



**PIPER CHEROKEE PA28-140**

**GENERAL INFORMATION**

**PRE-FLIGHT**

**TIME SENSITIVE**

**EMERGENCY**

**PIPER CHEROKEE 140**

**CHECKLIST**

*[FLIGHT PLAN DESIGNATION IS "PA28A"]*

**EMERGENCY CONTACT**

The following are First Landings' emergency contact telephone numbers. We ask that you call the numbers in the order listed. In addition, please continue down the phone list until you reach someone. Please do not assume a voice message left on one of the numbers will be immediately received.

<b>Office</b>	<b>(407) 886-7612</b>
<b>Peter Lankester</b>	<b>(352) 362-8722</b>
<b>Jim Williams</b>	<b>(239) 938-5796</b>
<b>Adam Valencic</b>	<b>(407) 557-7909</b>

**INFO:**

Engine .....Lycoming O320-E2A  
Rated HP .....150 BHP @ 2700 RPM  
Oil Type .....Phillips X/C (20w-50 or 100w)  
Oil Capacity .....8 qts.  
Fuel .....100LL or 80/87  
    ....Dual Tanks  
    ....25 Gal per side  
    ....50 Gal total  
    ....1 Gal unusable each wing

## AIRCRAFT V SPEEDS & LIMITATIONS

	MPH	KIAS
V <sub>R</sub> .....	45-50	38-43
V <sub>X</sub> .....	74	68
V <sub>Y</sub> .....	85	77
V <sub>NE</sub> .....	171	148
V <sub>NO</sub> .....	140	121
V <sub>A</sub> .....	129	112
V <sub>FE</sub> .....	115	100
V <sub>S1</sub> .....	64	55
V <sub>S0</sub> .....	55	48
V <sub>G</sub> .....	80	70
Max demonstrated cross wind .....	17 Kts.	
Gross Weight .....	2150 lbs	
Max ceiling (gross) .....	14,300'	
Take-off run (@SL gross) .....	800'	
Landing run (@SL gross) .....	535'	
Take-off run 50ft (@SL gross) .....	1,700'	
Landing run 50ft (@SL gross) .....	1,075'	

**75% power, 7000' (130 MPH)**

**Useful Load - N95315 853.8lbs**

**Intentional Spins - Prohibited**

## PREFLIGHT INSPECTION

Preparation: Remove gust locks, Tie Down Ropes, Pitot Tube Cover, Other Plane Protection Items/Covers.

Roll plane, back and forth to check all tires

### CABIN

- ⊗ Hobbs & Tach ..... Check and Record
- ⊗ Documents ..... AROW
- ⊗ Ignition & Master ..... Off
- ⊗ All Electrical ..... Off
- ⊗ Trim Tabs ..... Neutral Position
- ⊗ Avionics ..... Off
- ⊗ Master (Clear Area) ..... On
- ⊗ Fuel Gauges ..... Check Quantities
- ⊗ Flaps ..... Full Down
- ⊗ Lights ..... Check
- ⊗ Master ..... Off
- ⊗ Fuel Select Control ..... On Fuller Tank

### WARNING

**For Flight Safety, Pilot Should Verify Actual Fuel Quantity Visually in Tanks Before Takeoff.**

### EXTERIOR CHECK

- ⊗ Right Flap ..... Check Hinges, Connections
- ⊗ Right Aileron ..... Check Movement, Hinges
- ⊗ Right Wing ..... No Damage, Ice
- ⊗ R. Wing Nav Lt ..... Check
- ⊗ Right Fuel Tank ..... Visually Check Quantity
- ⊗ Right Wing Tie-down ... Remove
- ⊗ Right Fuel Vent ..... Check Clear
- ⊗ Right Fuel Sump ..... Drain & Check
- ⊗ Right Strut ..... Check Inflation
- ⊗ Right Tire, Brake ..... Check Inflation, Wear
- ⊗ Engine Oil Level ..... Check (6-8 qts), Leaks
- ⊗ Spark Plug Wires ..... Check for Wear
- ⊗ Fuel Leaks ..... Check

