENG 1-4 and ENG 2-3 sws at LO
ENGINE CONTROL SCHEDULE

verify rotary sw at NORMAL

verify sw at AUTO

SECONDARY AIR DOORS

verify sws 1-4 at SHUT

FLIGHT REV ARM

verify sw at RELEASED, OPEN lt OFF

NASU TEST

verify sw at NORM, NOZZLE lt OFF

close the Pressurization + Engines 1 sub-panel

open the Bleed Air + Conditioning sub-panel

AIR BLEED CONTROL

set BLEED VALVES ENG 1-4 sws to OPEN

press the OVER PRESS light 1,2,3,4

observe

OVER PRESS light ON
BLEED VALVE MIs show crossline
then return to inline
set BLEED VALVE sws to SHUT
set CROSS BLEED 2 & 3 sws to OPEN
observe pressure values show approx 65 psi as provided by Ground Service
verify CROSS BLEED 1 & 4 sws at SHUT
verify COND VALVES 1, 2, 3, 4 sws at OFF

close the Bleed Air + Conditioning sub-panel
open the Fuel Management 1 + Cooling sub-panel
FUEL TANKS LOCATION
set/verify

TANK 9 INLET VALVE MAIN to AUTO
TANK 9 INLET VALVE O/RIDE to OFF
TANK 9 PUMPS to AUTO

TANK 9 & 10 load limit at 0
TANK 10 PUMPS to AUTO

TANK 5A and 7A PUMPS to OFF

close the Fuel Management 1 + Cooling sub-panel

open the Fuel Management 2 sub-panel

TANKS 1 & 4 sw to NORM

TANK 11 PUMPS GREEN/BLUE (HYD) to AUTO
TANK 11 PUMPS (ELECTR) to AUTO

TRANS VALVE 5A-5 and 7A-7 to SHUT
TANK 5 and 7 PUMPS to OFF

TANK 5 and 7 INLET VALVE MAIN to AUTO
TANK 5 and 7 INLET O/RIDE to OFF

TANK 6 and 8 PUMPS 1 and 2 to OFF
INTER-CON VALVE 6-7 and 5-8 to OFF
ENGINE FEED PUMPS (12) to OFF
CROSSFEED rotary switches are CROSSLINE

close the Fuel Management 2 sub-panel
HYDRAULIC SYSTEM SCHEMATIC

NOTE:
VALVES INDICATED
THUS AUTO CLOSE
WHEN APPROPRIATE
ENGINE SHUT-DOWN
HANDLE PULLED.
HYDRAULIC MANAGEMENT PANEL

open the Hydraulic Management sub-panel

set/verify
GREEN system pumps G1 and G2 at AUTO and GUARDED
BLUE system pumps B3 and B4 at AUTO and GUARDED
YELLOW system pumps Y2 and Y4 at AUTO and GUARDED
YELLOW PUMPS sw is at NORM and GUARDED
observe L/PRESS lights (6) are ON
GREEN, YELLOW and BLUE hydraulic pressure gauges pointers at '0'

close the Hydraulic Management sub-panel
ELECTRICAL SYSTEM SCHEMATIC
ELECTRICAL PANEL

open the Electrical Generating Control 1 sub-panel

verify

CSD DISCONNECT sws (4) at NORM and GUARDED
CSD 1,2,3, 4 lights ON
KW KVAR Meters (4) reading '0'
GENERATOR sws (1-4) at ON
GCB 1,2,3,4 Mls show CROSSLINE
GEN 1,2,3,4 lights ON
AC MAIN BUS lights (4) OFF
BTB 1,2,3,4 at NORM and GUARDED
BTB Mls (4) show INLINE
SSB MI shows INLINE

close the Electrical Generating Control 1 sub-panel
open the Electrical Generating Control 2 sub-panel

verify

AC ESS BUS 1-4 indicator MIs show inline
AC ESS BUS lights (4) OFF

EMER GEN ISOL sw at NORM and GUARDED
EMER GEN sw at AUTO and GUARDED

O/HEAT lt OFF
SELECTED lt OFF

EMERG GEN KVA meter indicates '0'
TRU 1, 2, 3 and 4 load ammeter shows approx 50A
ESS MAIN SPLIT MIs show inline
DC ESS BUS lights (2) OFF
DC MAIN BUS light OFF

set

GEN 1 & 3 and GEN 2 & 4 GALLEY sws to ON
WATER HTRS sw to ON
LIGHTS CTR to TEST then HIGH
LIGHTS AFT to TEST then HIGH

close the Electrical Generating Control 2 sub-panel

close the Side Console
CAPTAIN’S COCKPIT PREPARATION

FLIGHT PLAN

RAMP ASSIGNMENT: Gate: A 16

DEPARTURE: LFPG Charles-De-Gaulle
Rwy: ILS/GS/DME 27L CGW
SID: EVX9A

ARRIVAL: KJFK Kennedy Intl
Rwy: ILS/GS 31L IMOH
STAR: ENE4

WAYPT FRQ LAT/LON
RSO 364.0 N49°00.68' E002°21.69'
PG280 N49°02.30' E002°08.80'
PG284 N49°03.88' E001°37.72'
EVX 112.40 N49°01.90' E001°13.25'
SENLO N49°05.00' W001°10.70'
JSY 112.20 N49°13.27' W002°02.77'
PHILI N49°28.52' W007°01.28'
RATKA N49°30.00' W008°00.00'
KENUK N50°00.00' W012°00.00'
SOMAX N50°00.00' W015°00.00'
5020N N50°00.00' W020°00.00'
5030N N50°00.00' W030°00.00'
4940N N49°00.00' W040°00.00'
YYT 113.50 N47°29.12' W052°51.13'
YQY 114.90 N46°09.20' W060°03.35'
ALLEX N44°25.00' W067°00.00'
ENE 117.10 N43°25.54' W070°36.81'
ASPEN N42°48.96' W070°54.69'
PVD 115.60 N41°43.46' W071°25.78'
TRAIT N41°17.08' W071°55.06'
PARCH N41°05.95' W072°07.24'
CCC 117.20 N40°55.78' W072°47.93'
ROBER N40°41.12' W073°01.96'

