

# PIPER SENECA NORMAL CHECKLIST

PREFLIGHT	
Cabin	
Documents	A R O W
Control Lock	Remove
Crossfeed System	Drain
Fuel Selectors	On
Cowl Flaps	Open
Magnetos	Off
Avionics	Off
Gear Handle	Down
Master Switch	On
Fuel Quantity	Check
Landing Gear Lights	3 Green
Lights, Pitot Heat, Stall Warning	Check
Master Switch	Off
Flaps	Down
Right Wing	
General Condition	Check
Flap	Check
Aileron	Check
Wingtip	Check
Nav/Strobe	Check
Leading Edge	Check
Fuel Tank	Quantity
Fuel Tank	Sump x 2
Fuel Vent	Unobstructed
Fresh Air Inlet	Unobstructed
Right Tire and Brake	Check
Right Landing Gear/Well	Check
Right Engine Nacelle	
Nacelle	General Condition
Engine Sump	Drain
Engine Oil	6-7 Qts
Inside Condition	Check
Engine Nacelle	Secure Both Sides
Propeller	Check
Cowl Flaps	Check Open
Nose	
Nose	General Condition
Nose Gear	Check
Wheel and Strut	Check
Gear Well	Check
Landing Light	Check
Baggage Door	Open
Brake Fluid	Check
Baggage Door	Secure
Windshield	Check / Clean

Left Engine Nacelle	
Nacelle	General Condition
Engine Sump	Drain
Engine Oil	6-7 Qts
Inside Condition	Check
Engine Nacelle	Secure Both Sides
Propeller	Check
Cowl Flaps	Check Open
Left Wing	
Right Landing Gear/Well	Check
Right Tire and Brake	Check
Fresh Air Inlet	Unobstructed
General Condition	Check
Leading Edge	Check
Fuel Tank	Quantity
Fuel Tank	Sump
Fuel Vent	Unobstructed
Pitot/Static	Unobstructed
Stall Warning Vanes	Check
Wingtip	Check
Nav/Strobe	Check
Aileron	Check
Flap	Check
Fuselage and Empennage	
Rear Door	Secure
Left Static Vents	Unobstructed
Air Scoop	Unobstructed
Empennage	General Condition
Tie Down	Check
Elevator	Check
Rudder	Check
Rotating Beacon	Check
Right Static Vent	Unobstructed
Antennas	Secure/Check
BEFORE STARTING	
Preflight	Complete
Passenger Briefing	Complete
Seats, Belts, Harness	Secure
Brakes	Hold
Circuit Breakers	Check In
Avionics Master	Off
Alternate Air	Off
Cowl Flaps	Open

# PIPER SENECA NORMAL CHECKLIST

STARTING ENGINES	
Fuel selectors	On
Alternators	On
FIRST ENGINE	
Master	On
Beacon	On
Mags	On
Throttle	Full
Props	Full
Mixture	Rich
Fuel Pump	On, 5GPH, Off
Mixture	Cutoff
Throttle	1/4 Open
Prop Area	Clear
Starter	Engage
Mixture	Rich
RPM	800
Oil Pressure	Check
Mixture	Taxi Lean
SECOND ENGINE Repeat	
FLOODED START	
Fuel selectors	On
Alternators	On
FIRST ENGINE	
Master	On
Beacon	On
Mags	On
Throttle	Full
Props	Full
Mixture	Rich
Fuel Pump	On, 5 Sec, Off
Mixture	Cutoff
Throttle	Full
Prop Area	Clear
Starter	Engage
Mixture & Throttle	Scissor Once Started
RPM	800
Oil Pressure	Check
Mixture	Taxi Lean
SECOND ENGINE Repeat	



