

Power Up

- **All Electrical Switches Off**
- Check all electrical switches are off
- Check all bilge pump switches are off
- Check battery master switch is off

- **Master Magneto and Switches Off**

- Check master magneto is pulled
- Check magneto switches are in off position

- **Gear Lever Down**

- Check gear lever is in down position and lock is in locked position

- **Battery Master Switch On**
- **Battery Voltage**

Check

- Minimum voltage 21 volts

- **GPU (if avail) Connect**

- Connect and start GPU
- Check voltage on GPU (26-28 V)

- **Parking Brake Set**

- Check Hydraulic pressure (Min 800 psi)
- Sit down in right hand seat and set parking brakes

- **Cowl Gills Open**

- Set cowl gills to full open position with spring-loaded switches

- **Battery Master Switch Off**

/On

- In case no GPU is available switch off battery master switch
- In case GPU is available leave battery master on to recharge the battery

- **Avionics Check**

- Check if VHF 1/NAV1 and VHF2/NAV2 and transponder are switched off
- Check if GPS is properly installed and switched off

- **Hydraulic aux. Pump**

Check

- Switch pump on and Check pump is momentarily on operation

- **Clock Check**

- Check if clock is running and showing right time
- Do not wind clock all the way tight

- **Emergency Shut Off Valves Open**

- Check the two guards are closed

- **Throttles Cracked**

- Open throttles appr. ¼ inch

- **Prop Levers Full Fine**

- Check prop levers fully forward

- **Mixtures I.C.O.**

- Check mixture levers are in idle-cut-off position

- **Master Magneto In**

- Check master magneto switch is pushed in

- **Magneto Switches Off**

- – Check both magneto switches are in the off position

- **Fuel Quantities Gals/Hr**
- Mention amount of Gallons and Endurance
- **Altimeters Set**
- Check both altimeters are set to current QNH value

Before Starting

- **Battery Master Switch On**
- **Windows Doors and Hatches Closed**
- **Cowl Gills Open**
- **Radio Master Switch On/Off**
- Switch Radio Master On
- Check if intercom is working
- Request start up, radio master switch Off
- **Anti Collision Light On**

Check that:

- Battery Switch is ON (27 volts minimal, reload aircraft when battery is low)
 - All other electrical switches are OFF
 - Cowl Gills are OPEN
 - Parking Brakes are SET
- Switch to Back Wall View

1. Beacon light ON
 2. Right Fuel Selector to BOTH
 3. Right Mixture Control to FULL RICH
- Switch to Main Virtual Cockpit View
4. Throttle slightly open (cracked)
 5. Right Fuel Booster to ON
 6. Right Starter ON and wait 6 seconds (12 blades count)
 7. Right Prime to ON for a 4 seconds and repeat and
 8. Immediately Right Magneto to BOTH
 9. When engine starts Right Mixture Control to AUTO RICH
 10. Right Starter to OFF
 11. Right Fuel Booster to OFF
 12. Repeat for Left Engine
- When engine does not start
- Starter to OFF
 - Fuel Boost to OFF
 - Ignition to OFF
 - And repeat with at item 4 with more priming

Before Taxi

- **Oil Pressure Check**
- Check oil pressure between 80-100 psi
- **Booster Pumps Off**
- **Fuel Pressure Check**

- Check fuel pressure between 14-16 psi
 - **Hydraulic/ Brake Pressure Check**
 - Check pressure between 850-1050 +/- 50psi
 - **Temperatures Check**
 - Check oil temp between 40°-100°C before using the engines
 - Check cylinder head temp between 120°-200° C before using engines
 - **Suction Check**
 - Check pressure between 2.8 –4.5 psi
 - **Generators/ Radio Master switch On**
 - **Radio's On**
 - Switch VHF/NAV1 and VHF/NAV2 On
 - Switch Transponder Stby
 - Set Transmit/ Receive panel for departure
 - **Nav/Comm Setup Set**
 - Set VHF/NAV1 and VHF/NAV2 to proper frequencies
 - Switch GPS master on
 - Set GPS for intended flight
 - **Gyros Set**
 - **Ground Equipment**
- Removed**

Taxi Out

- **Brakes Check**
- Check brakes and announce
- **Gyros and Instruments Check**
- Check gyros in turn
- Check instruments
- **Carburetor Heat (First Flight Only) Check**
- Open valves with spring-loaded switch and check light is on
- Close valves and check lights are out (wait 2 minutes before take-off)

Run-Up

This check may be done without checklist, PNF will do checklist after run-up

- **Mixture Auto Rich**
- Check mixture in Auto-Rich position
- **Temps & Pressures Check**
- Check all temps and pressure gauges are indicating in the green
- **RPM 1700 Set**
- **Feather Buttons**
- Checked**
- Push feather button individually and verify RPM drop with Ampere increase in the ampere gauge. Do not let RPM drop below 1200 RPM
- **Propeller lever Cycle**

○ With warm oil, one cycle is sufficient, otherwise cycle 3 times to create a warm oil flow in the propeller dome.

