IMPORTANT

ENGLISH
This checklist is designed for a efficient operation flow for one pilot, but I tried to keep it as close as possible to the real procedures. The procedures are intentionally simplified in some regards, to make this guide accessible for beginners.
Making these checklists has become very time consuming for me. So if you really like them, please consider a donation via flightsim.to (even the smallest donation would be helpfull. Many Thanks.

DEUTSCH
Die Checkliste ist für einen effizienten Bedienungs Flow für einen Piloten gemacht, aber ich versuche immer so dicht wie möglich an den realen Prozeduren zu bleiben. Die Prozeduren sind teilweise absichtlich vereinfacht, um es zugänglicher für Anfänger zu machen.
Das Erstellen dieser Checklisten ist für mich zu einer sehr zeitaufwendigen Sache geworden. Falls du die Checklisten wirklich magst, ziehe bitte eine Spende via flightsim.to in Betracht (selbst die kleinste Spende hilft weiter). Vielen Dank.

CHECKLIST LEGEND

(MP / MP-L / MP-R)	Main Panel (Left & Right)
(GS)	Glare Shield Panel
(OH) (OHP)	Overhead Panel
(CC/CP)	Center Console/Center Pedestal
(LP) (RP)	Left Panel / Right Panel
(BP)	Back Panel
abcdefg (bold)	most important items for a quick start
abcdefg	**Navigation & ATC**
abcdefg	Gameplay / EFBs / UI Features
abcdefg	usually done by F/O or Pilot Not Flying
*)	see Notes Sections
**abcde	not modelled/simulated yet or not possible
AS REQ / DES	as required / desired
(d.o.w)	depending on aircraft actual gross weight

SPECIFICATIONS & LIMITATIONS

	787-8	787-9	787-10
Max. T.O. Weight	502.500 lbs / 228 t	561.500 lbs / 255 t	560.00 lbs / 254 t
Max. LDG Weight	380.000 lbs / 172 t	425.000 lbs / 193 t	445.000 lbs / 202 t
Max .Seating	381	420	440
Range	7.355 NM	7.635 NM	6.430 NM
Takeoff Runway	8.500 ft	9.300 ft	9.100 ft
Service Ceiling	43.100 ft	41.100 ft	41.100 ft

NOTES

FMC	Flight Management Computer
CDU	Control Display Unit
MCP	Mode Control Panel
CPT	Captain
FO	First Officer
PF	Pilot Flying
PM	Pilot Monitoring (same as PNF – Pilot Not Flying)
VNAV	Vertical Navigation
LNAV	Lateral Navigation
FLC	Flight Level Change Mode

USING FLC & SELECTED SPEED
If not using VNAV then use FLC / Selected Speed:
Climb - 250 KIAS below 10.000 ft
          - 300 to 320 KIAS above 10.000 ft
Cruise - 300 to 320 KIAS
Descent - 280 to 300 KIAS above 10.000 ft
              - 240 to 250 KIAS below 10.000 ft

FLAPS SPEED BUGS
The Green Number Indicators (UP,1,5,20...) on the speed band are the Maneuver Speeds for the respective flaps setting and you would not fly slower than the Speed Bug with that setting.
I.E. You would use Flap 1 above the Speed Bug 1 und Flap 5 below the Speed Bug 1.
Flaps Schedule during Takeoff is: 15 to 5 to 1 to UP.
Flaps Schedule during Approach is: UP to 1 to 5 to 20 to either 25 or 30.

AUTOTHROTTLE & AUTOLAND
Autoland Autopilot Mode is not properly modeled yet. Autothrottle will also not IDLE automatically at touchdown. So disable Autothrottle at Final Approach and set Thrust manually. Retard to IDLE at around 50 ft callout. Start slowly Flaring at the same time.

NORMAL PROCEDURES (SIMPLIFIED)

INITIAL PREFLIGHT

FUEL/PAYLOAD	SET/CHECK CG

FLIGHT DECK SAFETY INSPECTION

Battery Switch (OH)	**ON**
Hydraulic Panel (OH)	SET
- C1 & C2 Elec Pump Switches	OFF
- Demand Pump Selectors	OFF
Wiper Selector (OH)	OFF
NAV Lights Switch (OH)	**ON**
Logo Light Switch (OH)	AS REQ
Landing Gear Lever (MP)	DOWN
- verify EICAS Gear Indication	DOWN
Parking Brake	**SET**
Throttles	**IDLE / REV STOWED**
Fuel Control Switches	**CUT-OFF**

ESTABLISHING POWER

EXT PWR Switches L, R & AFT (OH)	**ON (if available)**
APU (OH) (if no external Power available)	**START**
- APU selector → hold START → release to ON	
- APU Generator Switches	ON
Air Condition Panel	**SET**
- Equipment Cooling Switches	AUTO
- Recirculation Fan Switches	ON
- Flight Deck Temp Control	AS REQ / 10 o'clock
- Cabin Temp Control	AS REQ / 10 o'clock
- L & R PACK Switches	AUTO
- TRIM Air Switches	ON
*- Ventilation Switch	NORM
IRS selectors (OH)	**OFF 30 seconds, then ON**

