



Cockpit

Parking Brake - SET
Documents - ARROW
Electrical Switches - OFF
Circuit Breakers - NOT TRIPPED
Magneto - OFF, KEY OUT
Mixture - OUT
Hobbs/Tach - RECORD
Master Switches - ON
Fuel Quantity - CHECK
GAUGES/ VISUALLY
Flaps - EXTEND
Lights - ON INSPECT
Pitot Heat - CHECK IFR
Master Switches - OFF
Control Lock - REMOVE
Fuel Valve - BOTH

Exterior Wings - Fuselage

Left Wing - DISCONNECT TIE DOWN
Left Tank - VISUALLY CHECK
QUANTITY
Stall Horn - TEST
Pitot/Static Port - CLEAR
Fuel Vent - CLEAR
Left Aileron - MOVMENT FREE AND CORRECT
Left Flap - EXTENDED TO PROPER DEGREE
Left Wing Sump - TAKE SAMPLE
Left Main Gear - INSPECT TIRE AND BRAKES
Baggage Door - SECURE
Tail - DISCONNECT TIE DOWN
Horizontal Stabilizer - MOVMENT FREE AND CORRECT
Rudder - CHECK ATTACHMENT POINTS
Right Wing - DISCONNECT TIE DOWN
Right Tank - VISUALLY CHECK
QUANTITY
Right Aileron - MOVMENT FREE AND CORRECT
Right Flap - EXTENDED TO PROPER DEGREE
Right Wing Sump - TAKE SAMPLE
Right Main Gear - INSPECT TIRE AND BRAKES

Exterior Continued

Engine Sump - PULL 3-5 SEC
Oil - MIN 4 Qts MAX 8 Qts
Propeller - CHECK FOR DAMAGE
NOSE STRUT- CHECK TIRE/ TRAVEL ON STRUT

Engine Start

Seat Belts - ON
Clear PROP
Key - IN IGNITION
Master Switch - ON
Nav Lights - ON
Beacon - ON
Mixture - RICH
Carb Heat - COLD
Prime - 3x IF COLD
Primer - LOCKED
Throttle - OPEN 1/8th"
Check Area - CLEAR PROP
Starter - ENGAGE
Throttle - 800-1000 RPM
Oil Pressure - CHECK
Avionics Master - ON
GPS - CURRENT IFR
Transponder - ALT / CODE

Warm Up

Throttle - 1000 RPM
Flaps - RETRACT
Weather - OBTAIN
Mixture - LEAN AS NEEDED

Taxi

Brake - CHECK
Taxi Light - AS NEEDED
Taxi Clearance - AS NEEDED/DIAGRAM
Throttle - AS NEEDED

Run Up

Park Brake - SET
Doors/Windows - CLOSED/LOCKED
Flight Controls - FREE AND CORRECT
Fuel Valve - BOTH
Mixture - RICH
Trim - SET TAKEOFF
Throttle - 1700 RPM
Magneto - CHECK / 150 DROP
MAX / 75 DIFF MAX

Run Up Continued

Carb Heat - ON then OFF / 75-100 RPM DROP
Ammeter - POSITIVE
Engine Instruments - ALL GREEN
Mixture - SET
Throttle - IDLE CHECK
Flight Instrument - SET
Flaps - SET
Avionics - PROGRAM
Transponder - VERIFY
ALT/CODE
Clearance - OBTAIN IF NEEDED
Strobe Light - ON
Nav Light - ON FOR ADSB
Park Brake - RELEASE

Normal Takeoff/Climb

Mixture - RICH BELOW 3000FT
Flaps - 0°
Carb Heat - COLD
Throttle - FULL
Elevator - ROTATE 60Kts
Climb - 70Kts Vy

Cruise

Pitch - LEVEL AT ALT
Throttle - 2200-2500 RPM
Trim - AS NEEDED
Mixture - LEAN AS NEEDED

Before Landing

Seat Belts - ON
Weather - OBTAIN
Fuel Valve - BOTH
Mixture - RICH BELOW 3000FT
Carb Heat - ON
Flaps - 10° BELOW 110Kts
Final Approach Speed - 65Kts