HOT START	
Fuel Selectors	On
Alternators	On
FIRST ENGINE	
Mixture	Cutoff
Props	Full
Throttle	1/2 Open
Master	On
Beacon	On
Mags	On
Prop Area	Clear
Starter	Engage
Mixture	Rich
RPM	800
Oil Pressure	Check
Mixture	Taxi Lean
SECOND ENGINE Repeat	
PRE TAXI	
Fuel Selectors	Crossfeed
Avionics	On
Lights	As Required
Flaps	Retract
Transponder	On
TAXI	
ATIS/Taxi Clearance	Obtain
Brakes	Check
Turn Instruments	Check
RUNUP	
Brakes	Set
Flight Controls	Free and Correct
Fuel Selectors	On
Cowl Flaps	Open
Mixture	Best Power
Prop	Full
Throttle	1500 RPM
Prop	Feather Check
Throttle	2000 RPM
Engine Instruments	Check
Amps / Volts	Check
Prop	Cycle
Alternate Air	Check
Mags	Check (175 Max)
Alternators	Check
Vacuum	Check
Throttle	Idle Check/800

## PIPER SENECA NORMAL CHECKLIST

PRE-TAKEOFF	
Flight Instruments	Check
Autopilot & Electric Trim	Test
Trim	Takeoff
Lights	As Required
Boost Pumps	On
Quadrant Friction	Set
Transponder	SQUAWK/ALT
Mixture	Best Power
Flaps	0-25
Emergency Briefing	Review
NORMAL TAKEOFF	
Throttles	2000 RPM
Engine Instruments	Check
Brakes	Release
Throttles	Full
Rotate	80 MPH
Climb	105
Gear	Retract
<b>Short Field:</b> Flaps 0, Brakes Hold Full Power, Brake Release, Vr, Climb 90 until obstacle clear, Retract gear and flaps at safe altitude	
<b>Short Short Field:</b> Flaps 25, Brakes Hold Full Power, Brake Release, Rotate 70, Climb 80 until obstacle clear, Retract gear and flaps at safe altitude	
Climb	
Gear	Retract
Flaps	Retract
Speed	105
Power	25" 2500 RPM
Mixture	As Required
Cowl Flaps	Open
Instruments	Check
Boost Pumps	Off
Landing Light	Off

Cruise	
MP/RPM	Set
Mixture	Lean
Cowl Flaps	Closed
Instruments	Check
DESCENT	
Power	Set
Mixture	As Required
Cowl Flaps	Closed
Flaps	As Required
BEFORE LANDING	
A B C G U M P	
Autopilot	Off
Boost Pumps	On
Cowl Flaps	Closed
Gas	On
Undercarriage	Down (150)
Mixture	Rich
Power	Set
Prop	Full under 100 kts
Flaps	Set
Landing Light	On
<b>Short Field:</b> Flaps Full, Approach 87, Clear 50' obs, Touchdown on spot, Retract flaps, Max Brakes	
REJECTED LANDING	
5 C's	
Cram	Power
Climb	Attitude
Clean	Gear and Flaps
Cool	Cowl Flaps Open
Communicate	Go-Around

## PIPER SENECA NORMAL CHECKLIST

AFTER LANDING	
Flaps	Retract
Cowl Flaps	Open
Mixture	Ground Lean
Boost Pumps	Off
Transponder	On
Lights	As Required
SHUTDOWN	
Avionics, Lights	Off
Mixture	Idle Cut-off
Magnetos	Off
Master	Off
Alternators	Off
SECURING	
Control Lock	Install
Tie-Down / Chocks	Secure
Cowl / Pitot Plugs	Install
Clean	Windows
Lock	All Doors
REQUIRED EQUIPMENT	
Day VFR A - T O M A T O - F L A M E S	
Anti Collision Lights, Tach, Oil Pressure, Mag Compass, Airspeed, Temp (Liquid Cooled Engine), Oil Temp, Fuel Gauges, Landing Gear Indicator, Altimeter, Manifold Pressure, ELT, Seatbelts	
Night VFR "F L A P S"	
Fuses, Landing Light (Hire), Anti-Collision, Position Lights, Source of Power	
IFR "G R A B C A R D"	
Gen/Alt, Radios, Attitude Indicator, Ball, Clock, Altimeter (Sensitive), Rate of Turn, DG	
GENERAL INFO	
Max T/O Weight	4200
Max Landing Weight	4000
Max Baggage Weight	100# Fore/Aft
Full Fuel	93 Gal
Tire Pressure	31 Nose/50 Mains