TOTAL DISTANCE 3119.9 nm
for this tutorial we will be using the default
FS flight planner to control lateral navigation,
instructions are also included if you wish to use
FS Navigator (www.fsnavigator.com)

**FS FLIGHT PLANNER**

to load the plan, click Flights, Flight Planner

click 'Load'

select 'PSSconcorde_1.pln'

click OK

click OK

at 'do you want FS to move,,,,,'

click 'No'

**FS NAVIGATOR**

press F9 to open FS Navigator

press Plan, Open

select PSSconcorde_1.fsn

press OK

press Options, Settings, FMS

make sure HDG control is set to 'Set and hold Heading'

press OK

close FS Navigator
the Captain's INSTRUMENT TRANSFER panel allows for control of various navigation modes and also the VFE

**OFF - VFE**
Virtual Flight Engineer function when active, automatically controls fuel transfer, pressurization, selects engine ratings, and performs other checklist items

**INS - FS**
[INS]: the AFCS INS mode follows the route entered into INS

[FS]: the AFCS INS mode will depend on the next switch

**GPS - EXT**
[GPS]: the AFCS INS mode will follow the route currently loaded in the stock Flight Simulator flight planner; this route can be monitored on the default GPS (press Shift-7)

[EXT]: the AFCS INS mode will follow the heading selected on the flight simulator autopilot (NOT the heading selected in the AFCS window)

this allow any 3d-party flight planner or FMC products (such as FS Navigator) to control the aircraft by using FS HDG HOLD mode
RAD/INS

set to RAD

Note!

with RAD-INS switch at INS position, the HSI shows True headings; course pointer shows INS desired track (DTK), and deviation indicator shows INS cross track error (XTK) with full deflection equal to 7.5 nm offset

AFCS PANEL

verify AT1, AT2, FD1, AP1, AP2 and FD2 sws at OFF

WARNING AND LANDING DISPLAY

observe

TERRAIN light OFF
M/CG light OFF
TYRE light OFF
press and hold TEST button

observe

AUTO LAND light
AP light
AT light
AIRCRAFT ILS deviation light
LAND 2 and LAND 3 light
DH light

release the TEST button

**ASI**

![ASI diagram]

observe no failure flags visible

**ADI**

![ADI diagram]

press and hold TEST button

observe flag G visible, sphere moves 10 deg pitch/bank, and CHECK ATT lts

release the TEST button
VSI

observe no failure flags visible

RADIO ALTIMETER

observe red failure flag not visible

press and release TEST button

observe pointer rotates and failure flag visible

set DH height to '20'

observe DH lights on ADI and warning panel

set DH to '0'

STANDBY HORIZON

observe no failure flags visible
MARKERS

press and hold TEST button

observe OUTER, MIDDLE, AIRWAYS lights on then off

release TEST button

INCIDENCE AND ACCELEROMETER

observe no failure flags visible

STANDBY ASI/MACHMETER

observe no failure flags visible
HSI

pull HDG/TRK selector so HDG shows on HSI
rotate HDG left 10deg, right 10deg
observe heading on AFCS panel and HSI
observe MAG, RAD, 1 on HSI display
press and hole TEST button
observe HDG alarm flag, compass rotates, 8888 displayed in MILES and GND SPD window
release TEST button

FD1 SWITCH

set FD1 sw to ON
observe FD1 visible on ADI
set FD1 to OFF
ALTIMETER

observe no failure flags visible

rotate static pressure knob to set airfield QNH of 1013 mbar

check altimeter reads within +/- 35 ft of airfield elevation, which at LFPG is 390ft

CLOCK

the clock has three digital displays, GMT, ELAPS and CHRONO

the **GMT** display shows current hours and minutes of GMT time
the tendency indicator to the right of GMT display represents the seconds:

- 0 to 14 seconds - no bar lit
- 15 to 29 seconds - bottom bar lit
- 30 TO 44 second - two bottom bars lit
- 45 TO 59 second - all bars lit

the **ELAPS** display shows elapsed time counter
it is controlled by the ET selector next to it:

- 'STOP' - counter stopped
- 'RUN' - counter operating
- 'RESET' - counter reset to zero and indicators out

the **CHRONO** display shows chronometer or timer, depending on the position of TIMER - CHRO switch in the upper part of the clock
in **CHRONO mode**, the chronometer is controlled by the CHRO pushbutton in the lower corner of the clock

- **'FIRST'** - push starts counter increasing
- **'SECOND'** - push stops the counter
- **'THIRD'** - push resets counter to zero

in **TIMER mode**, the timer is first set using the GMT selector in the upper corner of the clock

it has these positions working only in TIMER mode:

- **'RUN'** - the timer is counting, if started
- **'HOLD'** - the timer is frozen
- **'SLOW'** - the timer is increased at slow rate
- **'FAST'** - the timer is increased at fast rate
- **'TEST'** - illuminates all segments on all displays

after the timer is set using SLOW or FAST and the GMT selector is returned to RUN position, the timer is started by pushing the CHRO pushbutton in the lower corner of the gauge

second push resets the timer to zero

in TIMER mode, two lights at the sides of CHRONO display begin to flash 5 seconds before the display achieves zero

at zero seconds the lights become steady
ENGINE RATING LIGHTS

observe T/O light is displayed

VOR/RMI

observe no failure flags visible

SIDE SLIP

observe no failure flags visible
ADF/RMI

observe no failure flags visible

INS MONITOR LIGHTS

INS warning lights on the main panel above the chronometer, are lit together with the ALERT lights on INS CDUs

steady light indicates less than one minute to next leg, and flashing light in manual leg change mode indicates that waypoint is passed

C.G INDICATOR

observe no failure flags visible

BRIEFING

as required
FIRST OFFICER'S COCKPIT PREPARATION

close the ZOOMED MAIN panel

open the LOWER Overhead panel

STAB, FEEL AND TRIM PANEL

verify

AUTO STAB No 1 PITCH, ROLL and YAW sws at OFF
AUTO STAB No 2 PITCH, ROLL and YAW sws at OFF
ELECTRIC TRIM No 1 and 2 sws at OFF
ARTIFICIAL FEEL No 1 PITCH, ROLL and YAW sws at OFF
ARTIFICIAL FEEL No 2 PITCH, ROLL and YAW sws at OFF