After Landing

Carb Heat - COLD
Throttle - 1000 RPM
Flaps - RETRACT
Trim - SET

Shut Down

Parking Brake - SET
Throttle - IDLE
Magnetos - GROUND CHECK
Avionics - OFF
Lights - OFF
Oil Temp/Pressure - GREEN
Mixture - CUT OFF
Magnetos - OFF/KEY OUT
Master Switch - OFF
Hobbs/Tach - RECORD
Fuel Valve - LEFT OR RIGHT

V Speeds ALL KNOTS

VR- 60 VSO 1.3 - 54
VX- 59 VFE - 85
VY- 73 VNO - 128
VA- VNE - 158
VSO- 41 VG - 65
Vs1- 47
Max Cross Wind - 15

Fuel - Oil

Full - 53 Gal
Useable - 50 Gal
Oil - 4 Qtr MIN - 8 Qtr MAX

Fuel Stick Measurements

1 INCH - 3 GAL
2 INCH - 6 GAL
3 INCH - 9.5 GAL
4 INCH - 13 GAL
5 INCH - 16.5 GAL
6 INCH - 20 GAL
7 INCH - 23 GAL

Emergency

Engine Failure - Takeoff

Airspeed - Vg
 Best Place to Land - RUNWAY IF SUFFICIENT REMAINING
 Checklist - **Throttle CLOSE, Mixture CUTOFF, Master OFF**
 Declare Emergency - 7700, 121.5 IF ABLE
 Execute - POWER OFF LANDING

Engine Failure - Airborne

Airspeed - 65Kts
 Carb Heat - ON
 Mixture - Rich
 Primer - LOCKED
 Fuel Selector - BOTH
 Ignition - BOTH
If power is regained - Carb Heat OFF - Land as soon as practical

Power Off Landing

Airspeed - 65Kts
 Mixture - CUT OFF
 Fuel Selector - OFF
 Magnetos - OFF
 Doors - Unlatch
 Master - OFF

Fire - During Start

Starter - CONTINUE TO CRANK
 Mixture - CUT OFF
 Throttle - FULL
 Fuel Selector - OFF
 ABANDON IF FIRE CONTINUES

Fire - In Flight

Source - ELECTRICAL or ENGINE
 Master - OFF IF ELECTRICAL
 Avionics - OFF IF ELECTRICAL
 Vents - CLOSED
 Fire Extinguisher - USE IF EQUIPED
 Land - AS SOON AS PRACTICAL

Fire - In Flight Continued

Source - ENGINE
 Mixture - OFF
 Fuel Selector - OFF
 Airspeed - 100Kts
 Vents - CLOSED
 Fire Extinguisher - USE IF EQUIPED
 Land - AS SOON AS PRACTICAL
 POWER OFF LANDING

Electrical Over Voltage

Avionics - OFF
 Master - OFF
 Master - ON CYCLED
 If over voltage light is off
 Avionics - ON
 Land - AS SOON AS PRACTICAL

Ammeter Discharge

Alternator Switch - OFF
 Non-Essential Equipment - OFF
 Land - AS SOON AS PRACTICAL

Engine Roughness

Carb Heat - ON
 If roughness continues after 1 min
 Carb Heat - OFF
 Mixture - ADJUST FOR SMOOTHNESS
 Fuel Selector - BOTH
 Engine Gauges - CHECK - First indication of engine failure LOW PRESSURE, HIGH TEMP
 Magnetos - CHECK LEFT, RIGHT, BOTH
 Land - AS SOON AS PRACTICAL, Prepare for POWER OFF LANDING

Emergency General

Squawk Codes

7500 - Hijacking
 7600 - Lost Comms
 7700 - Emergency

Emergency Radio Calls

Frequency - 121.5 - **STAY WITH ATC IF ALREADY TALKING TO THEM**
 MAYDAY - 3x (Life Threatening)
 PAN - 3x (Non-Life Threatening)

Frequencies Near KHFY

KGEZ - 122.8 CTAF - 121.55 ASOS
 KMQJ - 122.975 CTAF - 124.175 AWOS
 KBAK - 118.6 CT - 119.75 AWOS
 INDY APP - 127.15 - 124.95
 KIND TOWER - 120.9

Check List Legend

Pre-Flight

Engine Checks

Normal Operations

Emergency