

PREFLIGHT

COCKPIT SAFETY CHECK
MagnetosOFF, KEY OUT
MixtureCUTOFF
ThrottleCLOSED

Hobbs & TachRECORD
 Documents (A(R)ROW)CHECK
 Flight controls lockREMOVE
 Parking brake released.....AS REQUIRED
 Avionics/Radios OFF
 Electrical switches OFF
 Master switches **PROP CLEAR** ON
 Fuel gauges CHECK
 Pitot heatON, CHECK, OFF
(Only if required)
 Exterior lightsON, CHECK, OFF
 FlapsEXTEND
 Master switch OFF
 Altimeter FIELD ELEVATION
 Magnetic compass & deviation cardCHECK
 Fuel selectorBOTH
 Alternate static OFF
 Fire extinguisherCHECK
 Windows.....CHECK

EMPENNAGE

General Condition CHECK
 Baggage door..... Un-locked & LATCHED
 Tie down REMOVE
 ElevatorCHECK & CLEAR
 Trim tab CHECK & CLEAR
 Rudder CHECK & CLEAR
 Antennas CHECK

RIGHT WING

General conditionCHECK & CLEAR
 FlapCHECK
 AileronCHECK
 Wingtip CHECK
 Tie down/chockREMOVE
 Main gear & BrakesCHECK
 Fuel tank sump..... DRAIN & NO DRIPS
 Fuel tank & Quantity CHECK
 Fuel cap & Vent CHECK
 Fresh air inlet CHECK

NOSE

General condition & leaks CHECK
 Fuel drain DRAIN & NO DRIPS
 Oil (6 Qts) CHECK
 Propeller & spinner CHECK
 Alternator beltCHECK
 Air inlets CHECK
 Air filter CHECK
 Nose gear & strut CHECK
 Chock & Tow Bar REMOVE
 Static port CHECK

LEFT WING

General condition CHECK & CLEAR
 Fresh air inlet CHECK
 Stall horn CHECK
 PitotCHECK
 Tie down/chock REMOVE
 Fuel tank sump.....DRAIN & NO DRIPS
 Fuel tank vent CHECK
 Fuel tank & Quantity CHECK
 Fuel cap & Vent CHECK
 Wingtip CHECK
 Aileron CHECK
 Flap CHECK
 Main gear & Brakes CHECK

BEFORE ENGINE START

Tail Lock IN COCKPIT
 Passenger briefing COMPLETE
 Seats & seat belts SECURE
 Circuit breakers CHECK
 Electrical switches OFF
 Avionics/Radio master OFF
 Fuel selector BOTH
 Brakes HOLD

ENGINE START

Mixture RICH
 Carb heat OFF
 Throttle 1/8" OPEN
 Master switches ON
 Beacon ON
 Primer if **COLD**...2-6 STROKES and LOCKED
PROPELLER AREACLEAR
 Starter ENGAGE

Throttle800 RPM (No Higher Than 1000)
 Oil pressure CHECK
 Mixture LEAN

BEFORE TAXI

Flaps CHECK RETRACTED
 Avionics/Radio master ON
 Transponder (1200) ALT
 Radios SET
 ATIS CHECK
 Flight instruments SET
 Navigation..... SET
 Radio CLNC, GROUND/CTAF
 #2 Radio MONITOR 121.5
 LightsAS APPROPRIATE

TAXI

Parking BrakeRELEASE
 BrakesCHECK
 Flight instrumentsCHECK

ENGINE RUNUP

Brakes SET & HOLD
 Oil Temp IN THE GREEN
 Fuel selector BOTH
 Mixture (below 3000') RICH
 Primer LOCKED
 Throttle 1700 RPM
 Mags (drop 125,diff 50)CHECK
 Vacuum (4.6-5.4") CHECK
 Engine indicatorsCHECK
 Ammeter CheckCHECK
TURN ON ONLY EQUIPMENT & LTS EXPECTED FOR FLT.
EXTEND FLAPS ONLY FOR SHORT OR SOFT FIELD T/O
 Carb heat (RPM drop - NO RISE).....ON
 Carb heatOFF
 Throttle (min 500 RPM) IDLE
 Throttle 1000 RPM

BEFORE TAKEOFF

Pitot heat AS REQUIRED
 Flight instruments CHECK
 Trim TAKEOFF
 Flight controls CHECK
 FlapsNORMAL/SHORT 0°, SOFT 10°
 Seats & seat belts SECURE
 Doors & windows SECURE
 Takeoff briefing COMPLETE
 Radio TOWER/CTAF
 Lights WHEN CLRD FOR TAKEOFF ... AS APPROPRIATE

| FREQUENCIES | PRACTICE AREA - ALL123.5 | EMERGENCY (GUARD)..... 121.5 |
|---------------------------------------|--------------------------------|------------------------------|
| HANSCOM - KBED | NORWOOD - KOWD | NASHUA - KASH |
| ATIS124.6 | ATIS119.95 | ATIS125.1 |
| GROUND121.7 | GROUND121.8 | GROUND121.8 |
| TOWER118.5 | TOWER126.0 | TOWER133.2 |
| BOS APP124.4 | BOS APP 120.6 / 124.1 | BOS APP124.9 |
| Signature (or 781-274-0010).....130.8 | | |

