

PRE START (CHALLENGE/RESPONSE)

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|--|---|
| 1. Exterior Inspection | COMPLETED |
| 2. Interior Inspection | COMPLETED |
| 3. Aft Cabin/Cargo Door | CLOSED & SECURED |
| 4. Cargo Compartment Ventilator (if Installed) | CLOSED |
| 5. Locks, Chocks, Gear Pins | REMOVED |
| 6. Manifest & Weight & Balance | COMPLETED/ON BOARD |
| 7. Hydraulic System Quantity and Pressure | CHECKED |
| 8. Firewall Shut Off Valve | OPEN |
| 9. Escape Hatch | SECURED |
| 10. Seats and Rudder Pedals | SET / LOCKED |
| 11. Seat Belts & Shoulder Harnesses | FASTENED |
| 12. Landing Gear | DOWN / LOCKED / PRESSURE |
| 13. Flaps & Handles | UP AND NEUTRAL |
| 14. Parking Brake | SET WITH MANUAL PUMP |
| 15. Cowl Flaps | Switch to OPEN |
| 16. Oil Coolers | OFF |
| 17. Heater | OFF |
| 18. Pitot Heat | OFF |
| 19. Electrical Switches | OFF |
| 20. Generators | ON |
| 21. Radios | OFF |
| 22. Deicing System | OFF |
| 23. Battery Master Switch | ON OR "GND PWR" |
| 24. Beacon | ON |
| 25. Static Source | NORMAL |
| 26. Fuel Selectors | MAINS / OUTBOARD OFF |
| 27. Fuel Quantity | CHECKED/CONFIRMED |
| 28. * Fire Warning Systems (Engine, Heater, Aft Bag) | TESTED (1st Flt of day) |
| 29. Controls | FREE & CORRECT |

STARTING ENGINES (CHALLENGE/RESPONSE)

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|--|---|
| 1. Manifold Pressure | NOTED |
| 2. Carburetor Heat | COLD |
| 3. Mixture | IDLE CUT-OFF |
| 4. Throttles | SET 1/4"-1/2" |
| 5. Propeller Controls | FULL FORWARD |
| 6. * Pre-Oil | As Req'd. (1st Flight of day) |
| 7. Ignition Master Switch & Mags | ON / L&R OFF |
| 8. Boost Pump (Right engine first) | ON |
| 9. Propellers | CLEAR |
| 10. Starter | ENGINE SELECTED & 9 BLADES |
| 11. Prime | AS REQUIRED |
| 12. Ignition | ON BOTH |
| 13. Mixture (When Engine Starts) | AUTO LEAN |
| 14. Pressures and Temperatures | CHECKED NORMAL |
| 15. Boost Pumps | OFF, PRESSURE CHECKED |
| 16. Door Open Light | OFF |

REPEAT START PROCEDURE FOR OTHER ENGINE

AFTER STARTING ENGINES (CHALLENGE/RESPONSE)

1. Battery Master **BATTERY**
2. Vacuum System (if installed) **CHECKED NORMAL**
3. * MAP Lines **DRAINED (1ST FLT OF DAY)**
4. Flight Instruments **CHECKED AND SET**
5. Radios and Inverters (if installed) **ON , CHECKED AND SET**
6. Navigation Lights **AS REQUIRED**
7. Passenger Briefing **COMPLETED**
8. Chocks and Gear Pins **REMOVED & STOWED**
9. ATC Clearance **OBTAINED IF REQD.**
10. Parking Brake **RELEASED**

TAXI (CHALLENGE/RESPONSE)

1. Gear Pins **Pulled as Required**
2. Hydraulic System Pressure **NORMAL (950 – 1100 PSI)**
3. Brakes **ROLL AHEAD AND TESTED**
4. Turn & Bank and Flight Instruments **CHECKED**
5. Seat Belt No Smoking Sign **ON (IF PAX ON BOARD)**
6. Time or Timer **NOTED OR STARTED**

ENGINE RUN-UP (CHALLENGE/RESPONSE)

1. Parking Brake **SET**
2. Tailwheel **LOCKED**
3. Pressures and Temperatures **NORMAL**
4. Mixtures **AUTO RICH**
5. Propellers (1700 RPM) **EXERCISE FULL RANGE**
6. * Carburetor Air (Do not exceed 38 C) **CHECKED (1ST Flt of Day)**
7. Propeller Feathering **CHECKED**
8. Deice Pressure (7.5 – 8.5 PSI) **CHECKED**
9. * Power Check (MAP to Field Barometric Pressure) **CHECKED (1ST Flt of Day)**
10. * Ignition (Max 100 RPM Drop <40 split>) **CHECKED (1ST Flt of Day)**
11. Throttle **1000 RPM – AUTO LEAN**