V - SPEEDS	
Vr	80
Vx	90
Vxse	90
Vy	105
Vyse	105
Vso	69
Vs	76
Vmc	80
Vsse	90
Va (3000-4200)	133-146
Vno	190
Vne	217
X Wind	15
Vle/Vlo (ext)	150
Vlo (ret)	125
Vfe 10	160
Vfe 25	140
Vfe 40	125
LIGHT GUN SIGNALS	
Color and Type	Ground
Steady Green	Cleared for Takeoff
Flashing Green	Clear for Taxi
Steady Red	Stop
Flashing Red	Taxi Clear Ldg Area
Flashing White	Return To Start Point
Alt Red and Green	Extreme Caution
Color and Type	Flight
Steady Green	Cleared to Land
Flashing Green	Return for Landing
Steady Red	Give Way
Flashing Red	Airport Unsafe
Alt Red and Green	Extreme Caution

## PIPER SENECA EMERGENCY CHECKLIST

### ENGINE FAILURE AFTER LIFT OFF

Airspeed	105mph
Gear	UP
Flaps	UP
Directional Contro	MAINTAIN
Dead Engine	IDENTIFY VERIFY
Prop Dead Engine	FEATHER

### ENGINE RESTART ATTEMPT

Fuel Selector Valve	CROSSFEED
Cowl Flap Dead Engine	CLOSED
Cowl Flap Live Engine	OPEN
Alternate Air	ON
Mixture	RICH
Prop	FULL FORWARD
Throttle	1/4 OPEN
Magnetos	LEFT or RIGHT ON
Fuelpump	ON
Alternator	ON
Throttle 15" until Engine Warm	

### SECURE DEAD ENGINE

Prop	FEATHERED
Fuel Selector Valve	OFF
Cowlflap Dead Engine	CLOSED
Alternate Air	OFF
Mixture	CUTOFF
Throttle	IDLE
Magnetos	OFF
Fuel Pump	OFF
Alternator	OFF

### ENGINE UNFEATHERING

Fuel Selector Valves	ON
Cowl Flap Dead Engine	CLOSED
Alternate Air	OFF
Mixture	RICH
Prop	FULL FORWARD
Throttle	1/4 OPEN
Magnetos	ON
Fuelpump	OFF
Alternator	ON
Starter	ENGAGE
Throttle 15" until Engine Warm	

### ONE ENGINE LANDING

Seats and Seatbelts	SECURE
Airspeed on Final	105
Landing Gear	DOWN
<i>(when certain to make it to the field)</i>	
Flaps	AS REQUIRED

### ELECTRICAL FIRE IN FLIGHT

Master	OFF
Avionics	OFF
All Other Switches	OFF
Vents, Cabin Air, Heat	OFF
Fire Extinguisher	Activate
Vents	Open if Fire is Out

*If fire is out and electrical is required for flight*

Master	On
Circuit Breakers	CHECK DO NOT RESET
Radios	OFF
Avionics	ON
Radios/Electrical	ON, One at a Time
Vents, Cabin Air, Heat	ON

### FIRE DURING START

Cranking	CONTINUE
If Engine Starts	
Power	1700 for 1 Minute
Engine	SHUTDOWN

*If Engine Fails to Start*

Throttle	FULL OPEN
Mixture	IDLE CUTOFF
Cranking	CONTINUE
Fire Extinguisher	OBTAIN
Engine	SECURE
Master Switch	OFF
Mags	OFF
Fuel Selector	OFF
Aircraft	EVACUATE

### INE FIRE IN FLIGHT

Fuel Shutoff	OFF
Mixture	IDLE CUTOFF
Throttle	CLOSED
Propeller	FEATHERED
Heater/Defroster	OFF
Airspeed	INCREASE
Landing	ASAP

