

NORMAL PROCEDURES

BEFORE STARTING

Preflight.....COMPLETE
Passenger Briefing.....GIVE
Seatbelts.....FASTENED
Seats.....POSITION & LOCK
Brakes.....TESTED/HOLD
All Switches.....OFF
AVN Master Switch.....OFF
Beacon.....ON
Fuel Valve.....ON

STARTING

Master Switch.....ON
Mixture.....RICH
Carburetor Heat.....COLD
Prime.....AS REQUIRED

COLD Start: 2-4 Strokes

WARM Start: 0 Strokes

Primer.....IN & LOCKED
Throttle.....OPEN ¼ INCH
Propeller Area.....CLEAR
Ignition Switch.....START
Throttle.....1000 RPM
Oil Pressure...GREEN ARC
Voltmeter.....CHECK
Mixture.....LEAN

CAUTION

Maximum starter engage duty cycle is 30 seconds ON, followed by a minimum of two minutes OFF

FLOODED ENGINE

Mixture.....IDLE CUT-OFF
Throttle.....FULL OPEN
Propeller.....CLEAR
Starter.....ENGAGE
Mixture...when engine starts
ADVANCE TO FULL RICH
Throttle.....800 RPM

BEFORE TAXI

Flaps.....UP
Transponder...1200 & ALT
Avionics.....ON
Avionics Panel.....SET
Radios.....SET
ATIS/Wx.....CHECK
Flight Inst.....SET
Flight Controls.....CHECK
Lights.....AS REQUIRED
Area.....CLEAR
Contact Ground
Brakes....RELEASE/TEST

TAXI

Flight Controls:
POSITION FOR WIND

BEFORE TAKEOFF

Brakes.....SET
Cabin Doors.....CLOSED
Mixture.....ENRICHED
Throttle.....1700 RPM
Magnetos.....CHECK
(Max drop-150 RPM, Max diff.-75 RPM)
Carb. Heat.....ON/OFF
Engine Inst....GREEN ARC
Throttle.....IDLE
Less than 900 RPM
Throttle.....1000 RPM
Trim.....TAKEOFF
Radios.....SET
Fuel Valve.....ON
Mixture.....AS REQUIRED
Seatbelts.....FASTENED
Emer. Response.....BRIEF
Contact Tower or Announce departure
Approach Path.....CLEAR
Takeoff Time.....NOTE
Initial Heading.....NOTE

Normal Takeoff

Flaps.....UP
Mixture....AS REQUIRED
Position....CENTERLINE
Throttle.....FULL
Rotate.....50 KIAS
Climb.....68 KIAS

CRUISE CLIMB

Airspeed.....65-75 KIAS
Throttle.....FULL
Mixture.....RICH
Engine Inst....GREEN ARC

CRUISE

Pitch.....LEVEL
Airspeed.....CRUISE
Power.....2300 RPM
Trim.....ADJUST
Mixture.....LEAN
Engine Inst....GREEN ARC
Cross Check
Heading Indicator
Flight plan.....OPEN
Flight Following...REQUEST

DESCENT

Power.....AS REQUIRED
Mixture.....AS REQUIRED
Carb. Heat.....AS REQUIRED
Engine Inst....GREEN ARC
Altimeter.....SET

BEFORE LANDING

Gas.....ON
Undercarriage.....DOWN
Mixture.....AS REQUIRED
Power.....AS REQUIRED
Seatbelts & Switches

BALKED LANDING

Throttle.....FULL
Carb Heat.....OFF
Flaps.....RETRACT TO 20°
Airspeed.....55 KIAS
Flaps....RETRACT SLOWLY
Airspeed.....68 KIAS

AFTER LANDING

Taxi....CLEAR OF RUNWAY
Carb Heat.....OFF
Flaps.....RETRACTED
Lights.....AS REQUIRED
Mixture.....LEAN FOR TAXI
Contact Ground or Taxi

SHUTDOWN

Switches.....OFF
Lean to.....CUTOFF
Ignition.....OFF
Master.....OFF
Transponder.....1200
Trim.....TAKEOFF
Control Lock.....INSTALL
Hobbs/Tach.....RECORD
Pitot Cover.....ON
Tie Downs.....SECURE
Flight Plan.....CLOSE

