

3rd Step Flying Club PA-28-160 Piper Cherokee Checklist rev 14

Created by FlightChecklists.com

Before Start

Times in book & online
 Preflight Inspect & (FAR 91.103) ... Completed
 SMS Preflight Submitted
 Passenger Safety Briefing As needed
 Flight Controls Checked
 Parking Brake SET
 Electrical Equipment OFF
 Circuit Breakers & Fuses IN & Checked
 Fuel Tank Fullest
 Master Switch ON
 Beacon ON
 Mixture Enrichen
 Throttle 1/4 inch. Open
 Carburetor heat Cold (IN)
 Ignition On Left Magneto
 Primer As needed / locked
 Clear area Yell & Look
ENGINE START
 Starter Engage

Engine Start Fire

Starter Continue Cranking
 If the engine starts
 Throttle 1800 RPM (for 2mins)
 Engine Shutdown Checklist Complete
 Fuel Selector OFF
 If the engine doesn't start
 Engine Shutdown Checklist Complete
 Fuel Selector OFF
 Passengers Evacuate
 Fire Extinguish

Before Taxi

Magnetos Both
 Throttle 1000 RPM
 Engine Instruments Green *(oil pressure)
 Nav lights/ADS-B ON
Down day, Up night, center is off
 Radios/Avionics ON & Freqs/flight plan
 Weather Info Copied
 Flight Instruments SET & Checked
 Mixture Lean for taxi
 Transponder TST then ALT mode
 Airport Diagram Visible
 Contact/Call For taxi & brief route
 Brakes Checked (at throttle idle)

During Taxi Flow

Taxi Instrument Check During turns...
 Attitude- level within 5 degrees
 Turn Coordinator- go direction of turn
 Ball- opposite the turn
 Compass & Heading- go direction of turn

IFR Flight Equipment Check

Navigation/Required Equipment Checked
 VOR Check Completed & Logged
 GPS database Current/Noted
 Inspections Up-to-date
 RAIM Checked
 WAAS Checked/Noted

Run Up

Frequency Tower/CTAF & Dep. SET
 Brake SET
 Flight Instruments Checked
 Fuel Tank Fullest
 *Don't change tanks just before takeoff
 Mixture Rich
 Throttle 2000 RPM
 Magnetos Check for drops
 *Max. 125RPM each, both within 50RPM
 Carburetor heat ON RPM drop & OFF rise
 Vacuum (suction) 5 PSI +/- 0.2
 Ammeter Checked & Charging
 Voltmeter Between 12.5V to 14.3V
 Idle/Rich Engine Setting Check 5 secs
 Throttle idle, mixture rich, carb heat on
 then off

Before Takeoff

Throttle 1000 RPM
 Trims SET for Takeoff
 Flaps Checked & SET
 Fuel Pump ON (check pressure increase)
 Takeoff Briefing Complete
 (Rnw, VR, Vclimb, Flaps, Dep, Emers
 below)
 Doors & Windows Closed/Latched

Failures During and After Takeoff

During takeoff roll below VR
Throttle Idle
Brakes Apply & Stop
 Mixture Idle Cutoff
 Magnetos OFF
 Master OFF
After liftoff with runway remaining
Throttle Reduce/Idle
Airspeed Best Glide 80mph (69kts)
Land On remaining runway
After takeoff no remaining runway
below turning altitude
Airspeed Best Glide 80mph (69kts)
Best Landing Spot Select
Fuel Selector Switch tank
Primer IN & locked
Fuel Pump ON
Magnetos Check Both, L, R
Carburetor Heat Check ON/OFF
Mixture Adjust
Declare Emer. if able Radio/Squawk

Cleared for Takeoff/Line-Up Flow

Runway Heading Verify inside/outside/rnwys
 Lights ON- landing & strobe
 Transponder ALT & squawk code
 Mixture SET for Takeoff

After Takeoff/Climb/Go-around ~1000ft

Airspeed 85mph (75kts) Vy
 Climb Pitch Attitude
 Flaps (+ rate) 0 degrees UP
 Landing Light OFF

