



## ***Cold & Dark Start iFly 737NG***

**Not For Operational Use**

***An IFR flight from Sydney airport to Melbourne airport. 737 NG-600  
From a cold and dark cockpit all the way down to shutdown and securing.***

***Set the Airport and the Gate Sydney airport YSSY Gate 10 heavy***

### ***Electrical power up:***

- 1- The main batteries switch **ON**.
- 2- Standby power switches at **AUTO** position.
- 3- Alternate flaps guard **Closed**.
- 4- Wind shield wipers at the **Park** position.
- 5- Electric hydraulic pumps **OFF**.
- 6- Landing gear **Down**. Check the panel lights and the overhead lights all green.
- 7- Parking brake **Set**.
- 8- Electrical Transfer BUS at **AUTO**.
- 9- **Connect** the ground power.
- 10- Check the Standby power light is **OFF**.
- 11- At the fire panel Check the APU switch is at normal position- overheat detector switches is at normal position –check the fault lights work.
- 12- Check the fire bell ring
- 13- Check the extinguishers
- 14- Check the cargo bay fire alarm works.
- 15- Electric pump No 1 the rear **ON**.
- 16- **Start** the APU. The low oil pressure light turns ON the turns OFF.
- 17- After the APU is stabilized (EGT back to normal) **Connect** APU electric generator both sides.
- 18- **Disconnect** the ground power.



## **Cold & Dark Start iFly 737NG**

### **Preliminary preflight procedure:**

- 1- **Set** both IRS alignments.
- 2- Check the GPS light is **OFF**.
- 3- Check the EEC panel both switches positioned at **ON** and two reverser lights are **extinguished**.
- 4- Check the crew oxygen pressure is about 1500 psi and the passenger oxygen light is **OFF** and the guard is **Closed**.
- 4- Check the oil quantity on the lower DU to be minimum 12.
- 5- Check the hydraulic fluid quantity on the secondary lower DU.

### **CDU preflight procedure:**

- 1- Check the indent page to make sure about the type.
- 2- Go to the position page and set the position. Check IRSs aligns and PFD & ND panels get active.
- 3- At the route page set Origin **YSSY** Runway **16R** and company route **YSSYMMML**.
- 4- **Activate** the route and execute.
- 5- Performance initialization page and enter the information.
- 6- Go to the N1 page and then the take off page and set the flaps and write down V1 & Vr & V2
- 7- At the departure page set Runway **16R** and SID **DEENA4**.
- 8-** At the Arrival page set Runway **16 LOCZ** and STAR ARBEA2 .(or **27ILS** and SID **LIZZ5A**)
- 9- **Write down** the required trim by entering CG magnitude in the take off page.

### **Preflight procedure:**

- 1- Check the flight control Guards are **Closed** and the two lights are **ON**.
- 2- Spoiler guards **Closed**.
- 3- Yaw damper **ON**.
- 4- Check the low quantity and low pressure lights of standby hydraulics is **OFF** .
- 5- Alternate flaps guard is closed and the 4 lights are **OFF**.
- 6- On the navigation panel VHF NAC witch at normal position and IRS switch at **Normal** position.
- 7- Display switch and the control panel switch to be at **AUTO and Normal**.
- 8- Engine start lever lights **ON**.