FLIGHT CONTROL INVERTERS

set

BLUE INVERTER sw to ON and GUARDED
GREEN INVERTER sw to ON and GUARDED

**FLIGHT CONTROL SELECTION**

set

O&M ELEVONS sw to BLUE

IN ELEVONS sw to BLUE

RUDDER sw to BLUE

**ANTI-STALL**

![Diagram of anti-stall system](image)

set ANTI STALL SYSTEM 1,2 sws to ON

**LANDING LIGHTS**

![Diagram of landing lights](image)

set MAIN, TAXI, TAXI TURN to OFF

observe EXTENDED lt OFF

Note!
Landing lights, if left on and extended, automatically retract at 365 knots
W/SHEILD DE-ICE

confirm L/R sws at OFF

VISOR DE-ICE

confirm L/R sws at OFF

DV DE-MIST

confirm L/R sws at OFF

close the Overhead panel

at MAIN panel

BRAKE PRESSURE AND WARNING LIGHTS

observe
dual PARKING BRAKE pressure gauge reads full scale on both sides and no failure flags visible

BRAKE FAIL lt OFF

BRAKE EMERG lt ON
TAKE-OFF MONITOR

pull T/O MONITOR control button to INHIBIT

TOTAL FUEL CONTENTS INDICATOR

observe no failure flags visible

NAV1/2/DME

Note!
the rotating compass card indicates present magnetic heading, when referenced
to the fixed yellow index at the top of the instrument

the two pointers show bearings to the VOR stations tuned on

NAV1 (thin pointer) and NAV2 (thick pointer) radios

the bearings are absolute magnetic if referenced to the compass card, or relative
if referenced to the yellow index at the top of the instrument

a red and black striped flag appears over the compass card indicating loss of
power supply

red and black striped flags appear in windows below "VOR1" and "VOR2"
markings in the center of the instrument indicating station out of range or loss of
power supply

set
NAV 1 112.40 for EVX VOR

NAV 2 to 115.35 for CGN VOR

observe DME-2 displays 2.7 nm for CGN

PRIMARY ENGINE INDICATIONS

observe

power management lts (12) OFF

N2 pointers and digital counters at '0'

Over limit pointers at 110% and no flag across digital counters

N1 pointers and digital counters at '0'

Over limit pointers at 108.5%

N1 auto reduction lts (top left) OFF
and no flags across digital counters

FUEL pointers and lower digital counters at '0'

EGT pointers and digital counters show sensible readings,
no flags across digital counters and EGT instrument warning Lt off

AREA instrument pointers show sensible readings,
no flags and reheat selected Its OFF

open the Centre Console

**THROTTLES**

Note!
throttles can be individually moved by dragging with the mouse

if dragged by pressing RIGHT mouse button, all four throttles are moved altogether

advance throttle levers (4) to fully forward
and return to the idle stop

confirm at IDLE by pressing F1
WINDSHIELD WIPERS

verify W/S WIPERS rotary sws at OFF

REHEAT

confirm reheat sws are OFF
and reheat selected lights are OFF on Engine Exhaust gauge

ADF

the PSS Concorde allows for 2 ADF settings

Note!
the rotating compass card indicates present magnetic heading, when referenced
to the fixed yellow index at the top of the instrument

the two pointers show bearings to the ADF stations tuned on ADF1 (thin pointer)
and ADF2 (thick pointer) radios

the bearings are absolute magnetic if referenced to the compass card, or relative
if referenced to the yellow index at the top of the instrument

a red and black striped flag appears over the compass card indicating loss of
power supply

set ADF-1 to 364.0 for RSO NDB
set ADF-2 to 356.0 for RSY NDB

close the Centre Console
BEFORE START CHECK

open the Side Console panel

open the Pressurization + Engines 1 sub-panel

SECONDARY AIR DOORS

set SECONDARY AIR DOORS sws to AUTO

close the Pressurization + Engines 1 sub-panel

close the Side Console panel

open the UPPER Overhead panel

ANTI COLN

set ANTI COLN to ON

close the Overhead panel

at the Main panel
AIR SPEED INDICATOR

MAX SPEED POINTER
the yellow/black pointer indicates the value of Vmo

CAS POINTER
the white pointer indicates CAS also shown in the digital display

RED VMO FLAG
indicates loss of ADC validity signal and/or loss of power

SPD BUGS
set the 4 reminder bugs as follows

for Charles De Gaulle Airport
runway 27L, dry, no wind, standard pressure

V1 = 164
VR = 198
V2 = VR+21 = 219

PITCH INDEX set
(lower right corner of the ADI gauge)

set the pitch index indicator to 13 deg
LOADSHEET

for the Concorde it's best to deal in metric values

select Options, Settings, International

under Units of measure

make sure Metric (altimeter in feet) is selected

click OK

select Aircraft, Fuel and Payload

check 'Display fuel quantity as weight

Empty weight - is the weight of the aircraft minus fuel and payload, also referred to as Basic Operating Weight

Payload - is the combined weight of passengers, crew, baggage and cargo

Empty weight + Payload = Zero Fuel Weight

78,698 + 10,759 = 89,457 kgs is less than MZFW of 92,000 kgs

ZFW + FUEL load = Gross Weight (GW)

89,457 + 95,129 = 184,586 kgs

the Maximum Takeoff Weight (MTOW) of the Concorde is approx 185,454 kgs

as our GW of 184,586 Kg is less than the MTOW of 185,454 kgs a full fuel load is ok for takeoff
open the Side Console panel

