



CHECKLIST

B747
series

November 2017

PREFLIGHT

BATTERY SWITCH.....ON
STANDBY POWER SWITCH.....AUTO
HYDRAULIC DEMAND PUMPS.....OFF
PARKING BRAKE.....SET
LANDING GEAR LEVER.....DOWN
FLAP POSITION INDICATOR & LEVER.....AGREE
FUEL CONTROL SWITCHES.....CUTOFF
ANTI-ICE.....NAI OFF
OXYGEN.....CHECKED
EMERGENCY EXIT LIGHTS.....ARMED
ALITMETERS.....QNH SET

BEFORE START

HYDRAULIC DEMAND PUMPS.....AUX
FUEL LOAD and PUMPS _____AND ON
APU.....ON
BEACON.....BOTH
DOORS.....CLOSED and AUTO
PASSENGER SIGNS.....ON

AFTER START

APU SELECTOR.....AS REQUIRED
PACKS.....ON
RECALL / STATUS.....CHECKED
REF SPEEDS.....CHECKED
FLAPS.....SET / AS REQUIRED
TRIM.....SET
FLIGHT CONTROLS.....CHECKED
AUTOBRAKES.....RTO

BEFORE TAKEOFF

VITAL DATA.....CHECKED
PACKS.....SET / AS REQUIRED
CABIN CREW.....NOTIFIED

AFTER TAKEOFF

LANDING GEAR.....UP
FLAPS.....UP
PACKS.....ON
EXTERIOR LIGHTS.....AS REQUIRED
ALTIMETERS AT TA.....STD
APU.....OFF

APPROACH

ATIS.....OBTAIN
FMC ARRIVALS PROCEDURE.....ENTER
BRIEFING.....COMPLETE
RECALL.....CHECKED
ALTIMETERS at TL.....QNH
VREF.....KTS
MINIMA.....
PASSENGER SIGNS.....ON
AUTOBRAKES.....SET / AS REQUIRED
LANDING LIGHTS.....ON

LANDING

SPEEDBRAKE.....ARMED
LANDING GEAR.....DOWN AND GREEN
FLAPS.....SET / AS REQUIRED
CABIN CREW.....NOTIFIED

AFTER LANDING

LANDING LIGHTS & STROBE.....OFF
FLAPS.....UP
SPEEDBRAKE.....DOWN
WEATHER RADAR.....OFF

SHUTDOWN

HYDRAULIC PUMPS.....OFF
PARKING BRAKE.....SET
FUEL CONTROL SWITCHES.....CUTOFF
FUEL PUMP SWITCHES.....OFF
EXTERNAL POWER.....AS REQUIRED



NORMAL PROCEDURES

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POWER UP

CIRCUIT BREAKERS.....CHECK
 BATTERY SWITCH..... ON
 STANDBY POWER SELECTOR.....AUTO
 FIRE DETECTION PANEL.....NORMAL
 FUEL CONTROL SWITCHES.....CUTOFF
 START KNOBS.....CLOSED
 ALTERNATE FLAPS..... OFF and DISARMED
 LANDING GEAR LEVER.....DOWN
 FLAP POSITION INDICATOR & LEVER.....AGREE
 WEATHER RADAR.....OFF
 ELECTRICAL POWER, EXT or APUESTABLISH
 MAIN AND APU BATTERY VOLTAGE.....CHECK
 EXTERIOR LIGHTS.....AS REQUIRED
 INTERIOR LIGHTS.....AS REQUIRED
 GROUND INTERPHONE.....SET

PREFLIGHT

EXTERIOR SAFETY INSPECTION.....COMPLETE
 CREW OXYGEN MASKS.....CHECK
 EMERGENCY EQUIPMENT.....CHECK
 MAINTENANCE STATUS.....CHECK
 PRIMARY EICAS.....CHECKED, THEN CANCEL
 NO SMOKING SIGNS.....ON / AUTO
 SEATBELT SIGNS.....ON / AUTO
 GROUND TESTS SWITCH.....NORM
 FLIGHT CONTROL SHUTOFF VALUES.....NORM
 GEN FIELD MAN RESET SWITCHES.....NORM
 APU FIELD MAN RESET SWITCHES.....NORM
 SPLIT SYSTEM BREAKER SWITCH.....NORM
 COCKPIT VOICE RECORDER TEST.....COMPLETE
 SQUIB TEST.....COMPLETE
 EEC MAINTENANCE SWITCHES.....NORM
 IRS MODE SELECTORS.....OFF

