

# PA-28 Archer

## Preflight Inspection Cockpit

Aircraft docs (AROW)	Check
Weight & Balance	Check
Control wheel	Release belt
Flaps	Down
Hobbs	Note time
Avionics Power Switch	Off
Ignition	Off
Master Switch	On
Fuel quantity indicators	Check
Lights	On & Check
Alt Static	Off
Master Switch	Off

## Right Wing

Flaps	Check
Aileron	Free & Secure
Wing tie-down	Removed
Main tire	Inflated/condition
Main gear strut	4.5"
Brakes	Check & No Leak
Fuel Tank Sump	Sample
Fuel Quantity	Check
Fuel Filler Cap	Secure
Wing leading edge/surface	Clean

## Nose

Cowling	Secure
Engine oil level	8 qts max
Propeller and spinner	Check
Alternator belt	Check
Engine cooling intake	Clear
Carburetor Air Filter	Clear
Nose wheel strut & tire	3.25"
Fuel strainer	Sample

## Left Wing

Wing leading edge/surface	Clean
Main tire	Inflated / condition
Main gear strut	4.5"
Brakes	Check & No Leak
Wing tie-down	Removed
Pitot / static mast	clear
Fuel tank vent open	Check
Fuel tank sump	Sample
Fuel Quantity	Check Visually

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## Left Wing cont'd

Fuel Filler cap	Secure
Stall warning	Check
Aileron	Free & Secure
Flaps	Check

## Empennage

Tail Tie-Down	Removed
Control surfaces	Free & Secure
Trim Tab	Check Security
Antennas	Check Security
Baggage Door	Closed & Locked

## Before Starting Engine

Preflight inspection	Complete
Passenger Briefing	Complete
Seats, belts	Adjust & Lock
Doors	Closed & Locked
Brakes	Test and set
Circuit breakers	Check In
Electrical Equip/Autopilot	Off
Avionics Power Switch	Off
Fuel Selector	Fullest tank
Flaps	Up

## Starting Engine

Brakes	HOLD
Carb heat	Off
Master / Alternator Switch	On
Strobe Light	On
Fuel Pump	On
Mixture	Rich or DA
Prime	1-3 pumps
Throttle	Cold ¼" / Hot ½"
Propeller area	Clear
Ignition	Start
Throttle	1000 rpm
Oil Pressure	Check normal
Mixture	Lean for Taxi
Flaps	Up
Fuel Pump	Off
Avionics Master Switch	On
Transponder	Alt and 1200
Ammeter	Check charge
ATIS/AWOS/ASOS	Obtain
Altimeter	Set

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## Run-Up

Brakes	Set
Cabin doors	Closed & Locked
Flight controls	Free & Correct
Flight Instruments	Set
Fuel Quantity	Check
Fuel Selector	Switch Tanks
Electric Trim	Check
Elevator Trim	Set for TAKEOFF
Mixture	Rich
Throttle	2000 rpm
Circuit breakers	Check In
Ammeter	Check
Magnetos	max 175rpm drop
Carb heat	On
Throttle	Idle
Carb heat	Off
Throttle	1000 rpm
Fuel Pressure	Check
Throttle Friction Lock	Adjust
Annunciator Panel	Test
Radios/Avionics/GPS	Set

## Before Take-Off

Seats, belts	Adjust & Lock
Mixture	Rich or DA
Fuel Pump	On
Carb heat	Off
Fuel Selector	Fullest Tank
Magnetos	Both
Flaps	Set
Trim	Set for T/O
Transponder	Set
Lights	As Required
Window and door	Closed
Departure Brief	Complete
Radios/Avionics/GPS	Set

## Cruise

Landing Lights	OFF
Throttle	Set
Fuel Pump	Off at safe altitude
Mixture	Adjust (lean above 5,000)
Trim	Set

KSPG Runways:	
7 RNAV	18 VOR & RNAV
25 VISUAL &	36 RNAV
Full Stop Only	

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## Pre-Landing Checklist

Fuel Pump	On
Fuel selector	Fullest Tank
Mixture	Rich below 5000'
Seatbelts	Fastened
Lights	As Required
ATIS/AWOS/ASOS	Checked
Airspeed	66 KIAS (Flaps Full)

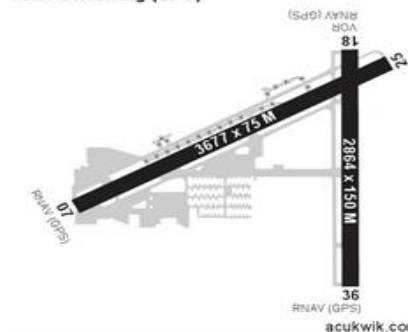
## After Landing

Flaps	Up
Carb Heat	Off
Lights	As Required
Mixture	Lean for taxi
Fuel Pump	Off
Radio	Taxi clearance

## Shut Down

Throttle	1000 RPM
Lights	Off
Avionics	Off
Mixture	Cut-off
Ignition	Off
Keys	Removed
Master Switch	Off
Hobbs	Record

St. Petersburg (SPG)



KSPG Frequencies:

ASOS	118.875
Ground	121.800
Tower	127.400
TPA Approach (South)	119.650
TPA Approach (West)	118.800

