

INSIDE

Aircraft Papers -----ARROW
Hobbs -----verify
Fire Extinguisher -----check
ELT -----check
Baggage -----secure
Windscreen -----check
Controls -----check

Ignition Key -----OUT
Switches / Breakers -----check

Battery Master Switch -----ON
Fuel Quantity -----check
Wing Flaps -----Down
External Lights -----check
Master Switch -----OFF

OUTSIDE

Fuel -----CHECK
Oil -----CHECK

NOSE

Windscreen -----check
Cowling & Screws -----check
Muffler -----check
Air Intakes & Cylinders -----check
Alternator Belt -----check
Propeller & Spinner -----check
Air Filter -----check
Nose Wheel -----check/30psi
Chocks -----remove

LEFT SIDE

Transponder Antenna ----check
Gear Bolts -----check
Main Gear & Chock -----check/30psi
Fuel Vent -----check
Pitot Mast -----clear

Wing Condition -----check
Tie down -----remove
Wing tip & lights -----check
Aileron -----check
Flap -----check

FUSELAGE & EMPANNAGE

Aircraft Skin Condition -----check
Antennas -----check
Access Panels -----check

Horizontal Stabilizer -----check
Trim tabs -----check
Rudder -----check
Skid Plate -----check
Tie down -----remove

RIGHT SIDE

Flap -----check
Aileron -----check
Wing tip & lights -----check
Tie down -----remove
Wing Condition -----check

Fuel Vents -----check
Gear Bolts -----check
Main Gear & Chock -----check/30psi

PRE-START

Pre-flight inspection -----done
Passenger Briefing-----done
Seats & Safety belts -----as required
Controls -----check
Pitot Heat -----OFF
Alternate Static -----Normal
Switches / Breakers -----check
Fuel Selector -----as required
Canopy -----locked

STARTING ENGINE

Carb heat -----OFF
Mixture -----Rich

Battery master -----ON
Fuel Pump -----ON
Strobes -----ON
Primer -----as required
Throttle -----as required
Propeller area -----clear
Toe brakes -----HOLD
Ignition -----START

Throttle -----1000-1200
Oil Pressure -----check
Fuel Pump -----OFF
Field & Alt Switches -----ON

Flaps -----UP
Mixture -----as required
Lights -----as required

Avionics Master & Radios -----ON
ATIS -----Recorded
Instruments -----SET
Clearance / Transponder -----as required

TAXI CHECK

Brakes -----check
Flight Instruments -----check

	ATIS	CDEL	GND	TWR	A/D
ISP	120.72	121.85	135.3	119.3	118.0
BDR	119.15		121.9	120.9	124.07
FOK	119.92		121.8	125.3	
HWV	119.62			122.8	

PRE-TAKEOFF RUN-UP

Primer -----locked
Controls -----free
Fuel Pump -----ON
Flaps -----UP
Trim -----Takeoff
Mixture -----RICH
Fuel Selector -----switch
Brakes -----HOLD
Throttle -----1700 rpm
Circuit Breakers -----check
Engine Gauges -----check
Suction Gauge -----5.0 ? .1

Mag Check ----- ? 100
Carb heat -----ON (drop)
Throttle -----IDLE
Carb heat -----OFF
Throttle -----1000 rpm
Throttle Friction -----adjust
Takeoff Briefing -----given
V_R-50, V_Y-65, V_X-62, V_A-108
Best Glide - 65

HOLDING SHORT

Radios -----Set
Com 1&2 (vol) - Nav 1&2 GPS
Flight Instruments -----check

Seats & Belts -----secure
Canopy & Windows -----locked
Key -----both
Carb Heat -----OFF
Fuel Pump -----ON
Mixture -----as required
Trim -----Takeoff
Flaps -----UP

Transponder -----Altitude
Lights -----as required

Clearing Magnetos

Key -----Both
Throttle -----2000
Mixture -----Lean (30 sec)
Mixture -----Rich
Throttle -----1700

500' CHECK

Engine gauges -----green
Clear area -----check

1000' CHECK

Fuel Pump -----OFF
Engine gauges -----green
Lights -----as required
Cruise climb -----as required

CRUISE

Engine gauges -----green
Fuel Selector -----as required
Heading Indicator-----as required
Throttle -----as required
Trim -----as required
Mixture -----as required
Lights -----as required

50% - 2300rpm - 4.9 gal/hr - 90 kts
60% - 2500rpm - 5.7 gal/hr - 95 kts
70% - 2700rpm - 6.7 gal/hr - 99 kts

DESCENT

ATIS & Instruments -----SET
Radios -----SET
Landing Briefing -----given
Runway & Crosswind
TPA & Pattern Entry
Go Around - Power, Pitch, Clean, Talk

Throttle -----as required
Carb heat -----as required
Mixture -----enrich

PRE-LANDING

Fuel Tank -----ON
Fuel Pump -----ON
Mixture -----Rich
Carb heat -----as required
Magnetos -----BOTH
Primer -----in & locked
Lights -----as required
Seat Belts -----secure

AFTER LANDING

Carb heat -----OFF
Fuel Pump -----OFF
Transponder -----standby
Mixture -----as required
Lights (ldg / taxi) -----as required
Flaps -----UP

ENGINE SHUT DOWN

Avionics Master -----OFF
KX-155 -----OFF
Lights -----OFF

Magnetos -----Check
Throttle -----Idle
Mixture -----ICO

Battery master -----OFF
Ignition -----Key Out
Field & Alternator -----OFF

Before You Go Home

HOBBBS & TACH-----note
Battery Master -----OFF
Avionics Master -----OFF
Cabin Lights -----OFF