### EXTERIOR CHECK CONT.

- ⊗ Cowl & Prop ..... Check for Nicks, Security
- ⊗ Alternator Belt ..... Check Wear, Tightness
- ⊗ Air Intake & Filter ..... Check for Obstructions
- ⊗ Landing Light ..... Check
- ⊗ Nose Gear ..... Check Tire & Strut
- ⊗ Hydraulic Fluid Res .... Check to line
- ⊗ Engine Fuel Sump ..... Drain, Check for Water
- ⊗ Windshield ..... Check Clean
- ⊗ Left Fuel Tank ..... Visually Check Quantity
- ⊗ Stall Warning ..... Clear
- ⊗ Left Fuel Sump ..... Drain, Check for Water
- ⊗ Left Strut ..... Check Inflation
- ⊗ Left Tire, Brake ..... Check Inflation, Wear
- ⊗ Left Fuel Vent ..... Check Clear
- ⊗ Left Wing Tie-down ..... Remove
- ⊗ Pitot-Static System ..... Check
- ⊗ Left Wing ..... No Damage
- ⊗ L. Wing Nav Light ..... Check
- ⊗ Left Aileron ..... Check Movement, Hinges
- ⊗ Left Flap ..... Check Hinges, Connections
- ⊗ Left Fuselage ..... Check for Damage
- ⊗ Vertical Stabilizer ..... Check
- ⊗ Beacon Lt ..... Check
- ⊗ Stabilator (Elevator) ..... Check Movement
- ⊗ Anti-Servo ..... Check
- ⊗ Rudder ..... Check
- ⊗ Tail Tie Down ..... Remove
- ⊗ Right Fuselage ..... Check
- ⊗ Antennas ..... Check

### ENGINE START

- ⊗ Tow-Bar ..... Removed/VERIFY
- ⊗ All Seats, Belts, Door .. Set & Secure
- ⊗ Passenger Briefing
  - ⊗ Seat Belt use
  - ⊗ Door Operation
  - ⊗ Emergency Equipment
  - ⊗ Motion Sickness
  - ⊗ Sterile Cockpit
  - ⊗ Cockpit Resource Management Briefing (CRM)
- ⊗ Parking Brake ..... Set ON
- ⊗ Carb Heat ..... Off
- ⊗ Fuel Selector ..... Check on Fuller Tank
- ⊗ Flaps ..... Up (Visually Check)
- ⊗ Trim ..... Neutral
- ⊗ All Electrical Switches · Off
- ⊗ Mixture Control ..... Rich
- ⊗ Throttle ..... Open 1/4"
- ⊗ Prime engine with Throttle if necessary
- ⊗ Prop ..... Call "CLEAR" & Visually Check
- ⊗ Beacon ..... On
- ⊗ Master Switch ..... On
- ⊗ Electric Fuel Pump ..... On
- ⊗ Ignition Switch ..... Start
- ⊗ Throttle ..... Adjust to 800-1000RPM
- ⊗ Oil Pressure ..... Check (Needle In Green)
- ⊗ Mixture ..... Lean 1"
- ⊗ Avionics & Radios ..... On
- ⊗ Transponder ..... STBY
- ⊗ Nav & Taxi Lights ..... On (Night)
- ⊗ Brake Check ..... Before Taxiing
- ⊗ Get ATIS & Clearance .. If Applicable

### WARNING

If Oil Pressure Doesn't Rise Within 10 Seconds,  
Shut Down Engine

## ENGINE RUNUP

- ⊗ Nose Gear ..... Straight
- ⊗ Parking Brake ..... Hold
- ⊗ Throttle ..... 1000 RPM
- ⊗ Cabin Door ..... Closed & Latched
- ⊗ Seat Belts ..... Check Self & Pax
- ⊗ Flight Controls ..... Free and Correct
- ⊗ Trim Tab ..... Set for Takeoff
- ⊗ Fuel Selector ..... Check ON Fuller Tank
- ⊗ Flight Instruments ..... Check & Set
- ⊗ Radios ..... Set for Frequencies
- ⊗ Fuel Pump ..... Off, Check Press, Then On
- ⊗ Check L&R Tanks Separately
- ⊗ Mixture Control ..... Rich
- ⊗ Throttle ..... 2000 RPM
- ⊗ R-L Magnetos ..... Max 150 Drop/50 Differential
- ⊗ Carb Heat ..... ON Check RPM Drop, OFF
- ⊗ Ammeter ..... Check Charging
- ⊗ Engine Instruments ..... Check
- ⊗ Throttle ..... 1000 RPM
- ⊗ Mixture Control ..... Lean