FMC/CDU SETUP

ATIS & ATC Clearance (IFR)	AS REQ
INIT REF → INDEX → IDENT	
→ check Aircraft / Engine Data & NAVDATA Cycle	
→ POS INIT → verifyt Position (Line 5R)	
ROUTE> 1/2 (RTE 1)	
→ set ORIGIN, DEST & FLT NO	
→ ACTIVATE → EXEC	
DEP/ARR	
→ DEP - select Departure (SID) → EXEC	
→ DEP/ARR	
→ ARR - select STAR & APPROACH → EXEC	
ROUTE 1/2 (RTE 1)	
→ NEXT PAGE (ROUTE 2/2 (ACT RTE 1)	
→ enter Enroute Waypoints / Airways	
→ EXEC	
LEGS	
→ verify Waypoints / delete DISCONTINUITIES	
→ EXEC (after making Changes)	
INIT REF → (INDEX →) PERF INIT	
→ set ZFW (Click on LSK4L)	
→ enter Reserves (Fuel) (e.g.20)	
→ enter CRZ ALT, COST INDEX (0-2000)	
→ EXEC → THRUST LIM	
THRUST LIM	
→ set SEL/OAT if desired for double derated Thrust	
→ select desired DERATED THRUST (LSK 2,3,4L & 2,3,4R)	
→ TAKEOFF	
TAKEOFF REF 1/2	
→ enter FLAPS (5°)	
→ set CG TRIM (Click on LSK3L)	
→ set V1,VR & V2 (click LSK 1,2,3R)	
→ NEXT PAGE = 2/2 (opt)	
→ enter ACCEL HT and THR REDUCTION if desired (opt)	

COCKPIT PREPARATION

OVERHEAD PANEL
(scan top to bottom, from left to right column)

IRS	**ON**
Electrical Panel	**SET**
- Battery Switch	ON
- IFE/PASS Seats	ON
- Cabin Utility	ON
- APU	START (if not already)
- APU Generator Switches	ON
- EXT PWR Switches L, R & AFT	OFF
- Generator Control Switches	ON (OFF = illuminated)
FD Door Power	**ON**
Emergency Light	**ARMED / GUARDED**
Window Heat	**ALL ON (6)**
Hydraulic Panel (OH)	SET
- set as in Safety Check	
PASS Signs/Seat Belts Selector	**AUTO**
Lighting Panel Left	AS DES
Engine Panel	SET
- *EEC Mode Switches	NORM & GUARDED
- START Selectors	NORM
Fuel Panel	**SET**
- Crossfeed Switch	OFF
- Fuel Pump Switches	OFF (PRESS = illuminated)
- L AFT PUMP "PRESS" Light is extinguished if APU is on	
- BALANCE Switch	OFF
WING & ENGINE Anti-Ice	**AUTO**
Lighting Panel Right	AS DES
Air Condition Panel	SET
- set as in POWER UP	
Pressurization Panel	SET
- FWD & AFT Outflow Valves	AUTO
- Landing Altitude Selector	PUSHED IN

GLARESHIELD PANEL

EFIS Panel	SET AS DES
- Altimeter	**SET LOCAL**
- ND WXR / TFC / TERR	OFF
- EICAS Side	AS DES
Mode Control Panel (MCP)	SET AS DES
- Flight Director	**both ON**
- verify FMA TOGA | TOGA Mode	
- Autothrottle ARM Switches	**ARM**
- Autopilot DISENG Bar	UP
- preselect LNAV & VNAV	
- preselect Speed = V2+10	
- preselect CRZ or cleared Altitude	
- HDG Bug → RWY Heading	

SIDEWALL & MAIN PANEL

*Oxygen Mask	STOWED & TESTED
FWD Panel Brightness Controls	AS REQ
Flight Instruments/PFD/ND	CHECK
Landing Gear Lever	**DOWN**
Autobrake Selector	**RTO**
Integrated Standby Flight Display	CHECK & SET
Fuel Qantity	CHECK EICAS FUEL QTY

PEDESTAL

Speedbrake Lever	**DOWN**
Thrust Levers	**IDLE / REV STOWED**
Parking Brake	**SET**
Flap Lever	**SET to agree with actual Flap Position**
Fuel Control Switches	CUTOFF
Transponder	**SET & STBY**
Aisle Stand/PNL Flood Switch	AS REQ

CALL FOR „PREFLIGHT CHECKLIST"

BEFORE PUSHBACK / BEFORE START

APU	verify ON
EXT Power	OFF/DISC
Doors	CLOSED
PASS Sign/Seat Belts	ON
Hydraulic Panel (OH)	SET
- Primary Pumps	ON (FAULT = illuminated)
- C1 & C2 Pump Switches	AUTO
- Demand Pump Selectors	AUTO
Fuel Pumps	ALL ON
STAB Trim	SET - CHECK EICAS
Rudder Trim	ZERO - CHECK EICAS
Beacon (OH)	ON
Transponder Mode	AS REQ / STBY

CALL FOR „BEFORE START CHECKLIST"

ENGINE START

ATC Clearance (Pushback/Start)	AS REQ
Pushback	AS REQ
Parking Brake	AS REQ

Engines may be started simultaneously!