Cruise

Pitch & Power As needed (POH chart)
 Fuel Pump As needed
 Fuel Manage tank selection
 Mixture Lean (above 5000ft)

Descent/Approach

Weather info Copied
 Approach Select (if needed) Setup NAVs
 Arrival/Approach Briefing Completed
 Flight Instruments SET
 Fuel Pump ON
 Fuel Fullest tank
 Mixture Adjust
 Carburetor Heat As needed
 Safety belts ON

Before Landing

Fuel Selector Fullest tank
 Fuel Pump ON
 Carburetor Heat As needed
 Mixture Enrichen
 Landing Light (when cleared) ON

After Landing

After clear of runways
 Fuel Pump OFF
 Carburetor Heat OFF
 Strobe Light OFF
 Landing Light OFF/as needed
 Mixture Lean for taxi
 Contact/Call For taxi

Shutdown/Secure

Comm/Nav Radios . (except audio panel) OFF
 Radio Master (if applicable) OFF
 Transponder OFF
 GPS OFF
 Nav Lights OFF
 Magnetos (off/on) Ground Check
 Mixture Idle
 Magnetos OFF
 Beacon OFF
 Master Switch OFF
 Brakes Release
 Controls Seat belt lock
 Tie-downs Complete
 Times in book & online

V-Speeds

Vr — 65mph (55kt) Rotation speed
 Vx — 75mph (65kt) Best Angle Climb
 Vy — 85mph (75kt) Best Rate Climb
Vso — 46mph (40kt) Stall Landing Config
Vs — 55mph (48kt) Stall Clean Config
Vfe — 115mph (99kt) Flaps Extend
 Vg — 80mph (69kt) Best Glide
 Va — 129mph (112kt) Max Wt. maneuvering
Vno — 140mph (121kt) Max Cruise
Vne — 170mph (148kt) Never Exceed

Pre-Flight

Aircraft & Pilot Docs Check
"ARROW PECS" Cert, ID, Med
Inspections "AV1ATES" Up-to-date
Equipment None required inop
Master Switch ON
Lights ON/Check/OFF
Fuel Quantity Indicators Check
Flaps Extend
Master Switch OFF

Exterior Walkaround

Right Wing, Gear, Tire, Tank, Sump Check
Nose Gear (strut, tire) Check
Engine Oil Check (6qt local, 7qt XC flights)
Cowling & Propeller Check
Gascolator Sump fuel
Left Wing, Gear, Tire, Tank, Sump Check
Pitot Tube/Mast Check
Stall Warning tab Check light
Fuselage (static port) Check
Rudder & Stabilator Check (bolt & trim)
Baggage Door Closed & Locked
Flaps Retract

Acronyms

"ARROW PECS"

Airworthiness Certificate, Registration
Certificate, Radio Station License
(international), Operating Limitations (POH),
Weight & Balance (POH), Placards, External
Data Plate, Compass Deviation Card,
Supplements (Equipment installed)
"AV1ATES" Annual- 12 calendar months,
VOR- 30 days IFR, 100 hour- if for hire,
Altimeter- 24 calendar months IFR,
Transponder- 24 calendar months if needed,
ELT- 12 calendar month inspection, battery
replacement, Static Encoder- 24 calendar
months IFR

Engine Failure During Flight

Airspeed & Trim 80mph (69kt)
Best Landing Spot Select
Troubleshooting if time allows
If not "land w/out power" mem. items
Fuel Selector Switch Tank
Primer pump IN/Locked
Fuel pump ON
Ignition Switch (L, R, Both) ON
Carburetor heat ON
Throttle Adjust
Mixture Adjust
*If it fails due to fuel starvation in tank,
can take 10secs to get fuel from other
tank after switching
If no Engine Power Restored, Complete
Landing Without Power Checklist

Landing Without Power

Approach 80mph (69kt) trim Normal
Declare Emergency On Freq or 121.5
Transponder Squawk 7700
Evacuation Plan Briefed
Mixture Idle cutoff
Fuel Selector OFF
Ignition Switch OFF
Just before ground contact
Door Unlatch
ELT ON
Master Switch OFF
Flaps As needed

Engine Fire (in-flight)

