

PREFLIGHT

COCKPIT SAFETY CHECK

MagnetosOFF
 MixtureCUTOFF
 ThrottleCLOSED

Documents (A(R)ROW)CHECK
 G1000 reference guide ON-BOARD
 Flight controlsRELEASE
 Parking brake released AS REQUIRED
 Hobbs & TachRECORD
 All Inst' Panel and Overhead Switches OFF
 StrobesON
 Left / Right Magneto Switches OFF
 Master switch (upper panel) **PROP CLEAR** ON
 Altimeters FIELD ELEVATION
 Verify Altimeter Inches CHANGE VIA PFD OPTION
 Fuel gauges CHECK QTY
 Pitot Heat (IFR / NIGHT ONLY) ON / CHECK / OFF
 ON CAS Msg CHECK OFF
 OFF CAS Msg CHECK ON
 Exterior lights (upper panel) ON, CHECK, OFF

NIGHT - Landing Lights, & Strobes
NIGHT - Landing Lights, Strobes & Nav Lights

Stall Warning CHECK
 Alternate airCHECK CLOSED
 Master switch (upper panel) OFF
 Empty seats SECURE SEAT BELTS
 Pitot & static systems DRAIN
 Flight controls CHECK
 Flaps EXTEND
 Fire extinguisher (if installed) CHECK
 Windows CHECK

RIGHT WING

General condition CHECK & CLEAR
 Flap CHECK
 Ailerons (& static wicks if installed) CHECK
 Wingtip CHECK
 Tie down/chock REMOVE
 Stall Strip CHECK
 Fuel tank vent CHECK
 Fuel tank sump DRAIN & NO DRIPS
 Fuel tank quantity CHECK
 Fuel cap & ventCHECK
 Main gear & brakeCHECK
 Fresh air inletCHECK

NOSE

General condition & leaks CHECK
 Cowling SECURE
 Oil (6 Qts) CHECK
 Propeller & spinner CHECK
 Air inlets CHECK
 Nose gear CHECK
 Chocks (If in place) REMOVE
 TOW BAR REMOVED AND STOWED
 Fuel strainer DRAIN & NO DRIPS

LEFT WING

General condition CHECK & CLEAR
 Fresh air inletCHECK
 Main gear & brakeCHECK
 Fuel tank ventCHECK
 Fuel tank sumpDRAIN & NO DRIPS
 Fuel tank CHECK
 Fuel cap & vent CHECK
 Stall Strip CHECK
 Tie down/chockREMOVE
 Pitot Tube (3 holes)CHECK
 OAT CHECK
 Wingtip CHECK
 Ailerons & static wicks (if installed) CHECK
 Flap CHECK

LEFT FUSELAGE

General conditionCHECK
 AntennasCHECK
 Fresh air inletCLEAR

EMPENNAGE

Stabilator CHECK & CLEAR
 Trim tab & Nut CHECK & CLEAR
 Rudder CHECK & CLEAR
 Antennas CHECK
 Tie down / Lock REMOVE

RIGHT FUSELAGE

General ConditionCHECK
 AntennasCHECK
 Baggage areaSECURE
 Baggage door.....UNLOCKED & LATCHED

BEFORE ENGINE START

Tail Lock IN BAGGAGE OR COCKPIT
 Flaps RETRACT
 Passenger briefing COMPLETE
 DoorCLOSED AND SECURE
 Seats & seat belts UPRIGHT & SECURE
 Alternate Static Source OFF
 Fuel selector..... LOWEST or OTHER TANK
 Circuit breakers CHECK
 All SwitchesOFF
 Emergency battery ARM
 Verify Operation of:
 PFD NO RED X's

Attitude | Airspeed | Altitude | Vertical Speed

Audio PanelCHECK
 Com 1 CHECK
 Nav 1 CHECK
 Engine Indications (except oil press)CHECK
 Standby Flight Instruments CHECK
 E VOLTS 23.3 VOLTS (Min)
 Fuel CHECK QTY & IMBALANCE
 StrobesON
 Brakes HOLD

ENGINE START

Throttle 1/2 INCH
 Batt Master (upper panel) **PROP CLEAR**ON
 Alternator (upper panel)ON
 Left / Right Mag Switches.....ON
 Fuel pump (upper panel)ON
 Strobes CHECK ON
 Mixture (if cold - Prime 3-5 secs then)IDLE CUTOFF
 CAS Messages CHECK
 PFD Annunciations CHECK
PROPELLER AREA CLEAR
 Starter (upper panel) ENGAGE
 Mixture (when engine starts) ADVANCE
 Throttle (800 RPM to 1200 RPM)ADJUST
 Oil Pressure CHECK