EICAS	SHOW SECOND.g ENG. INDICATIONS
Left Start Selector (OH)	START
Left Fuel Control Switch (CP)	RUN
Right Start Selector (OH)	START
Right Fuel Control Switch (CP)	RUN
EICAS	CHECK INDICATIONS

BEFORE TAXI

Left & Right Start Selector	verify NORM
Generators L1, L2, R1 & R2	verify ON (no OFF Light)
APU	OFF
Anti-Ice	AS REQ
Flight Controls	verify FREE & FULL MOVEMENT
Autobrake	RTO
Flaps	SET FOR TO (5 or 15)
*Flight Deck Door	CLOSED & LOCKED

CALL FOR „BEFORE TAXI CHECKLIST"

ATC Clearance (Taxi)	AS REQ
Taxi Lights	ON
Runway Turnoff Lights	AS REQ / ON

TAXI

- → release Parking Brake
- → slowly apply power
- → max. 30 kts on straights & max. 8-10 kts in turns
- → test Brakes & Steering
- → check Flight & Engine Instruments

BEFORE TAKEOFF

Flaps	verify SET FOR T.O.
ND WXR / TFC / TERR (EFIS Panel)	AS DES

CALL FOR „BEFORE TAKEOFF CHECKLIST"

ATC Clearance	AS REQ
Start Replay-Tool	IF REQ
Landing Lights	ON
Strobe Lights	ON
Taxi & Runway Turnoff Lights	OFF
Transponder Mode Selector	TA or TA/RA

TAKEOFF

- line up and brake (rolling Takeoff is also permitted)
- set ~40% N1 (GE) or 20 TPR (RR)
- let Engines stabilize
- use TO/GA Button or set Takeoff Thrust Manually
- use a little down pressure on the yoke up to 80 - 100 KIAS
- at VR smoothly rotate with ~2° per second
- rotate to ~ 15 ° Pitch
- after Liftoff follow FD Bars
- at postive rate → GEAR UP
- maintain min. V2 or V2 + ~20 knots (if very light)
- @ ~ 400 ft – TO/GA mode will switch to LNAV/VNAV
  - or manually set Roll & Pitch Modi
- engage Autopilot at own discretion
- @ Acceleration Height → lower Nose
- accelerate to 250 KIAS
- flap retraction at F Bugs (15 → 5 → 1 → UP)

CLIMB

Landing Gear	verify UP
Flaps	verify UP
Engine Anti-Ice	AS REQ/AUTO
Autobrake	OFF
Transponder Mode Selector	TA/RA

CALL FOR „AFTER TAKEOFF CHECKLIST"

10.000 ft

Landing Lights	OFF
Logo Lights	OFF
Taxi & Runway Turnoff Lightsl	OFF
Passenger Signs	AS DES

TRANSITION ALTITUDE

Altimeters	SET STD

CRUISE

Pass Signs/Seat Belt Sign	OFF
Top Of Descent	VERIFY AND CROSS CHECK

You can see Distance to T/D on CDU PROG Page!

Estimated Top Of Descent (TOD) Formula:
(CRZ ALT - DEST ALT)/1000 x 3 + 20 = TOD in NM Out

30 - 50 NM PRIOR TO TOD

Autobrake	AS REQ / Std 2 or 3
Minimums	SET / BARO
Passenger Signs	AS DES

FMS / CDU SETUP

- → **INIT REF → APPROACH**
  - **- verify / enter DATA**
  - **- choose FLAP/SPD → LSK 4R**
- → **RADNAV → check / set ILS FREQUENCY**
- → **HOLD → programm Holding if req**

DESCENT

ATC Clearance	AS REQ

@ TOP OF DESCENT

AP Altitude	SET DESCENT ALT AND PUSH
AP Descent Mode	VNAV or VS
Passenger Signs	AS DES

@ 10.000 ft

Landing Lights	ON
Logo Lights	AS DES
Passenger Signs	AS DES
Speed	250 KIAS MAX

@ TRANSITION FLIGHT LEVEL

Altimeters	SET STD

INSTRUMENT APPROACH & LANDING

*- approach @ ~ 3.000 ft above destination airport elevation
  or (preferred) use proper procedure altitudes*
*- Flaps Extension: 0 → 1 → 5 → 20 prior to Glide Slope or 3.000 ft
  and → 25 or → 30 on Glideslope*
- select Flap according to F Bugs → i.e. Below Bug „1" use Flap 5

20-15 NM OUT
- verify Altimeter is set LOCAL
- verify AUTOBRAKE is set
- use VNAV or ATH Speed Mode
- descelerate to Flaps 5 Maneuver Speed (Speed Bug "5")
   - set FLAPS 1 at Speed Bug "UP" or 230 KIAS
   - set FLAPS 5 at Speed Bug "1"
- use LNAV or HDG Mode to intercept Localizer
- arm MCP APP Mode on Localizer Intercept Course

BEFORE GLIDE SLOPE
- GEAR DOWN
- set FLAPS 20
- descelerate to Speed Bug „20"
- arm SPEED BRAKES

