Preflight Inspection

Cockpit

Parking Brake	Set
Hobbs/Tach	Check
Master Switch	On
Fuel QTY	Check
Lights/Stall Warning	Check
Electrical Equipment	Off
Master Switch	Off
Flaps	Down
Trim	Neutral
Acft Documents	On Board

Right Wing

Flap Hinges	Check
Alleron	Check Hinges
Wingtip/Lights	Check
Wing Secure	Check
Leading Edge	Clean
Fuel Quantity	Check
Fuel Vent	Clear
Fuel Strainer	Sample
Landing Gear	Check
Tire	No bald spots

Nose

Engine Condition	Check
Oil Quantity	Check
Propeller & Spinner	Check
Alternator Belt	Check
Air Inlet	Clear
Landing Light	Check
Nose Gear & Tire	Check
Engine Condition (L)	Check
Fuel Strainer	Sample

Left Wing

Same as Right Wing (in reverse)
ADD pitot static mast

Fuselage and Empenage

Antennas	Check
Air Inlet	Check
Stabilator & Trim	Check
Rudder	Check

Before Start

Parking Brake	Set
Seats/Seat Belts	Fastened
Safety Brief	Briefed
Circuit Breakers	Check
Mixture	Rich
Carburetor Heat	Cold/Off
Prime	As Req
Throttle	1/4 inch Open
Master + Alternator	On
Beacon	On
Fuel Selector	Lowest Tank

Engine Start

Electric Fuel Pump	On
Magneto	Left
Prop Area	Clear!
Starter	Engage
Magneto	Both
Throttle	1,000 RPM
Oil Press.	Check
Engine Instruments	Check
Electric Fuel Pump	Off

After Start

Avionics	On
Nav Lights / ADSB	On
Radios	Set /Weather
Transponder	STBY / VFR
Circuit Breakers	Check
Mixture	Leaned for Taxi
Fuel Pump	Off
Parking Brake	Release
Brakes Check	Working

Before Run Up

Parking Brakes	Set
Flight Controls	Check
Flight Instruments	Check & Set
Radios	Verify Set
Flaps	Check & Set
Trim	Set
Takeoff Briefing	Complete
Door & Window	Secured

Run Up

Fuel Pump	On
Fuel Selector	Fullest Tank
Mixture	Rich / As Required
Throttle	2000 RPM
Carb Heat	Check
Magnetos	Check
(max drop 175RPM / max diff. 50 RPM)	
Engine Gauges	In Limits
Vacuum	5.1 (+/- .1)
Ammeter	Check
Throttle	Low Idle
Throttle	1000 RPM
Parking Brake	Released

Before Takeoff

Fuel Selector	Fullest Tank
Mixture / Carb Heat	Set / OFF
Transponder	Altitude / VFR
Landing Light	On
Electric Fuel Pump	On
Clock	Noted

V-Speeds (MPH)

Vr	50-60	Va	129
Vx	74	Vfe	115
Vy	85	Vno	140
Climb	100	Vne	171
Vs1	64	Glide	(gross) 83
Vso	55	Max dem XW	17
Approach F/UP		85	
Approach F/DN		76	

After Takeoff

1000 AGL Minimum	
Electric Fuel Pump / Landing Light	Off

Cruise

Pitch	Set
Throttle	As required
Trim	Set
Mixture	Lean for Cruise
Fuel Tank	Swap every 20min

Approach

Flight Instruments	Ckd & Set
Radios	ATIS/ Set
Carburetor Heat	As Required
Electric Fuel Pump	On
Mixture	Rich
Fuel Selector	Fullest Tank
Approach Briefing	Complete
Landing Light	On
Seat Belts	Fastened

After Landing

Flaps	Up
Mixture	Leaned
Transponder	Squawk VFR
Landing Light	Off
Electric Fuel Pump	Off

Parking

Avionics/ Transponder	Off
All Electrical (Not Including Beacon)	Off
Throttle	1000 RPM
Magnetos	Check Off/On
Throttle	Low Idle
Mixture	Cut-Off
Magneto	Off / Key on Dashboard
Master / Beacon	Off

Securing the Aircraft

Master Switch	Check Off
Hobbs / Tach	Record
Flight Controls	Secure
Door & Window	Secure
Tie-Downs	Secure

Second Page

Engine Failure

Altitude Sufficient For Restart?

