

## **\*EMERGENCY PROCEDURES\***

## **PIPER CHEROKEE ARCHER II**

**PA28-181**

**This is not an FAA Approved Checklist and is to be used for General Purposes Only**

### **ENGINE FAILURE**

#### **IMMEDIATELY AFTER TAKEOFF**

1. Airspeed - MAINTAIN SAFE AIRSPEED
2. Fuel Selector Valve - OFF
3. Fuel Pump - OFF
4. Mixture - IDLE CUT-OFF

#### **DURING FLIGHT**

1. Airspeed - 87mph
2. Fuel Selector - SWITCH TO OTHER TANK
3. Mags - BOTH
4. Fuel Pump - ON
5. Alternate Air - ON
6. Engine Gauges - CHECK

### **FORCED LANDINGS**

#### **EMERGENCY LANDINGS W/OUT ENGINE POWER**

1. Airspeed - 87mph
2. Mixture - IDLE CUT-OFF
3. Fuel Selector Valve - OFF
4. Mags - OFF
5. Flaps - AS REQUIRED
6. Doors - UNLATCH PRIOR TO TOUCHDOWN
7. Master Switch - OFF
8. Touchdown - SLIGHTLY TAIL LOW
9. Brakes - APPLY HEAVILY

#### **PRECAUTIONARY LANDING WITH ENGINE POWER**

1. Airspeed - 87mph
2. Flaps - 25°
3. Select Field - FLY OVER, noting terrain and obstructions.
4. Electrical Switches - OFF
5. Flaps - 40° (on final approach)
6. Airspeed - 76mph

|              |           |
|--------------|-----------|
| Vso - 61 mph | Vfe - 115 |
| Vs - 68      | Va - 124  |
| Vx - 74      | Vno - 140 |
| Vy - 87      | Vne - 171 |

Best Glide - 87

#### **BEFORE STARTING ENGINE**

1. Preflight Inspection - COMPLETE
2. Seats, Belts, Shoulder Harnesses - ADJUST and LOCK
3. Fuel Selector Valve - ON FULLEST TANK
4. Avionics Power Switch - OFF
5. Autopilot - OFF
6. Electrical Equipment - OFF
7. Brakes - TEST and SET
8. Flaps - RETRACTED
9. Circuit Breakers - ✓

#### **STARTING ENGINE - NORMAL**

1. Carburetor Heat - OFF
2. Mixture - RICH
3. Throttle - OPEN 1/2"
4. Prime - As Required (Skip when HOT)
5. Master - ON
6. Rotating Beacon - ON
7. Fuel Pump - ON
8. Starter - ENGAGE
9. Throttle - 1000 RPM warm up
10. Oil Pressure - ✓ within Green arc
11. Fuel Pump - OFF

#### **AFTER START**

1. Lights - As Required
2. Radios - SET
3. Transponder - SBY, 1200
4. DG - SET
5. Mixture - LEAN for Taxi
6. Parking Brake - Release
7. Brakes & Steering - ✓

#### **WHILE TAXING (IFR ✓)**

1. Attitude indicator - ERRECT & STABLE, TURN TIP ≤ 5°?
2. Turn coordinator - SKIDDING TURNS

#### **BEFORE TAKE OFF - (IFR ✓)**

1. IFR Clearance? - AS NEEDED
2. Clock - SET
3. Magnetic compass - KNOWN HEADING
4. DG - ✓ SET
5. Marker beacon - TEST then LOW
6. VOR - IDENT, if Possible
7. Airspeed - ZERO
8. Altimeter - SET ± 75 FEET
9. Vertical speed - ZERO

**BEFORE TAKEOFF - RUN UP**

1. Cabin Doors and windows - CLOSED and LOCKED
2. Parking Brake - SET
3. Flight Controls - FREE and CORRECT
4. Flight Instruments - SET
5. Fuel Selector Valve - ON FULLEST TANK
6. Elevator Trim - TAKEOFF
7. Mixture - RICH or As Required
8. Throttle - 2000 RPM
  - a. Magnets - ✓
  - b. Carburetor Heat - ✓
  - c. Engine Instruments and Ammeter - ✓
  - d. Suction Gauge - ✓ 5"±/.1
9. Throttle - ✓ IDLE, then 1000 RPM
10. Annunciator Panel - TEST
11. Radios - SET
12. Transponder - SET then ALT
13. Autopilot - OFF
14. Throttle Friction Lock - ADJUST
15. Fuel Pump - ON
16. Lights - As Required
17. Parking Brake - RELEASE

**TAKEOFF - NORMAL**

1. Flaps - 0-10°
2. Power - FULL THROTTLE
3. Elevator Control - LIFT NOSE WHEEL at 60-70mph
4. Climb Speed - 87mph
5. Flaps - RETRACT

**SHORT FIELD TAKEOFF**

1. Flaps - 25°
2. Power - FULL THROTTLE
3. Elevator Control - LIFT NOSE WHEEL at 47-56mph
4. Climb Speed - Vx 74mph, climb past obstacle
5. Climb Speed - Vy 87mph
6. Flaps - RETRACT

**EN ROUTE CLIMB (500-1000'AGL)**

1. Airspeed - 100mph
2. Mixture - FULL RICH (below 3000 feet)
3. Fuel Pump - OFF

**CRUISE**

1. Power - SET
2. Elevator and Rudder Trim - ADJUST
3. Mixture - LEAN above 3000'
4. Engine Instruments - ✓
5. Landing Light - OFF

**DESCENT**

1. Power - AS DESIRED
2. Mixture - ENRICH as required

**BEFORE LANDING**

1. Seats, Belts, Shoulder Harnesses - ADJUST and LOCK
2. Fuel Selector Valve - PROPER TANK
3. Mixture - RICH below 3000'
4. Fuel Pump - ON
5. Landing Light - ON
6. Autopilot - OFF

**LANDING - NORMAL**

1. Airspeed - 86mph
2. Flaps - AS DESIRED (below 125mph)
3. Airspeed - 76mph w/ 40° flaps

**SHORT FIELD LANDING**

1. Airspeed - 86mph
2. Flaps - 40° (below 125mph)
3. Airspeed - 76mph
4. Trim - ADJUST
5. Power - REDUCE to idle as obstacle is cleared.
6. Touchdown - MAIN WHEELS FIRST
7. Brakes - APPLY HEAVILY
8. Wing Flaps - RETRACT for maximum braking

**AFTER LANDING**

1. Flaps - RETRACT
2. Electric Fuel Pump - OFF
3. Transponder - SBY
4. Lights - As Required
5. Mixture - LEAN for taxi

**SECURING AIRPLANE**

1. Parking Brake - SET
2. Throttle - IDLE 1000 RPM
3. Avionics Power Switch - OFF
4. Electrical Equipment - OFF, except Beacon
5. Mixture - IDLE CUT-OFF
6. Beacon - OFF
7. Ignition Switch - OFF
8. Master Switch - OFF
9. Control Lock - INSTALL