## ***Cold & Dark Start iFly 737NG***

- 9- Cross feed valve is **Closed**.
- 10- Check the 5 fuel pumps are **OFF**.
- 11- Check the generator drive disconnect guards are **closed** and the two drive lights are **ON** .
- 12- Check the equipment cooling switches at normal position and the two lights are **OFF**.
- 13- Emergency exit lights guard closed and not armed.
- 14- No smoking and fasten seat belt at **Auto**.
- 15- Window heat **ON** and the 4 lights are green.
- 16- Probe heats **OFF** and the 8 lights are **ON**.
- 17- Wing anti ice and engine anti ice **OFF** and the lights are **OFF**.
- 18- Electric hydraulic pumps **OFF** and Engine hydraulic pumps **ON**.
- 19- Check high altitude landing setting.
- 20- Duct overheats light extinguished.
- 21- Temperature selectors at **Auto**.
- 22- Ram doors full **Open**.
- 23- Recirculation FAN **Auto**.
- 24- Packs **Auto**.
- 25- Engine Bleeds **ON** & APU bleed **ON**.
- 26- The six lights OFF (wing body overheat- bleed trip-pack trip )
- 27- Set cabin pressurization to Auto and check the landing altitude.
- 28- Landing lights and taxi lights off.
- 29- Ignition switch at BOTH position and the two engine start switches OFF.
- 30- Anti-collision light **OFF**.
- 31- Flight directors **ON** . Set the course as required
- 32- Bank selector at 25 degrees.
- 33- Autopilot disengage bar at up position.
- 34- Check the EFIS panel.
- 35- **Set** the clock.
- 36- Display unit selectors at normal.
- 37- Check the take off configuration light and cabin altitude lights are **OFF**.
- 38- Check disengages light by the test switch.
- 39- Check the PFD and DU panel.
- 40- Set Auto brake at **RTO** and check antiskid light **OFF**.
- 41- N1 selector and speed reference selector **Auto**.
- 42- Check the primary and secondary engine indication.(Lower DU)
- 43- Check the standby instruments are operative.
- 44- Check the Speed brake is **Down**.
- 45- Reverse thrust levers down and forward thrust levers **Closed**.
- 46- Check the flaps position indicator at zero and flap load relief light is OFF.



## **Cold & Dark Start iFly 737NG**

- 47- Verify engine start levers at cut off position
- 48- Stab trim switches up and locked.
- 49- Check the radio instruments.

### **Call for preflight check list:**

Oxygen 100%  
Navigation transfer and display switches Normal & Auto  
Window heat ON  
Pressurization mode selector Auto  
Altimeter SET  
Parking brake SET  
Engine stars lever CUT OFF

### **Before start procedure:**

- 1- Confirm that the **N1 BUG** is the same as the green reference N1 readouts.
- 2- Set the MCP panel **heading** selector, **VNAV** , **altitude** set.
- 3- Fuel pumps **ON**. ( the center tanks must be 500 kgs at least)
- 4- Anti-collision light switch **ON**.
- 5- **Set** the trim.

## **Push back**

### **Call for the before start check list:**

Fuel pumps **ON**  
CDU preflight Completed  
MCP V2 & heading & Altitude  
Rudder and aileron trim Free and 0 .  
Taxi and take off briefing completed.  
Anti-collision light **ON** .



## ***Cold & Dark Start iFly 737NG***

### ***Engine start procedure:***

- 1- Engine display indicator at the primary mode( to monitor N2)
- 2- Packs **OFF**.
- 3- Engine No.1 start switch at the **GRD** position.
- 4- Look at the N2 for engine 1 and once it reaches to 25% pull up the engine start lever from the cut off position to the IDLE position
- 5- At N2 56% check the oil low pressure light extinguishes.
- 6- Do the same for Engine No. 2 .

### ***Before taxi procedure :***

- 1- Generators 1 & 2 **ON**
- 2- Probe heat **ON**
- 3- Electric hydraulic pumps **ON**.
- 4- Anti ice switches as required
- 5- Packs **Auto** and isolation valve **Auto** .
- 6- APU bleed **OFF**
- 7- APU **OFF**
- 8- **Set** the flaps .
- 9- Check the controls on the secondary lower DU.

### ***Call for the before taxi check list:***

Generators **ON**  
Probe heat **ON**  
Isolation valve **Auto**  
Auto brake **RTO**  
Engine start Levers **IDLE detent**  
Flight controls **Checked**



## **Cold & Dark Start iFly 737NG**

### **Before takeoff procedure:**

- 1- With throttle about 30% taxi with max ground speed 16 kt.
- 2- Select the two engine start switches to **CONT**.
- 3- Set the transponder to **TA/RA**
- 4- Check the center fuel tank and if the quantity is below 2300 kg turn off the related pumps.