SPARK PLUG FOULING: LOW POWER – Set RPM to 1200, Energize primer - if no drop manually lean the mixture to a 25 – 50 RPM drop for approximately two minutes. HIGH POWER – Set MP to Field Baro + 5” and mixture to auto lean for 1 minute. Use low power procedure first.

CAUTION: During Flight, DO NOT permit operation with Manifold Pressure to be less than Propeller RPM ÷ 100

BEFORE TAKEOFF (CHALLENGE/RESPONSE)

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|--|--------------------------------------|
| 1. Flight Controls..... | FREE & CORRECT |
| 2. GEAR PINS | PULLED |
| 3. Passenger Briefing..... | COMPLETED |
| 4. Loaded Weight | CONFIRMED |
| 5. Captain's Briefing..... | GIVEN (INC TO PWR & V1/2) |
| 6. Hatches/Doors/Windows..... | SECURED |
| 7. Seat / Belts / Shoulder Harnesses..... | SET |
| 8. Lights & Beacon..... | AS REQUIRED |
| 9. Trim Tabs | SET |
| 10. Throttle Friction | SET |
| 11. Flaps | AS REQUIRED (1/4 =NORMAL) |
| 12. De/Anti Icing Equipment | AS REQUIRED / BOOTS OFF |
| 13. Heater | AS REQD FOR WINDSHIELD |
| 14. Pitot Heat..... | ON – LIGHTS OFF |
| 15. Fuel Selectors | BEST TANKS |
| 16. Carburetor Heat..... | COLD (SEE COLD WX OPS) |
| 17. Propellers/Autofeather (if reqd) | SET / ON (IF REQD) |

When cleared for Takeoff

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|--------------------------------|------------------------|
| 18. Mixtures | AUTO RICH |
| 19. Cowl Flaps & Coolers | CLIMB & SET |
| 20. Boost Pumps..... | ON |

Line Items on the Runway

| | |
|-----------------------------|-----------------------------|
| 21. Directional Gyros | SET / CHECKED ON RWY |
| 22. Transponder..... | ON |
| 23. Tail wheel | LOCKED |
| 24. Timer | STARTED |

AFTER TAKEOFF / CLIMB (NON FLYING PILOT)

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|--|------------------------------------|
| 1. Gear/Flaps/Lights | UP – THEN FLAPS NEUTRAL |
| 2. Initial Climb Power | AS BRIEFED (MAX 45” / 2500) |
| 3. Auto Feather (If Installed)..... | OFF |
| 4. Boost Pumps (above 400 ft AGL)..... | OFF – 1 AT A TIME CK PRES. |
| 5. Pressure and Temperatures..... | NORMAL (MONITOR) |
| 6. Mixtures | AUTO RICH FOR CLIMB |
| 7. Landing Lights | ↑ 3,000 AGL OFF / RETRACT |
| 8. Checklist | CALLOUT “COMPLETED” |

CRUISE (Non Flying Pilot)

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|-----------------------------|-------------------------------------|
| 1. Cruise Power | 2050 / 29.5” (OR PER CHARTS) |
| 2. Cowl Flaps..... | CLOSE (MAINTAIN 170°-180°) |
| 3. Oil Cooler | MAINTAIN 70°-80° |
| 4. Fuel Selectors | AS REQUIRED |
| 5. Seat Belt Sign | AS REQUIRED |
| 6. Flight Log | RECORD OUT / OFF TIMES |
| 7. Mixtures | AUTO LEAN WHEN STABLE |
| 8. Engine Instruments | MONITOR |
| 9. Checklist | CALLOUT “COMPLETED” |

DESCENT (NON-FLYING PILOT)

1. Mixtures.....**AUTO LEAN**
2. Propellers.....**AS REQUIRED**
3. Cowl Flaps.....**AS REQUIRED**
4. Pressure and Temperatures.....**NORMAL**
5. Rate of Descent.....**1000 FPM MAX. WITH PAX**
6. Checklist**CALLOUT "COMPLETED"**