ON GLIDE SLOPE or latest 2.500 ft AGL
- set FLAPS 25°, then 30°
- descelerate to be VREF
- preselect Missed Approach Altitude

CALL FOR „LANDING CHECKLIST"

Landing Gear	**DOWN**
Flaps	**30°(FULL)**
Speed Brakes	**ARMED**
Autobrakes	**SET**

@ 1.000 ft AGL
- be stable at LOC and G/S and not more then VREF +20
- *verify „LAND 3" and FMA „Rollout" and „Flare" armed*
- *either leave AUTOPILOT ON for CAT III AUTOLAND
  or AUTOPILOT OFF for manual Landing*
- *either now AUTOTHROTTLE OFF and set Thrust to maintain
  VREF manually
  or disarm AUTOTHROTTLE at 50 ft Callout and then quickly
  retard your Hardware Throttles to IDLE*

@ TRESHOLD
- @ 50 ft → FLARE
- @ 50 ft → THROTTLE → IDLE
- touch down with Main Gear, then lower the Nose Gear
- set REVERSE THRUST
- @ 60 KIAS → REVERSE IDLE
- @ 40 KIAS → brake manually to disable AUTOBRAKE

CIRCLED APPROACH & LANDING

INBOUND on RWY HEADING
- descent to Runway with FLAPS 20°
- Speed ~ 160 KIAS
- at MDA → turn left or right 45°
- fly 20 seconds on that course then turn Down Wind

DOWN WIND LEG
- preselect Missed Approach Altitude
- set GEAR DOWN
- set Landing Flaps
- verify Autobrake is set and Spoilers are armed
- Speed → stay around 10 KIAS above VREF
- abeam (90° to RWY Threshold) → Start Timer
- turn Base Leg 20 sec after beeing abeam
- *either now AUTOTHROTTLE OFF and set Thrust to maintain
  VREF manually
  or disarm AUTOTHROTTLE at 50 ft Callout and then quickly
  retard your Hardware Throttles to IDLE*

CALL FOR „LANDING CHECKLIST"

Landing Gear	**DOWN**
Flaps	**30°(FULL)**
Speed Brakes	**ARMED**
Autobrakes	**SET**

BASE TURN
- start to slightly descent (300 - 400 fpm)
- aim be at ~ 400 ft AGL when you roll out on Final
- stabilize at VREF at rolling out on Final

@ TRESHOLD
- @ 50 ft → FLARE
- @ 50 ft → THROTTLE → IDLE
- touch down with Main Gear, then lower the Nose Gear
- set REVERSE THRUST
- @ 60 KIAS → REVERSE IDLE
- @ 40 KIAS → brake manually to disable AUTOBRAKE

GO AROUND

- use TO/GA Button or set Takeoff Thrust Manually
- set FLAPS 20
- at VR smoothly rotate with ~2° per second
- at postive rate → GEAR UP
- @ ~ 400 ft – set Roll & Pitch Modi
- engage Autopilot at own discretion
- @ Acceleration Height → lower Nose
- accelerate to 250 KIAS
- flap retraction at F Bugs (15 → 5 → 1 → UP)

AFTER LANDING / CLEAR OF RUNWAY

Taxi Lights	ON
Runway Turnoff Lights	AS DES
Landing Lights	OFF
Strobe Lights	OFF
Logo Lights	AS REQ / OFF
Speedbrake	DOWN
Flaps	UP
Transponder Mode	AS REQ / STBY
APU	START if req
Anti-Ice	AS REQ
WXR / TFC / TERR	OFF

PARKING / SHUT DOWN

Parking Brake	SET
Fuel Control Switches	CUTOFF
Electric Hydraulic Pumps	OFF
Fuel Pumps	OFF
Anti-Ice	AUTO
Beacon	OFF
Pass Signs/Seat Belt Sign	OFF
Flight Director	OFF
Transponder	STBY
APU / EXT Power	AS REQ
Cockpit Door	UNLOCK

CALL FOR „SHUTDOWN CHECKLIST"

SECURING THE AIRCRAFT

IRS Selectors	OFF
Packs/Lower Recirc Fan	OFF
APU / EXT Power	AS REQ
Battery Switch	OFF

CALL FOR „SECURE CHECKLIST"

NORMAL PROCEDURES (FULL)

PREFLIGHT FLOWS

Fuel/Load-Manager...SET/CHECK CG

FLIGHT DECK SAFETY INSPECTION

Battery Switch (OH)..ON
Hydraulic Panel (OH)..SET
   - C1 & C2 Pump Switches.......................................OFF
   - Demand Pump Selectors.......................................OFF
Wiper Selector (OH)..OFF
NAV Lights Switch (OH)..ON
Logo Light Switch (OH)...AS REQ / ON
Landing Gear Lever (MP)..DOWN
   - EICAS Gear Indication...DOWN
*Alternate Flaps Arm Switch..OFF
*Alternate Flaps Selector...OFF
Parking Brake...SET

ESTABLISHING EXTERNAL & APU POWER

FWD EXT PWR Switches 1 & 2 (OH)......................................ON
APU Switch (OH)...............................hold START, then ON
  - check APU "FAULT" light extinguishes
APU Generator Switches (OH)..ON
*Trim Air Switches (OH)...ON
*Pack Switches (OH)..AUTO
*Recirculation Fans Upper/Lower Switches (OH)....................ON

