

PA 34-200 SENECA CHECKLIST

PRE-FLIGHT ACTION

Weather	Check
Equipment Required	Check
Performance Data	Complete

WALK AROUND INSPECTION

INTERIOR

Landing Gear Handle	Down
Avionics Master	OFF
Master Switch	ON
Landing Gear lights	3 green
Fuel Quantity	check
Cowl Flaps	open
Master Switch	off
Ignition Switches	off
Mixtures	Idle cutoff
Trim	Neutral
Control Lock	Removed
Flaps	Down
Pitot static system	drain
ARROW	check

EXTERIOR

Right aileron & flaps	inspect
Right main gear	inspect
Right wing tip	inspect
Right leading edge	inspect
Right fuel tank	inspect
	Cap & Qty
Oil quantity	check
Right propeller	inspect
Right cowl flap	open and secure
Fuel drains	drain
Nose section	inspect
Nose gear	inspect
Fwd Baggage	check brake fluid
	Secured & locked
Windshield	Clean and secure
Left wing and engine	same as right
	side
Pitot tube	inspect
Stall warning veins	inspect
Rear door	latched
Left static vent	inspect
Dorsal fin air scoop	inspect
Empennage	inspect
Stabilator	inspect
Right static vent	inspect
Antennas	inspect
Nav and landing lights	check

BEFORE START

Seats	adjusted
Seat belts and harnesses	fastened
Parking brake	set
Circuit breakers	check in
Avionics master	off
Alternate air	off
Alternators	on

STARTING THE ENGINES

Mixture	idle cutoff
Throttle	open ½ inch
Propellers	forward
Master switch	on
Beacon	on
Magnetos	on
Electric fuel pumps	on
Mixtures	rich until fuel
	flow is stabilized
	then back to idle
	cutoff
Propeller area	clear
Left starter	engage
Left mixture	advance as
	engine starts
	check
Left oil pressure	repeat steps for
Right engine	left engine
	off
Electric pumps	set
Fuel flow meter	
Mixtures	lean
Avionics master switch	on
Atis	obtain
Altimeter	set
Directional gyro	set
GPS	Check & Set

TAXI

Brakes	test
Compass	check
Airspeed indicator	check
Attitude indicator	check
Altimeter	field elevation
Vertical speed indicator	check
Directional gyro	check
Turn coordinator	check

RUN UP

Parking brake on
 Mixtures rich
 Propellers forward
 Throttles 1500 RPM
 Propellers feather
 Throttle 2000 RPM
 Governor check
 Magnetos check
 Alternate air check
 Propellers check 3 times
 Alternators check
 Vacuum and engine instruments check
 Throttle idle

BEFORE TAKEOFF

Fuel selectors on
 Alternators on
 Engine gauges green
 Vacuum 4.5 to 5.2 hg
 Altimeter set
 Attitude indicator set
 Heading indicator set
 Clock set
 Mixtures rich
 Propellers forward
 Quadrant friction adjusted
 Cowl flaps open
 Seat backs erect
 Wing flaps set
 Trim set
 Seat belts & harness fastened
 Controls free and correct
 Doors latched
 Electric fuel pumps on
 Pitot heat as required
 Transponder altitude
 Departure briefing complete

TAKEOFF

Rotate 85-90 MPH
 Landing gear up no more rwy Available
 Flaps up
 Climb speed 105 MPH

CLIMB CHECK

Throttles 25 inches Hg
 Propellers 2500 RPM
 Fuel pumps off one at a time
 Flight & engine instruments check

CRUISE

Throttles 22 inches Hg
 Propellers 2300 RPM
 Mixtures lean
 Cowl flaps closed

Engine instruments scan

DESCENT

Cowl flaps closed
 Throttles reduced
 Mixtures as required

APPROACH

Atis obtain
 Flight & nav instruments set
 Altimeter set
 Heading indicator set
 Approach briefing complete
 Fuel selectors ON
 Electric fuel pumps on
 Cowl flaps closed
 Airspeed 120 MPH