FMC INITIALIZATION:

IDENT PAGE.....CHECK
 PRESENT POSITION.....ENTER
 GMT.....CHECK
 FLIGHT NUMBER.....ENTER

IRS MODE SELECTOR.....OFF, THEN NAV
 STANDBY POWER SELECTOR.....BAT, THEN AUTO
 L and R UTILITY POWER SWITCHES..... ON
 BUS TIE SWITCHES.....AUTO
 GENERATOR CONTACTORS.....ON
 DRIVE DISCONNECT SWITCHES..... NORMAL
 HYDRAULIC DEMAND PUMP SELECTORS.....OFF
 HYDRAULIC ENGINE PUMP SWITCHES.....ON
 HYDRAULIC QUANTITY.....CHECK
 FIRE / OVERHEAT TEST.....COMPLETE
 EMERGENCY EXIT LIGHTS.....ARMED
 OVSERVER AUDIO SYSTEM.....NORM
 SWITCH
 SERVICE INTERPHONE SWITCH.....OFF
 CARGO FIRE FWD / AFT SWITCH.....DISARMED
 CARGO FIRE DISCHARGE SWITCH.....NORMAL
 STANDBY IGNITION SWITCH.....NORM
 CONTINUOUS IGNITION SELECTOR.....OFF
 AUTO IGNITION SELECTOR.....SINGLE
 L and R JETTISON NOZZLE SWITCHES..... OFF
 ALL FUEL PUMPS.....OFF
 FUEL X-FEED SWITCHES.....AS REQUIRED
 WING ANTI-ICE.....AUTO
 NACELLE ANTI-ICE.....OFF
 WINDSHIELD WIPER SWITCHES.....OFF
 PASSENGER OXYGEN SWITCH.....NORM
 YAW DAMPER SWITCHES.....ON
 LANDING ALTITUDE.....AUTO
 OUTFLOW VALVE MANUAL SWITCHES.....OFF
 OUTFLOW VALVES.....VERIFY OPEN
 CABIN ALTITUDE AUTO SELECTOR..... NORM
 PASSENGER TEMPERATURE SELECTOR.....AUTO
 FLIGHT DECK TEMPERATURE SELECTOR.....AUTO
 ZONE SYS FAULT LIGHT.....EXTINGUISHED
 TRIM AIR SWITCH..... ON
 RECIRC FAN SWITCHES.....ON
 AFT CARGO HEAT SWITCH.....OFF
 EQUIP. COOLING SELECTOR.....NORM, OVRD >21°C
 HIGH FLOW SWITCH.....OFF
 PACK SYS FAULT LIGHT.....EXTINGUISHED
 GASPER FAN..... ON



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COCKPIT HUMIDIFIER.....ON
 PACK CONTROL SELECTOR..... NORM
 L and R ISOLATION VALVE SWITCHES..... ON
 APU BLEED AIR SWITCH.....ON
 ENGINE BLEED AIR SWITCHES.....ON
 RADIO TUNING PANEL..... AS REQUIRED
 WEATHER RADAR PANEL.....SET
 AUDIO CONTROL PANEL.....SET
 HF and SELCAL..... CHECK
 DATA PRINTER TEST.....COMPLETE
 ATIS and CLEARANCE.....OBTAIN

FMC NAVIGATION DATA:

ROUTE..... ENTER / CHECK
 RUNWAY.....ENTER
 SID.....SELECT
 FUEL RESERVES.....ENTER
 COST INDEX.....ENTER
 CRUISE ALTITUDE.....ENTER
 TRANSITIONS..... CHECKED
 NAV RADIOS.....AS REQUIRED

