



Piper Twin Comanche PA-30 CHECKLIST

PREFLIGHT

- W&B/Performance COMPLETE
- Documents ON BOARD
- Ignition and Master Switch OFF
- Fuel Strainer Sump DRAINED
- Fuel Selector MAIN CELLS
- Control Surfaces/Wing/Fuselage .. CHECK
- Fuel Supply/Cell Caps CHECK
- Fuel System Vents OPEN
- Landing Gear Struts CHECK
- Tires CHECK
- Cowling/Landing Gear Doors SECURE
- Oil and Inspection Covers SECURE
- Propellers CHECK
- Oil Supply ADEQUATE
- Leaks ABSENT
- Windshield CLEAN
- Dorsal Fin Air Scoop CHECK
- Control Locks DETACHED
- Tow Bar STOWED
- Baggage Door SECURE
- Cabin Controls OPERATIVE
- Gear Selector Switch DOWN
- Stall Warning System CHECK
- Navigation Lights CHECK
- Door LOCKED

ENGINE START

- Master Switch ON
- Gear Lights ALL GREEN
- Fuel Quantity CHECK
- Cowl Flaps OPENED
- Trim Tabs SET
- Throttles OPEN ½ IN.
- Propellers controls FORWARD
- Mixture RICH
- Fuel Pump ON/PRIME
- Mixtures IDLE
- Magneto Switches ON
- Propellers CLEAR
- Starters* ENGAGE
- Mixtures ADVANCE
- Oil/Fuel Pressure CHECK

FLOODED START

- Magneto Switches ON
- Throttles OPEN
- Mixture IDLE
- Fuel Pump OFF
- Starters* ENGAGE
- When engine fires, retard throttle and advance mixture.

*Cranking periods should be limited to 30 SECONDS with a 2 MINUTE INTERVAL.

TAXIING

- Brakes/Instrument CHECK

STALL SPEED TABLE (CAS)

Bank	Gear/Flaps Up	Gear/Flaps Down
0°	76	69
20°	79	71
40°	87	79
60°	108	98

Figures are at gross weight of 3600 pounds with power off.

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WORM UP & GROUND CHECK

- Worm Up at 1000-1400RPM MAX 2'W/4'C
- AVOID PROLONGED IDLING AT LOW RPM
- Parking Brake ON
- Flight Controls CHECK
- Mixture FORWARD
- Propeller FORWARD
- Throttle 1500 RPM
- Propeller (Not More Than 500) ... EXERCISE
- Throttle 2200 RPM
- Magnetos L&R (175/50)
- Engine Gauges CHECK
- Vac/Ammeter CHECK
- Throttle REDUCE
- Lights/Pitot Heat AS REQUIRED
- Instruments CHECK/SET
- Generators ON
- Fuel Selectors **ON MAIN FUEL CELLS**
- Door/Windows LOCK
- COM/NAV/Lights/Transponder ... SET
- Flaps/Trim SET
- Clearance OBTAIN
- Take Off Briefing COMPLETED

LINING UP

- Parking Brake OFF
- Fuel Pumps ON
- Transponder ON/ALT
- Strobe Lights ON
- Landing Lights AS REQUIRED

ROLLING

- Power (Take OFF) SET
- Man. Press./RPM/Fuel Flow CHECK
- Speed RISING
- Accelerate to Vmc Prior Climb 90 MPH

AFTER TAKEOFF

- Gear (Vlo 150MPH) POS. CLIMB/UP
- Vy 112 MPH
- Power (Climb) SET
- Flaps (Vfe 125 MPH) RETRACT
- Landing Lights OFF
- Fuel Pumps OFF

SHORT & SOFT FIELD TAKEOFF

- Flaps SET FOR T/O
- Brakes SET
- Power MAXIMUM
- Instruments CHECK
- If airborne **before Vmc** fly low level to reach **Vmc 90MPH.**
- Before Vmc** be ready to **reduce power promptly.**
- Vx 90 MPH
- Landing Gear RETRACT
- Vy (clear of obstacle) 112 MPH
- Flaps RETRACT

CLIMB

- Throttles/Props SET CLIMB
- Enroute Climb 130 MPH

CRUISE

- Throttles-Props SET/TABLE
- Mixture ADJUST
- Tanks AS NEEDED
- Instruments AS NEEDED

**Under ONE Engine Flight Conditions
Maintain IAS ABOVE 97 MPH**



Piper Twin Comanche PA-30 CHECKLIST

APPROACH/LANDING

ATIS/AWOS/ASOS OBTAIN
 Brief/Seat Belts CHECK
 Mixture RICH
 Props 2400 RPM
 Fuel Pumps ON
 Fuel Selectors **ON MAIN FUEL CELLS**
 Landing Lights AS REQUIRED
 Gear (Vlo 150MPH) 3 GREEN
 Flaps (Vfe 125 MPH) SET
 Final Approach 100 MPH

