

Seneca I No Smoking

Checklist

Nice Air Do Not Remove From Aircraft

PRE-FLIGHT

Control Lock.....REMOVE
 Gear.....DOWN
 Master.....ON
 Gear lights/indicator.....✓
 Fuel gauge.....✓
 Nav lights.....✓
 Pitot heat.....✓
 Master.....OFF
 Trims.....SET TO ZERO
 Flaps.....✓
 Cross Feed.....DRAIN

RIGHT WING

Flap.....✓
 Aileron.....✓
 Lights.....✓
 Fuel.....✓ and SECURE
 Fuel drains.....DRAIN(2)
 Tie Downs/Chocks.....REMOVE
 Cowl Flap.....✓
 Engine Air Intake.....✓
 Engine Oil.....✓ SECURE
 Propeller.....✓
 Engine Cowl and Doors.....✓
 Engine Gascolator.....DRAIN
 Tire, Brake line, Shock strut,
 trunion.....✓

NOSE SECTION

Well doors, Tire, Strut.....✓
 Taxi light.....✓
 Baggage door.....SECURE
 Windshield.....CLEAN

LEFT WING

Engine Gascolator.....DRAIN
 Cowl Flap.....✓
 Tire, Brake line, Shock strut,
 Gear uplock rollers, trunion.....✓
 Engine Oil.....✓ SECURE
 Propeller.....✓
 Engine Cowl and Doors.....✓
 Engine Air Intake.....✓
 Tie Down/ Chocks.....REMOVE
 Pitot.....✓
 Stall Warning Vanes.....(2) ✓
 Fuel drains.....DRAIN(2)
 Fuel.....✓ & SECURE
 Lights.....✓
 Aileron.....✓
 Flap.....✓

LEFT FUSELAGE

Rear Door.....✓
 Cabin Air Outlet.....✓
 Static Port.....✓
 Antenas and Beacon.....✓

EMPENNAGE

Cabin air inlet.....✓
 Control surfaces, Tabs.....✓
 Tail cone.....✓
 Tie down.....REMOVE

RIGHT FUSELAGE

Static Port.....✓

PRE-START

Seats.....POSITISON & LOCK
 Seat Belts.....FASTENED
 Brake.....SET
 Circuit Breakers.....IN
 Landing Gear Handle.... DOWN

Avionics.....OFF
 Alternate Air.....OFF
 Cowls Flap.....OPEN
 Fuel Selector.....ON
 Auto Pilot.....OFF
 Master Switch.....ON
 Landing Gear.....3 GREEN
 Alternators.....ON

NORMAL STARTING

Left Engine
 Beacon.....ON
 Magneto Switches.....ON
 Throttle.....½" OPEN
 Propeller.....FORWARD
 Mixture.....FULL RICH
 Fuel boost pump.....ON
 (until pressure stabilizes then-OFF)
 Mixture.....IDLE CUT-OFF
 Propeller area.....CLEAR
 Start switch.....START
 Warm up.....800 to 1000 RPM
 Oil pressure.....25 PSI in 30sec
 Right Engine...**Repeat above**
 Mixture.....1" LEAN for taxi
 Radios.....ON
 Transponder.....STANDBY

TAXING

Parking Brakes.....OFF
 Taxi.....CHECK BRAKES
 Fuel Pumps.....OFF
 Left fuel.....X feed
 Right fuel.....X feed
 Flight Instruments.....✓

BEFORE TAKEOFF

Parking Brake.....SET
 Cowls.....OPEN
 Fuel Valve Selectors.....ON
 Mixture.....FULL RICH
 Prop.....FULL FWD
 Power.....1500 RPM
 Prop.....CHECK FEATHER
 Power.....2000 RPM
 Props.....EXERCISE
 Magnetos.....✓
 Max 175 Drop/50 Diff
 Fuel flow. CHECK, Purge Vapor
 Alternate air.....✓
 Alternators.....OFF/ON ✓Drop
 Vacuum gauge.....✓
 Power.....1000 RPM
 Quadrant Friction.....SET
 TRIM(s).....SET
 Flaps -✓Operation & SET
 Controls.....FREE & CORRECT
 Altimeter.....SET
 Heading.....SET
 Attitude.....SET
 Engine Gauges.....in GREEN
 Seats.....ADJUST and LOCK
 Seat Belts.....FASTENED
 Doors/Windows.....LOCKED
 Electric Fuel Pumps.....ON
 Mixture.....SET
 Prop.....FULL FWD
 Pitot Heat.....AS REQUIRED
 Anti-Collision Lights.....ON
 Radios.....SET
 Transponder.....SET/ALT