BEFORE TAXI

Avionics Master ON
 Emergency BatteryVERIFY ARM
 MFD CHECK DB
 MFD AUX Weights ENTERED & VERIFIED
 Fuel Qty SYNCH OR ENTER
 CAS/PFD MessagesCHECK
 System Message (Msgs Softkey) CHECK
 TAWS and Traffic SELF TEST COMPLETE
 Autopilot CHECK
 Standby Flight Instrument..... CHECK
 ATIS CHECK
 Altimeter/Standby Altimeter SET

Transponder (1200 VFR) ALT
 Navigation SET FLT PLAN
 COM/NAV Radios CHECK & SET
 Annunciator TestTEST
 Radio #1 CLNC / GROUND / CTAF
 Radio #2 MONITOR 121.5
 Heater and Defroster AS REQUIRED
 LightsAS REQUIRED

TAXI

Parking Brake CHECK RELEASED
 Brakes CHECK
 Flight instruments CHECK

ENGINE RUNUP

Brakes HOLD
 Oil Temp / Pressure IN THE GREEN
 Fuel selector OTHER TANK
 Mixture CHECK RICH
 Throttle 2000 RPM
 Mags L/R (Max drop 175, diff 50)CHECK
 Volts/Check Bus 28±1 VOLT
 ALT Air ON THEN OFF
 Fuel Pump (verify engine operation) OFF / CHECK / ON
 Throttle IDLE then 1000 RPM
 Flight controls CHECK FREE AND CORRECT

If E VOLTS were less than 23.3 Volts, during BEFORE STARTING ENGINE checklist:
 E-BATTVERIFY ARM
 Avionics Master OFF
 Alternator OFF
 Battery Master OFF
 E-Volts CHECK 23.3 VOLTS MIN

If E VOLTS less than 23.3 Volts, determine cause and correct the issue prior to flight.
If E VOLTS Greater Than or Equal to 23.3 volts:
 Battery Master ON
 Alternator ON
 Avionics Master ON

BEFORE TAKEOFF

Batt Master (upper panel) ON
 Alternator (upper panel) ON
 Fuel Pump (upper panel) ON
 Left / Right Mag Switches (upper panel) ON
 Alternate AirCLOSED
 Flight instruments CHECK
 Standby Flight Instruments CHECK
 CAS/PFD MessagesCHECK
 System Message (Msgs Softkey) CHECK
 Fuel Selector PROPER TANK
 Engine Indications CHECK
 Electric Trim & Cut Out.....CHECK
 Trims ELEVATOR & RUDDER TAKEOFF
 Door 2 latches & Window SECURE
 Pitot heat AS REQUIRED
 AutopilotOFF
 FlapsNORMAL 0°, SHORT/SOFT 25°
 Seats UPRIGHT, LATCHED
 ALL Seat belts SECURE
 Takeoff briefing COMPLETE
 Radio TOWER/CTAF
 #2 Radio MONITOR 121.5
 Transponder 1200 or assigned
 Mixture (below 3000')RICH
 Fuel Pump CHECK ON
 Lights (WHEN CLRD FOR TAKEOFF) AS APPROPRIATE

FREQUENCIES PRACTICE AREA - ALL123.5 EMERGENCY (GUARD)..... 121.5

HANSCOM - KBED

ATIS	124.6
GROUND	121.7
TOWER	118.5
BOS APP	124.4
Signature (or 781-274-0010)	130.8

NORWOOD - KOWD

ATIS	119.95
GROUND	121.8
TOWER	126.0
BOS APP	120.6 / 124.1
Flight Level (or 781-769-8680)	129.42

NASHUA - KASH

ATIS	125.1
GROUND	121.8
TOWER	133.2
BOS APP	124.9
Infinity (or 603-598-4526)	129.75

TAKEOFF

Mixture (below 3000') RICH
 Throttle FULL
 Power 2240-2340 RPM=STATIC CHECK
 Engine gauges CHECK
 Airspeed CHECK
 Rotate (0°/25°) 60 / 55 KIAS

CLIMB

FlapsRETRACT AT SAFE SPEED (60 KIAS)
 Airspeed (cruise climb) 87KIAS/500'/MIN
 Fuel pump OFF (at desired altitude)... CHECK PRESSURE
 Oil pressure & Temp CHECK
 Enroute..... 87 KIAS

CRUISE

PowerAS REQUIRED
 Mixture.....LEAN AS REQUIRED
 Enroute..... 87 KIAS

FUEL TANK SWITCH

Place to land in emergencyIDENTIFY
 Fuel pump ON
 Fuel selector DESIRED TANK
 Fuel pump OFF
 Fuel pressure CHECK

DESCENT

Fuel Pump ON
 Fuel Selector FULLEST TANK
 Power 2000 RPM
 Airspeed 100-110 KIAS
 Mixture ENRICH / AS REQUIRED
 Seats & seat belts UPRIGHT & SECURE