## BEFORE TAKEOFF

- ⊗ Fuel Pump.....ON
- ⊗ Mixture ..... Full Rich
- ⊗ Transponder ..... Switch to Altitude
- ⊗ Throttle Friction Lock ... Adjust as Needed
- ⊗ Flaps ..... 10°—25°
- ⊗ Landing & Strokes ..... On (Night)
- ⊗ Directional Gyro ..... Set by Compass
- ⊗ Tower Clearance ..... If Applicable
- ⊗ Take OFF Time.....Noted

## TAKEOFF

- ⊗ Throttle Full, Carb Heat Cold
- ⊗ Rotate ..... 60 KNOTS
- ⊗ Flaps ..... Up
- ⊗ Engine Instruments ..... In Green
- ⊗ Climb Out ..... 77 KNOTS
- ⊗ Elec. Fuel Pump ..... Off at 1000AGL

## CRUISE

- ⊗ Throttle ..... Max 2500 RPM
- ⊗ Mixture ..... Lean Above 3000 Ft.
- ⊗ Fuel Select ..... Alternate Tanks 30 mins

## CAUTION

Check Fuel Gauges Frequently With One Tank Shut Off To Prevent Fuel Starvation.

## PRE-LANDING CHECK

- ⊗ Tune & Get ATIS Info, GPS set Brief Approach
- ⊗ Advise Tower of Distance and Direction From Airport if Applicable
- ⊗ Check Seat Belts ..... Self & Pax
- ⊗ Fuel Selector ..... On Fuller Tank
- ⊗ Fuel Mixture ..... Rich
- ⊗ Electric Fuel Pump ..... On
- ⊗ Landing Light ..... On (Night)

## BEFORE LANDING

- ⊗ Electrical Fuel Pump .. Verify On
- ⊗ Carb Heat.....OFF (unless indication of icing)
- ⊗ Throttle ..... 1500-1700 RPM
- ⊗ Mixture.....FULL RICH
- ⊗ Flap.....10°
- ⊗ Lights.....ON

## FLAPS IF NEEDED:

- ⊗ Flaps .....1st Notch (10°) under 100 KNOTS
- ⊗ Base Leg Flaps ..... 2nd Notch (25°)
- ⊗ Landing Assured Flaps ..... 3rd Notch (40°)
- ⊗ Landing Speed Flare ..... 48-52 KNOTS

### POST LANDING CHECK

- ⊗ Clear Active Runway... Clear/Radio Call
- ⊗ Flaps ..... Retracted
- ⊗ Elec. Fuel Pump ..... Off
- ⊗ Elevator Trim ..... Set to Neutral
- ⊗ Transponder ..... Set to Standby
- ⊗ Contact Gnd. Con. For Clearance if Applicable

### SECURING AIRCRAFT

- ⊗ Avionics & Radios ..... Off
- ⊗ Electrical Switches ..... Off
- ⊗ Mixture ..... Idle Cut-Off
- ⊗ Ignition ..... Off
- ⊗ Master Switch ..... Off
- ⊗ Control Lock ..... In Place
- ⊗ Hobbs Meter & Tach ... Record
- ⊗ Wing & Tail Tie-Downs Secure

### LANDING WITH A FLAT NOSE TIRE

- ⊗ Pre-landing checklist ..... COMPLETE
- ⊗ Approach ..... NORMAL
- ⊗ Flaps ..... AS REQUIRED
  - ⊗ 74 KNOTS ... Flaps UP-10
- ⊗ Land and maintain aircraft NOSE HIGH attitude as long as possible

### LANDING WITH A FLAT MAIN TIRE

- ⊗ Pre-landing checklist ..... COMPLETE
- ⊗ Approach ..... NORMAL
- ⊗ Flaps ..... FULL
- ⊗ Directional Control ..... MAINTAIN
- ⊗ Land the airplane on the opposite side of runway to the side with the defective tire to compensate for change in direction, which is to be expected during final rolling.
- ⊗ Touchdown with the GOOD TIRE FIRST and hold flat tire off the ground as long as possible.