INITIAL PREFLIGHT PROCEDURE

IRS selectors (OH)..............................OFF 30 seconds, then ON
Status Display...CHECK
  - select SYS/STAT on Display
*Circuit Breaker Status...CHECKED
   *- select SYS/CB on Display
Engine Display Switch (GS)...PUSH
  - check engine indications
  - check oil quantity
EICAS Display...CHECK
CDU/HEAVY MOD Options & Payload................................SET

Ovehead Panel Setup

*Flight Control Surface Panel..SET
   *- TAIL..NORM
   *- WING..NORM
*HEADING REF Switch...NORM
*Primary Flight Computers DISC Switch.....................GUARDED
Electrical Panel...SET
   - Battery Switch..ON
   *- IFE/PASS Seats Switch...ON
   *- Cabin Utility Switch..ON
   - APU Selector...AS REQ
   - APU Generator Switches..ON
   - Generator Control Switches...............................ALL ON
         ...."OFF" Lights illuminated
Left Wiper Selector..OFF

*Towing Power Lights...OFF
*Flight Deck Door Power Switch..ON
*CCR Reset Switches...GUARDED
*Emergency Lights Switch...GUARDED
*Service Interphone Switch...OFF
*Passenger Oxygen....................ON illuminated and GUARDED
Window Heat Panel..SET
   *- Backup Switches...ON
   - Primary Switches..ON
*RAM Air Turbine...Light extinguished

Hydraulic Panel...SET
   - L ENG & R ENG Primary Pumps................................ON
         ...."FAULT" illuminated
   - C1 & C2 Electric Pump Selectors.............................OFF
         ...."FAULT" illuminated
   - L ELEC & R ELEC Demand Pump Selectors................OFF
         ...."FAULT" illuminated
PASS Signs/Seat Belts Selector..SET
Lighting Panel...SET
   - Light Controls...AS REQ
   - Landing Lights...OFF

*GND TEST Selector..NORM
*CVR..TEST

*APU Fire Switch..verify IN
         ....all lights extinguished
*Cargo Fire ARM Switches..verify OFF
         ....all lights extinguished
Engine Panel...SET
   *- EEC Mode Switches...NORM
   - START Selectors...NORM
*Fuel Jettison Panel...SET
   - Fuel Jettison Nozzle Switches..............................verify OFF
         ....all lights extinguished
   *- Fuel To Remain Switch..IN
   - Fuel Jettison ARM Switch..OFF
         ....all lights extinguished
Fuel Panel..SET
   - Crossfeed Switch...OFF
         ....verify "VALVE" Light extinguished
   - Fuel Pump Switches..OFF
    ....L AFT PUMP "PRESS" Light extinguished if APU is on
       ....verify all other Pump "PRESS" Lights illuminated
   - BALANCE Switch..OFF
        ....verify "ON" and "FAULT" Lights extinguished
Anti-Ice Panel...SET
   - WING Anti-Ice Selector...AUTO
   - Engine Anti-Ice Selectors......................................AUTO
Lighting Panel...SET
   - Beacon...OFF
   - NAV Light...AS REQ / ON
   - LOGO Light Switch..AS REQ / ON
   - WING Light Switch.......................................AS REQ / OFF
   *- Indicator Lights..TEST
   - Runway Turnoff Lights...OFF
   - Taxi Light...OFF
   - Strobe Light..OFF

*ELT Switch...GUARDED
*HUMID Switch..ON
*Cargo Temp Switches...AS REQ
*Air Condition Panel...SET
   *- Euipment Cooling Switches...................................AUTO
   *- Recirculation Fan Switches......................................ON
   *- Flight Deck Temp Control.....................AS REQ / 10 o'clock
   *- Cabin Temp Control...........................AS REQ / 10 o'clock
   *- L & R PACK Switches...AUTO
   *- TRIM Air Switches...ON
   *- Ventilation Switch...NORM
*FWD & AFT Outflow Valves..AUTO
*Landing Altitude Selector..IN
Right Wiper Selector..OFF

PREFLIGHT FLOWS - Continiued

Glareshield Panel Setup

```
EFIS Panel...............................................................SET
   - MINIMUMS Selector.............................................SET
   - FPV Switch...................................................AS REQ
   - METERS Switch................................................AS REQ
   - BAROSET Selector................................................SET
   - Altimeter................................................SET LOCAL
   - ND Selector.....................................PLAN + PUSH
   - ND Range Selector................................................SET
   - Display Select / EICAS Switch........................AS REQ
   - ND WXR Switch....................................................OFF
   - ND TFC & TERR Switches...........................AS REQ
Mode Control Panel (MCP).......................................SET
   - Flight Direcor....................................................ON
   - Autothrottle ARM Switches.................................ARM
   - Autopilot DISENG Bar..........................................UP
   - HDG/TRK Reference Switch...........................AS REQ
   - Bank Limit Selector..........................................AUTO
   - VS/FPA Reference Switch...............................AS REQ
   *- Altitude Increment Selector.........................AS REQ
```

