AIRCRAFT AND SIMULATOR SETUP

1. Time / Weather / A/C Position ..... **As Chosen**

    --- IF FLYING ON IVAO ---

    a. A/C Position ..... **Free of other traffic**

    b. IVAO Pilot Client ..... **Connect**

2. EFB > Home > Flight Details ..... **Import Simbrief Flight Plan**
3. Sidestick, Throttle, Rudders, External Monitor ..... **Connected**
4. MSFS Pop-Out Panel Manager ..... **Start Pop-Out**

ELECTRICAL POWER UP

1. Battery ..... **On**
2. C1 & C2 ELEC Hydraulic Pumps ..... **OFF**
3. Hydraulic Demand Pumps ..... **OFF**
4. Wipers ..... **OFF**
5. LDG Gear ..... **DOWN**
6. ALTN Flaps ..... **OFF**

--- Establish Electrical Power ---

7. L & R BUS TIE ..... **AUTO**

    --- IF EXT PWR AVAIL ---

    a. PRIMARY & SECONDARY EXT PWR ..... **ON**

    b. APU ..... **ON**

    --- IF NO EXT PWR AVAIL ---

    c. APU ..... **ON, then START**

8. PARKING BRAKE ..... **SET**

OUTSIDE INSPECTION

1. Tires ..... **Check Condition**
2. Brake Pins ..... **Check not flush with boundary**

    --- IF MAINTANANCE REQUIRED ---

    a. EFB > Ground Operations > Ground Maintenance ..... **Perform**

PRELIMINARY PREFLIGHT PROCEDURE

1. Electrical Power Up ..... **Completed**
2. ADIRU ..... **ON**
3. EMER LIGHTS ..... **Guard Closed**
4. LWR CTR Display ..... **STAT page**
   a. Hydraulic Quantities ..... **Verify Sufficient (no RF)**
   b. APU Oil QTY ..... **Verify Sufficient (no RF)**
   c. Messages ..... **Only Expected**
5. LWR CTR Display ..... **ENG page**
   a. Oil QTY ..... **Verify Sufficient**
   b. Flight < 6h: >= 17
   c. Flight > 6h: >= 20
6. EICAS Messages ..... **Only expected**
7. Oxygen ..... **Test**
8. CHKL ..... **PREFLIGHT**

FMC Setup

1. Menu > FMC > IDENT ..... **Check Information Correct**
   a. A/C Type
   b. Engine Type
   c. NAV DATA Cycle
2. POS INIT ..... **Copy GPS Pos into Inertial Pos**
3. ROUTE > Route Request ..... **Select desired route**
   a. SET PAYLOAD
   b. SET FUEL
4. SELECT RTE ..... **Wait for Uplink**
   a. ROUTE UPLINK ..... **Load (Takes some time)**
   b. ACTIVATE > EXEC
5. FS Actions ..... **Set Desired PAX and CARGO**
6. DEP ARR ..... **Enter Departure and Arrival**
   a. GO > PREV PAGE **LEGS > PREV PAGE until DISCONTINUITY > Last WP that is part of route**
7. RTE ..... **RTE COPY**
8. LEGS ..... **Verify DEP, Route, and ARR correct**
   a. Be aware that SPEED restrictions without ALT restrictions will be missing from procedure
   b. WP180/25 ..... **Waypoint WP at Radial 180 for 25 NM**
9. LEGS > RTE DATA (ND no PLAN mode) ..... **WIND DATA LOAD, then EXEC**
10. FMC COMM > UPLINK DES FORECAST ..... **LOAD**
11. PROG ..... **Compare shown ground distance to planned distance**
12. RTE page > NEXT PAGE ..... **Compare Uplinked route to flight plan**
13. NAV RAD ..... **Frequencies as desired**
14. FIX ..... **Draw visual helpers**
    a. MSA around aerodrome
    b. Others according to procedures
15. VNAV ..... **Check TA**
16. INIT REF > PERF INIT > PERF INIT DATA ..... **ACCEPT**
    a. Uplinks Reserves, Cruise Level, and Cost Index
    b. Min Fuel Temp ..... **Verify (JetA1 -44Â°C, JetA -37Â°C)**
    c. CRZ CG can be left at 7.5% or set to 30%

COCKPIT PREPARATION

1. BROADBAND SYSTEM SWITCH ..... **Guarded**
2. ADIRU Switch ..... **ON**
3. THRUST ASYM COMP ..... **AUTO**
4. PRIMARY FLIGHT COMPUTERS ..... **Guarded & OFF light extinguished**
5. BATTERY ..... **ON**
6. IFE/PASS Switches ..... **ON**
7. APU GEN ..... **ON**
8. APU Switch ..... **ON & OFF light extinguished**
9. L & R BUS TIE ..... **AUTO**
10. EXT PWR ..... **As Needed**
11. GEN ..... **ALL ON**
    a. DRIVE DISC Switches ..... **Guarded & up**
12. VOICE RECORDER ..... **ON**
13. EMER LIGHTS ..... **Armed & Guarded**
14. SERV ITPH ..... **OFF**
15. WINDOW HEAT ..... **ON**
16. RAM AUR Turbine SW ..... **Guarded**
17. HYD ENG PUMPS L & R ..... **ON**
    a. Remaining Pumps ..... **OFF**
18. NO SMOKING / NO ELECTRONICS ..... **AUTO**

