

**BEFORE START**

- |                        |                |
|------------------------|----------------|
| 1. External inspection | COMPLETE       |
| 2. Documents           | CHECK / SIGN   |
| 3. Parking brake       | SET            |
| 4. Seats & belts       | ADJUST         |
| 5. Trim                | NEUTRAL        |
| 6. Controls            | FREE & CORRECT |
| 7. Flaps               | CHECK          |
| 8. Radio master switch | OFF            |
| 9. FD/AP master switch | OFF            |
| 10. Circuit breakers   | CHECK          |
| 11. Passenger briefing | COMPLETE       |

**NORMAL START**

- |                          |                     |
|--------------------------|---------------------|
| 1. Fuel                  | LOWEST TANK         |
| 2. Throttle              | 1 CM OPEN           |
| 3. Mixture               | RICH                |
| 4. Carb. heat            | OFF                 |
| 5. Battery master switch | ON                  |
| 6. Nav lights            | ON                  |
| 7. Fuel pump             | ON / PRESSURE       |
| 8. Left magneto          | ON                  |
| 9. Primer                | AS REQUIRED         |
| 10. Propeller area       | CLEAR               |
| 11. Starter              | ENGAGE, max 10 sec. |
| 12. Throttle             | 1000 RPM            |
| 13. Oil pressure         | CHECK               |
| 14. Alternator           | ON                  |
| 15. Right magneto        | ON                  |

**AFTER START**

- |                          |                |
|--------------------------|----------------|
| 1. External lights       | AS REQUIRED    |
| 2. Fuel pump             | OFF / PRESSURE |
| 3. Radio master switch   | ON             |
| 4. HSI HDG flag          | GONE           |
| 5. Information/clearance | RECEIVED       |

**TAXI**

- |                       |               |
|-----------------------|---------------|
| 1. Altimeter(s)       | SET QNH/CHECK |
| 2. Brakes             | CHECK         |
| 3. Nosewheel steering | CHECK         |

**ENGINE RUN-UP**

- |                       |                    |
|-----------------------|--------------------|
| 1. Parking brake      | SET                |
| 2. Throttle           | 2000 RPM           |
| 3. Magnetos           | CHECK LEFT / RIGHT |
| 4. Carb. heat         | CHECK              |
| 5. Engine instruments | GREEN RANGE        |
| 6. Amperemeter        | CHECK              |
| 7. Vacuum             | 5 inHg (+/- 1 in)  |
| 8. Throttle           | IDLE, ~700 RPM     |
| 9. Fuel pressure      | CHECK              |
| 10. Throttle          | 1000 RPM           |
| 11. Warning lights    | CHECK              |

**BEFORE TAKE-OFF**

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|--------------------------------|--|
| 1. Controls                    | FREE   |
| 2. Flaps                       | SET  |
| 3. Altimeter(s)                | CHECK  |
| 4. Fuel                        | FULLEST TANK   |
| 5. Fuel pump                   | ON / PRESSURE  |
| 6. Magnetos                    | BOTH ON  |
| 7. Carb. heat                  | OFF  |
| 8. Engine instruments          | GREEN RANGE  |
| 9. HSI / compass heading / bug | CHECK / SET  |
| 10. Cabin door                 | LATCH  |
| 11. Seats & belts              | ERECT / LOCK / ADJUST  |
| 12. Departure briefing         | REVIEW   |
| 13. Engine failure procedure   | REVIEW   |
| 14. Vent fan                   | OFF  |
| 15. Transponder                | SQUAWK / ALT   |
| 16. Landing light & strobes    | ON   |
| 17. Review speeds              | V <sub>r</sub> 60 KIAS<br>V <sub>x</sub> 64 KIAS    V <sub>y</sub> 76 KIAS |

**CLIMBOUT**

- |                  |                |
|------------------|----------------|
| 1. Flaps         | UP             |
| 2. Climb power   | 2450 RPM       |
| 3. Climb speed   | 90 KIAS        |
| 4. Fuel pump     | OFF / PRESSURE |
| 5. Landing light | OFF            |

**CRUISE**

- |                          |                  |
|--------------------------|------------------|
| 1. Power                 | CRUISE SETTING   |
| 2. Mixture               | LEAN AS REQUIRED |
| 3. Engine instruments    | CHECK            |
| 4. Fuel balance          | CHECK            |
| 5. HSI / compass heading | CHECK            |
| 6. Carb. heat            | CHECK            |