Sidewalls

```
*Oxygen Mask.................................................STOWED
*RESET/TEST Switch......................PUSH & RELEASE
          .........verify Yello Cross is showing in the flow indicator
FWD Panel Brightness Controls...........................AS REQ
```

Forward Panels

```
*AIR DATA/ATT Selector........................................AUTO
*PFD/MFD Selector.............................................NORM
Flight Instruments..........................................CHECK
   - NO VSPD Indicator shows until V Speed are selected
   *- TCAS OFF Indicator
   - Autothottle Mode is Blank
   *- Roll Mode is TO/GA
   *- Pitch Mode is TO/GA
   - AFDS Status is FLT DIR
Landing Gear Panel.........................................CHECK
   - Landing Gear Lever.........................................DOWN
   - ALT Gear Switch.......................................GUARDED
   - Autobrake Selector...........................................RTO
Integrated Standby Flight Display.....................CHECK
   - check no approach mode
   - set Altimeter Local
   - verify indications are correct and no flags are shown
```

Aisle and Control Stand

```
Speedbrake Lever..............................................DOWN
Reverse Thrust Levers......................................DOWN
Forward Thrust Levers....................................CLOSED
Parking Brake.......................................................SET
          .....verify "PARKING BRAKE" message in EICAS
*Stabilizer Cutout Switches...........................GUARDED
Fuel Control Switches....................................CUTOFF
Fuel Control Switch Fire Warning Lights.............EXTINGUISHED
*Alternate Flaps Arm Switch................................OFF
*Alternate Flaps Selector.....................................OFF
Captain´s Audio Control Panel.........................AS REQ
   *- Weather Radar.................................................SET
   - Transponder......................................................SET
Captain´s Tuning & Control Panel.........SELECT L VHF
*Flight Deck Door Access.....................................AUTO
Flap Lever..........................SET to agree with actual Flap Position
*Glideslope Inhibit Switch...................EXTINGUISHED
Transponder Mode Selector.................................STBY
*Aural Cancel Light...............................EXTINGUISHED
*Floor Light Switches.......................................AS REQ
Evac Command Switch....................................GUARDED
Aisle Stand/PNL Flood Switch..............AS REQ  / MID POSITION
```

FMC/CDU SETUP

```
INIT REF → INDEX → IDENT
   → check Aircraft / Engine Data & NAVDATA Cycle
   → POS INIT →  verifyt Position (Line 5R)
ROUTE> 1/2 (RTE 1)
   → set ORIGIN, DEST & FLT NO
   → ACTIVATE → EXEC
DEP/ARR
   → DEP - select Departure (SID) → EXEC
   → DEP/ARR
   → ARR - select STAR & APPROACH → EXEC
ROUTE 1/2 (RTE 1)
   → NEXT PAGE (ROUTE 2/2 (ACT RTE 1)
   → enter Enroute Waypoints / Airways
   → EXEC
LEGS
   → verify Waypoints / delete DISCONTINUITIES
   → EXEC (after making Changes)
INIT REF → (INDEX →) PERF INIT
   → set ZFW (Click on LSK4L)
   → enter Reserves (Fuel) (e.g.20)
   →  enter CRZ ALT, COST INDEX (0-2000)
   → EXEC → THRUST LIM
THRUST LIM
   →  set SEL/OAT if desired for double derated Thrust
   → select desired DERATED THRUST (LSK 2,3,4L & 2,3,4R)
   → TAKEOFF
TAKEOFF REF 1/2
   → enter FLAPS (5°)
   → set CG TRIM (Click on LSK3L)
   → set V1,VR & V2 (click LSK 1,2,3R)
   → NEXT PAGE = 2/2 (opt)
   → enter ACCEL HT and THR REDUCTION if desired (opt)
```

PREFLIGHT COMPLETION

```
Mode Control Panel (MCP)
   - LNAV select to ARM
   - VNAV select to ARM
   - verify Roll Mode is TO/GA / LNAV
   - verifiy Pitch Mode is TO/GA / VNAV
   - HDG select Departure RWY Heading
   - SPD select V2
   - Altitude preselect CRZ Flight Level or cleared Altitude
```

PERFORM PREFLIGHT CHECKLIST

```
Oxygen........................................................Tested, 100%
Flight Instruments.......................HEADING___, ALTIMETER___
Parking Brake.......................................................SET
Fuel Control Switches....................................CUT OFF
```

BEFORE PUSHBACK/BEFORE START

APU...verify ON, else start APU
.....................................verify no "FAULT" Light
EXT Power..OFF/DISC
SYS/STAT Page...CHECK
SYS/DOOR Page...............CHECK DOORS CLOSED & ARMED
Seat Belts (Captain & FO)..ON
PASS Sign/Seat Belts (OH)..ON
*Hydraulic Pumps (OH)..ON
*Left & Right Demand Pump Selectors (OH).......................AUTO
...................verify no "FAULT" Light
*C1 & C2 ELEC Pumps (OH)....................................AUTO
...................verify no "FAULT" Light
Fuel Qantity..........................CHECK EICAS FUEL QTY
Fuel Pumps LEFT, RIGHT & CENTER (OH)..........................ON
STAB Trim................................SET - CHECK EICAS
RUDDER Trim.........................ZERO - CHECK EICAS
FO MDF............................SELECT DOORS Page
*Flight Deck Door (CP)..............................CLOSED & LOCKED
Beacon (OH)..ON
Transponder Mode Selector (CP)......................................XPDR

