

PRE-FLIGHT

CABIN

DocumentsAROW
 Control lock Removed
 Gear SwitchDown
 IgnitionOFF
 Master Switch ON
 Fuel Quantity .. Check level
 FlapsDown
 Gear lights 3 green
 Landing Light Check
 Stall warning Check
 Nav Lights Check
 Strobes Check
 Beacon Check
 Master SwitchOFF

EMPENNAGE

Control Surfaces Check
 Anti-Servo tab Check
 Tail tie Down Disconnect
 Static vents Check

Left Wing

Flap Check
 Aileron Check free
 Navigation Light Check
 Fuel Qty Check Visually
 Fuel Vent Check
 Pitot Tube Check
 Wing Tiedown .. Disconnect
 Main Wheel Tire Check
 Squat Switch Clear
 Fuel Sump Drain/Check

Nose

Fuel Strainer Drain
 Prop & Spinner Check
 Air Inlets Check
 Alternator belt Check
 Nose Wheel Check
 Nose Gear strut Check
 (inflation 2.75" +/- .25")
 Oil Check level
 Cowling Secure

Right Wing

Main wheel tire Check
 Fuel Sump Drain/Check
 Fuel Vent Check
 Fuel Qty Check Visually
 Wing Tie-down .. Disconnect
 Aileron Check free
 Flap Check

BEFORE ENGINE START

Preflight inspection .. Done
 Tow bar/baggage... Secure
 Baggage door Secure
 Seats & Belts... Adjust/lock
 Avionics MasterOFF
 Breakers Check/IN
 Alternate Air Closed
 Propeller Full forward
 Fuel Selector ..Desired tank

STARTING ENGINE

Throttle ½ " open
 Prop Control High RPM
 Master ON
 Mixture Full Rich
 Electric fuel pump ON
 (Until fuel pressure needle moves)
 Electric fuel pump OFF
 Mixture Idle CutoFF
 Beacon On
 Starter Engage
 Mixture Full rich
 Throttle 1000 RPM
 Oil Pressure Check
 Mixture 1" Lean
 Avionics Master On
 Transponder Standby

V-SPEEDS (KIAS)

Vr 70
 Vx (gear down) 72
 Vx (gear up) 78
 Vy (gear down) 78
 Vy (gear up) 90
 Max gear retraction 107
 Cruise Climb 104
 Vfe 103
 Vle 129
 Best Glide 79
 Approach 65-75
 Va (2750 max gross) ... 118
 (2500 lbs) 110
 (1865 lbs) 96

BEFORE TAKEOFF

Mixture Rich
 Prop control High RPM
 Throttle 2000 RPM
 Prop Exercise
 Magnetos Check
 Max Drop <175
 Max Difference <50
 Vacuum Gaugeü (4.8"-5.1")
 Oil Temp Check
 Oil pressure Check
 Annunciator panel Test
 Alternator Check
 Alternate air Check
 Throttle . 1000 RPM or less
 Flight Controls .. Free/Clear
 Door Secure
 Flight Instruments ... Check
 Radios Set

TAKEOFF

Fuel Pump ON
 Transponder ALT
 Lights As Needed
 Flaps Set
 Trim Takeoff position
 Mixture Rich
 Prop High RPM

AFTER TAKEOFF

Gear Up
 Flap Up
 Throttle MP 25"
 Prop 2500 RPM
 Mixture Set
 Cruise Climb 104 KIAS
 Fuel Pump OFF
 Fuel pressure Check
 Landing light Off

CRUISE

Power Set per table
 Mixture Adjust
 Engine gauge Monitor

SWITCHING TANKS

Fuel pump ON
 Fuel valve Switch tanks
 Fuel Pump OFF
 Fuel pressure Check

BEFORE LANDING

Seats & Belts ... Adjust/lock
 Fuel Pump ON
 Fuel Selector .. Fullest tank
 Mixture Rich
 Propeller High RPM
 Gear Down <129 KIAS
 Flaps Set <103 KIAS
 Landing Light ... As needed
 Approach 75 KIAS
 GUMPS Check

AFTER LANDING

Landing Light OFF
 Mixture 1" Lean
 Flaps UP
 Transponder Standby
 Fuel Pump OFF
 Trim Set for T/O

SHUTDOWN AIRPLANE

Electrical Switches OFF
 Avionics Master OFF
 Mixture Idle Cutoff
 Ignition OFF
 Master Switch OFF

SECURING AIRPLANE

Control lock Install
 Wheel chocks SET
 Wing tie downs Connect
 Tail Tie Down Connect
 Propeller ... Level & Inspect
 Wheels/Brakes Inspect
 Visual Inspection Done
 Tach/HOBBS Record
 Squawks Note if any
 Tow bar Stow
 Trash Remove all

ENGINE FAILURE AFTER TAKEOFF

Airspeed Pitch for 79 KIAS
Mixture Idle Cutoff
Fuel Selector OFF
Ignition switch OFF
Wing flaps As required
Master Switch OFF
IF landing area is rough GEAR UP

ENGINE FAILURE DURING FLIGHT

RESTART PROCEDURE

Airspeed 79 KIAS
Fuel pump ON
Fuel Selector Fullst Tank
Mixture RICH
Alternate air OPEN
Ignition Check on Both
..... Or start if prop stopped

FORCED LANDING WITHOUT POWER

Seats/Belts Secure
Gear Down (if landing area smooth)
Airspeed 79 KIAS
Fuel Selector OFF
Ignition switch OFF
Master switch OFF
Mixture Idle cutoff
Doors Unlatch prior to landing
Touchdown Slightly tail low
Brakes Apply heavily

PROPELLER OVERSPEED

Throttle Reduce
Oil pressure Check
Prop Full decrease
Airspeed reduce
Throttle As required to remain <2700 PRM

EMERGENCY LANDING GEAR EXTENSION

Master Check ON
Circuit breaker Check
Panel light Off (in daytime)
Gear indicator bulbs check

Reduce airspeed <87 KIAS
Landing gear selector DOWN
Locking Pin Remove
Emergency gear lever EMERGENCY DOWN
Locking pin Insert pin above lever
Fishtail Three greens

FIRE ON GROUND

During start on ground Continue cranking
If engine starts Power 1700 for 2 minutes
Engine Shutdown

If engine fails to start

Cranking Continue
Mixture Idle Cutoff
Throttle Full Open
Fuel pump OFF
Fuel selector OFF
Master OFF
Fire extinguisher Use

ENGINE FIRE IN FLIGHT

Fuel Selector OFF
Throttle Close
Mixture Idle Cut OFF
Electric Fuel Pump OFF
Heater & Defroster OFF
Airspeed Speed up to Vno
Forced Landing Execute

ELECTRICAL FIRE IN FLIGHT

Master OFF
Vents/Cabin Air/Heat OPEN
Cabin Heat OFF
Master Each component ON one at a time

WING FIRE

Navigation Light Switch OFF
Pitot Heat OFF
Side slip .. Keep flames away from cabin & fuel tanks
Land Immediately

ELECTRICAL POWER SUPPLY MALFUNCTIONS

Ammeter shows excessive rate of charge

Alternator OFF
Non-essential electrical equipment OFF
Flight Terminate

LOW VOLTAGE LIGHT ILLUMINATES

Avionics Master OFF
Master Switch OFF(both sides)
Circuit Breakers Reset any popped circuits
Master Switch ON
Low Voltage light Check ON
If light is still on TERMINATE FLIGHT