open the Fuel Management 2 sub-panel

ZFW and ZFCG

set to 89,500

**TOTAL FUEL REM/AC WEIGHT**

should be approx 95,130 kgs and 117530 kgs
BEFORE START CHECKLIST

all items on the checklist have now been completed

<table>
<thead>
<tr>
<th>Item</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>MASTER CB's</td>
<td>SET/CHECKED</td>
</tr>
<tr>
<td>OXYGEN</td>
<td>CHECKED 100%</td>
</tr>
<tr>
<td>DV WINDOWS</td>
<td>CLOSED</td>
</tr>
<tr>
<td>FLIGHT CONTROL INVERTERS</td>
<td>ON</td>
</tr>
<tr>
<td>ANTI-STALL SYSTEMS</td>
<td>ON</td>
</tr>
<tr>
<td>RADAR/INSTRUMENT SWITCHES</td>
<td>RAD</td>
</tr>
<tr>
<td>INSTRUMENT TRANSFER SWITCHES</td>
<td>SET</td>
</tr>
<tr>
<td>QNH/AA/ALTIMETERS</td>
<td>SET / CROSS CHECKED</td>
</tr>
<tr>
<td>NAV RADIOS</td>
<td>SET</td>
</tr>
<tr>
<td>TRANSPONDER</td>
<td>XPDR</td>
</tr>
<tr>
<td>BRAKES</td>
<td>PARK/CHECKED</td>
</tr>
<tr>
<td>NAV LIGHTS</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>THROTTLE MASTERS</td>
<td>MAIN/ALT</td>
</tr>
<tr>
<td>GROUND HYDRAULICS CHECK OUT</td>
<td>YELLOW, YELLOW/OFF</td>
</tr>
<tr>
<td>FUEL HEATERS</td>
<td>AUTO</td>
</tr>
<tr>
<td>ENGINE RECIRCULATING VALVES</td>
<td>SHUT</td>
</tr>
<tr>
<td>SECONDARY AIR DOORS</td>
<td>AUTO</td>
</tr>
<tr>
<td>BATTERIES</td>
<td>ON / Normal</td>
</tr>
<tr>
<td>INS 1, 2 &amp; 3</td>
<td>LOADING CHECKED</td>
</tr>
<tr>
<td>NAV MODE/MIX ASI BUGS, PITCH INDEX &amp; 3/4 REHEAT PLACARD</td>
<td>SET</td>
</tr>
<tr>
<td>FUEL FLOW &amp; P7 BUGS</td>
<td>SET</td>
</tr>
<tr>
<td>CLOCK AND TLA BUGS</td>
<td>SET</td>
</tr>
<tr>
<td>SEAT BELT SIGNAL</td>
<td>ON</td>
</tr>
<tr>
<td>BRIEFING</td>
<td>STATED</td>
</tr>
<tr>
<td>Radio Aids, Emergencies</td>
<td>REVIEW</td>
</tr>
<tr>
<td>LOADSHEET</td>
<td>CHECKED</td>
</tr>
<tr>
<td>----------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>ZFW &amp; ZFCG</td>
<td>SET/CHECKED</td>
</tr>
<tr>
<td>FUEL REM. &amp; A/C WEIGHT</td>
<td>SET/CHECKED</td>
</tr>
<tr>
<td>LOAD LIMITS</td>
<td>SET</td>
</tr>
<tr>
<td>START CLEARANCE</td>
<td>OBTAIN</td>
</tr>
<tr>
<td>DOOR LIGHTS</td>
<td>CHECKED</td>
</tr>
<tr>
<td>MASTER WARNING</td>
<td>RECALL</td>
</tr>
<tr>
<td>ANTI-COLLISION LIGHTS</td>
<td>ON</td>
</tr>
<tr>
<td>THROTTLES</td>
<td>IDLE</td>
</tr>
<tr>
<td>ENGINE FEED PUMPS</td>
<td>ON</td>
</tr>
<tr>
<td>FLIGHT DECK DOOR</td>
<td>LOCKED</td>
</tr>
<tr>
<td>CLEARANCE TO START</td>
<td>OBTAIN</td>
</tr>
<tr>
<td>AG ONLY BATTERIES</td>
<td>ON</td>
</tr>
<tr>
<td>GALLEY SWITCHES</td>
<td>OFF</td>
</tr>
<tr>
<td>1ST ENGINE</td>
<td>START</td>
</tr>
<tr>
<td>BATTERIES</td>
<td>NORMAL</td>
</tr>
<tr>
<td>START ENGINE</td>
<td>AS REQUIRED</td>
</tr>
</tbody>
</table>
ENGINE START PROCEDURE

click Flights, Save Flight, enter the title

PSSconcorde_2

click OK

we will be following the CROSS BLEED engine start procedure

START ENGINE 3

open the Side Console panel

the following can be completed without enlarging the sub-panels, your choice

at Fuel Management 2 panel sub-panel

set MAIN ENGINE PUMP sw 3 to ON
(each pump has 3 switches, main and 2 standby pumps)

at Engines 2 panel sub-panel

set REFLIGHT/START sw 3 to START

observe
switch latched at START
START VALVE MI reads OPEN
START PUMP light is ON

close the Side Console panel

observe N2 increasing
when N2 is between 10-12%

open UPPER Overhead panel

set HP VALVE sw 3 to OPEN

close the UPPER Overhead

observe EGT increases

open the Side Console panel

at Engines 2 panel sub-panel
observe

REFLIGHT/START sw 3 at OFF

START VALVE MI reads SHUT

START PUMP light is OFF

at Air Bleed Control sub-panel

set BLEED VALVE 3 sw to OPEN

set COND VALVE 3 sw to ON
REPEAT START PROCEDURE FOR ENGINE 2

MAIN ENGINE PUMP sw 2 to ON

REFLIGHT/START sw 2 to START

N2 increasing

HP VALVE sw 2 to OPEN

EGT increases

REFLIGHT/START sw 2 at OFF

START VALVE MI reads SHUT

START PUMP light is OFF

BLEED VALVE 2 sw to OPEN

COND VALVE 2 sw to ON

CSD2 light is OFF

SECONDARY NOZZLE 2 indicates 18-24 deg
at Hydraulic Management panel sub-panel

set GREEN hydraulic pump sws 1,2 to ON

set BLUE hydraulic pump sws 3,4 to ON

at Electrical Generating Control 1 sub-panel

set GROUND POWER sw to TRIP

close the Side Console panel
PUSHBACK CHECKLIST

all items on the checklist have now been completed

<table>
<thead>
<tr>
<th>Item</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOs 3 &amp; 2 ENGINES</td>
<td>STARTED</td>
</tr>
<tr>
<td>HYDRAULICS</td>
<td>CHECKED</td>
</tr>
<tr>
<td>GROUND EQUIPMENT</td>
<td>CLEAR</td>
</tr>
<tr>
<td>PUSHBACK</td>
<td></td>
</tr>
<tr>
<td>NOs 4 &amp; 1 ENGINES</td>
<td>STARTED</td>
</tr>
<tr>
<td>PUSHBACK CHECKLIST</td>
<td>COMPLETE</td>
</tr>
</tbody>
</table>
PUSHBACK PROCEDURE