**DESCENT**

- |                     |                  |
|---------------------|------------------|
| 1. Fuel             | FULLEST TANK     |
| 2. Magnetos         | BOTH ON          |
| 3. Mixture          | ENRICH           |
| 4. Carb. heat       | CHECK / AS REQ'D |
| 5. Altimeter        | SET QNH / CHECK  |
| 6. Arrival briefing | REVIEW           |

**DOWNWIND**

- |                  |                    |
|------------------|--------------------|
| 1. Fuel          | FULLEST TANK       |
| 2. Magnetos      | BOTH ON            |
| 3. Mixture       | RICH               |
| 4. Carb. heat    | ON                 |
| 5. Fuel pump     | ON / PRESSURE      |
| 6. Landing light | ON                 |
| 7. Flaps         | SET / MAX 103 KIAS |

**FINAL**

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|-------------------------------|---------|
| 1. Final speed                | 70 KIAS |
| 2. Carb. heat                 | OFF     |
| 3. Touchdown speed, 40° flaps | 66 KIAS |

**GO-AROUND**

- |               |      |
|---------------|------|
| 1. Power      | FULL |
| 2. Carb. heat | OFF  |
| 3. Flaps      | UP   |

**AFTER LANDING**

- |                  |         |
|------------------|---------|
| 1. Flaps         | UP      |
| 2. Carb. heat    | OFF     |
| 3. Fuel pump     | OFF     |
| 4. Transponder   | STANDBY |
| 5. Pitot heat    | OFF     |
| 6. Landing light | OFF     |
| 7. Strobelight   | OFF     |

**STOPPING ENGINE**

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|-----------------------------------|--------------|
| 1. Throttle                       | 1000 RPM     |
| 2. FD/AP master switch            | OFF          |
| 3. Radio master switch            | OFF          |
| 4. El. switches, except NAV light | OFF          |
| 5. Alternator                     | OFF          |
| 6. Magnetos                       | CHECK GND    |
| 7. Mixture                        | IDLE CUT-OFF |
| 8. Magnetos                       | BOTH OFF     |
| 9. Lights                         | OFF          |
| 10. Battery master switch         | OFF          |

**POST FLIGHT**

- |                    |                       |
|--------------------|-----------------------|
| 1. Documents       | WRITTEN               |
| 2. ATC flight plan | CLOSED (tel.64819000) |
| 3. Aircraft        | CLEANED               |
| 4. Aircraft        | SECURED               |



**PA-28-181 Archer****LN-NEW****ENGINE POWER LOSS IN FLIGHT**

- |                           |              |
|---------------------------|--------------|
| 1. Establish glide        | 76 KIAS      |
| 2. Emergency landing site | LOCATE       |
| 3. Carb. heat             | ON           |
| 4. Fuel selector          | SWITCH TANK  |
| 5. Magnetos               | BOTH ON      |
| 6. Fuel pump              | ON           |
| 7. Mixture                | RICH         |
|                           |              |
| 8. Radio                  | MAYDAY CALL  |
| 9. Transponder            | 7700         |
| 10. Master switch         | OFF          |
| 11. Magnetos              | BOTH OFF     |
| 12. Mixture               | IDLE CUT-OFF |
| 13. Fuel selector         | OFF          |
| 14. Seat belts            | TIGHT        |
| 15. Door                  | UNLATCH      |
| 16. ELT                   | ACTIVATE     |

**ENGINE FIRE**

- |  |              |
|--|--------------|
| 1. Cabin heat & defroster  | OFF          |
| 2. Mixture   | IDLE CUT-OFF |
| 3. Fuel  | OFF          |
| 4. Fuel pump   | OFF          |
|  |              |
| 5. Proceed with items 9-16 in <b>ENGINE POWER LOSS</b> checklist |              |

**ELECTRICAL FIRE**

- |                                |               |
|--------------------------------|---------------|
| 1. Master switch               | OFF           |
| 2. All electrical equipment    | OFF           |
| 3. Cabin vents                 | OPEN          |
| 4. Tripped CBs                 | LEAVE OFF     |
| 5. Restore electrical items    | ONE AT A TIME |
| 6. Land as soon as practicable |               |

