

N7178L Normal Checklist

PREFLIGHT

Cabin

Unlock/Open Canopy-----Counterclock
 Documents----- AROW
 Ignition Switch-----OFF
 Avionics-----OFF
 Control Lock-----REMOVE
 Mixture Control-----IDLE CUTOFF
 Master-----ON
 Fuel Quantity Indicators -----CHECK
 Flaps----- DOWN
 Lights/Pitot Heat-----ON
 Check Lights/Stall Horn, then-----OFF
 Master-----OFF
 Fuel Selector - CHECK EA. POSITION

Left Wing

Flap----- CHECK
 Aileron & Counterweight-----CHECK
 Wing Tie-down -----REMOVE
 Pitot Tube----- CHECK
 Fuel Tank Vent ----- CLEAR
 Fuel Qty-----VISUAL CHECK
 Fuel Filler Cap -----SECURE
 Fuel Sump -----TANK&SUMP TANK
 Main Wheel Tire----- CHECK
 Windshield and Canopy-----CHECK
 Air Vents -----CHECK

Nose

Prop & Spinner ----- CHECK
 Open Cowling/Carb Air-----CHECK
 Landing Light-----CHECK
 Engine Oil -----CHECK (6-8qts)
 Nose Wheel -----CHECK

Right Wing

Main Wheel Tire----- CHECK
 Fuel Sump -----Tank and Sump Tank
 Fuel Qty-----VISUAL CHECK
 Fuel Filler Cap -----SECURE
 Fuel Tank Vent ----- CLEAR
 Stall Horn Vane-----CHECK
 Wing Tie-down -----REMOVE
 Aileron & Counterweight-----CHECK
 Flap-----CHECK

Elevator/Rudder

Elevator/Rudder -----FREE, CLEAR
 Elevator Counterweight-----CHECK
 Tail Tie-down -----REMOVE
 Static Source (Both Sides)-----CHECK
 Baggage Door-----CHECK SECURE

BEFORE START

Preflight -----COMPLETE
 Passenger Brief-----COMPLETE
 Seats, Seat Belts-----SECURE
 Parking Brake -----SET
 All Control Operation-----CHECK
 Fuel Selector-----FULLEST TANK
 Radios and Lights-----OFF
 Circuit Breakers-----ALL IN

STARTING

Prime -----AS REQUIRED (1 to 3)
 Mixture-----RICH
 Throttle-----OPEN 1/8
 Carburetor Heat -----OFF
 Master/Alternator Switch-----ON
 Beacon -----ON
 Aux Fuel Pump-----ON (0.5-8 PSI)
 Aux Fuel Pump-----OFF
 Propeller -----CLEAR
 Ignition Switch-----ON BOTH
 Starter Button-----PRESS
 Oil Temp/Pressure-----CHECK
 Warm Up Engine-----800-1200 RPM
 Flaps -----UP
 Transponder (Squawk 1200)-----ALT

TAXI

ATIS (KFUL-125.05)-----OBTAIN
 Altimeter-----SET TO ATIS INFO
 Taxi Clearance (KFUL-121.8)-OBTAIN
 Parking Brake-----OFF
 Brakes -----TEST
 Turn Instruments-----CHECK

VFR Day Minimum Equipment:

Gas Gauges, Oil Temp, Oil Pres., Seat Belts, ELT, Altimeter, Compass, Airspeed indicator, Tach.

VFR Night Minimum Equipment:

Position Lights (NAV), Anti-Collision Lights (beacon, strobes), Landing Light (if for hire), Electrical source, Spare fuses.