TAKE -OFF

Seat Belts.....FASTENED
 Fuel.....On
 Trim(s).....SET
 Flaps.....SET
 Prop.....FULL FWD
 Mixture.....SET
 Electric Fuel Pumps.....ON

AFTER TAKEOFF

Gear.....Check UP
 Flaps.....UP
 Cruise Climb.....120 MPH
 Manifold Pressure.....25 in.
 Propellers.....2500 RPM
 Fuel Pumps...OFF left then right
 Engine Temp.....MONITOR
 Mixture.....LEAN
 Cowl Flaps.....AS REQUIRED
 Landing Lights...AS REQUIRED

DESCENT

Altimeter.....SET
 Fuel Selector.....ON
 Cowl Flaps.....CLOSED
 Mixture.....Rich
 Power-.....AS REQUIRED
 (avoid prolonged idle settings
 and low cylinder head
 temperatures)

BEFORE LANDING

Safety belts.....SECURE
 Fuel.....ON
 Mixtures.....RICH
 Electric Fuel Pump.....ON
 Gear.....DOWN (<150MPH)
 Green lights & Mirror....VERIFY
 Landing Lights.....ON
 Flaps.....As required
 Cowl Flaps.....CLOSED
 Propellers....FULL FWD on final
 Approach.....95 MPH

AFTER LANDING

Flaps.....RETRACT
 Transponder.....OFF
 Trim Tabs.....SET TO ZERO
 Fuel Pumps.....OFF
 Strobes.....OFF
 Mixture.....LEAN
 Electric Fuel- Pumps.....OFF
 Cowl flaps.....OPEN
 Landing lights.....OFF

SHUTDOWN

Parking brake.....SET
 Avionics.....OFF
 Propellers.....FULL FWD
 Throttles.....1000 RPM
 Mixtures...Idle Cutoff (L then R)
 Magnetos.....OFF
 Boost pumps.....OFF
 Alternators.....OFF
 Master.....OFF
 Controls.....LOCKED
 Tie downs.....SECURE
 Parking brake.....Release

V-SPEEDS

V_R.....85 MPH
 V_{MC}.....Red Line 80 MPH
 V_{YSE}.....Blue Line 105 MPH
 V_{XSE}.....93 MPH
 V_{SSE}.....90 MPH
 V_X.....90 MPH
 V_Y.....105 MPH
 V_{SO}.....69 MPH
 V_{S1}.....76 MPH
 V_{FE}.....125 MPH
 V_{LE}.....150 MPH
 V_A.....146 MPH
 V_{NO}.....190 MPH
 V_{NE}.....217 MPH

FLY THE AIRPLANE

ENGINE OUT PROCEDURE

1. MaintainHeading with Rudder & Bank
2. MaintainV_{YSE}(105 MPH)
3. Mixtures.....BOTH FULL FWD
4. PropBOTH FULL FWD
5. Throttles.....BOTH FULL FWD
6. Gear.....UP
7. Flaps.....UP
8. IDENTIFY.....Dead engine
(Dead Foot=Dead Engine)
9. VerifyDead Engine
(Retard POWER)
10. Altitude: < 2000' AGL FEATHER & Secure

Troubleshoot when > 2000' AGL

1. Engine Gauges.....CHECK
2. Fuel Flow.....CHECK
3. Fuel Pump.....ON
4. Fuel Dead Engine..... ✓ ON then X FEED
5. Alternate Air.....ON
6. Magnetos.....CHECK
7. If Still Dead.....FEATHER AND SECURE