press Shift+S for SPOT view

adjust view as required

press '.' to release the PARKING BRAKE

press Shift+P for Pushback

when the nose wheel is at the taxi line

press Shift+P to stop the pushback

press Ctrl+. to set the PARKING BRAKE

press 'S' to return to the cockpit
START PROCEDURE FOR ENGINE 4

open the Side Console panel

set CROSS BLEED 4 to ON
MAIN ENGINE PUMP sw 4 to ON
REFLIGHT/START sw 4 to START
N2 increasing
HP VALVE sw 4 to OPEN
EGT increases
REFLIGHT/START sw 4 at OFF
START VALVE MI reads SHUT
START PUMP light is OFF
BLEED VALVE 4 sw to OPEN
COND VALVE 4 sw to ON
CSD4 light is OFF
SECONDARY NOZZLE 4 indicates 18-24 deg
START PROCEDURE FOR ENGINE 1

set CROSS BLEED 1 to ON

MAIN ENGINE PUMP sw 1 to ON

REFLIGHT/START sw 1 to START

N2 increasing

HP VALVE sw 1 to OPEN

EGT increases

REFLIGHT/START sw 1 at OFF

START VALVE MI reads SHUT

START PUMP light is OFF

BLEED VALVE 1 sw to OPEN

COND VALVE 1 sw to ON

CSD1 light is OFF

SECONDARY NOZZLE 1 indicates 18-24 deg

set CROSS BLEED sws 1-4 to OFF

ENGINE FEED PUMPS

set all PUMPS to ON

close the Side Console panel
AFTER START CHECK

FLIGHT CONTROL AFCS

at the flight control position indicator, observe ELEVONS and RUDDERS are inline

AUTO THROTTLE

set AT1 sw to engage position

observe IAS HOLD lt ON

press Ctrl+T for 'Autothrottle Instinctive Disconnect'

observe AT1 sw to OFF, IAS HOLD lt to OFF

observe AT light flashing on warning panel

press AT light to cancel the warning

AUTO PILOT

set AP1 sw to engage position

observe HDG HOLD and PITCH HOLD lts ON

press Ctrl+Z for 'AutoPilot Instinctive Disconnect'

observe AP1 sw to OFF, HOLD and PITCH lts to OFF

observe AP light flashing on warning panel

press AP light to cancel the warning
open the LOWER Overhead panel

**STAB and FEEL**

set ELECTRIC TRIM 2 sw to ENGAGE

set ELECTRIC TRIM 1 sw to ENGAGE

set AUTO STAB NO 1 PITCH, ROLL and YAW to ENGAGE

set AUTO STAB NO 2 PITCH, ROLL and YAW to ENGAGE

set ARTIFICIAL FEEL NO 1 PITCH, ROLL and YAW to ENGAGE

set ARTIFICIAL FEEL NO 1 PITCH, ROLL and YAW to ENGAGE

**LIGHTS LANDING TAXI**

set to EXTEND/ON

at the MWS panel

press RECALL

observe no warning lights

close the LOWER Overhead panel
**AFTER START CHECKLIST**

all items on the checklist have now been completed

<table>
<thead>
<tr>
<th>Item</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOSEWHEEL STEERING</td>
<td>CHECKED</td>
</tr>
<tr>
<td>FLIGHT CONTROL, AFCS &amp; TRIMS</td>
<td>CHECKED</td>
</tr>
<tr>
<td>STAB &amp; FEEL</td>
<td>ENGAGED</td>
</tr>
<tr>
<td>ENGINE ANTI-ICE/ENGINE SCHEDULE</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>BRAKE FANS</td>
<td>ON</td>
</tr>
<tr>
<td>IDLE SWITCHES</td>
<td>LOW</td>
</tr>
<tr>
<td>DOOR WARNINGS</td>
<td>TESTED/OFF</td>
</tr>
<tr>
<td>ENGINE FEED PUMPS</td>
<td>ALL ON</td>
</tr>
<tr>
<td>HYDRAULICS</td>
<td>CHECKED</td>
</tr>
<tr>
<td>ELECTRICS</td>
<td>CHECKED: GREEN BYPASS</td>
</tr>
<tr>
<td>GROUND EQUIPMENT</td>
<td>CLEAR</td>
</tr>
<tr>
<td>AFTER START CHECKLIST</td>
<td>COMPLETE</td>
</tr>
</tbody>
</table>
TAXI CHECK

VISOR NOSE

set VISOR/NOSE lever to 5 deg

at the UPPER Overhead

AUTO IGNITION

set to ON

at the Main panel

FLIGHT CONTROLS

using flight control
apply full left, right, forward, back pressure
observe ELEVONS follow control movements
### TAXI CHECKLIST

Some items will be set by the VFE once we are holding short of the runway.