IFR Minimum Equipment:

Directional Gyro, Electrical source Clock (h:m:s), Altimeter (pressure sensitive), Radios appropriate for nav aids to be used, Attitude indicator,

Turn Coordinator

VOR Check last 30 days

N7178L Normal Checklist

RUN-UP

Parking Brake-----SET
 Canopy -----CLOSED, LOCKED
 Flight Controls -----FREE AND COR
 Trim -----TAKEOFF
 Flight Instruments -----SET
 Fuel Selector -----FULLEST TANK
 Mixture -----RICH (Below 5000)
 Throttle -----1800 RPM
 Magnetos-----CHECK (175/50)
 Engine Instruments-----CHECK
 Ammeter -----CHECK
 Suction -----CHECK
 Carburetor Heat -----ON/OFF
 Idle -----CHECK
 Throttle-----1000 RPM
 Radios-----SET

PRE-TAKEOFF

Flaps-----CHECK & UP
 Primer Knob-----IN & LOCKED
 Mixture-----FULL RICH
 Carburetor Heat-----OFF
 Auxiliary Fuel Pump-----ON
 HI to Compass-----SET
 Transponder-----ALT/SQWK
 Lights-----ON, as req'd
 Departure -----REVIEW
 Abort Plan-----REVIEW
 Parking Brake-----OFF

TAKEOFF

Tower Clear (KFUL-119.1)---OBTAIN
 Time-----RECORD
 Throttle-----FULL OPEN
 Oil Pres/Temp/Suction-----GREEN
 Elevator Control-----Lift Nose 60(Vr)
 Climb Speed-----100 (Vx-77, Vy-90)

V Speeds – MPH (IAS)

Vne	189	Vno	149
Vr.....	59	Vs1.	61
Vy	90	Vso.	57
Vx	77	Best Glide	82
VCanopy.....	129	Slips.....	74-84
Vfe:	119	Va.....	121

CLIMB

Airspeed-----100 MPH
 Throttle -----FULL
 Mixture-----LEAN ABOVE 5000'
 HI to Compass-----SET
 Landing Lights-----OFF-IF DESIRED
 Engine Instruments -----CHECK

CRUISE

Auxiliary Fuel Pump-----OFF
 Power-----2200-2700RPM
 Mixture--LEAN/FULL RICH OVER 75%

BEFORE LANDING

Fuel Selector-----FULLEST TANK
 Mixture-----FULL RICH
 Auxiliary Fuel Pump-----ON
 Carburetor Heat -----As Req'd
 Landing Light -----ON
 Seats, Seat Belts, Harnesses---SECURE
 Wing Flaps---AS DESIRED (119MPH)
 Airspeed-----75 MPH
 Airspeed Short Final-----70 MPH

GUMPS + FUEL PUMP

LANDING (NORMAL)

Touchdown-----MAIN GEAR
 Directional Control---RUDDER (20 MPH)
 Brakes-----STOPPING/CONTROL

GO AROUND

Throttle-----FULL OPEN
 Carburetor Heat-----OFF
 Climb-----Vx(77) or Vy(90)
 Flaps-----RETRACT SAFE SPEED

AFTER LANDING/CLEAR RUNWAY

Flaps -----UP
 Carburetor Heat -----OFF
 Auxiliary Fuel Pump-----OFF

SECURING

All Electrical Equipment-----OFF
 Mixture-----IDLE CUTOFF (OUT)
 Magneto Switch-----OFF
 Master-----OFF
 Control Lock -----INSTALL
 Airplane-----TIEDOWN

N7178L Emergency Checklist

SHORT/SOFT FIELD TAKEOFF

Flaps.....UP
Carburetor Heat.....OFF
Mixture.....RICH
Brakes.....APPLY
Throttle.....Full Open
Elevator Control.....NEUTRAL
Brake....LIGHT SMOOTH PRESSURE
Climb Speed..... Vr (59) then 77 MPH

SOFT FIELD.....NO FLAPS

SHORT FIELD LANDING

Airspeed.....70 MPH
Flaps.....FULL DOWN (119 MPH)
Touchdown....MAIN WHEELS FIRST
Yoke.....FULL AFT
Flaps.....RETRACT
Brakes.....AS REQ/CONTROL

SOFT FIELD LANDING.....70 MPH

ENGINE FAILURE DURING TAKEOFF RUN

Brakes..... APPLY
FlapsRETRACT
MixtureIDLE CUT-OFF
Ignition SwitchOFF
MasterOFF

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

Airspeed.....82 MPH
MixtureIDLE CUT-OFF
Fuel Selector Valve.....OFF
Ignition SwitchOFF
Flaps.....AS REQUIRED
MasterOFF

EMERGENCY LANDING WITHOUT POWER

Airspeed.....82 MPH
Mixture.....IDLE CUT-OFF
Fuel Selector Valve.....OFF
Ignition Switch.....OFF
FlapsAS REQUIRED

ENGINE FAILURE DURING FLIGHT

AVIATE – Immediately pitch for Best Glide Speed (82 MPH).

