Pre-Start Checklist

Parking Brake SET Throttle IDLE Fuel Flow CUTOFF **BATT Master Switch ON** Panel Lights ON if required Landing Gear Lever CHECK DOWN Flaps UP Spoiler RETRACTED **Fuel Quantity CHECK** Pitot Heat / Anti-Ice OFF Flight controls FREE AND CORRECT Fasten Seat Belts ON No Smoking Sign ON **Elevator Trim TAKEOFF SETTING** Avionics ON FMC CPU1/CPU2 ON Check Weather (Atis, Flight Services) Anti-Ice TEST/CHECK **Request Clearance** Transponder STANDBY Beacon ON

Startup Checklist

Thrust Levers IDLE Engine Area CLEAR Fuel Flow Switches ON APU Switch ON wait until "ON" light turns on, set APU to START Central Engine Starter Switch Pos. 1 Start Button Engine 1 START (hold until engine starts) Central Engine Starter Switch Pos. 2 Start Button Engine 2 START (hold until engine starts) Central Engine Starter Switch CENTER POSITION APU Switch ON

Before Taxi Checklist

Nav Lights ON Taxi Lights / Runway Turnoff Lights ON Heading Indicator/Altimeters SET Radios and Avionics SET FOR DEPARTURE Autopilot SET, ARM, don't activate Autothrottle SET, ARM, don't activate F/D ON Yaw Damper ON Autobrake RTO *Request Taxi Clearance*

Taxi Checklist

Parking Brake RELEASE Brakes CHECK during taxi Directional Gyro / Turn Coordinator PROPER IND. during turns Artificial Horizon ERECT during turns Taxi to assigned runway SPEED Max. 20 knots

Before Take-off Checklist

Parking Brake SET Throttle IDLE Elevator Trim SET for takeoff Flaps 10 deg Spoilers RETRACTED Flight Instruments CHECKED Engine Instruments CHECK Takeoff Data (V1, VR, V2) CHECK Nav Equipment CHECK Landing Lights ON Ta xi Lights / Runway Turnoff Lights OFF Strobe Light ON Pitot Heat ON Anti-Ice AS REQUIRED Transponder ON **Request Takeoff Clearance**

Take-off Checklist

Smoothly increase thrust to 40% N1 let spool up Takeoff Thrust FULL or TO/GA Brakes RELEASE V1 = 450 KIAS (descision) Vr = 145 KIAS (rotate) Pitch 10 deg. nose up V2 = 150 KIAS (safety speed) At Positive Climb Rate Touch Brakes Landing Gear RETRACT At 180 KIAS (V2 + 30) RETRACT Flaps to 5 deg At 210 KIAS (V2 + 60) RETRACT flaps up

Climb-out Checklist

Throttle AS REQUIRED Trim for 250 KIAS / 1800 fpm Autopilot/Autothrottle CHECK and ACTIVATE Autobrake OFF Below 10000' max. speed 250 KIAS *ATC AS REQUIRED* Fasten Seat Belts OFF No Smoking Sign OFF Above 10000' speed 300 KIAS Landing Lights OFF

Cruise Checklist (above FL 180)

At Transition Altitude (FL180) set Altimeter to 29,92" (1013mb) Accelerate to cruise speed FL180 0.68 mach (332 KIAS) FL240 0.75 mach (330 KIAS) FL280 0.80 mach (325 KIAS) FL330 0.80 mach (292 KIAS) Engine+Instruments CHECK Fuel Quantity CHECK Radios TUNED and SET Autopilot CHECK and SET Lights as required

Descent Checklist

Atis/Airport Information CHECK Altimeter CHECK Radios SET Anti-Ice AS REQUIRED Descent Speed to FL240 0.78 mach to FL180 0.68 mach At Transition Altitude (FL180) reset Altimeter to local to FL120 300 KIAS below 10'000ft 250 KIAS Fuel Quantities and Balance CHECK Flaps / Landing Gear CHECK UP Check Weather (ATIS, Flight Services)

Approach Checklist

Localizer Level Flight : Fasten Seat Belts ON No Smoking Sign ON Avionics + Radios SET Speed: Establish 220 KIAS Landing Lights ON Flaps 5 degree Speed: Establish 200 KIAS Auto Spoilers ARM Autobrake SET Flaps 10-15 degrees Speed: Establish 180 KIAS Flaps 20 degrees Speed: Establish 165 KIAS Landing Gear DOWN Turning toward runway: set flaps 25 degrees or FULL Final Glideslope Descent: Speed Establish 155 KIAS **Elevator Trim AS DESIRED** Parking Brake VERIFY OFF Anti-Ice AS REQUIRED

Landing Checklist

Autoland Available ? Landing Gear CHECK DOWN Autopilot and Autothrottle OFF Landing Speed 145 KIAS After touchdown Apply Reverse Thrust, at 60 kts: Cancel Reverse Thrust Spoilers VERIFY EXTENDED Brakes AS REQUIRED Autobrake OFF

Taxi To Ramp

Strobe Light OFF Flaps UP Spoilers RETRACTED Taxi Lights / Runway Turnoff Lights ON Landing Lights OFF Speed Max. 20 knots Transponder 1200 / OFF Elevator Trim TAKEOFF SETTING

Shutdown Checklist

Parking Brake SET Throttle IDLE Passenger Signs OFF Pitot Heat OFF Anti-Ice OFF Taxi Lights / Runway Turnoff Lights OFF Nav Lights OFF F/D OFF Avionics OFF Fuel Flow OFF Beacon OFF Panel Lights OFF BATT Master Switch OFF

Securing Aircraft

Parking Brake Verify SET Throttle Verify IDLE All Switches Verify OFF