



N4546T Seneca I Checklist

FLIGHT PREP

- ✓ Radio/GPS *Backup*
- ✓ Fuel (antifreeze) *Adequate*
- ✓ Oil *Extra on board*
- ✓ Life vests/rafts *as needed*
- ✓ Rest rooms, Travel Johns *On Board*

PREFLIGHT (CABIN)

- ✓ Seat *Adjust*
- ✓ Gust Lock *Remove*
- ✓ Charts, flashlight, etc *Store*
- ✓ VOR check *as required*
- ✓ ATC Clr *Get*, FPL (430) *Program*, 430 Database *Update*, ATIS *Obtain*
- ✓ Altimeter *Adjust*
- ✓ Friction lock *Adjust*
- ✓ Magnetos *Off*, Mixtures *Cut Off*
- ✓ Gear selector *Down*
- ✓ Cowl flaps *Open*
- ✓ Static system, *Drain*, then *Normal*
- ✓ Transponder *STBY*
- ✓ Avionics master *Off*/Master *On*
- ✓ Gear lights, 3 *Green*
- ✓ Flaps *Test* (landing), then *Retract*
- ✓ Fuel gauge *full or as appropriate*
- ✓ Master *Off*
- ✓ Starting Hobbs *Log*
- ✓ X-feed fuel lines *Drain*

RIGHT WING

- ✓ X-feed lines *No Water, Closed*
- ✓ Right flap/aileron/wing tip & below
- ✓ Nav/Strobe/Taxi Lights
- ✓ Right wing leading edge
- ✓ Right wing tie-down *Release*
- ✓ Fuel tank vent, *Check*
- ✓ Right fuel sumps (3) *Drain*
- ✓ Right tank fuel level/Cap
- ✓ Open/Inspect right nacelle/right engine—Ensure 6 qts Oil, then *secure*
- ✓ Air inlet/Cowl Openings *Clear*
- ✓ Right propeller& spinner *Check*
- ✓ Cowl flaps *Check*
- ✓ Open/Inspect left nacelle/right engine, then *secure*
- ✓ Right main gear/strut (53 psi)

NOSE

- ✓ Nose *Undamaged*
- ✓ Nose gear, 31 psi, Strut, chocks
- ✓ Landing/taxi lights *Inspect*
- ✓ Forward baggage door *Locked*
- ✓ Windshield *Clean and Secure*

LEFT WING

- ✓ Open/Inspect right nacelle/left engine—Ensure 6 qts oil, then *secure*
- ✓ Cowl flaps *Check*
- ✓ Air inlet/Cowl Openings *Clear*
- ✓ Left propeller & spinner *Check*
- ✓ Open/Inspect left nacelle/left engine, then *secure*
- ✓ Left wing tie-down *Release*
- ✓ Fuel tank vent, *Check*
- ✓ Left fuel sumps (3) *Drain*
- ✓ Left tank fuel level/Cap
- ✓ Left wing leading edge
- ✓ Pitot tube *Check*
- ✓ Stall Horn Vanes, *Check*
- ✓ Taxi/Nav/Strobe Lights
- ✓ Left wing tip (& below), aileron/flap
- ✓ Left main gear (Strut, 53 psi)

LEFT FUSELAGE

- ✓ Antennas (above and below) *Secure*
- ✓ Rear door *Latched (NOT locked)*
- ✓ Left static port opening *Clear*

EMPENNAGE

- ✓ Fin & Fin-strobe *Check*
- ✓ Left leading edge horiz stabilator
- ✓ Rudder/Stabilator & Trims, *Check*
- ✓ Tail tie down *Remove*
- ✓ Right leading edge of horiz stabilator

RIGHT FUSELAGE

- ✓ Fin air scoop *Unobstructed*
- ✓ Right static port opening *Clear*

ELECTRICAL/LIGHTING CHECK

- ✓ Master *On*
- ✓ All Lighting *Test*
- ✓ Pitot Heat *On*, Pitot Head *Warm*
- ✓ All lights/Pitot *Off*, Master *Off*

ENGINE START

- ✓ Passengers *Brief* (belts/exits)
- ✓ Seats, belts, Doors **SECURE/LOCKED**
- ✓ All Electric/Avionics Master *Off*
- ✓ Beacon *On*, A/P *Off*
- ✓ All circuit breakers *In*
- ✓ Props *Full Forward*, Mixtures *Idle*
- ✓ Throttles *½"*
- ✓ Magnetos/Master/Alternators *On*
- ✓ Gear lever *Down* (3 green no red)
- ✓ Right fuel pump *On*, Prime mixture, then *Idle*
- ✓ Brakes *Set*, Right *"Clear!"*
- ✓ Right starter *Engage*, Mixture *Full Rich*, RPM *1000*
- ✓ Oil pressure *Check*
- ✓ Left fuel pump *On*, Prime mixture, then *Idle*
- ✓ Brakes *Set*, Left *"Clear!"*
- ✓ Left starter *Engage*, Mixture *Full Rich*, RPM *1000*
- ✓ Oil pressure *Check*
- ✓ Fuel pumps *Off*
- ✓ Air/heat/defrosting controls *Adjust*
- ✓ Nav/Taxi/Ildg/inst lights *as required*
- ✓ Avionics Master *On*