<table>
<thead>
<tr>
<th>Item</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>VISOR / NOSE</td>
<td>DOWN / 5 DEG</td>
</tr>
<tr>
<td>BRAKES</td>
<td>CHECKED / NORM</td>
</tr>
<tr>
<td>FLIGHT INSTRUMENTS</td>
<td>CHKD / NO FLAGS</td>
</tr>
<tr>
<td>FLIGHT CONTROLS / EFC</td>
<td>CHECKED / LIGHT OFF</td>
</tr>
<tr>
<td>TRIMS</td>
<td>SET</td>
</tr>
<tr>
<td>C.G. MOVEMENT</td>
<td>AS REQD</td>
</tr>
<tr>
<td>ENGINE RATING MODE</td>
<td>TAKE-OFF</td>
</tr>
<tr>
<td>AUTO IGNITION</td>
<td>ON</td>
</tr>
<tr>
<td>THROTTLES</td>
<td>CHECKED</td>
</tr>
<tr>
<td>DRAIN MAST HEATER</td>
<td>ON</td>
</tr>
<tr>
<td>ENGINE FLIGHT RATING</td>
<td>CLimb</td>
</tr>
<tr>
<td>PRESS STATIC HEATERS</td>
<td>ON</td>
</tr>
<tr>
<td>ADS &amp; STBY HEATERS</td>
<td>Tt INHIB / ON</td>
</tr>
<tr>
<td>AIR INTAKES</td>
<td>CHECKED / SET</td>
</tr>
<tr>
<td>ENGINE CONTROL SCHEDULE</td>
<td>CHECKED</td>
</tr>
<tr>
<td>ENG 4 T/O N1 LIMITER</td>
<td>88%</td>
</tr>
<tr>
<td>AIR CONDITIONING</td>
<td>CHECKED / SET</td>
</tr>
<tr>
<td>FUEL LP PROTECTION SWITCH</td>
<td>ARMED</td>
</tr>
<tr>
<td>FUEL CONSUMED INDICATORS</td>
<td>CHECKED</td>
</tr>
<tr>
<td>ENGINE FEED PUMPS</td>
<td>ALL ON</td>
</tr>
<tr>
<td>CROSSFEED VALVES</td>
<td>SHUT</td>
</tr>
<tr>
<td>ANTI-SKID 'R' LTS / TRYE LTS</td>
<td>OFF</td>
</tr>
<tr>
<td>REVERSE ASOV's</td>
<td>CHECKED/18-24o/NORM</td>
</tr>
<tr>
<td>ENGINE O/HEAT</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>SEATS &amp; HARNESS</td>
<td>LOCKED, PWR OFF &amp; SEC</td>
</tr>
<tr>
<td>TRIM TANKS CONTENTS</td>
<td>CHECKED</td>
</tr>
<tr>
<td>DE-AIR PUMPS</td>
<td>ON</td>
</tr>
<tr>
<td>TAKE-OFF CG SWITCH</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>CG POSITION</td>
<td>CHECKED</td>
</tr>
<tr>
<td>MAIN TRANSFER PUMPS</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>CABIN / SLIDES</td>
<td>SECURE / ARMED</td>
</tr>
<tr>
<td>TAXY CHECKLIST</td>
<td>COMPLETE</td>
</tr>
</tbody>
</table>
**TAXI PROCEDURE**

release the parking brake

press F3 to increase thrust till moving

then press F1 for idle

adjust thrust as required for 15 kts taxi speed

at the hold short point

press F1 for idle

set the PARKING BRAKE
click Flights, Save Flight, enter the title

PSSconcorde_3

click OK

**C.G. MANAGEMENT / TRIM TRANSFER**

for this tutorial flight we will be using the VFE to control

Fuel Transfer and various systems

*at the Main panel*

set OFF - VFE to VFE for Virtual Flight Engineer

*open the LOWER overhead panel*

**LANDING LIGHTS**

set LIGHT TAXI to OFF

set LIGHTS MAIN LANDING to EXTEND/ON

**MASTER WARNING**

press RECALL

observe indicators

press INHIBIT
close the LOWER overhead panel

at the Main panel

**T/O MONITOR**

set to ARMED

**RADAR ALTIMETER.**

set to 500'

**PITCH INDEX**

verify set to 13 deg for take-off

open the Centre Console

**TRANSPONER**

set to A and 5515

**ADF**

confirm ADF1 at 364.0 and ADF2 at 356.0

close the Centre console

at the Main Panel we will now do some final AFCS settings

confirm

AT1/2, FD1/2, AP1/2 all OFF

all indicator lts OFF
NAV1 at 112.40
NAV2 at 115.35
set
SPEED SELECT to 400 kts
HDG to 269
CRS to 277
ALT to FL260'
at INSTRUMENT TRANSFER PANEL
if using the FS flight planner
set
INS - FS to FS
GPS - EXT to GPS
if using FS Navigator
set
INS - FS to FS
GPS - EXT to EXT
press Shift+F4 to set REHEAT to ON
the items on the checklist have now been completed
## BEFORE TAKE-OFF CHECK

<table>
<thead>
<tr>
<th>Item</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRIEFING, T/O DATA</td>
<td>UPDATED</td>
</tr>
<tr>
<td>CABIN CREW CALL</td>
<td>3 PRESSES</td>
</tr>
<tr>
<td>LANDING LIGHTS</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>TRANSPONDER</td>
<td>SET</td>
</tr>
<tr>
<td>WHEEL LIGHTS</td>
<td>OFF</td>
</tr>
<tr>
<td>OVERLOAD MI</td>
<td>BLACK</td>
</tr>
<tr>
<td>MASTER WARNING</td>
<td>RECALL / INHIBIT</td>
</tr>
<tr>
<td>T/O MONITOR</td>
<td>ARMED</td>
</tr>
<tr>
<td>REHEAT</td>
<td>ON</td>
</tr>
<tr>
<td>NOZZLE OVERRIDE LIGHTS</td>
<td>OFF</td>
</tr>
<tr>
<td>PITCH INDEX</td>
<td>CHECKED</td>
</tr>
<tr>
<td>RADAR</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>BRAKE FANS</td>
<td>OFF</td>
</tr>
<tr>
<td>BEFORE TAKE-OFF CHECKLIST</td>
<td>COMPLETE</td>
</tr>
</tbody>
</table>
DEPARTURE PROCEDURE

we will be departing on runway 27L
maintaining the runway heading of 269 deg, climbing through 6000'
at DME-2, 5.5 nm from CGN (115.35)
commence right turn to 299 deg
intercept the 277 radial from CGN
at DME-1, 13.9 nm from CGN
maintain heading of 277 deg direct to intersection PG284
then direct to VOR EVX

TAXI INTO POSITION

with the BRAKES released
increase thrust slightly taxi into position rny 27L
press F1 for idle
set BRAKES to ON
press Shift+F4 for reheat
confirm REHEAT Its on
**TAKE-OFF**

BRAKES OFF

press F4

at VR

ROTATE initially to 18 deg

GEAR UP at positive climb

500' REHEATS OFF

NOSE DOWN to 13 deg t hold approx 250 kts

NOSE to VIS/0

GEAR to 'N'

passing 4000'

lower nose to 8 deg

press AT1

press IAS ACQ

set VISOR to UP

press FD1, and AP1

press ALT ACQ

press INS to activate FS - GPS flight plan

observe IAS ACQ, INS, PITCH HOLD and ALT ACQ primed (yellow triangle)