APPROACH & LANDING

Downwind 90 KTS
 Fuel pumpON
 Fuel selector FULLEST TANK
 Mixture RICH
 Alternate Air AS REQUIRED
 Flaps (<102 KIAS)AS REQUIRED
 Initial Approach Speed 75 KIAS
 Landing (0°) 70 KIAS
 Landing (40°) 66 KIAS

AFTER LANDING

RPM 1000
 Radio GROUND/CTAF
 Lights AS APPROPRIATE
 Flaps RETRACT
 Fuel pump OFF
 MixtureLEAN
 Pitot Heat OFF
 Transponder 1200

SHUTDOWN

Call for fuel **TO TABS**..... AS REQUIRED
 Emergency battery OFF
 Avionics OFF
 Electrical switches OFF

Alternator OFF
 Throttle IDLE
 Mixture CUTOFF

WHEN PROP STOPS

Magnetos L/R OFF
 Battery Master OFF
 Verify Shutdown AS PER POH
 StrobesLEAVE ON
 Hobbs & tach RECORD
 Flight controls SECURE
 PARKING BRAKE CHECK RELEASED
 Tie downs (Chocks - if no tie downs) SECURE
 Cover ON

SPEEDS

Vr (0°/25°) 60/55 KIAS
 Vg (0° Flaps) 76 KIAS
 Glide distance approx 1 NM per 550'
 Va (2550/1917 lbs)113/98 KIAS
 Vfe 102 KIAS
 Vy (0°) 76 KIAS
 Vx (0°) 64 KIAS
 Vx (25°) 60 KIAS
 Vs0 45 KIAS
 Vs1 50 KIAS

AIRPLANE SPECS

Usable fuel..... Tabs 34g / Full 48g
 Taxi fuel 1.4g
 Climb fuel 14.0 GPH
 Max Crosswind17 KTS
 Cruise 3000' @75% . 2560 RPM/122KTS Cruise
 GPH@75% (leaned) 11.0

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 pump OFF
 Fuel selector OFF
Evacuate to rally point

ENGINE POWER LOSS IN FLIGHT

Airspeed 76 KIAS
 Fuel selector FULLEST TANK
 Fuel pump ON
 Mixture RICH
 Alternate AirOPEN
 L/R MagsTurn OFF then ON one at a time
 Engine gauges CHECK

WHEN POWER IS RESTORED

Alternate Air CLOSE
 Fuel pump OFF
 Land as soon as practical and investigate cause of power loss.
 If power is not restored prepare for power-off landing.

POWER OFF LANDING

Trim for best glide 76 KIAS
 Landing area IDENTIFY
 ELT ACTIVATE
 Radio 121.5 / TOWER / APCH..... MAYDAY
 Transponder 7700
 Final approach (40°) 66 KIAS
 Magnetos..... OFF
 Master switch OFF
 Alternator switch OFF
 Fuel selector OFF
 Throttle CLOSED
 Mixture CUTOFF
 Seatbelts SECURE
 Door UNLATCH

ENGINE ROUGHNESS

Alternate Air OPEN
 after one minute
 MixtureADJUST TO SMOOTHEST
 Alternate AirCLOSE
 Fuel pump ON
 Fuel selector SWITCH TANKS
 Engine gaugesCHECK
 L/R Magnetos Individually Select OFF and ON
 Mixture RICH
 Land AS SOON AS PRACTICAL

ENGINE FIRE IN FLIGHT

Fuel selector OFF
 Throttle CLOSED
 Mixture CUTOFF
 Fuel pump OFF
 Heater & defroster OFF
 IF FIRE PERSISTS
 Airspeed..... INCREASE TO EXTINGUISH
 Land (Power Off Landing)..... IMMEDIATELY

LOSS OF FUEL PRESSURE

Fuel pump ON
 Fuel selector CHECK ON FULL TANK

ELECTRICAL (CABIN) FIRE

Emergency batt' switch CONFIRMED ARMED
 Master switchOFF
 Alternator switch OFF
 Vents CLOSED
 Heater & defroster OFF
 Fire extinguisher AS NECESSARY
 Vents OPEN
 Airspeed (if needed)... INCREASE TO EXTINGUISH
 Emergency Descent IF NEEDED
TO A SAFE ALTITUDE CONSISTENT WITH TERRAIN
 LandAS SOON AS PRACTICAL

OPEN DOOR IN FLIGHT

Airspeed (less than 87 KIAS) REDUCE
 Cabin ventsCLOSE
 Storm window OPEN
 Upper latch (if open) CLOSE
 Side latch (if open) PULL ON Armrest
 While Closing Latch
 If Both Latches Open CLOSE
 Side Then Top Latch

FREQUENCIES

HANSCOM - KBED

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 GROUND121.7
 TOWER118.5
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PRACTICE AREA - ALL123.5

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