## Short Field Take-off

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Seats, belts **Adjust & Lock**  
 Lights **As Req'd**  
 Mixture **Rich or DA**  
 Fuel Pump **On**  
 Fuel Selector **Fullest Tank**  
 Carb heat **Off**  
 Magnetos **Both**  
 Flaps **25°**  
 Trim **Set for T/O**  
 Transponder **Set**  
 Windows and doors **Closed**  
 Departure Brief **Briefed**  
 Radios/Avionics/GPS **Set**  
 Taxi **Max runway**  
 Brakes **Set and hold**  
 Throttle **Full**  
 Engine Gauges **Check**  
 Brakes **Release**  
 Climb **54 kts**  
 Flaps **Retract Above 64 kts**  
 Airspeed **76 kts**

## Soft Field Take-off

Seats, belts **Adjust & Lock**  
 Lights **As Req'd**  
 Mixture **Rich or DA**  
 Fuel Pump **On**  
 Fuel Selector **Fullest Tank**  
 Carb heat **Off**  
 Magnetos **Both**  
 Flaps **25°**  
 Trim **Set for T/O**  
 Transponder **Set**  
 Windows and doors **Closed**  
 Departure Brief **Briefed**  
 Radios/Avionics/GPS **Set**  
 Taxi **keep rolling**  
 Accelerate **in ground eff 76 kts**  
 Flaps **retract**

## Short Field Landing

Fuel Pump **On**  
 Fuel selector **Fullest Tank**  
 Mixture **Rich below 3000'**  
 Seatbelts **Fastened**  
 Lights **As Req'd**  
 ATIS/AWOS/ASOS **Checked**  
 Airspeed **64 KIAS (Flaps Full)**  
 Braking **Heavy as required**

## Soft Field Landing

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Fuel Pump **On**  
 Fuel selector **Fullest Tank**  
 Mixture **Rich below 3000'**  
 Seatbelts **Fastened**  
 Lights **As Req'd**  
 ATIS/AWOS/ASOS **Checked**  
 Airspeed **66-71 KIAS (Flaps Full)**  
 Touchdown **Main first, softly**  
 Landing roll **Nose wheel up**  
 Elevator **Up**  
 Braking **As required**

## Go-Around

Throttle **Full**  
 Carb Heat **Cold (In)**  
 Flaps **slowly retract**  
 Airspeed **Accelerate to 76**

## V-Speed in kts

Rotate	V <sub>r</sub>	52-65
Max angle (no flaps)	V <sub>x</sub>	64
Climb rate (no flaps)	V <sub>y</sub>	76
Normal Climb Out	V <sub>climb</sub>	87
Glide	V <sub>g</sub>	76
Maneuver	V <sub>a</sub>	89-113
Norm. oper. range		55-125
Flaps	V <sub>fe</sub>	102
Never exceed	V <sub>ne</sub>	154
Stall (clean)	V <sub>s</sub>	55
Stall (dirty)	V <sub>so</sub>	49
Final Approach	Flaps	66
	No Flaps	72

## Engine Fire During Start

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Crank **Continue**  
 Mixture **Idle Cut-off**  
 Throttle **full**  
 Fuel Pump **Off**  
 Fuel Selector **Off**  
 Engine **Shut down and inspect**

## Engine Fire During Flight

Mixture **Idle Cut-off**  
 Throttle **closed**  
 Fuel Pump **Off**  
 Fuel Selector **Off**  
 Heater **Off**  
 Defroster **Off**

## Electrical Failure

Voltmeter **Verify Charge**  
 Alternator **Off**  
**Reduce load to minimum**  
 Breaker/alt **Check & Reset**  
 Alternator **On**  
 If still no power:  
 Alternator **Off**  
**Reduce load and land**

## Electrical overload

Master Switch **Off**  
 All on/off appliances **Off**  
 Master Switch **On**  
 turn on appliance one at a time  
 Over-voltage light **Off**  
**or TERMINATE flight ASAP**

## Spin Recovery

Throttle **IDLE**  
 Ailerons **NEUTRAL**  
 Rudder **Full opposite**  
 Control wheel **smoothly forward**  
 Pitch **Level when AS >63kts**

## Engine Roughness

Carb Heat **On**  
 Magnetos **Check**  
 Mixture **Adjust**  
 Fuel Pump **On**  
 Fuel Tank **Switch**

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## Engine Failure

### DURING FLIGHT

Airspeed **76 KIAS**  
**LOOK FOR A FIELD!**  
 Fuel selector valve **Fullest Tank**  
 Ignition **Both**  
 Primer **In & Locked**  
 Fuel Pump **On**  
 Mixture **Rich**  
 Carb heat **On**  
 Mayday **Transmit 121.5**  
 Mayday **Squawk 7700**

### If no engine restart possible:

Fuel selector valve **Off**  
 Ignition **Off**  
 Fuel Pump **Off**  
 Mixture **Idle Cut-off**  
 Flaps **As Required**  
 Master switch **Off**  
 Seatbelts **Fastened**  
 Door **Crack open**

### ON TAKEOFF

Power **Idle**  
 Brakes **Apply**  
 Centerline **Maintain**  
 Mixture **Cut off**  
 Mags **Off**  
 Master **Off**

### AFTER TAKEOFF

Yoke **push forward**  
 Airspeed **76 KIAS (flaps UP)**  
 Fuel selector valve **Off**  
 Ignition **Off**  
 Fuel Pump **Off**  
 Mixture **Idle Cut-off**  
 Flaps **As Required**  
 Master switch **Off**  
 Door **Crack open**