SECURE DEAD ENGINE

1. Fuel Pump.....OFF
2. Mixture.....IDLE CUT-OFF
3. Fuel.....OFF
4. Cowl.....CLOSED
5. Magnetos.....OFF
6. Alternators.....OFF
7. Alernate Air.....CLOSED
8. Good Engine POWER Maximum until
safe altitude
9. Good Engine Cowl Flaps OPEN as
required
10. Electric load.....Monitor/Reduce
11. Fuel.....Cross Feed as needed

RESTARTING INOP ENGINE

Before start, identify the cause of failure but before oil gets cold

1. Fuel.....ON
 2. Magneto.....BOTH
 3. Throttle.....SET ~1"
 4. Propeller.....FULL FWD
 5. Starter.....ENGAGE
(until engine windmills)
 6. Boost Fuel Pump.....ON
 7. Mixtures.....RICH
- If engine fails to run, clear engine by allowing it to windmill with mixture in the FULL LEAN position. When engine fires, advance mixture to FULL RICH.
8. After start.....12" MP/ 1800 RPM
(Until Engine Temp In Green)
 9. Oil PressureCHECK
 10. Oil Temperature.....CHECK
 11. Alternator.....ON
 12. Cowl flaps.....set as required
 13. Boost Pump.....OFF

NOTE: If air start is unsuccessful, return propeller control to the FEATHER position and secure engine.

SINGLE ENGINE GO AROUND

1. Mixtures.....RICH
2. Propeller.....FORWARD
3. Power.....FULL
4. Gear.....UP
5. Flaps.....RETRACT
6. Airspeed.....V_{YSE}(105 MPH)
7. Trim.....Set
8. Radio.....Declare emegency
9. Turns.....Toward Good Engine
10. Cowl Flaps.....AS REQUIRED

SINGLE ENGINE LANDING

1. Dead Engine.....FEATHERED
2. Altitude.....Maintain Normal
3. AirspeedBlueline until final
4. GearAS REQUIRED
5. Mixture.....FORWARD
6. Propeller.....FORWARD
7. Flaps -UP until final

EMERGENCY GEAR EXTENSION

1. Master Switch.....ON
2. Landing Gear Switch.....DOWN
3. Circuit Breaker.....CHECKED
4. Nav Lights.....CHECKED
5. Airspeed.....< 100 MPH
6. Manual Gear Ext.....PULL KNOB
7. Fishtail Aircraft
8. Gear lights.....CHECK 3 GREEN

WARNING: After emergency landing gear extension, do not move any landing gear controls or reset circuit breakers until airplane is on jacks.

PROP OVERSPEED

1. Throttle.....CLOSED
2. Airspeed.....105 MPH
3. Propeller control..... low RPM
4. Slowly increase throttle until governor is engaged
5. Slowly increase prop and throttle to the desired setting
6. Continue flight at reduced speed and power

RUNAWAY ELECTRIC TRIM

1. Apply control pressure as needed for attitude control
2. Trim interrupt.....DEPRESS
3. Trim.....SET

LOSS OF OIL PRESSURE

1. Throttle.....CLOSED
2. Mixture.....IDLE CUT-OFF
3. Propeller.....FEATHER
4. Continue..... single engine flight

ENGINE FIRE (GROUND)

1. Mixture Controls.....IDLE CUT-OFF
2. Continue to crank affected engine
3. Throttles.....OPEN
4. Fuel Selectors.....OFF
5. Electric Fuel Pumps.....OFF

ENGINE FIRE (IN FLIGHT)

Shut down the affected engine according to the following procedure, and land immediately. Follow the applicable single-engine procedures.

1. Fuel Selector.....OFF
2. Mixtures.....IDLE CUT-OFF
3. Propeller.....FEATHER
4. Aux Fuel Pump.....OFF
5. Magneto/Start Switch.....OFF
6. Alternator Switch.....OFF
7. Cabin Heat.....OFF

ELECTRICAL FIRE INFLIGHT

1. Master Switch.....OFF
2. Air Vents.....OPEN
3. Cabin Heat.....OFF
4. Land as soon as practical