PERFORM BEFORE START CHECKLIST

Flight Deck Door.............................CLOSED & LOCKED
Passenger Signs...ON
Mode Control Panel (MCP)..............V2___, HDG___, Altitude___
Takeoff Speeds................................V1___, VR___, V2___
CDU Preflight...COMPLETED
Trim...____ UNITS, 0, 0
Taxi & Takeoff Briefing....................................COMPLETED
Beacon...ON

ENGINE START

ATC Clearance..AS REQ

Engines are started simultaneously under normal circumstances.

EICAS...........................SHOW SECOND. ENG. INDICATIONS
LEFT Start Selector (OH)..START
LEFT Fuel Control Switch (CP).....................................RUN
   *- verify AUTOSTART message in EICAS above left N2
RIGHT Start Selector (OH)......................................START
RIGHT Fuel Control Switch (CP).................................RUN
   *- verify AUTOSTART message in EICAS above left N2
EICAS...CHECK INDICATIONS

BEFORE TAXI

Generators L1, L2, R1 & R2.........................CHECK ON
APU (OH)...OFF
Engine Anti-Ice (OH)..AS REQ
*RECALL...CHECKED
Autobrake (MP)..RTO
Flight Controls...CHECKED
   - select SYS/FCTL Page
   - move Control Column and Rudder full travel in all directions
CPT MFD...ND Page
Flaps...SET FOR TO (5-15)
CDU Reference Speeds...SET
   - CDU CPT/PF.........................TAKEOFF REF Page 1/2
   - CDU FO/PM.................................ACT RTE 1 LEGS Page 1/x
   - Cross Check Settings:
      - Flap Setting, Thrust Selection, Runway, V-Speeds
      - V2 in MCP/SPD Selected
STAB Trim....................................SET - CHECK EICAS
RUDDER Trim.............................ZERO - CHECK EICAS
Radio Panel.....................................SET (CPT VHF L)
Flight Deck Door.............................CLOSED & LOCKED

PERFORM BEFORE TAXI CHECKLIST

Anti-Ice..____
Recall...CHECKED
Autobrake.................................RTO (Rejected TakeOff)
Flight Controls...CHECKED
Ground Equipment...CLEAR

ATC Clearance...AS REQ
Taxi Lights...ON
Runway Turnoff Lights.....................................AS REQ / ON
.

TAXI

→ release Parking Brake
→ slowly apply power, max. 35% N1
→ max. 30 kts on straights & max. 8-10 kts in turns
→ test Brakes & Steering
→ check Flight & Engine Instruments

BEFORE TAKEOFF

Departure Briefing..COMPLETED
*Departure Announcement (Cabin Chime)...............COMPLETED
Flaps...CHECK SET
Transponder Mode Selector (CP)............................TA or TA/RA
WXR/TERR/VSD (EFIS Panel).......................................AS REQ

PERFORM BEFORE TAKEOFF CHECKLIST

Flaps..___

ATC Clearance...AS REQ

Landing Lights (OH)..ON
Strobe Lights (OH)...ON
Runway Turnoff Lights (OH)..ON
Logo Lights (OH)...AS REQ / ON
Wing Lights (OH)...AS REQ / ON
Taxi Lights (OH)...OFF

Start Replay-Tool...IF REQ

TAKEOFF

→ line up and brake (rolling Takeoff is also permitted)
→ set ~40% N1, let engines stabilize
→ use TO/GA Button or set Takeoff Thrust Manually
→ use a little down pressure on the yoke up to 80-100 KIAS
→ at VR smoothly rotate with ~2° per second
→ rotate to 10 – 15 ° Pitch
→ at postive rate – GEAR UP
→ airspeed ~ V2+15 to 25 knots
→ use FD pitch as reference
→ AP might by engaged at above 200 ft
→ at ~ 400 ft – TO/GA mode will switch to LNAV/VNAV
→ flap retraction at ~20 knots below Flap Maneuver Speed

AFTER TAKEOFF

Landing Gear...UP
Flaps...UP
Engine Anti-Ice...AUTO

PERFORM AFTER TAKEOFF CHECKLIST

Landing Gear...UP
Flaps...UP

CLIMB

@ 10.000 ft

Landing Lights...OFF
Taxi Lights...OFF
Runway Turnoff Lightsl..OFF
Wing Lights..OFF
Logo Lights..AS REQ / OFF
Transponder Mode Selector (CP)...............................TA/RA

@ Transition Altitude

Altimeter...SET STD

CRUISE

Pass Signs/Seat Belt Sign...OFF
Altimeters...............................CHECK SET TO STD (29.92/1013)

TOP OF DESCENT

Estimated Top Of Descent (TOD) Formula:

$$\frac{(\text{Cruise Altitude} - \text{Destination Altitude})}{1.000} \times 4 = \text{TOD in NM Out}$$

