PA-28-181 - Short Checklist

Cockpit

Parking Brakes Set Hobbs/Tach Check Battery ON Check Fuel Quantity Lights/Stall Warning Check Electrical Equipment OFF Battery OFF Flaps Check/UP Trim Check Pitot/Static/Drains Drain/Close Acft/Pilot Documents On Board

Right Wing

Flap Hinges Check Check Hinges Aileron Winatip/Lights Check Clean Leading Edge Check Fuel Quantity Fuel Vent Clear Fuel Strainer Sample Landing Gear/Tyre Check Air Inlet Clear

Nose

Engine Condition Check Oil Quantity Check Propeller & Spinner Check Alternator Belt Check Air Inlets Landing Light Check Nose Gear & Tyre Check Fuel Strainer Sample

Left Wing

Check Flap Hinges Check Hinges Aileron Winatip/Lights Check Leading Edge Clean Check Fuel Quantity Fuel Vent Clear Fuel Strainer Sample Check Landing Gear/Tyre Air Inlet Clear Pitot / Static Port Check Stall Warning Horn

Fuselage / Emp.

Antennas Check Air INlet Check Stabilator & Trim Check Rudder

Before Start

Seat Belts Fastened Battery ON ON Anti-Collision Lights Nav Lights As Rea. Fuel Selector Lowest Tank

Engine Start

PIC Established Parking Brake Set ON Electric Fuel Pump Full Rich 1/4" Open Prime As Rea. CLEAR Prop Area Starter Engage 1000 RPM **Engine Instruments** Check Annunciators 0ut Electric Fuel Pump OFF

After Start

ON Alternator ON Avionics Radios Set Transponder STBY Circuit Breakers IN Leaned for Taxi Fuel Selector Opposite Tank Toe Brakes Check Fuel Pump OFF for Taxi

Run Up

Brakes Set Mixture Full Rich Throttle 2000 RPM **Engine Instruments** In Limits Magnetos Check Annunciators Test Carb Heat Check Gyro Suction In Limits Idle Throttle RPM & Oil Pressure In Limits Throttle 1000 RPM

Before Takeoff

Flight Controls Check Flight Instruments Set Radios Set Flaps As Rea. Trim Takeoff Briefing Complete Door & Window Secured Parking Brake Released Electric Fuel Pump Landing Light ON Transponder Altitude Time Off Noted

After Takeoff

UP Flaps Electric Fuel Pump OFF

Cruise

RPM Throttle Mixture Leaned Landing Light

Pre-Maneuvre

Rich Mixture Minimum Safe Altitude Verify Area Clear

Post-Maneuvre

Lean **Engine Instruments** Check Fuel Selector **Fullest Tank**

Approach

Flight Instruments Check & Set Radios Set Landing Light ΩN ON Electric Fuel Pump Mixture Full Rich **Fuel Selector** Fullest Tank Approach Briefing Complete Seat Belts Fastened

After Landing

Transponder STBY Electric Fuel Pump 0FF Landing Light OFF Mixture Leaned Flaps

Parking

Avionics 0FF Cut-Off **Electrical Equipment** OFF Battery & Alternator OFF 0FF Magnetos

Securing Aircraft

Hobbs/Tach Record Flight Controls Secure Door & Window Secure Tie-Downs Secure

V-Speeds (in KIAS)

V _R	45-55	
V _x	64	
V _Y	76	
Climb	88	
V _s	50	
V _{so}	44	
V _{REF} Flaps 0 - 10		

V _A	89-113	
V _{FE}	102	
V _{NO}	125	
V _{NE}	154	
Glide	76	
Max XW		
V _{REF} Flaps 25 - 40		

PA-28-181 - EMERGENCY

Electrical Failure

Load Meter

Alternator

Verify InOp

OFF

IF LOAD METER INDICATES ZERO Alternator OFF REDUCE ELECTRICAL LOAD TO MIN Alternator & Circuit Breaker Check & Reset Alternator

IF POWER IS NOT RESTORED

REDUCE ELECTRICAL LOAD TO A MINIMUM, LAND AS SOON AS PRACTICAL

Electrical Overload

Battery IF ALTERNATOR LOADS ARE REDUCED.

REDUCE ELECTRICAL LOADS TO A MINIMUM, LAND AS SOON AS PRACTICAL.

OTHERWISE:

OFF Alternator Battery As Rea.

LEAVE BATTERY ON ONLY IF NEEDED TO POWER ESSENTIAL ELECTRICAL **EOUIPMENT. LAND AS SOON AS** PRACTICAL.

Loss of Fuel Pressure

ON Electric Fuel Pump Fuel Selector Opposite Tank

Flooded Engine Start

Throttle 1/2" Open Battery / Alternator Electric Fuel Pump OFF Mivture Cut-Off Starter Engage Mixture (when engine fires) Full Rich 1000 RPM Oil Pressure Check

Hot Engine Start

Throttle 1/2" Open Battery / Alternator Electric Fuel Pump ON Full Rich Mixture Starter Engage Throttle 1000 RPM Oil Pressure Check

Engine Failure

ALTITUDE SUFFICIENT FOR RESTART?

NO Establish Landing Site Select Cut-Off OFF Battery/Alternator OFF

OFF

YES

Magnetos

Fuel Selector

Establish Landing Site Select Flectric Fuel Pump ON **Full Rich** Mixture Fuel Slecto Opposite Tank Carb Heat ON Throttle Set Locked Primer Check Magnetos

ENGINE RESTARTED?

YES

Leave fuel selector on present tank Land as soon as possible

NO

Mavdav Transmit Mixture Cut-Off Throttle Open 0FF Electric Fuel Pump **Fuel Selector**

Engine Roughness

Carb Heat IF ROUGHNESS CONTINUES - AFTER ONE MINUTE:

Carb Heat OFF Mixture Adjust Electric Fuel Pump ON **Fuel Selector** Opposite Tank **Engine Instruments** Check Magnetos Check

IF OPERATIONS ON EITHER MAGNETO IS SATISFACTORY, CONTINUE ON THAT MAGNETO AT REDUCED POWER WITH MIXTURE FULL RICH. LAND AS SOON AS PRACTICAL.

Carburetor Icina

Carb Heat ON Mixture Adjust

Engine Fire During Start

Starter Engage Mixture Cut-Off Throttle Open Electric Fuel Pump OFF Fuel Selector **EVACUATE IF FIRE CONTINUES!**

Engine Fire During Taxi

Airplane STOP Mixture Cut-Off Fuel Slector OFF Battery / Alternator OFF

EVACUATE AIRCRAFT!

Engine Fire During In Fliaht

Mixture Cut-Off **Fuel Selector** Establish Landing Site Select Mavdav Transmit Magnetos 0FF Battery / Alternator

Cabin Fire In Flight

Battery / Alternator Electrical Equipment OFF Vents 0pen

Spin Recovery

Throttle Idle Ailerons Neutral Opposite Dir of Rotation Rudder Control Wheel Full Forward

RUDDER AND CONTROL WHEEL NEUTRAL WHEN ROTATION STOPS

Pitch

Loss of Oil Press. / High Oil Temp.

LAND AS SOON AS PRACTICAL, PREPARE FOR IMMINENT ENGINE FAILURE