### CABIN FIRE

Master	OFF
Vents/Air/Heat	CLOSED
Fire Extinguisher	ACTIVATE
Vents/Air/Heat	OPEN IF FIRE OUT
Land	ASAP

### WING FIRE

All Lights	OFF
Pitot Heat	OFF
Side slip to keep fire away from tanks/cabin	

## PIPER SENECA EMERGENCY CHECKLIST

### LANDING GEAR FAILS TO RETRACT

Master	ON
Landing Gear Lever	CHECK
Landing Gear Circuit Breakers	IN
Gear Up Lights	CHECK
Landing Gear Lever	RECYCLE
Gear Motor	CHECK AMMETER

### LANDING GEAR FAILS TO EXTEND

Circuit Breakers	CHECK
Master Switch	ON
Alternators	CHECK
Navlights (Daytime)	OFF
Airspeed max	100mph
Gear Selector	DOWN
Emergency Gear Extension Knob	PULL
3 Green Lights	CHECK
Emergency Gear Extension Knob	OUT

### GEAR UP LANDING

Gear Lever	UP
Landing Gear Circuit Breakers	IN
Runway	Longest Hard or Smooth
Wing Flaps	UP
Airspeed	95
Doors	UNLATCH
Avionics Master	OFF
Master	OFF
Touchdown	TAIL LOW
Mixture	IDLE CUTOFF
Mags	OFF
Fuel Selectors	OFF
Airplane	EVACUATE

### LANDING WITHOUT POSITIVE INDICATION OF GEAR LOCKING

Before Landing Checklist	COMPLETE
Approach	NORMAL
Landing Gear Circuit Breakers	IN
Landing	TAIL LOW
Braking	MINIMUM
Taxi	SLOWLY
Engine	SHUTDOWN

### LANDING WITH FLAT MAIN TIRE

Approach	NORMAL
Touchdown - good tire first. Hold airplane off flat tire as long as possible using aileron control	
Directional Control	MAINTAIN

### PROPELLER OVERSPEED

Throttle	CLOSED
Speed	105
Prop	LOW RPM
Throttle increase till Governor engages	
Prop/Throttle	INCREASE

### VACUUM SYSTEM FAILURE

Prop	2700 RPM
Altitude descend where about 4.5 inches of mercury can be maintained	
Use Turn Coordinator (Electric) to monitor HI and AI performance	

### HIGH VOLTAGE ANNUNCIATOR BOTH

Avionics Master	OFF
Alternator circuit breaker	IN
Alternators Both	OFF THEN ON
(one at a time)	

Alternator with least load	ON
Nonessential Equipment	OFF
Do not exceed 50 amperes output	
Alternators Both	ON (if they show equal output of less than 50 amperes)

### HIGH VOLTAGE ANNUNCIATOR

Avionics Master	OFF
Alternator circuit breaker	IN
Alternator	OFF THEN ON
(OFF if alternator output is still excessive)	
Nonessential Equipment	OFF

Do not exceed 50 amperes output

### LOW VOLTAGE ANNUNCIATOR

Avionics Master	OFF
Alternator circuit breaker	IN
Alternator	OFF THEN ON
Low Voltage Annunciator	CHECK OFF
Avionics Master	ON

*If it does not solve the problem*

Alternator	OFF
Non-Essential Electrical	OFF
Landing	ASAP



## Weight & Balance

PA34-200 N4833T

STATION	WEIGHT	ARM	MOMENT
Aircraft BASIC EMPTY WEIGHT		XXX	
Pilot & Co-pilot		85.5	
Middle Row Seats		118.1	
Rear Row Seats		155.7	
Nose Baggage		22.5	
Rear Baggage (max 100)		178.7	
Fuel @ 6 lbs/Gal		93.6	
<b>Sub Total - Takeoff Weight (4200 Max)</b>		XXX	
Less Fuel to Destination @ 6 lbs/gal	-	93.6	-
<b>Landing Weight (4000 Max)</b>		XXX	
<b>Ramp Weight CG</b>			
<b>Landing Weight CG</b>			