Gas Card -----IN Plane
Canopy Doors -----Locked
Flight Plan -----Closed
Tie Downs, Chocks, Cover
Keys -----In Office

V- Speeds

V_{NE} -----143
V_{NO} -----108
V_A (1692) -----108

V_{FE} -----101
V_S -----48
V_{SO} -----30
V_R -----50

V_X -----62 (54 w/flaps)
V_Y -----65 (56 w/flaps)
Best Glide -----65 (no flaps)
X-WIND -----25

Last Revised (11/04/09)

(Training purposes only – see appropriate POH for official procedures)

Last Revised (11/04/09)

(Training purposes only – see appropriate POH for official procedures)

ENGINE FAILURE

SPEED --- 65 / trim

SPOT ---- landing area

SPEC

Fuel Tank ----- Switch

Fuel Pump ----- ON

Mixture ----- Rich

Carb heat ----- ON

Key (mags) ----- Both

Primer ----- IN

If restart successful:

Oil pressure ----- check

Oil temp ----- check

Electrical equip ----- as required

If restart NOT successful:

FORCED LANDING

Distress call – 121.5

- Who, Where, # on board

- “Committed to landing”

Transponder -----7700

Seat belt/harness ---Tight

ENGINE SECURING

Fuel shut-off ----- OFF

Mixture ----- ICO

Ignition ----- OFF

Prior to impact

Seat Belts -----Secure

Flaps ----- as required

Battery Master ----- OFF

Door latches ----- as required

LOSS OF OIL PRESSURE

X-check Oil Temp

If **NORMAL** – Land ASAP

If **RIISING**– Reduce throttle to minimum required – Land ASAP & Prepare for engine failure

LOSS OF FUEL PRESSURE

Fuel Pump ----- ON

Fuel Selector ----- ON/change?

Land ASAP

ROUGH ENGINE

Carb Heat -----ON

Fuel Pump -----ON

Fuel Tank -----check

Mixture -----adjust

Magnetos -----Both

Engine Gauges -----check

ENGINE FIRE – IN FLIGHT

Mixture ----- ICO

Fuel Shut-off ----- CLOSED

Battery Master ----- OFF

Cabin Heat ----- OFF

Airspeed ----- 100 kts

Prepare for Forced Landing

Emergency Decent --- consider

FIRE – ELECTRICAL

Battery Master ----- OFF

Avionics ----- OFF

All switches ----- OFF

Vents, Air, ----- open

Cabin Heat -----off

Fire Extinguisher ----- consider

Emergency Decent --- consider

If extinguished & power is needed

Vents (open when fire is out)

Battery Master ----- ON

Circuit Breakers ----- Check

Radio Switches ----- OFF

Avionics ----- ON

Radio switches ----- ON (1x1)

Land as soon as possible

ICING

Leave area (turn, climb, descend)

Pitot Heat -----ON

Carb heat -----ON

Cabin heat -----ON

Throttle -----MAX pwr

Flaps -----Leave UP

Move control surfaces

Sacrifice altitude for airspeed

STATIC SOURCE BLOCKED

Alternate Static -----ON

Else – Break VSI

AMMETER - overcharging

(Ammeter charging Full)

Alternator ----- OFF

Alternator Breaker --- OFF

Non-essential equip -- OFF

Land ASAP

Review Light Gun Signals

AMMETER - Failure/Discharging

Alt & Field Switches --Check ON

Alt Breaker -----Check ON

Alt & Field Breakers - Cycle

Radios & Av. Master- OFF

Lights/Elec Load -----reduce/OFF

Battery Master -----Cycle

Radios & Av. Master- ON

If still Discharging:

Lights/Elec Load -----reduce/OFF

Alt & Field Breakers - OFF

Avionics ----- reduce

(use COM 2 backup)

Land ASAP

Review Light Gun Signals

LOST COMMS

Radio ON; Volume Set;

Correct frequency / alternates;

Circuit Breakers; alternator;

Mike / headset plugs

Range location; Last ATC Alternate

radio; Cell Phone

If still not working –

Transponder – 7600

Maintain VFR – land ASAP

DAY – rock wings if receiving

NIGHT – flash lights if receiving

Light Signals

Stdy grn Clrd takeoff Clrd to land

Flsh grn Clrd to taxi Clrd for app

Stdy red Stop Give way-cir

Flsh red Clr rwy Unsafe-no ldg

Flsh wht Return

Red / grn Caution Caution

SPIN RECOVERY

Rudder ----- Fully opposite

Aileron ----- Neutral

Elevator ----- Briskly forward

Power ----- Idle

After rotation has stopped

Rudder – neutralize

Elevator – ease back

ENGINE FIRE - START UP

Continue to crank engine

If engine starts:

Throttle – 1700 rpm

Shutdown - inspect for damages

If engine fails to start:

Throttle ----- FULL

Mixture ----- ICO

Fuel Shut-off ----- CLOSED

Continue to crank engine

Battery Master ----- OFF

Ignition Switch ----- OFF

Evacuate Airplane Immediately

DIVERT to ALTERNATE

A – Alternate airport

B – Best guess heading

C – Change Altitude

D – Distance

E – Estimate time & fuel

F – Flight Plan & ATC

G – Ground (close flight plan)

LOST PROCEDURES

Confess (to yourself)

Control / Circle (last known...)

Climb

Cross Radials

Communicate to ATC

Comply

Conserve (fuel)

Last Revised (11/04/09)

(Training purposes only – see appropriate POH for official procedures)

Last Revised (11/04/09)

(Training purposes only – see appropriate POH for official procedures)