TAXI

- ✓ Pitot heat *As required*
- ✓ Stormscope *On*
- ✓ Frequencies/Nav devices *Set*
- ✓ Brakes *Check*
- ✓ HSI vs. compass, turn indicator/ball
- ✓ X-feed fuel/both engines *Check*

RUN-UP

- ✓ Brakes *Engage*
- ✓ Seats belts, Cabin doors *Locked*
- ✓ Flight controls *Check*
- ✓ Flight Instruments *Check*
- ✓ Mixtures—*full rich*, props *forward*
- ✓ Fuel selectors set *On*
- ✓ Eng. instruments *Check*
- ✓ Throttles *1500 RPM* (ensure warm)
- ✓ Feather props, ensure 500 RPM drop (NO more) within 3 seconds
- ✓ Throttles *2000 RPM*
- ✓ Cycle prop 3 times (2 – 300 RPM drop), once for RPM, MP rise & oil pressure drop
- ✓ L/R mags (<175 RPM drop, <50 RPM diff.)
- ✓ Alternate air *Check*
- ✓ Engine gauges *Green*
- ✓ Throttles idle (*check*), then *1000 RPM*
- ✓ Ammeter outputs equal, <50
- ✓ Switch one *Off*, Annunciator *Test*, Load Transfer *Ensure*. Then test the other. Leave both *On*.
- ✓ Fuel *Verify*
- ✓ Engine Instruments/Vacuum *Check*
- ✓ Flaps *Take-off* (0 – 25)
- ✓ Stabilator/Rudder Trim *Take-off*
- ✓ Transponder *Alt* (check squawk)

BEFORE TAKE-OFF

- ✓ **Doors *Re-check—locked***
- ✓ Take-off *Brief* (V1, Engine out)
- ✓ Electric fuel pumps *On*
- ✓ Mixtures *Full Rich* or as appropriate
- ✓ Strobe lights *On*, Nav/landing lights (night/bad weather) *On*
- ✓ Frequencies *Set*
- ✓ Parking brake *Release*

TAKE-OFF

- ✓ Throttles/Props *Full*, Engine Instruments *Monitor*
- ✓ Rotate, 85 (80 w/25 deg flaps)
- ✓ Climb, 105 (Vy/Vyse) (90 Vx, 93Vxse)

AFTER TAKE-OFF

- ✓ **Gear/Flaps *Retract***
- ✓ **At 1,000', *Reduce power 25/25***

CRUISE CLIMB

- ✓ Mixtures *Full Rich*
- ✓ Power 25/25, Speed 120
- ✓ Engine Instruments *Monitor*
- ✓ Cowl flaps, *Closed or Half-open* (**watch temps**)
- ✓ Fuel pumps *Off* (Check fuel flow)
- ✓ **Flight plan *Activate***

CRUISE

- ✓ Power *Cruise*, Props *Sync*

(3,000' ISA day):

75%--24.7 MP/2400 RPM

65%--22.2 MP/2400 RPM

- ✓ Cowl flaps *Closed*
- ✓ Mixtures *Lean rich of peak*
- ✓ Engine/Flight instruments *Monitor*
- ✓ Altimeter *Reset to local settings*
- ✓ If potential icing, Alt engine air/Static Source *Open*
- ✓ Landing/Taxi lights *Off*

CRUISE DESCENT/APPROACH

- ✓ Power *Reduce Slowly*
- ✓ Mixtures *Enrichen*, Cowl flaps *Closed*
- ✓ Passengers *Brief* (Belts)
- ✓ ATIS *Obtain*, Altimeter *Reset*
- ✓ Landing Performance *Brief*
- ✓ Frequencies *Set/Ident/Verify*
- ✓ **CDI to *VLOC or GPS***

TRAFFIC PATTERN

- ✓ Landing Lights/Strobes *On*
- ✓ Speed <160, 1st Flap *Engage*
- ✓ **Gear *Extend* (<150), *verify mirror***
- ✓ **GUMPS *Check*, Flaps *Engage*** (<140 25 Deg., <125 40 Deg.)
- ✓ Short Final *105* (short field: 95-100)
- ✓ **3 *Green Ensure***

AFTER LANDING

- ✓ Flaps *Retract*, Cowl flaps *Open*
- ✓ Electric fuel pumps *Off/Strobes Off*
- ✓ Ldg/Taxi lights *Off or As Required*
- ✓ Transponder *STDBY*

SECURING

- ✓ Avionics master *Off*
- ✓ All Lights/Electric *Off*
- ✓ Mixtures *Cut-off*, Mags/Alternators/Master *Off*
- ✓ Airplane Log *Complete*
- ✓ **FLIGHT PLAN *CLOSE***
- ✓ Gust Lock *Install*
- ✓ Sunshade *Install*
- ✓ Cockpit/Passenger doors *Lock*
- ✓ Tie-downs/Chocks

PERFORMANCE NOTES

WEIGHTS

Gross T/O: 4,200, Landing: 4,000

Empty: 2,831, Useful: 1,369

FUEL

Usable Fuel: 93 gallons

SPEEDS

Vr 85, Vy 105 (**blue line**), Vx 90, Vyse 105 (**blue line**), Vxse 93, Vle 150, Vfe 10-160, 25-140 & 40-125, Vs 76, Vs0 69, Va 133, Vno 190, Vne 217, Vmc 80 (**red line**), gear retract speed 125

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