TCAS SYSTEM.....TEST
 TRANSPONDER CODE.....SET
 TRANSPONDER MODE.....XPNDR
 VOR/ADF SWITCHES..... AS REQUIRED
 ALTIMETER.....SET QNH
 TFC-TRAFFIC DISPLAY.....ON
 ND DISPLAY OPTIONS..... AS REQUIRED
 FLIGHT DIRECTOR..... ON
 AUTOTHROTTLE ARM SWITCH..... OFF
 BANK LIMIT SELECTOR.....AUTO
 MCP HEADING AND ALTITUDE.....SET
 AUTOPILOT DISENGAGE SWITCH..... UP
 RADAR ALTIMETER.....CHECK
 SOURCE SELECT PANEL.....SET
 CLOCK.....CHECK and SET
 CRT DISPLAY SELECT PANEL.....SET
 PFD.....CHECK
 ND.....CHECK
 STANDBY FLIGHT INSTRUMENTS.....CHECK

HEADING REF SWITCH.....NORM
 FMC SOURCE SELECT.....LEFT
 PRIMARY EICAS.....CHECK
 EICAS STATUS DISPLAY.....CHECK
 OIL QUANTITY.....CHECK
 ALTERNATE GEAR EXTENSION SWITCHES.....OFF
 GROUND PROXIMITY PANEL.....SET
 SPEEDBRAKE LEVER.....DOWN
 THRUST LEVERS..... IDLE
 PARKING BRAKE.....SET
 STAB TRIM CUTOUT SWITCHES.....CLOSED

FMC TAKEOFF DATE:

ZFW.....ENTER
 GROSS WEIGHT.....CONFIRM
 THRUST.....SELECT
 TAKEOFF FLAPS..... ENTER
 RUNWAY CONDITIONS.....ENTER
 TAKEOFF SPEEDS.....CONFIRM
 TRIM CG.....CONFIRM

MCP SPEED..... SET V2
 APU.....START / CHECK

PREFLIGHT

BATTERY SWITCH..... ON
 STANDBY POWER SWITCH.....AUTO
 HYDRAULIC DEMAND PUMPS.....OFF
 PARKING BRAKE.....SET
 LANDING GEAR LEVER.....DOWN
 FLAP POSITION INDICATOR & LEVER.....AGREE
 FUEL CONTROL SWITCHES.....CUTOFF
 ANTI-ICE..... NAI OFF
 OXYGEN.....CHECKED
 EMERGENCY EXIT LIGHTS.....ARMED
 ALTIMETERS.....QNH SET



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BEFORE START

FLIGHT DECK DOOR.....LOCKED
 HYDRAULIC DEMAND PUMP 4.....AUX
 HYDRAULIC DEMAND PUMP 1, 2 and 3.....AUTO
 FUEL QUANTITY and DISTRIBUTION.....CHECK
 FUEL PUMPS.....ON AS REQUIRED
 DUCT PRESSURE.....CHECK
 LNAV.....AS REQUIRED
 VNAV.....ON
 PACK CONTROL SELECTORS 2 & 3.....OFF
 BEACON.....BOTH

BEFORE START

HYDRAULIC DEMAND PUMPS.....AUX
 FUEL LOAD and PUMPSAND ON
 APU.....ON
 BEACON.....BOTH
 DOORS.....CLOSED and AUTO
 PASSENGER SIGNS.....ON

PUSH BACK.....AS REQUIRED
 GROUND SIGNAL.....RECEIVED
 ENGINES.....START

AFTER START

APU.....AS REQUIRED
 HYDRAULIC DEMAND PUMP 4.....AUTO
 PACK CONTROL SELECTORS (after 2 min).....NORM
 AFT CARGO HEAT SWITCH.....ON
 ENGINE INDICATIONS.....NORMAL
 OIL QUANTITY (after 30 sec).....CHECK
 NACELLE ANTI-ICE.....AS REQUIRED
 AUTOBRAKES.....RTO
 FLAPS.....SET TAKEOFF
 STAB TRIM.....SET
 RUDDER & AILERON TRIMS.....SET 0
 FLIGHT CONTROLS.....CHECK
 PRIMARY EICAS.....RECALL and CHECK
 ACARS OFF-BLOCK TIME.....CONFIRM

AFTER START

APU SELECTOR.....AS REQUIRED
 PACKS.....ON
 RECALL / STATUS.....CHECKED
 REF SPEEDS.....CHECKED
 FLAPS.....SET / AS REQUIRED
 TRIM.....SET
 FLIGHT CONTROLS.....CHECKED
 AUTOBRAKES.....RTO