DESCENT

Before TOD

*Recall...CHECKED
CDU/APPROACH Page..SET
  - select Flaps/Speed for Landing (LSK 1,2,3 R, then 4R)
  - standard are 25° or 30° Landings
CDU/RADNAV Page..........................CHECK ILS FREQUENCY
Autobrake.....................................AS REQ / Std 2 or 3
Minimums...SET / BARO
Approach Briefing......................................PERFORMED
Pass Signs/Seat Belt Signs......................................ON

ATC Clearance..AS REQ
  - Use VNAV or FLC for Descent

@ 10.000 ft

Landing Lights..ON
Runway Turnoff Lights.......................................ON
Wing Lights..ON
Logo Lights..AS REQ / ON

@ Transition Flightlevel

Altimeter...SET LOCAL

INSTRUMENT APPROACH & LANDING

approach @ ~ 3.000 ft above destination airport elevation or use proper procedure altitudes

Flaps Extension: 1, 5, 20, 25 or 30
Extend next Flaps before speed drops under the Speed Bug for Maneuver Speed of current Flap Setting.

@ 20-10 NM out
→ check Altimeter is set LOCAL
→ use AT Speed Mod or manually set Thrust
→ reduce speed to Flaps 5 Maneuver Speed (Speed Bug "5")
→ set FLAPS 1 at Speed Bug "UP"
→ set FLAPS 5 at Speed Bug "1"
→ arm MCP APP Mode on Localizer Intercept Course

@ G/S Capture or 3.000 ft AGL
→ reduce speed to be VREF+5 at 3 NM out or 1.000 ft AGL
→ set FLAPS 20
→ LANDING GEAR DOWN
→ set FLAPS 25° or 30°
→ arm SPEEDBRAKES
→ preselect Missed Approach Altitude

PERFORM LANDING CHECKLIST

Speedbrakes...ARMED
Landing Gear..DOWN
Flaps...SET FOR LDG

@ 1.000 ft AGL
→ Autothrottle OFF, set Thrust to maintain VREF+5
→ Autopilot OFF (No Autoland)
→ start Flaring @ ~ 30 ft
→ slowly retard Throttle to Idle
→ Use Reverse Thrust

AFTER LANDING/CLEAR OF RUNWAY

Runway Turnoff Lights..ON
Taxi Lights...ON
Landing Lights...OFF
Strobe Lights...OFF
Wing Lights..OFF
Logo Lights..AS REQ / OFF

Speedbrake...DOWN
Flaps...UP
Transponder..XPDR
APU..START, then ON
Anti-Ice..AS REQ
Weather Radar...OFF

PARKING / SHUT DOWN

Parking Brake...SET
Fuel Control Switches..CUTOFF
Pass Signs/Seat Belt Sign..OFF
*Electric Hydraulic Pumps..OFF
*Engine Hydraulic Pumps (Primary)..................................ON
IRS Selectors..OFF
*FD Door Power..OFF
Fuel Pumps..OFF
Engine Anti-Ice...AUTO
Beacon..OFF
Flight Director..OFF
Transponder...STBY
External Power..AS REQ

PERFORM SHUTDOWN CHECKLIST
Hydraulic Panel..SET
Fuel Pumps..OFF
Flaps...UP
Parking Brake...SET
Fuel Control Switches..CUTOFF
Weather Radar...OFF

SECURING THE AIRCRAFT

*Emergency Lights...OFF
*Packs/Lower Recirc Fan..OFF
*EFB..OFF
APU/EXT Power..AS REQ/ON
Battery Switch..OFF

PERFORM SECURE CHECKLIST
IRS..OFF
*Emergency Lights...OFF
*Packs...OFF

CHECKLISTS ONLY

PREFLIGHT CHECKLIST

Oxygen..Tested, 100%
Flight Instruments.........................HEADING___, ALTIMETER___
Parking Brake..SET
Fuel Control Switches...CUT OFF

BEFORE START CHECKLIST

Flight Deck Door...CLOSED & LOCKED
Passenger Signs...ON
Mode Control Panel (MCP)..............V2___, HDG___, Altitude___
Takeoff Speeds..V1___, VR___, V2___
CDU Preflight..COMPLETED
Trim...____ UNITS, 0, 0
Taxi & Takeoff Briefing.......................................COMPLETED
Beacon...ON

BEFORE TAXI CHECKLIST

Anti-Ice...___
Recall..CHECKED
Autobrake...RTO (Rejected TakeOff)
Flight Controls...CHECKED
Ground Equipment..CLEAR

BEFORE TAKEOFF CHECKLIST

Flaps...___

AFTER TAKEOFF CHECKLIST

Landing Gear..UP
Flaps...UP

LANDING CHECKLIST

Speedbrakes..ARMED
Landing Gear..DOWN
Flaps...SET FOR LDG

SHUTDOWN CHECKLIST

Hydraulic Panel..SET
Fuel Pumps..OFF
Flaps...UP
Parking Brake...SET
Fuel Control Switches...CUTOFF
Weather Radar..OFF

SECURE CHECKLIST

IRS..OFF
*Emergency Lights..OFF
*Packs...OFF