Mixture Idle
Throttle Idle
Carburetor heat OFF
Fuel pump OFF
Fuel Selector OFF
Cabin Heat/Defroster OFF
If fire persists
Airspeed Increase 138mph (120kt)
Bank 30 degrees For +G Force
Complete Landing Without Power Checklist

Wing Fire

Slip into fire Rudder into fire side
Wing lights (strobe&nav) OFF
Land ASAP

Electrical Fire

Master Switch OFF
All Electrical Equipment OFF
Cabin Heat & Air OFF
Window Vent OPEN
Door (if smoke) Unlatch
Land ASAP

Electrical Failure

Discharge shown on ammeter / low volts
Note time For battery life (~30mins)
Electrical load Reduce non-essential items
Note Volts Between 12.5V-14.3V
*Elec. Ignition Sys. Partial Engine loss
Notify ATC for Possible Lost comms
Land As Soon As Practical

Inadvertent Spin Recovery

Power Idle
Rudder Full Opposite Rotation
Stabilator Full Forward
Ailerons Neutral
Rudder (when spin stops) Neutral
Dive Result Recover smoothly
Regain Level Flight

Plane info

Engine- Lycoming O-320, 4 cylinder,
Horizontally opposed, Air cooled, Direct drive,
Carbureted, 160HP, powerflow exhaust,
320cubic in. displacement
Fuel- 100LL ~9gph, 50 total gal, 1.1 lb each
tank unusable
Weight- max gross 2200 lbs.

Checklist Usage Philosophy

This is meant to be a read & do checklist in the
airplane. Flows are "during taxi"- done while
taxiing & "Cleared for takeoff/line-up" - done
while taking the runway for departure. Normal
items are read. Emergency "red" checklists
have memory items that are in **BOLD**.

3rd Step Management Personnel

Maintenance Issues/Squawks:
Doug ATP, CFI, A&P IA: (602)790-7240
Dale A&P IA, Comm IR: (602)694-3083
Club Management & Account Info:
Laurie Comm IR: (602)740-3492
Website: www.fly3rdstep.club
Checklist, Standard Ops Procedures,
Student Training:
Jakob ATP, CFI(I), MEI: (845)514-7669

Traffic Pattern Checklist

Before Takeoff

Throttle 1000 RPM
Trims SET for Takeoff
Flaps Checked & SET
Fuel Pump ON (check pressure increase)
Takeoff Briefing Completed
Door & Windows Closed/Latched

Departure Failures Brief

Make sure to be familiar with 3 different
possibilities: failure during takeoff roll,
after liftoff w/ runway left, & after liftoff
w/out runway left

Cleared For Takeoff/Line-Up Flow

Runway heading Check (3x's)
Lights ON - landing & strobe
Transponder ALT & squawk code
Mixture SET for Takeoff

After Takeoff/Climb/Go-around

Airspeed Vy 85mph (75kt)
Climb Pitch Attitude
Flaps (+ rate) 0 degrees UP
Landing Light OFF

Before Landing

Fuel Selector Full Tank
Fuel pump ON
Carburetor Heat As needed
Mixture Enrichen
Landing Light (when cleared) ON

After Landing

After clear of all runways
Fuel Pump OFF
Carburetor Heat OFF
Strobe Light OFF
Landing Light OFF/as needed
Mixture Lean for taxi
Contact/Call For taxi

Pattern Checklist info

This should be used as a simplified checklist
while working in the pattern with either full-stop
taxi backs or touch-&-go's.

KCHD Frequencies

KCHD Ground — 124.4
KCHD ATIS — 128.325
KCHD N Tower (CTAF) — 126.1
KCHD S Tower — 133.1

PHX area Frequencies

SE & SW Prac Area — 122.85
PHX app/dep — 124.9 & 123.7
KPHX ATIS — 127.57
KIWA ATIS — 133.5
KIWA TWR — 120.6
A39 AWOS — 126.9
A39 CTAF — 122.9
KCGZ & TFD stack CTAF — 122.7
PXR VOR — 115.6
IWA VOR — 113.3
TFD VOR — 114.8
CHD Fuel Truck — 623-202-7223