TAXI LIGHTS.....ON
 TAXI OUT.....AS REQUIRED

BEFORE TAKEOFF

CABIN REPORT.....RECEIVED
 WEATHER RADAR.....AS REQUIRED
 AUTOTHROTTLE ARM SWITCH.....ARM
 TRANSPONDER CODE.....CHECK
 TRANSPONDER MODE.....TA / RA
 TRANSPONDER BIAS.....ABOVE
 PACKS 2 & 3.....AS REQUIRED
 EXTERIOR LIGHTS.....AS REQUIRED
 ELAPSED TIME.....ZERO

BEFORE TAKEOFF

VITAL DATA.....CHECKED
 PACKS.....SET / AS REQUIRED
 CABIN CREW.....NOTIFIED

AFTER TAKEOFF

LANDING GEAR.....UP
 FLAPS.....UP
 PACKS.....ON
 EXTERIOR LIGHTS.....AS REQUIRED
 ALTIMETERS AT TA.....STD
 APU.....OFF

T/C: TRANSPONDER BIAS.....N
 T/D: TRANSPONDER BIAS.....BELOW



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APPROACH

ATIS.....OBTAIN
 FMC ARRIVALS PROCEDURE.....ENTER
 BRIEFING.....COMPLETE
 RECALL.....CHECKED
 ALTIMETERS at TL.....QNH
 VREF.....KTS
 MINIMA.....
 PASSENGER SIGNS.....ON
 AUTOBRAKES.....SET / AS REQUIRED
 LANDING LIGHTS.....ON

LANDING

SPEEDBRAKE.....ARMED
 LANDING GEAR.....DOWN AND GREEN
 FLAPS.....SET / AS REQUIRED
 CABIN CREW.....NOTIFIED

AFTER LANDING

AUTOBRAKES.....OFF
 AUTOPILOT.....OFF
 TRANSPONDER MODE.....STBY
 EXTERIOR LIGHTS.....AS REQUIRED
 FLAPS.....UP
 SPEEDBRAKE LEVER.....DOWN
 WEATHER RADAR.....OFF
 CONTINUOUS IGNITION.....OFF
 FLIGHT DIRECTOR.....OFF
 AUTOTHROTTLE ARM SWITCH.....OFF
 APU.....AS REQUIRED
 EQUIP. COOLING SELECT.....NORM, OVRD >21°C
 AFT CARGO HEAT SWITCH.....OFF

AFTER LANDING

LANDING LIGHTS & STROBE.....OFF
 FLAPS.....UP
 SPEEDBRAKE.....DOWN
 WEATHER RADAR.....OFF

SHUTDOWN

PARKING BRAKE.....SET
 WING ANTI-ICE.....AUTO
 NACELLE ANTI-ICE.....OFF
 ELECTRICAL POWER.....AS REQUIRED
 STABILIZER TRIM.....6 UNITS
 RUDDER & AILERON TRIMS.....NEUTRAL
 HYDRAULIC DEMAND PUMP SELECTORS.....OFF
 FUEL CONTROL SWITCHES.....CUTOFF
 FUEL PUMP SWITCHES.....OFF
 BEACON.....OFF
 SEATBELT SIGNS.....OFF
 PACKS.....AS REQUIRED
 IRS ERROR.....DETERMINE
 TRANSPONDER CODE.....VFR
 EICAS STATUS DISPLAY.....CHECK
 GEAR BRAKE TEMPERATURE.....CHECK
 IRS MODE SELECTORS.....OFF
 WINDSHIELD PROTECTION.....OFF
 CHOCKS.....IN PLACE

SHUTDOWN

HYDRAULIC PUMPS.....OFF
 PARKING BRAKE.....SET
 FUEL CONTROL SWITCHES.....CUTOFF
 FUEL PUMP SWITCHES.....OFF
 EXTERNAL POWER.....AS REQUIRED

POWER-DOWN

TRIM AIR SWITCH.....OFF
 RECIRC FAN SWITCHES.....OFF
 HIGH FLOW SWITCH.....OFF
 GASPER FAN.....OFF
 COCKPIT HUMIDIFIER.....OFF
 PACK CONTROL SELECTORS.....OFF
 EXTERIOR LIGHTS.....OFF
 EMERGENCY EXIT LIGHTS.....OFF
 L and R UTILITY POWER SWITCHES.....OFF
 APU.....OFF
 FIRE DETECTION PANEL (after 2 min).....NORMAL
 INTERIOR LIGHTS.....OFF
 STANDBY POWER SELECTOR.....OFF
 BATTERY SWITCH.....OFF