NAVIGATE – Find a place to land and fly towards it.

RESTART – Change Fuel tanks, Auxiliary fuel pump ON, Mixture full RICH, Throttle slightly open, Carburetor Heat ON, Magnetos check Right and Left and Starter Button

GET HELP – Switch Transponder to 7700 then Transmit MAYDAY on last frequency if in range or 121.5

SECURE PLANE – Fuel Selector OFF, Mixture IDLE CUT-OFF, Throttle Full Back (IDLE), Carburetor Heat Pushed In (OFF), Ignition OFF, Open Canopy, Master OFF Last

FIRE DURING START

Cranking..... CONTINUE

If engine starts:

PowerINCREASE RPM
Engine..... SHUTDOWN

If engine fails to start:

Throttle FULL OPEN
Mixture IDLE CUTOFF
Cranking CONTINUE
Fire ExtinguisherOBTAIN
Engine..... SECURE
Master OFF
Ignition Switch..... OFF
Fuel Selector OFF
Fire Extinguisher USE

ENGINE FIRE IN FLIGHT

Fuel Selector.....OFF
Mixture.....IDLE CUTOFF
Cabin Heat & Air.....OFF
Airspeed.....MAX SAFE DESCENT
Master.....OFF
Forced LandingEXECUTE

N7178L Emergency Checklist

ELECTRICAL FIRE IN FLIGHT

Master OFF
All Electrical Switches.....OFF
Ignition Switch..... ON
Vents, Cabin Air/HeatOFF
Fire ExtinguisherACTIVATE
If Fire is OutOPEN VENTS

If Electrical Required for Flight:

MasterON
Electrical Circuit.ENGAGE SEPARTE
Faulty Circuit.....DISENGAGE

CABIN FIRE

MasterOFF
Vents, Cabin Air / HeatOFF
Fire Extinguisher.....ACTIVATE
If Fire Out.....OPEN VENTS
LANDASAP

WING FIRE

Navigation LightsOFF
StrobesOFF
Pitot Heat.....OFF
Side SlipAWAY FROM FIRE
LAND.....ASAP

ICING

Pitot HeatON
Carburetor Heat.....SLOWLY APPLY
Turn Back or Change Altitude
Cabin HeatON
Windshield Defroster.....ON
Increase Engine Speed to Minimize Prop Ice
Watch for Signs of Carburetor Ice.

DITCHING

RadioMAYDAY on 121.5
Squawk.....7700
Approach
High Winds, Heavy Seas INTO WIND
Light Winds, Heavy Swells .. PARALLEL
FlapsAS NEEDED
Power-300ft/min DESCENT 82 MPH
DoorsUNLATCH
Touchdown.....LEVEL ATTITUDE
FaceCUSHION
AirplaneEVACUATE

AMMETER SHOWS EXCESSIVE RATE OF CHARGE

(full scale deflection)

Alternator.....OFF
Nonessential ElectricalOFF
FlightTERMINATE

RADIO FAILURE

Microphone Buttons..... NOT STUCK
Comm PanelCORRECT RADIO
RadioON, CHECKSQUELCH
Volume.....UP
Frequency..... CORRECT
Headset or MicPLUGGED IN
IntercomON, Volume, Squelch up
Circuit Breakers..... IN
Avionics Master ON
Master..... ON
Load MeterPOSITIVE CHARGE
Transponder.....7600

REFER TO POH FOR OFFICIAL INFORMATION