VFE will have set ENGINE RATING to CLB and will be adjusting fuel transfer

passing 10,000'

set LANDING LIGHTS to OFF
### AFTER TAKE-OFF CHECKLIST

<table>
<thead>
<tr>
<th>Item</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>LANDING GEAR</td>
<td>UP: LIGHTS OFF NEUTRAL</td>
</tr>
<tr>
<td>LANDING LIGHTS</td>
<td>OFF/10,000'</td>
</tr>
<tr>
<td>MASTER WARNING</td>
<td>RECALL</td>
</tr>
<tr>
<td>ADS &amp; STBY HEATERS</td>
<td>ON</td>
</tr>
<tr>
<td>ENGINE RATING MODE</td>
<td>FLIGHT</td>
</tr>
<tr>
<td>PRESSURISATION</td>
<td>CHECKED</td>
</tr>
<tr>
<td>SECONDARY AIR DOORS</td>
<td>OPEN</td>
</tr>
<tr>
<td>NOSE / VISOR</td>
<td>UP / LOCKED</td>
</tr>
<tr>
<td>AFTER TAKE-OFF CHECKLIST</td>
<td>COMPLETE</td>
</tr>
</tbody>
</table>
at M = 0.7 CLIMB CHECKLIST

these items will be checked by the VFE

<table>
<thead>
<tr>
<th>Item</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALTIMETERS</td>
<td>SET</td>
</tr>
<tr>
<td>FUEL TRANSFER</td>
<td>AFT</td>
</tr>
<tr>
<td>TAKE-OFF CG SWITCH</td>
<td>NORMAL</td>
</tr>
<tr>
<td>BRAKE FANS</td>
<td>OFF</td>
</tr>
<tr>
<td>ENGINE CONTROL SCHEDULE</td>
<td>NORMAL</td>
</tr>
<tr>
<td>SEAT BELT SIGNS</td>
<td>AS REQUIRED</td>
</tr>
<tr>
<td>TAXI TURN LTS</td>
<td>OFF</td>
</tr>
<tr>
<td>NOZZLE OVERRIDE LIGHTS</td>
<td>OFF</td>
</tr>
<tr>
<td>SECONDARY AIR DOOR SWITCHES</td>
<td>OPEN</td>
</tr>
<tr>
<td>SECONDARY NOZZLES</td>
<td>MODULATING</td>
</tr>
<tr>
<td>CLIMB CHECKLIST</td>
<td>COMPLETE</td>
</tr>
</tbody>
</table>

at M=0.90 approx FL260

<table>
<thead>
<tr>
<th>Item</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUXILIARY INLETS</td>
<td>SHUT</td>
</tr>
<tr>
<td>SECONDARY NOZZLES</td>
<td>&lt;15 DEG</td>
</tr>
<tr>
<td>REHEAT</td>
<td>ON</td>
</tr>
<tr>
<td>FUEL TRANSFER</td>
<td>TRANSFER AFT</td>
</tr>
</tbody>
</table>
at FL260 approx M = 0.90

observe ALT HOLD

confirm NAV1 to 112.20 for VOR JSY

set CRS and HDG to track JSY, approx 280 deg

pre set ALT to FL580

set RA to 0

set PITCH INDEX to 0

monitor DME-1

100 nm from JSY

set AT1 to OFF

press F4

press Shift+F4 for REHEAT

press MAX CLIMB

press ALT ACQ

observe pressure wave effect passing M = 1.00 on VSI and Altimeter

at FL320 observe Vmo indicator increasing

set NAV 1 to 113.50 for YYT (Saint John's)

set NAV 2 to 112.20

at M = 1.7

press Shift+F4 to turn off reheat
open Side Console panel

right click to open the Fuel Management 1 + Cooling sub-panel

then right click to open the Fuel Management 2 sub-panel

click the left edge of the FM2 panel and drag it down to lineup with the FM1 panel
you can now watch the VFE control the fuel transfer

fuel will be transferred from TANK 9 to TANKS 5 and 7

when TANK 9 is empty TANK 10 will be used

TANKS 5A and 7A will also be transferred as required to TANKS 5 and 7 via the TRANS VALVE 5A-5 and 7A-7 switches

when TANK 9 is empty the LOW PRESS lights will come on, same for TANK 10

when TANKS 9, 10, 5A and 7A are empty

TANKS 5 and 7 will supply fuel to TANKS 1, 2, 3, 4

when 5 and 7 are empty

TANKS 6 and 8 will supply TANKS 1, 2, 3, 4

TANK 6 left pump supplies TANK 1

TANK 6 right pump supplies TANK 2

TANK 8 left pump supplies TANK 3

TANK 8 right pump supplies TANK 4
AT FL500

observe MAX CLIMB and MAX CRUISE Its ON

NOTE!
MAX CRUISE PUSH BUTTON LIGHT
on - indicates engagement of the mode

MAX CRUISE is automatically engaged from the MAX CLIMB mode
when the 'corner point' is reached
once engaged it constrains the aircraft to the lesser of M = 2.00 or the airspeed
associated with Tmo

passing FL500 the climb speed will reduce

further climbing to FL580 will continue based on the fuel
load, and OAT, this is similar to step climbing in modern aircraft

you can monitor the progress using the default GPS by
pressing Shift+7

some info on AFCS modes

IAS HOLD
holds the existing airspeed

MACH HOLD
holds the existing Mach No
IAS ACQ
initiates the acquisition and subsequent hold of speed set on the SPEED SEL control

FD
engagement mode is PITCH HOLD if no AP is engaged
if engaged after AP, will assume the established mode

INS
initiates acquisition of track set by INS CDU or FS or EXT

TRK HDG
follows preset track or heading using bank angle not > 30 deg

HDG HOLD
holds existing magnetic heading

PITCH HOLD
holds existing attitude

TURB
holds existing pitch attitude and heading

BACK BEAM
is specific to the FD and only used with AP disengaged

GO AROUND
automatic go around,

VOR LOC
intercepts the selected VOR radial or Localizer

LAND
primes both VOR LOC and GLIDE modes

GLIDE
captures GLIDE beam and LOC beam

MACH HOLD
holds existing MACH number

MAX CLIMB
when at or near Vmo constrains the airspeed to Vmo,
disengages between 530 kts and M = 2.00