TAKEOFF

Carb heat COLD
 Mixture (below 3000') RICH
 Throttle FULL
Power 2270-2370 RPM = STATIC CHECK
 Engine gauges CHECK
 Airspeed CHECK
 Rotate 52 KTS / 60 MPH

CLIMB

Flaps.....RETRACT AT SAFE SPEED (57 KTs)
 Airspeed (cruise climb) 70-78 KTS /500'/MIN
 80-90 MPH

CRUISE

PowerAS REQUIRED
 Mixture.....LEAN AS REQUIRED

DESCENT

Fuel Selector BOTH
 Carb heat AS REQUIRED
 Power REDUCE SLOWLY
 MixtureAS REQUIRED/RICH
 Seats & seat beltsUPRIGHT & SECURE

APPROACH & LANDING

Downwind 83 KTS / 95 MPH
 Fuel selector BOTH
 Mixture (below 3000') RICH
 Carb heat FULL HEAT
 Flaps
 (N733LF - 85 KTS / 98 MPH) AS REQUIRED
 (N488BA - 110 KTS / 126 MPH) ..AS REQUIRED
 Landing (0°) 64 KTS / 74 MPH
 Landing (40°) 60 KTS / 69 MPH

AFTER LANDING

RPM 1000
 Radio GROUND/CTAF
 Carb heat COLD
 Flaps RETRACT
 Mixture LEAN
 Lights AS REQUIRED
 Pitot Heat OFF
 Transponder 1200

SHUTDOWN

Call for fuel AS REQUIRED
 Avionics/Radio master OFF
 Throttle IDLE
 Mixture CUTOFF

WHEN PROP STOPS

Magnetos..... OFF
 KEY OUT / ON CONSOLE
 Electrical switchesOFF
 Beacon / Strobes LEAVE ON
 Master switches OFF
 Hobbs & tach RECORD
 Flight control lock INSTALL
 Fuel selector LEFT or RIGHT
 Tie downs SECURE

SPEEDS

Vg (0°) 65 KTS / 75 MPH
glide distance approx 1 NM per 700'
 Va (2000 lbs) 80 KTS / 92 MPH
 Va (2300 lbs) 97 KTS / 112 MPH
Vfe (N733LF).....85 KTS / 98 MPH
Vfe (N488BA) 110 KTS / 126 MPH
 Vy (0°, 0' MSL)73 KTS / 84 MPH
 Vy (0°, 10,000' MSL) 68 KTS / 78 MPH
 Vx (0°) 59 KTS / 68 MPH
 Vs0 43 KTS / 49 MPH
 Vs1 50 KTS / 57 MPH

AIRPLANE SPECS

Usable fuel 40g
 Taxi fuel 1.0g
 Climb fuel 11.5 GPH
 Crosswind 15 KTS / 17 MPH
 Maneuvers 2200 RPM/87 KTS/100 MPH
 Cruise 3000'@71% 2500 RPM/123 MPH/107 KTS
 Cruise GPH @ 71% (leaned) 7.7

EMERGENCY PROCEDURES

NOTE: NOT ALL EMERGENCY PROCEDURES ARE HERE
Check POH for additional procedures

ENGINE FIRE DURING START

Starter CONTINUE CRANKING
 Mixture CUTOFF
 Throttle OPEN

Fuel shutoff OFF
 Magnetos OFF
 Master switches OFF
 Fire Extinguisher ACTIVATE

ENGINE POWER LOSS IN FLIGHT

Airspeed70 KTS / 80 MPH
 Carb heat FULL HEAT
 Mixture..... RICH
 Fuel selector BOTH
 Magnetos BOTH
 Primer..... IN and LOCKED
 Engine gauges CHECK

POWER OFF LANDING

Trim for best glide 65 KTS / 75 MPH
 Landing area IDENTIFY
 Radio MAYDAY
 Transponder 7700
 Final approach (40°) 60 KTS / 69 MPH
 Mixture CUTOFF
 Fuel shutoff OFF
 Magnetos OFF
 Master switches OFF
 Seat beltsSECURE
 Doors UNLATCH

ENGINE FIRE IN FLIGHT

Mixture CUTOFF
 Fuel shutoff OFF
 Throttle CLOSED
 Master switches OFF
 Airspeed to extinguish104 KTS / 120 MPH
 Cabin heat & air OFF
 Airspeed INCREASE TO EXTINGUISH
 Land IMMEDIATELY

ELECTRICAL FIRE

Master switches OFF
 Avionics/Radio master OFF
 Vents, cabin heat & air CLOSED
 Fire extinguisher AS NECESSARY
 Electrical switchesOFF
 Vents (when fire extinguished) OPEN
 LandAS SOON AS PRACTICAL

FREQUENCIES

HANSCOM - KBED

ATIS124.6
 GROUND121.7
 TOWER118.5
 BOS APP124.4
 Signature (or 781-274-0010).....130.8

PRACTICE AREA - ALL123.5

NORWOOD - KOWD

ATIS119.95
 GROUND121.8
 TOWER126.0
 BOS APP 120.6 / 124.1

EMERGENCY (GUARD)..... 121.5

NASHUA - KASH

ATIS125.1
 GROUND121.8
 TOWER133.2
 BOS APP124.9