No

Glide	Establish
Landing Site	Select
Mixture	Cut-Off
Master Switch	Off
Magnetos	Off
Fuel Selector	Off
Door	Unlatched

Loss of Fuel Pressure

Electric Fuel Pump	On
Fuel Selector	Opposite Tank

Flooded Engine Start

Throttle	Full Forward
Master Switch	On
Electric Fuel Pump	Off
Mixture	Cut-Off
Starter	Engage
Mixture (when engine fires)	Full Rich
Throttle	1000 RPM
Oil Pressure	Check

Hot Engine Start

Throttle	1/2" Open
Master Switch	On
Electric Fuel Pump	On
Mixture	Full Rich
Starter	Engage
Throttle	1000 RPM
Oil Pressure	Check

Engine Roughness

Carb Heat	On

If roughness continues after one minute:

Carb Heat	Cut-Off
Mixture	Adjust
Electric Fuel Pump	On
Fuel Selector	Opposite Tank
Engine Instruments	Check
Magnetos	Check

If operation on either magneto is satisfactory, continue on that magneto at reduced power with mixture full rich, Land as soon as practical.

Yes

Engine Restarted?

No

Glide	Establish
Landing Site	Select
Electric Fuel Pump	On
Mixture	Full Rich
Fuel Selector	Fulest Tank
Carb Heat	On
Throttle	Set
Primer	Locked
Magnetos	Check

Mayday	Transmit 121.5
Mixture	Cut-Off
Master Switch	Off
Magnetos	Off
Fuel Selector	Off
Door	Unlatched

Engine Fire During Start

Starter	Engage
Mixture	Cut-Off
Throttle	1800 RPM
Electric Fuel Pump	Off
Fuel Selector	Off

Evacuate if fire continues

Engine Fire During Taxi

Airplane	Stop
Mixture	Cut-Off
Fuel Selector	Off
Master Switch	Off

Evacuate Aircraft

Engine Fire In Flight

Mixture	Cut-Off
Fuel Selector	Off
Glide	Establish
Landing Site	Select
Mayday	Transmit 121.5
Magnetos	Off
Master Switch	Off

Cabin Fire In Flight

Master Switch	Off
Electrical Equipment	Off
Vents	Open
Land	ASAP

Carburetor Icing

Carb Hear	On
Mixture	Adjust

Spin Recovery

Throttle	Idle
Ailerons	Neutral
Rudder	Opposite dir of rotation
Contol Wheel	Full Forward

Rudder and Contol Wheel Neutral when rotation stops.

Pitch	Level

Yes

Leave fuel selector on present tank. Land as soon as possible.

Loss of Oil Pressure / High Oil Temp

Land as soon as practical. Prepare for imminent engine failure.

Electrical Failure

Load Meter	Verify Inop
If load meter indicates zero	
Alternator	Off
Reduce electrical load to min	
Alternator Fld Circuit Breaker	Check & Reset
Alternator	On
If power is not restored	
Alternator	Off

Reduce electrical loads to a minimum, land as soon as practical.

Electrical Overload

Alternator	Off
Battery	On

If alternator loads are reduced, reduce electrical loads to a minimum, land as soon as practical. Otherwise;

Alternator	Off
Battery	As Required

Leave Battery on only if needed to power essential electrical equipment. Land as soon as practical.

PA-28-160 CHECKLIST

Rev 2

* Use at your own risk. Refer to aircraft POH or AFM for more detailed information.*