**LOSS OF OIL PRESSURE**

1. Land as soon as possible. Prepare possible POWER OFF LANDING (items 9-16 in **ENGINE POWER LOSS** checklist).

**LOSS OF FUEL PRESSURE**

- |                       |             |
|-----------------------|-------------|
| 1. Electric fuel pump | ON          |
| 2. Fuel selector      | SWITCH TANK |

**OPEN DOOR**

- |                    |         |
|--------------------|---------|
| 1. Reduce airspeed | 87 KIAS |
| 2. Cabin vents     | CLOSE   |
| 3. Storm window    | OPEN    |
| 4. Side latch      | LATCH   |
| 5. Top latch       | LATCH   |

**PA-28-181 Archer****LN-NEW****PREFLIGHT INSPECTION**

- |                               |                                      |
|-------------------------------|--------------------------------------|
| 1. Documents                  | CHECKED & ON BOARD                   |
| 2. Tie downs (3) & chocks (3) | REMOVE                               |
| 3. Fuel selector              | LEFT or RIGHT TANK                   |
| 4. Fuel system                | DRAIN 2 TANKS<br>DRAIN FUEL STRAINER |
| 5. Exterior                   | CHECK FOR DAMAGE                     |
| 6. Control wheel              | RELEASE RESTRAINTS                   |
| 7. Magnetos                   | BOTH OFF                             |
| 8. All electric consumers     | OFF                                  |
| 9. Master switch              | ON                                   |
| 10. Fuel quantity gauges      | CHECK                                |
| 11. All external lights       | ON                                   |
| 12. Pitot heat                | ON                                   |
|                               |                                      |
| 13. All external lights       | CHECK                                |
| 14. Stall warning             | CHECK                                |
| 15. Pitot heat                | CHECK HEAT ELEMENT                   |
|                               |                                      |
| 16. Pitot heat                | OFF                                  |
| 17. All external lights       | OFF                                  |
| 18. Master switch             | OFF                                  |
| 19. Flaps                     | SET 1 NOTCH                          |
| 20. Controls                  | FREE & CORRECT                       |
| 21. Trim wheel                | CHECK                                |
|                               |                                      |
| 22. RH wing surface           | FREE OF ICE / SNOW                   |
| 23. RH flaps                  | CHECK                                |
| 24. RH aileron                | CHECK                                |
| 25. RH wing tip               | CHECK                                |
| 26. RH static dischargers     | CHECK                                |
| 27. RH fuel tank              | CHECK, SECURE CAP                    |
| 28. RH fuel tank vent         | OPEN                                 |
| 29. RH main gear struts       | CHECK INFLATION                      |
| 30. RH tire                   | CHECK                                |
| 31. RH brake block & disc     | CHECK                                |
| 32. RH air inlet              | CHECK                                |
|                               |                                      |
| 33. Windshield                | CHECK CLEAN                          |
| 34. Propeller and spinner     | CHECK                                |
| 35. Oil                       | CHECK LEVEL                          |
| 36. Dipstick                  | PROPERLY SEATED                      |
| 37. Cowling                   | SECURE                               |
| 38. Nose wheel tire & strut   | CHECK                                |
| 39. Engine air inlets         | CHECK                                |
| 40. Alternator belt           | CHECK                                |
|                               |                                      |
| 41. LH air inlet              | CHECK                                |
| 42. LH brake block & disc     | CHECK                                |
| 43. LH tire                   | CHECK                                |
| 44. LH main gear struts       | CHECK                                |
| 45. LH fuel tank vent         | OPEN                                 |
| 46. LH fuel tank              | CHECK, SECURE CAP                    |
| 47. Pitot tube                | REMOVE COVER<br>CHECK 3 HOLES        |
|                               |                                      |
| 48. LH wing tip               | CHECK                                |
| 49. LH static dischargers     | CHECK                                |
| 50. LH aileron                | CHECK                                |
| 51. LH flaps                  | CHECK                                |
| 52. LH wing surface           | FREE OF ICE / SNOW                   |
|                               |                                      |
| 53. Antennas                  | CHECK                                |
| 54. Stabilator & trim tabs    | CHECK                                |
| 55. Rudder                    | CHECK                                |
| 56. Static dischargers        | CHECK                                |
|                               |                                      |
| 57. Baggage                   | STOW & SECURE                        |
| 58. Baggage door              | CLOSE & SECURE                       |