IN RANGE

1. ATIS / FSS / AWES.....**CHECKED**
2. Captain's Briefing.....**GIVEN**
3. Approach Charts.....**REVIEWED**
4. Altimeters.....**SET AND CROSS CHECKED**
5. Directional Gyros.....**SET**
6. Hydraulic Pressures and Quantity.....**CHECKED**
7. Brakes.....**TESTED**
8. Tail wheel.....**LOCKED**
9. Fuel Selectors & Quantity.....**CHECKED**
10. Passenger Seatbelts & No Smoke Sign.....**ON**
11. Checklist**CALLOUT "COMPLETED"**

1. Approach Flaps.....**SET (Below 128 KIAS)**

BEFORE LANDING (NON FLYING PILOT)

2. Mixtures.....**AUTO RICH**
3. Boost Pumps.....**ON**
4. Deicer Boots.....**OFF**
5. Cowl Flaps/Oil Coolers.....**CLIMB / SET**
6. Landing Lights.....**EXTENDED (IF REQD.)**
7. Landing Gear.....**DOWN, LOCKED, PRESSURE**
8. Heater.....**OFF OR AS REQUIRED**
9. Flaps.....**AS REQUIRED**
10. Propellers.....**FULL FORWARD @ FLARE**
11. Flaps.....**UP ON TOUCH DOWN**
12. Checklist**CALLOUT "COMPLETED"**

AFTER LANDING (NON FLYING PILOT)

1. Mag Check.....**Check Ops**
2. Flight Time.....**NOTED**
3. Flaps.....**UP / NEUTRAL**
4. Cowl Flaps.....**OPEN, OFF**
5. Oil Coolers.....**OFF (OR AUTO)**
6. Boost Pumps.....**OFF**
7. Mixtures.....**AUTO LEAN**
8. Propellers.....**CHECK FULL FORWARD**
9. Pitot Heat.....**OFF**
10. Trim Tabs.....**RESET FOR TAKEOFF**
11. Transponder.....**STANDBY**
12. Landing Lights.....**OFF / RETRACTED**
13. Temperatures & Pressures.....**CHECKED / MONITOR**

SHUT DOWN (CHALLENGE/RESPONSE)

1. Flight and Block Times**Noted**
2. Tail wheel**STRAIGHT & LOCKED**
3. Parking Brake**AS REQUIRED**
(SHOULD BE OFF FOR PARKING IN EXCESS OF 1 HOUR)
4. Seat Belt No Smoking Sign.....**OFF**
5. Heater**COOL TO <30° IF NOT SHUT
DOWN PRIOR TO LANDING**
6. Landing Lights **CONFIRM RETRACTED / OFF**
7. Throttles **1200 RMP / 1 MINUTE**
8. Temperatures**CHECKED**
9. Mixtures **IDLE CUT OFF**
10. Radios and Electrical Switches**OFF**
11. Ignition Switches **OFF**
12. Gear and Flap Handles**SPLIT**
13. Battery Master **OFF**
14. Windows.....**CLOSED**
15. Flight Log.....**COMPLETE (RECORD TIMES)**
16. All Paperwork**COMPLETE
AND IN METAL BOX**

SECURING (CAPT'S RESPONSIBILITY)

1. Gear and Flap Handles**SPLIT**
2. COWL FLAPS **CLOSED (THEN OPEN POS)**
3. FUEL SELECTORS**OFF POSITION**
4. Gear Safety Pins**INSTALLED**
5. Control Locks**INSTALLED**
6. Pitot Covers**INSTALLED**
7. Wheel Chocks**INSTALLED – BRAKE OFF**
8. Drip Pans**POSITIONED**
9. Engine Plugs**AS REQUIRED**
10. Oil Quantity**CHECKED**
11. Engine Tannis Heaters**IN ✓ PWR IF TEMP IS < 40° F.**
12. Interior Cockpit Heater**ON ✓ PWR IF TEMP IS < 40° F.**
13. Tie Downs**AS REQUIRED**
14. Walk AROUND**CHECK FOR DISCREPANCIES**
15. Post Flight Clean Up**REMOVE TRASH, FOLD TIE
DOWNS STRAPS AND NETS, SWEEP FLOOR AS REQD, CHECK SEAT BACKS FOR PAX
BRIEF CARDS – SIC SACS – EAR PLUGS, WASH NACELLES AS REQD.**
16. Metal Box**TO FLIGHT RECORDS DEPT.**