-- AFTER REFUELING COMPLETED ---

19. SEAT BELTS ..... **ON**
20. Flight Deck lights ..... **As Needed**
21. LANDING Lights ..... **OFF**
22. CARGO FIRE SW ..... **Not Armed**
    a. DISC SW ..... **Guarded**
23. ENGINE EEC MODE ..... **Norm & Guarded**
24. START PANEL ..... **Norm for both engines**
    a. AUTOSTART SW ..... **ON**
25. FUEL JETTISON NOZZLES ..... **OFF & Guarded**
    a. FUEL TO REMAIN ..... **Pushed In**
    b. ARM SW ..... **Disarm**
26. Fuel Pumps ..... **OFF**
    a. CROSSFEED ..... **OFF**
    b. L FWD pump feeds APU
27. ANTI-ICE ..... **AUTO**
28. OUTSIDE Lights

--- DAYLIGHT ---

a. NAV ..... **ON**

TAKEOFF PERFORMANCE CALCULATION

1. LWR ECAM > COMM > Flight Information > TWIP Request ..... **Get Current Weather**
2. ZFW & TO CG ..... **MENU > FS ACTIONS > PAYLOAD**
3. EFB > Performance Tool > Take Off ..... **Calculate TO Performance**
   a. Verify RWY Length Correct
4. FMC > THRUST LIM
   a. Selet RTG (Take Off Rating)
   b. Enter Sel Temp
   c. Check D-TO N1 close to %N1 from Performance Calculation
   d. CLB Rating will match N1 (keep default selection) (CLB 1 = 10% reduction -> for 90% or r
5. PERF ..... **Enter GR WT and ZFW**
6. TAKEOFF ..... **Enter Flaps & TO CG**
   a. V Speeds ..... **Verify and Enter (EFB has precendence)**
   b. GR WT ..... **Crosscheck**
   c. NEXT PAGE ..... **Verify ACCEL HT**
7. CAPT TAKEOFF page, F/O LEGS page

BEFORE START

1. APU ..... **Verify Running**
2. EXT PWR ..... **Disconnect & Remove**
3. PARKING BRAKE ..... **Verify Set**
4. Chocks ..... **Removed**
5. GND Equipment & Vehicles ..... **Released**
6. Doors ..... **Closed & Armed**
7. MCP ..... **Enter V2, RWY HDG, INIT CLIMB**

   --- IF ROUTING CAN BE FLOWN COMPLETELY VIA FMC ---

   a. LNAV & VNAV ..... **Activate**
8. GND Crew clear of aircraft ..... **Pressurize Aircraft**

   a. R ELEC Demand Pump ..... **AUTO**

   --- ONCE FAULT LIGHT EXTINGUISHED ---

   b. Remaining Demand Pumps & C1 & C2 ELEC Pumps ..... **On**
9. FUEL PUMPS ..... **ON**

   a. CENTER PUMPS only if EICAS message "FUEL in CTR"
10. TRIM ..... **Set**
11. Transponder ..... **XPNDR**
12. CHKL ..... **Before Start**
13. Push and Start Clearance ..... **As Required / Obtained**
14. Beacon ..... **ON**
15. Off-Block Time ..... **Noted**

PUSHBACK AND ENGINE START

1. Pushback ..... **Follow Instructions**
2. Engine L & R ..... **Start**

   a. ENG START Selector ..... **START**

   b. FUEL CUTOFF SW ..... **RUN**

   c. Start Completed Once Red EGT Line Disappears

BEFORE TAXI

1. APU ..... **OFF**
2. ENG ANTI-ICE ..... **As Required / ON**
3. Flaps ..... **TO**
4. Flight Controls ..... **Checked**
5. CHKL ..... **Before Taxi**
6. TAXI Lights ..... **ON**
7. RUNWAY TURNOFF Lights ..... **ON**
8. Taxi Clearance ..... **As Required / Obtained**
9. Brakes ..... **Checked**

--- AT HOLDING POINT ---

10. STROBE Light ..... **ON**
11. WXR & TERR ..... **CAP & F/O**
12. Transponder ..... **TCAS TA/RA**
13. CHKL ..... **Before Takeoff**
14. TAXI & TURNOFF Lights ..... **OFF**
15. Landing Lights ..... **ON**

-- CLEARED FOR TAKEOFF ---

16. Start Time ..... **Noted**
17. Chronometer ..... **ON**

TAKEOFF

1. N1 ..... **55% (extension of EGT gauge)**

--- ONCE ENGINES STABILIZED ---

2. TOGA ..... **Push**
3. Forward column pressure until 80 kts
4. Rotate at around 2Â° - 2.5Â° (one stripe) per second until 15Â° pitch
5. Autopilot at 200ft AGL
   a. 80 kts ..... **HOLD**
   b. 50 ft ..... **LNAV**
   c. 400 ft ..... **VNAV**

AFTER TAKEOFF

1. ENG & WING Anti-Ice ..... **AUTO**
2. CHKL ..... **AFTER TAKEOFF**
3. VNAV page ..... **Open**
4. HDG Bug ..... **Synchronize**
5. Once TO Thrust Over ..... **CHRONO Off**

CLIMB

1. at 10000 ft
   a.