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SPEED LIMITATIONS (IAS)

| | |
|---|-----|
| MANUAL LANDING CROSSWIND..... | 30 |
| AUTOLAND CROSSWIND..... | 25 |
| AUTOLAND ONE ENGINE CROSSWIND..... | 5 |
| AUTOLAND HEADWIND..... | 25 |
| AUTOLAND TAILWIND..... | 10 |
| AUTOLAND CAT III CROSSWIND..... | 10 |
| MAX TURBULENT AIR PENETRATION >15000..... | 290 |
| MAX LANDING GEAR, EXTENSION..... | 270 |
| MAX LANDING GEAR, EXTENDED..... | 320 |
| MAX FLAPS EXTENSION, FLAPS 1..... | 280 |
| FLAPS UP STALL SPEED..... | 175 |
| FULL FLAPS STALL SPEED..... | 122 |

FLAPS EXTENSION SPEED (IAS)

| | |
|---------------|-----|
| FLAPS 1..... | 280 |
| FLAPS 5..... | 260 |
| FLAPS 10..... | 240 |
| FLAPS 20..... | 230 |
| FLAPS 25..... | 205 |
| FLAPS 30..... | 180 |

WEIGHTS (LBS)

| | |
|--------------------------------------|---------|
| MIN ZERO FUEL (ZFW)..... | 397.000 |
| MAX ZERO FUEL (MZFW)..... | 535.000 |
| MAX TAXI (MTW)..... | 877.000 |
| MAX TAKE OFF GROSS (MTOG)..... | 875.000 |
| MAX LANDING (MLW)..... | 630.000 |
| MAX PAYLOAD..... | 138.000 |
| MIN LANDING FUEL, DOMESTIC..... | 19.000 |
| MIN LANDING FUEL, INTERNATIONAL..... | 24.000 |

WEIGHTS (KG)

| | |
|--------------------------------------|---------|
| MIN ZERO FUEL (ZFW)..... | 180.076 |
| MAX ZERO FUEL (MZFW)..... | 242.671 |
| MAX TAXI (MTW)..... | 397.800 |
| MAX TAKE OFF GROSS (MTOG)..... | 396.893 |
| MAX LANDING (MLW)..... | 285.763 |
| MAX PAYLOAD..... | 62.595 |
| MIN LANDING FUEL, DOMESTIC..... | 8.618 |
| MIN LANDING FUEL, INTERNATIONAL..... | 10.886 |

LANDING WIND RULE

Vref plus 1/2 steady headwind component plus full gust wind component - but not more than in total 20 kts.

AUTOBRAKE LANDING DISTANCE

| AUTOBRAKE SETTING | APPROACH SPEED (KIAS) | | | | | | | | |
|-------------------|-----------------------|------|------|------|-------|-------|-------|-------|-------|
| | 120 | 130 | 140 | 150 | 160 | 170 | 180 | 190 | 200 |
| 1 | 6300 | 7200 | 8100 | 9100 | 10300 | 11400 | 12600 | 14000 | 15300 |
| 2 | 5400 | 6000 | 6800 | 7700 | 8600 | 9500 | 10500 | 11600 | 12600 |
| 3 | 4800 | 5300 | 6000 | 6600 | 7500 | 8300 | 9100 | 10000 | 10900 |
| 4 | 4000 | 4600 | 5000 | 5600 | 6200 | 6800 | 7600 | 8300 | 9000 |
| MAX AUTOBRAKE | 3400 | 3800 | 4200 | 4600 | 5000 | 5500 | 6000 | 6600 | 7000 |

The distances are valid with or without reverse thrust and include 1200 ft of air distance.
Tailwind adjustment per 10 knots:

| | | | |
|----------------|-------|------------------|-------|
| Autobrake 1 -> | +2050 | Autobrake 4 -> | +1100 |
| Autobrake 2 -> | +1650 | Autobrake Max -> | +800 |
| Autobrake 3 -> | +1400 | | |