### DOOR OPEN IN FLIGHT

- ⊗ Airspeed ..... 87 KNOTS Or Less
- ⊗ Cabin Vents ..... Closed
- ⊗ Push Door Further Open Then Shut, Locking Top Latch

**A Slip In The Direction Of The Open Door  
Will Assist In Latching Procedure**

### ALTERNATOR FAILURE

**If A Zero Reading Is Being Indicated By The Ammeter, First Activate An Electrical Device To Ensure The Ammeter Isn't Just Showing Low. If No Increase Is Seen, Alternator Failure Can Be Assumed.**

- ⊗ Electrical Load ..... Reduce
- ⊗ Alternator Breaker ..... Check
- ⊗ Alt Switch ..... Off For 1 Second, Then On

**If Ammeter Continues To Show No Output, Or Alternator Will Not Stay Reset, Turn Off ALT Switch, Maintain Minimum Electrical Load and Land As Soon As Practical.**

## EMERGENCY PROCEDURES

Emergency procedures shown in bold faced type are immediate action items which should be committed to memory.

### ENGINE FAILURES AND MALFUNCTIONS

#### ENGINE FIRE DURING START

- ⊗ IF STARTED
  - ⊗ RUN ENGINE TO 1800 RPM For 2 Minutes
  - ⊗ ENGINE .....SHUTDOWN AND INSPECT
- ⊗ IF NOT STARTED
  - ⊗ **Throttle** .....**FULL OPEN**
  - ⊗ **Mixture**.....**IDLE CUT-OFF**
  - ⊗ **CONTINUE CRANKING TO EXTINGUISH FLAMES**

#### ENGINE FAILURE DURING TAKEOFF ROLL

- ⊗ **Throttle**.....**IDLE**
- ⊗ **Brakes**.....**APPLY AS NEEDED**
- ⊗ Wing Flaps .....RETRACT
- ⊗ Mixture .....IDLE CUTOFF
- ⊗ Magnetos .....OFF
- ⊗ Master Switch .....OFF

#### ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

##### **NOSE DOWN!**

- ⊗ **Airspeed** .....**70 KNOTS**  
**Suitable Landing Site off Nose, No more than 45\* either way**
- ⊗ **Flaps** .....**AS REQUIRED**
- ⊗ Mixture .....IDLE CUTOFF
- ⊗ Magnetos .....OFF
- ⊗ Master switch .....OFF
- ⊗ Door Latch .....OPEN (Just Prior to Touchdown)

#### ENGINE ROUGHNESS OR RPM LOSS

- ⊗ **Carb Heat**.....**ON**
- ⊗ **Throttle**.....**Full**
- ⊗ **Magnetos** .....**Check Both**
- ⊗ **Mixture** .....**Lean (as required)**

## ENGINE FAILURE DURING FLIGHT

- ⊗ **Establish Glide** ..... **70 KNOTS**
  - ⊗ **Select Emergency Landing Site**
  - ⊗ **Fuel Selector**..... Switch To Another Tank With Fuel
  - ⊗ **Electric Fuel Pump**..... **ON**
  - ⊗ **Mixture**..... **FULL RICH**
  - ⊗ **Carb Heat** ..... **ON**
  - ⊗ Engine Gauges ..... Check for Problem
  - ⊗ **Primer**..... **Check In & Locked**
  - ⊗ **Throttle** ..... **Open**
  - ⊗ Master Switch..... Check On
  - ⊗ Magnetos ..... Check on Both
  - ⊗ Ignition to Start if Propeller Stopped
- IF ALTITUDE PERMITS, TRY RESTART CONTINUOUSLY**