• **Magnetos Check**

○ Check L/R magneto per engine

• **Power lever Idle**

○ Verify idling RPM

• **1000 RPM Set**

Before Take Off (land + sea)

• **Wing Floats Check**

○ With water landing intended run floats all the way down and up with generators online (more than 1200 RPM)

• **Gear A/R**

○ Clearly state configuration

• **Hydraulic Pressure**

Check

○ Check pressure between 850-1050 +/- 50psi

• **Transponder On**

• **Carburetor Heat**

Cold

○ Check carburetor valve lights are out

○ Check if 2 min. have passed since last movement of the valves before T/O

• **Cowl Gills Trail**

○ Close cowl gills and open them to trail position

○ Check generators on-line above 1200 RPM

• **Magneto's Both**

• **Landing and Strobe Lights**

• **On**

• **Pitot Heat A/R**

• **Mixtures Auto Rich**

• **Prop Levers Full Fine**

• **Trims and Tensions Set**

○ Check if Trims and Tensions are properly set for take off

• **Controls Check and**

Free

○ Check flight controls through complete motion

• **Temps and Pressures**

Check

○ Check all temps and pressures are in the green bands

○ Check cylinder head temp(C.H.T.) is between 120° and 200° C

• **Windows Doors and**

Hatches **Closed**

• **Runway Heading Set**

○ Check runway heading against compass and directional gyro and adjust if necessary

After Take Off

• **Gear and Floats Up**

○ In case of land take off check gear fully up and gear handle is locked

- Check if amber nose door closed light is on
- Check if red gear up and locked light is on
- In case of water take off check if floats are visually up
- Check that float motor stopped running
- Set float switch in neutral position

- **Power Set**

- State required power and check

- **Temps and Pressures**

Check

- Check oil pressures
- Check oil temperatures
- Check carburetor temperatures
- Check cylinder head temperatures (C.H.T.)

- **Visual Engine Check Dry**

and Clean

- Each pilot checks his/her side engine on condition

- **Mixture A/R**

- Set mixture lever to Auto Lean if C.H.T. is between 180°-200° C

- **Cowl Gills A/R**

- Set gills to keep C.H.T. between 180°-200° C

- **Carburetor heat**

A/R

- Use carburetor heat to keep carburetor inlet temperature above freezing

- **Generators Check**

- Switch off one gen.- check if load is taken over by other generator & switch back on

- Same for other generator

- **Altimeters Set**

- Mention QNH when cruise is at altitude and mention 1013 when cruise is at level.

- **Landing Lights A/R**

Approach

- **Mixtures Auto Rich**

- **Carburetor Heat As**

Required

- **Cowl Gills As**

Required

- **Landing Lights On**

- **Temps and Pressures**

Check

- **Hydraulic Pressure**

Check

Landing (Land)

- **Gear Down and Check**

- In case of land landing check if gear handle is locked

- Check if green down and lock light is on

- Check visually if main and nose gear is down and locked

- **Brakes and Pressure**

Check

- PF pushes brakes and PNF checks if parking brake is released
- Check brake pressure is sufficient
- **Prop Levers TO GO**
- PNF moves prop levers to full fine on command of PF when he is retarding the throttles to idle in the flare.

Landing (Sea)

- **Gear Up and Check**
- Check if red gear up and locked light is on
- Check physically and visually if main gear is up and locked
- Check visually if nose gear is up through aft window
- **Nose Wheel Doors**

Closed and Check

- Check if amber nose door closed light is on
- Check visually at daylight in nose wheel compartment
- **Wing Floats TOGO/**

Down

- In case of water landing check if floats are visually down
- Check that float motor stopped running
- Set float switch to neutral position
- In rough water it is allowed to lower the floats after touch down
- **Prop Levers TO-GO**
- PNF moves prop levers to full fine on command of PF when he is retarding the throttles to idle in the flare

Taxi In

- **Cowl Gills Open**
- **Landing and Strobe Lights**
- **Off**
- **Pitot Heat Off**
- **Carburetor heat Off**
- **Transponder Stby**

After Parking/Docking

- **Parking Brake A/R**
- **Rudder Lock On**
- **GPS Off**
- **Nav Lights Off**

- **Internal lighting Off**
- **Mixtures I.C.O.**
- **Anti Collision Light Off**
- **Radio Master Switch Off**
- **Battery Master Switch Off**
- **Magneto Switches Off**
- **Master Magneto**

Out

- **Throttles Fwd**
- Move throttles forward to prevent head bumping while trying to get out

Shutdown

- **Parking Brake Release**
- **Cowl Gills Close**