GO AROUND

Power FULL
 Gear (Positive Climb) UP
 Flaps RETRACT SLOW
 Vy 112 MPH

MANUAL GEAR EXTENSION

Master/Gear Circuit Breakers IN
 Master ON
 Navigation Lights OFF Day
 Emergency Disengage Control REMOVE COVER
 Airspeed 100 MPH
 Landing Gear Switch OFF
 Disengage Motor FULL FORWARD
 Gear Extension Handle **R Socket** . FULL FORWARD
 Gear Extension Handle **L Socket** . FULL FORWARD
 Gear Lights GREEN
DON'T RETRACT WITH HANDLE IN SOCKET
DON'T RE-ENGAGE MOTOR IN FLIGHT

AFTER LANDING

Flaps RETRACT
 Cowl Flaps OPEN
 Fuel Pumps OFF
 Props FORWARD
 Transponder STBY
 Strobe/Landing Lights OFF

COMPLETE STOP

Radio/Elec. Equip. OFF
 Heater OFF
 Mixture/Ignition/MASTER OFF
 Parking Brake ON
 Chocks/Chains/Papers COMPLETE

• CLOSE FLIGHT PLAN

LOST COM

Check: Freq., Volume, Squelch, Phones
 Transponder 7600
 Pattern Enter/Lights

**Under ONE Engine Flight Conditions
 Maintain IAS ABOVE 97 MPH**

ENGINE FAILURES

During Take Off or After Lift Off

During Run STOP
 After Lift Off With Adequate Landing
 Distance LAND

During Climb After Take Off

Vyse 105 MPH
 Mixture/Props/Throttles FORWARD
 Flaps UP
 Gear DECIDE

IDENTIFY DEAD ENGINE

Propeller (Dead Engine) FEATHER
 Rudder Trim USE

RETURN TO AIRPORT FOR LANDING

During Cruise Flight

Mixture/Props/Throttles ADVANCE

IDENTIFY DEAD ENGINE

Rudder Trim USE
 Cause Of Engine Failure DETERMIN
 Propeller (Dead Engine) FEATHER
 Mixture (Dead Engine) IDE/CUT OFF
 Ignition (Dead Engine) OFF
 Operating Engine SET POWER
 Electrical Load REDUCE

SINGLE ENGINE APPROACH

Power REDUCE
 Rudder Trim USE
 Reaching Airport ASSURED
 Gear DOWN
 Additional Altitude/Speed MAINTAIN
 Final Approach Speed 105 MPH
 Flaps AVOID
 Go Around...FLAPS/GEAR UP

FEATHERING POSSIBLE OVER 1000 RPM

UNFEATHERING

Ignition ON
 Mixture RICH
 Throttle OPEN ½ IN.
 Prop CRUISE
 Starter ENGAGE
 Power 1000-1500 rpm Until Oil Temp Rise

DON'T FEATHER A PROP FOR PRACTICE:

- if you think engine may be difficult to start
- at a low altitude AGL
- with a low charged battery
- unless you are within reasonable distance of an airport
- in conditions that may prevent single engine flight at altitude well above the ground

Power Setting Table	Press. Alt.	88HP – 55% RPM AND MAN. PRESS				104HP – 65% RPM AND MAN. PRESS				120HP – 75% RPM AND MAN. PRESS		
		1000ft	2100	2200	2300	2400	2100	2200	2300	2400	2200	2300
	SL	22.4	21.7	21.0	20.4	25.0	24.2	23.3	22.7	26.5	25.6	24.9
2	21.8	21.2	20.5	19.9	24.4	23.6	22.8	22.2	25.9	25.0	24.3	
4	21.3	20.6	19.9	19.4	23.8	23.0	22.2	21.6	25.3	24.3	23.7	
6	20.8	20.1	19.4	18.9	23.2	22.4	21.6	21.1	FT	FT	23.1	
8	20.2	19.5	18.9	18.4	FT	21.8	21.0	20.5	---	---	FT	
10	19.7	19.0	18.3	17.9	---	FT	FT	20.0	This product is not a substitute for any operation manual. ©2011 Smart Aero Service/KF			
12	FT	18.4	17.8	17.4	---	---	---	FT				
14	---	FT	FT	16.9	---	---	---	---				
V SPEEDS (MPH)	Vmc	90	Vx	90	Vfe	125	Vne	205	GPH TOTAL	65%	15.2	
	Vyse	105	Vy	112	Vlo	150	Crosswind	20		75%	17.2	