## SECURING AIRCRAFT FOR FORCED LANDING

- ⊗ Ignition Switch ..... Off
- ⊗ Fuel Selector ..... OFF
- ⊗ Throttle ..... Closed
- ⊗ Mixture ..... Idle Cut-Off
- ⊗ Flaps ..... As Required
- ⊗ Transponder ..... Set 7700
- ⊗ Radio ..... Set to 121.5, Declare
  - ⊗ "Mayday, Mayday, Mayday, N95315, Location"
- ⊗ Seats and Belts ..... SECURE
- ⊗ Door ..... Ajar Just Before Landing
- ⊗ Master Switch ..... Off When Field Made

## LOW OIL PRESSURE

- ⊗ Oil Temp ..... CHECK
  - Above Green or Rising; **LAND** as soon as possible and be alert for impending engine failure
- ⊗ Throttle ..... REDUCE IMMEDIATELY
  - If stable within the green arc; LAND as soon as practical
- ⊗ Oil Temp/PSI ..... Monitor
  - If Roughness Continues Land As Soon As Practical**

## ENGINE FIRE IN-FLIGHT

- ⊗ Mixture .....IDLE CUTOFF
- ⊗ Fuel Selector .....OFF
- ⊗ Ignition Switch .....OFF
- ⊗ Master Switch.....OFF
- ⊗ Cabin Heat/Air .....CLOSED
- ⊗ Air Speed.....INCREASE TO BLOW OUT FIRE,
- ⊗ DO NOT EXCEED  $V_{NE}$  148 KNOTS
- DO NOT Attempt an In-Flight Restart**
- ⊗ Procedure For a Forced Landing

## ELECTRIC FIRE IN CABIN IN FLIGHT

- ⊗ Master Switch.....OFF
- ⊗ Air Vents.....OPEN
- ⊗ Cabin Heat .....OFF
- ⊗ Fire Extinguisher .....ACTIVATE,
- ⊗ Ventilate Cabin After Discharge
- ⊗ Avionics.....OFF
- ⊗ ALL Other Switches .....OFF (Except Magnetos)

### **IF FIRE HAS NOT BEEN EXTINGUISHED**

- ⊗ Master Switch .....ON
- ⊗ Rapid Descent .....Execute
- ⊗ **DO NOT EXCEED  $V_{ne}$**
- ⊗ Avionics.....ON
- ⊗ Radio .....Alert ATC or 121.5 MAYDAY
- ⊗ Forced Landing .....Execute

### **IF FIRE HAS BEEN EXTINGUISHED AND ELECTRICAL POWER IS NECESSARY**

- ⊗ Cabin Vents .....Open
- ⊗ Circuit Breakers .....Check for Open, DO NOT RESET
- ⊗ Master Switch .....ON
- ⊗ Avionics.....ON
- ⊗ Precautionary Landing...Execute

## WING FIRE

- ⊗ NAV Light..... OFF
- ⊗ Sideslip to Keep Flames Away from the Fuel Tank and Cabin
- ⊗ Land as Soon as Possible

## PRECAUTIONARY LANDING WITH ENGINE POWER

- ⊗ Seatbelts..... SECURE
- ⊗ Airspeed ..... 74 KNOTS
- ⊗ Wing Flaps ..... As Needed
- ⊗ Radio ..... ALERT ATC/ MADAY 121.5
- ⊗ Transponder ..... SQUAWK 7700
- ⊗ Selected Field ..... FLY OVER
  - ⊗ (noting terrain & obstacles)
- ⊗ Airspeed ..... 70 KNOTS
- ⊗ Mater Switch ..... OFF (ALT&BAT)
  - ⊗ (when landing is assured)
- ⊗ ELT ..... ACTIVATE
- ⊗ Door Latch..... OPEN
  - ⊗ (just prior to touchdown)
- ⊗ Touchdown..... SLIGHTLY TAIL LOW
- ⊗ Mixture ..... IDLE CUTOFF
- ⊗ Magentos ..... OFF
- ⊗ Brakes ..... APPLY HEAVILY