### **Call for before take off check list**

Flaps **Green**

Stabilizer trim **Set**

### **Take off procedure:**

- 1- Advance the thrust lever to 40% to check the engines are stable.
- 2- Toga switch and rolling to take off at **Vr**
- 3- After seeing a positive rate of limb landing gears **up**
- 4- Gradually **retract** the flaps
- 5- **Engage** LNav.
- 6- Landing gears **OFF**
- 7- Engine starts switches **OFF**

### **Call for after take off check list**

Engine bleeds **ON**

Packs **AUTO**

Landing gear **UP and OFF**

Flaps **Up no light**

### **Climb procedure**

- 1- If the center tank fuel pump has been OFF during takeoff and if it's quantity is more than 500 kg position it to **ON** above 10000 feet or IAS more than 250 kt.
- 2- If the quantity of the center tank goes under 500 kg turn it's fuel pumps to **OFF**.
- 3- **Set** the altimeter at the transition altitude.
- 4- **Reset** the altitude at any phase on MCP panel otherwise the aircraft will remain at lowest altitude among the settings during the climb.
- 5- **Monitor** the flight parameters and the flight progress on the PFD & ND and CDU and also pay attention to the **T/C** point which is a small green circle on the ND and it is the last point of the climb or top of the climb.



## ***Cold & Dark Start iFly 737NG***

### ***Cruise procedure***

Check the center fuel tank

Check cruising altitude and landing altitude

During the cruise phase you need to be vigilant for any possible failure and be prepared for the related emergency procedures.

Always think ahead

You can monitor flight parameters on the related instruments as well.

### ***Descent check list***

Pressurization landing altitude

Auto brake

Landing DATA Verify

Modify any arrival and approach if necessary prior the descent phase

Set VREF

Set minimums

Set the auto brake

Check the landing speed from the CDU approach menu

### ***Descent procedure***

Press ALT INTV if you want to start early descent.

### ***Approach and landing procedure :***

Altimeter set.

ILS frequency set **109.70** for LOCZ 16 or **109.30** for ILS 27

Approach **ARM**

Both the autopilots **Engaged**

Landing lights ON

Both the ignition switches **CONT**

Speed brake **ARMED**

Flaps down green

Auto brake **SET**.

Landing gears **DOWN**



## **Cold & Dark Start iFly 737NG**

### **After landing procedure:**

- 1-After touch down apply the reverse as required and steer the aircraft manually.
- 2-Before reaching taxi speed auto turn brakes **OFF**
- 3-After exiting the run way turn **ON** taxi lights and turn **OFF** landing lights.
- 4- **Retract** spoilers and flaps
- 5- **Start** APU
- 6-Probe heats **OFF**
- 7-Engine stars switches **OFF**
- 8-Transponder **Standby**
- 9-Taxi to the designated gate

### **Shutdown procedure:**

- 1-Parking brakes SET
- 2-Connect **APU** or **Ground power**
- 3-APU bleed **ON**
- 4-Move engine start levers to **CUTOFF** position.
- 5- Fasten seat belts **OFF**
- 6- Anti collision light OFF
- 7- Anti ices **OFF**
- 8- Packs **AUTO** isolation valve **OPEN**
- 9- Flight directors **OFF**
- 10- APU **OFF**

### **Call for shutdown check list**

- Fuel pumps **OFF**
- Probe heat **OFF**
- Hydraulic panel **SET**
- Flaps **UP**
- Parking brake **Set**
- Engine start levers **CUT OFF**





## ***Cold & Dark Start iFly 737NG***

### ***Secure procedure***

Turn OFF both IRS  
Emergency Exit lights **OFF**  
Windows heat **OFF**  
Packs **OFF**  
Ground power OFF  
Battery switch **OFF**

### ***Call for securing check list***

IRSs OFF  
Emergency exit lights **OFF** windows heat OFF  
Packs **OFF**