**MAX CRUISE**
automatically engaged from MAX CLIMB

**VERT SPEED**
holds the existing vertical speed

**ALT HOLD**
holds existing altitude

**ALT ACQ**
primes for acquisition of the pre set altitude

**DESCENT**

after approx 1.5hrs

set RAD/INS to RAD

NOTE!
with RAD-INS switch at INS position, the HSI shows True headings; course pointer shows INS desired track (DTK), and deviation indicator shows INS cross track error (XTK) with full deflection equal to 7.5 nm offset

passing YYT 113.50 (St John’s Newfoundland)

set NAV 1 to 114.90 for YQY (Sydney, Nova Scotia)

set NAV 2 to 117.10 for ENE (Kennebunk, Maine)

final altitude will vary depending on several factors, fuel load, Outside Air Temp

press ALT HOLD
DECELERATION AND DESCENT CHECKLIST

we will let the VFE look after the checklist items
further checklists can be found at the end of the tutorial

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<td>DECELERATION AND DESCENT CHECKLIST</td>
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</table>
click Flights, Save Flight, enter the title

PSSconcorde_4

click OK

**YQY**

at 50 nm DME-1 from YQY

set SPEED SELECT to 350 kts

press AT1

press IAS ACQ

set ALT SELECT to FL410

passing YQY (114.90)

press ALT ACQ

observe VERT SPEED selected

HDG and CRS should be approx 275 deg

set NAV 1 to UZX 117.60

with a projected landing weight of 115,000 kgs

pre-set SPD BUGS for landing VREF

VREF = 160 kts
VREF+7 = 167
VREF+10 = 170
VREF+30 = 190

while we have some time,

set ADF 1 to 275.0 for BABYLON
*we will need this during the final approach
set ADF 2 to 268.0 for GRIMM

passing UZX (117.60)

leave NAV 1 at UZX as ENE won't be in range

observe DME-1 increasing as we fly from UZX

at approx 74 nm DME-1 NAV 2 will activate

set NAV 1 to ENE 117.10

set NAV 2 to PVD 115.60

we are still using the INS for navigation, however it is good practice to set CRS and HDG

adjust CRS and HDG values to track direct to ENE approx 266 deg

when at FL410 and ALT HOLD

set ALT SELECT to FL240

when 70 nm DME-1 from ENE (117.10)

press ALT ACQ

**ENE**

passing ENE

set SPEED SELECT to 300 kts

we will now be flying direct to the next waypoint which is VOR PVD 115.60 as indicated on NAV 2 and DME-2

set NAV 1 to PVD 115.60

set NAV 2 to JFK 115.90
set HDG and CRS to approx 212 deg

press TRK HDG

adjust CRS as required to fly direct to PVD (115.60)

set VISOR to VIS/0

monitor DME-1

passing PVD we will turn direct to TRAIT

set HDG to 235 deg

set NAV 1 to CCC 117.20

**APPROACH CHECKLIST**

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<td>ENGINE FEED PUMPS</td>
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<td>CROSS FEED VALVES</td>
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<td>BATTERIES / d.c. split SWITCH</td>
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<td>SEATS &amp; HARNESS</td>
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TRAIT

click Flights, Save Flight, enter the title

PSSconcorde_5

click OK

when DME-1 is at 47 nm we will be passing TRAIT

set SPEED SELECT to 240 kts

set ALTITUDE SELECT to 9,000'

press ALT ACQ

open the AP DATUM ADJUST panel

press NOSE DOWN till VS is -1500 fpm

set VISOR/NOSE to 5
we are going to fly direct to CCC

with NAV 1 set to 117.20 for CCC

adjust CRS to centre the VOR 1 deviation needle as shown on the HSI, approx 258 deg

press VOR LOC to track direct to CCC

adjust CRS as required to centre deviation needle

pre-set HDG to 230 deg

when DME-1 at 5 nm

press TRK HDG

set NAV 1 to 111.35 for runway 31L KJFK

set both VOR/LOC selectors to 315 for runway 31L

passing 10,000’ set Landing Lights to ON
at ALT HOLD of 9,000'
set ALTITUDE SELECT to 2,000'
press ALT ACQ
set SPEED SELECT to 210 kts
confirm ADF 1 set at 275.0 for BABYLON
when ADF 1 BRG is at 320 deg

set HDG to 285 deg to fly direct to ZACHS
approx DME-2 at 25 nm the ILS for 31L will activate

press VOR LOC observe prime light on
set VISOR/NOSE to DOWN

at LOC intercept

press LAND

observe GLIDE primed

set SPEED SELECT to 190

set ASI reminder bug to 160 kts

set DH to 30'

set HDG to 315
click Flights, Save Flight, enter the title

PSSconcorde_6

click OK

as the GLIDE SLOPE starts moving DOWN

set GEAR to DOWN

at GLIDE SLOPE intercept

set SPEED SELECT to 170 kts

observe LAND selected

set AP2 to ON
set SPEED SELECT to 160

**LANDING CHECKLIST**

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<td>BRAKES</td>
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<td>ANTI-SKID</td>
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<tr>
<td>AUX INLETS</td>
<td>OPEN / X-HATCH</td>
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<tr>
<td>YELLOW SYSTEM</td>
<td>CHECKED</td>
</tr>
</tbody>
</table>

**LAND 3**

approaching touchdown

Concorde with flare slightly

thrust will go to IDLE

at TOUCHDOWN

set AT1 to OFF

set AP1, AP2 to OFF

lower the nose

press F2 for REVERSE

use brakes as required

exit the runway when able

press F1 for IDLE

press BRAKE to STOP

set VISOR/NOSE to 5
open the LOWER Overhead panel

set LANDING LIGHTS to OFF

set TAXI LIGHTS to ON

taxi to the gate and continue with the shutdown checklist

Hope you enjoyed the flight

Phoenix Simulation Software

The Phoenix (PSS) Support Forum
# AFTER LANDING CHECKLIST

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<td>5 DEG</td>
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<td>RADAR</td>
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<td>SSB</td>
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<td>RAMP SPILL MASTER sws</td>
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