BEFORE LANDING

Seat back erect
 Seat belts & harness fastened
 Fuel selectors on
 Cowl flaps open
 Electric fuel pumps ON
 Mixtures rich
 Landing gear down 3 green

AFTER LANDING

Flaps UP
 Mixtures lean
 Transponder STBY
 Fuel pumps off
 Radios set

SHUT DOWN

Avionics master OFF
 Mixtures idle cutoff
 Magnetos off
 Master switch off

ENGINE FAILURE

BEFORE ROTATION SPEED

Throttles	close
Brakes	apply
Stop	straight ahead

AFTER ROTATION SPEED (with runway remaining)

Throttles	close
Land	straight ahead
Brakes	apply
Stop	straight ahead

AIRBORNE BELOW 1000 FT

Pitch for blue line	if required
Identify	dead foot dead engine
Verify	retard throttle
Inoperative engine	feather

AIRBORNE ABOVE 1000 FT

Pitch for blue line	if required
Mixtures	Forward
Propellers	forward
Throttles	forward
Flaps	UP
Gear	up
Identify	dead foot dead engine
Verify	throttle idle
Fuel selectors	on
Fuel pumps	on
If engine does not start	
Inoperative engine	feather

SECURE ENGINE CHECKLIST (FEATHERING)

Inoperative engine fuel selector	off
Inoperative engine cowl flap	off
Inoperative engine mixture	off
Inoperative engine magnetos	off
Inoperative engine electric fuel pump	off
Inoperative engine alternator	off
Electrical load	reduce
Fuel selector	consider Xfeed
Return for landing, Declare emergency	

UNFEATHERING PROCEDURE

Fuel selector	on
Mixture	rich
Propeller	cruise RPM
Throttle	open ¼ inch
Magnetos	on
Electric fuel pump	on
Starter	engage
Throttle	low RPM
Alternator	on

ENGINE FIRE ON THE GROUND

Mixture	idle cut-off
Fuel selector	off
Fire	extinguish

ENGINE FIRE IN FLIGHT

Fuel selector	off
Throttle	close
Propeller	feather
Mixture	idle cut-off
Airspeed	increase

EMERGENCY DESCENT

Throttles	close
Propellers	forward
Mixtures	rich
Landing gear	extend
Airspeed	below 150 MPH

ELECTRICAL FAILURES

OVERVOLTAGE LIGHT ILLUMINATES

Electrical load	turn off all equip
Alternator switches	off
Alternator switches	on one at a time
Alternator switch with highest load	off
Electrical load maximum	50 AMPS

DEPLETED BATTERY

Circuit breakers	reset
Electrical load	reduce
Operating alternator	on
Master switch	off then on
	observe output
If no output observed	repeat
Operating alternator	on
Master switch	off then on
Electrical load	under 50 AMPS

LOSS OF OUTPUT FROM ONE ALTERNATOR

Electrical load	under 50 AMPS
Circuit breakers	reset
Alternator switch	OFF then ON

VACCUM SYSTEM FAILURE

Engine speed	2700 RPM
Altitude descent to maintain	4.5 Hg

LANDING GEAR EMERGENCIES

MANUAL EXTENTION

Circuit breakers	check
Master switch	on
Alternators	check
Navigation lights	check
Airspeed below	100 MPH
Gear selector	down
Emergency extension knob	pull
Gear lights	3 green
Emergency extension knob	leave pulled out

GEAR UP EMERGENCY LANDING

Approach speed	normal
Flaps	up
Throttles	close before touch-down
Master switch	off
Magnetos	off
Fuel selector valves	off
Touch-down	minimal airspeed

PROPELLER OVERSPEED

Throttle	CLOSE
Airspeed	105 MPH
Propeller	low RPM
Throttles	increase until governor engages
Propellers	increase to desired setting