Miscellaneous

V-SPEEDS

Vso.....42 KIAS
Vs1.....47 KIAS
Vx56 KIAS
Vy67 KIAS
Vg60 KIAS
Vfe.....85 KIAS
Va97 KIAS
Vno107 KIAS
Vne141 KIAS

FREQUENCIES:

ATIS126.85
Ground128.70
Tower118.50
Center134.30
UNICOM.....122.95
Flight Service122.65
CFD123.00
RWV, LHB, 60R..... 122.90

EMERGENCY PROCEDURES

ENGINE FAILURE DURING GROUND ROLL

Throttle.....IDLE
Brakes.....APPLY
Flaps.....RETRACT
Mixture.....CUTOFF
Ignition.....OFF
Master.....OFF

ENGINE FAILURE DURING CLIMB OUT

Airspeed.....60 KIAS
Mixture..... CUTOFF
Fuel ValveOFF
Throttle.....IDLE
Ignition.....OFF
FlapsAS REQUIRED
MasterOFF WHEN
LANDING ASSURED

ENGINE FAILURE IN FLIGHT

RESTART

Airspeed60 KIAS
SELECT A FIELD: FLY TO IT
Carb. Heat.....ON
Primer.....IN & LOCKED
Fuel ValveON
MixtureRICH
Throttle.....IDLE
IGNITION:

Prop TurningBOTH
Prop StoppedSTART

Transponder7700
Radio:121.5
MAYDAY

IN-FLIGHT SECURE

Airspeed 60 KIAS
Fuel Valve OFF
Mixture CUTOFF
ThrottleIDLE
IgnitionOFF
Flaps AS REQUIRED
MasterOFF
DoorsOPEN
JUST BEFORE LANDING
Seatbelts..... FASTEN
Prep Passengers

ENGINE FIRE IN FLIGHT

MixtureCUTOFF
Fuel Valve.....OFF
Master Switch..... OFF
Vents/ Cabin Air/ Heat CLOSED
Airspeed.....100 KIAS or
better to extinguish flames

PROCEED TO IN-FLIGHT
SECURE

ELECTRICAL FIRE

Master Switch.....OFF
Vents/Cabin/Heat/Air CLOSED
LAND AS SOON AS POSSIBLE

OVER-VOLTAGE LIGHT ILLUMINATES

Master Switch.....OFF
Avionics Switch.....OFF
Master Switch.....ON
Over-Voltage Light.....OFF

If over-voltage light illuminates
again:

Flight...TERMINATE as soon as
practical

1.

ELECTRICAL SMOKE OR FIRE

1. Master Switch—OFF
2. All Electrical Switches—OFF
3. Master Switch—ON
4. Essential Electrical Equipment—ON (Isolate defective equipment)

NOTE

Ensure fire is out and will not be aggravated by draft. Turn off CABIN HEAT and CABIN AIR control. To aid in smoke evacuation, open pilot storm window.

NO OUTPUT INDICATED ON THE AMMETER

1. Minimize all electrical loads. Select only that electrical equipment which is essential for safe flight.
2. 5 amp field breaker – check in
3. 60 amp output breaker – check in
4. Reset either or both breakers if open
5. Master Switch – OFF for 30 seconds then ON
6. If ammeter continues to indicate NO output ,maintain minimum electrical load and terminate flight as soon as practical.
7. Extend landing gear with emergency system.

CAUTION

Minimize electrical load in order to reduce the possibility of damage to electrical components.

ENGINE FIRE (GROUND)

1. Mixture Control—IDLE CUT OFF
2. Continue to crank engine
3. Fuel Selector—OFF
4. Master switch—OFF
5. Extinguish fire with extinguisher

ENGINE FIRE IN FLIGHT

1. Fuel Selector—OFF
2. Mixture Control—IDLE CUT OFF
3. Aux Fuel Pump—OFF
4. Magneto Switch—OFF
5. **Land Immediately**

EMERGENCY DESCENT

1. Throttles—IDLE
2. Propeller—Full forward (fine pitch)
3. Flaps - UP
4. Landing Gear—DOWN (Below 130 KTS)
5. Airspeed—Maximum 130 KTS