

Emergency Procedures

Engine Failure

- Fuel Selector Switch
- Primer Locked
- Throttle..... Full Open
- Mixture Rich
- Carb Heat..... On
- Airspeed..... 83 MPH

Emergency Decent

- Throttle..... Closed
- Flaps 40°
- Airspeed..... 100 MPH
- Bank Angle..... 45°

Engine Fire

- Fuel Selector Off
- Throttle..... Closed
- Mixture Lean
- Airspeed..... 120 MPH

Normal Procedures

Pre-Flight

Cockpit

- Control Lock..... Remove & Stow
- Hobbs Time..... Record
- Master Switch..... On
- Fuel Gauges..... Checked
- Master Switch..... Off
- Flaps Extended

Right Wing

- Flap Attach Bolts Secure
- Aileron Attachment Secure
- Wing Tip..... No Damage
- Fuel Quantity..... Confirm to Gauge
- Fuel Sump..... Drain
- Tie Down Remove

Landing Gear Right Side

- Inflation Checked
- Brake Pads..... Within Limits

Engine Right Side

- Oil Quantity 6 Quarts (MIN)
- Steering Linkage Checked

Nose

- Strut Inflation Checked
- Air Intake..... Clean
- Landing Light..... Secure
- Propeller..... Free from Nicks
- Alternator Belt Tight – No Damage

Normal Procedures

Pre-Flight (Continued)

Engine Left Side

- Brake Fluid Reservoir Full
- Fuel Filter Drain

Landing Gear Left Side

- Inflation Checked
- Brake Pads..... Within Limits

Left Wing

- Fuel Sump..... Drain
- Tiedown Remove
- Fuel Quantity..... Confirm to Gauge
- Pitot Tube..... No Obstructions
- Stall Warning Vane..... Free
- Wing Tip..... No Damage
- Aileron Attachment Secure
- Flap Attach Bolts Secure

Fuselage

- Left Side..... No Damage

Empenage

- Stabilator..... Free Movement
- Trim Tab..... Secure
- Linkage Safety Devices in Place
- Rudder Safety Devices in Place
- Tiedown Remove

Fuselage

- Right Side No Damage

Night

- Lights Operational

Normal Procedures

Starting Engine

- Preflight..... Complete
- Flaps Retract
- Seats..... Adjusted
- Seat Belts & Shoulder Harness..... Attached
- Fuel Selector Desired Tank
- Parking Brake..... Set
- Carb Heat..... Off (Cold)
- Mixture Rich (cold engine)
- Mixture..... Lean (hot engine)
- Throttle..... Closed
- Master Switch..... On
- Anti-collision light..... On
- Electric Fuel Pump On,
Check Pressure then Off
- Prime As Required
- Starter Engage
- Mixture..... Rich
- Oil Pressure..... Green w/in 30 Seconds
- Throttle..... 800 – 1200 RPM
- Avionics..... On
- Mixture Lean for Taxi
- Lights..... As required

Ground Check & Engine Run-Up

- Flight Controls Free & Correct
- Flight Instruments Set & Checked
- Clock..... Wound & Set
- Mixture Rich
- Throttle..... 1800 RPM
- Carb Heat..... Checked – Then Off
- Magnetos R - Both - L - Both
(50 RPM Differential MAX – 175 Either MAX)
- Vacuum Gauge 5" HG \pm 0.1"
- Oil Pressure..... Green
- Oil Temp Green
- Fuel Pressure Green
- Fuel Pump..... On
- Ammeter Charging
- Throttle..... 1000 RPM

Normal Procedures

Before Take Off

- Fuel Selector Desired Tank
- Electric Fuel Pump On
- Pulse Lights..... On
- Engine Gauges..... Checked
- Primer In & Locked
- Carb Heat..... Off (Cold)
- Mixture Rich Below 5000' MSL
- Quadrant Friction..... Set
- Flaps Set
- Elevator Trim..... Slightly Aft of Neutral
- Rudder Trim Set
- Door and Window Latched
- Seat Belt(s) Fastened
- Shoulder Harness(es) Attached

Take Off - Normal

- Transponder ALT
- Heading Indicator Aligned with Runway
- Clock Note Time Off
- Throttle..... Full Open
- Rotate 55 MPH
- Initial Climb..... 85 MPH (Vy)
- Enroute Climb 100 MPH

Normal Procedures

Short Field Take Off Without Obstacle

- Flaps 25°
- Transponder ALT
- Heading Indicator Proper Heading
- Clock Note Time Off
- Brakes Apply
- Throttle Full
- Brakes Release
- Rotate 55 MPH
- Climb 85 MPH (Vy)
- Flaps Slowly Retract
- Climb Enroute 100 MPH

Short Field Take Off With Obstacle

- Flaps 25°
- Transponder ALT
- Heading Indicator Proper Heading
- Clock Note Time Off
- Brakes Apply
- Throttle Full
- Brakes Release
- Rotate 55 MPH
- Climb 74 MPH (Vx)
- Flaps Slowly Retract
- Climb 85 MPH (Vy)
- Climb Enroute 100 MPH

Normal Procedures

Soft Field Take Off Without Obstacle

- Flaps 25°
- Transponder ALT
- Heading Indicator Proper Heading
- Clock Note Time Off
- Yoke Full Aft
- Throttle Full
- Rotate As Soon As Possible
- Accelerate In Ground Effect
- Climb 85 MPH (Vy)
- Flaps Slowly Retract
- Climb Enroute 100 MPH

Soft Field Take Off With Obstacle

- Flaps 25°
- Transponder ALT
- Heading Indicator Proper Heading
- Clock Note Time Off
- Yoke Full Aft
- Throttle Full
- Rotate As Soon As Possible
- Accelerate In Ground Effect
- Climb 74 MPH (Vx)
- Flaps Slowly Retract
- Climb 85 MPH (Vy)
- Climb Enroute 100 MPH

Normal Procedures

Enroute

- Fuel Pump..... Off - Monitor Pressure
- Pulse Lights..... Off
- Mixture As Req'd - Rich < 5000'
- Fuel Selector Change As Required

Normal Procedures

Before Landing

- Fuel Selector Fulllest Tank
- Mixture Rich
- Fuel Pump..... On
- Carb Heat..... Checked; Then off
- Pulse Lights..... On

Landing – Normal

Downwind

- Throttle..... 2100 RPM
- Flaps 10° (1st Notch)
- Trim Level Flight

Abeam Touchdown Point

- Throttle..... 1600 RPM
- Airspeed..... 90 MPH

Base

- Flaps 25° (2nd Notch)

Final

- Flaps 40° (3rd Notch)
- Airspeed..... 80 MPH

Touchdown

- Main Wheels First..... Slowest Possible
Airspeed

Normal Procedures

Landing – Short Field

Downwind

- Throttle..... 2100 RPM
- Flaps 10°
- Trim Level Flight

Abeam Touchdown Point

- Throttle..... 1600 RPM
- Airspeed..... 90 MPH

Base

- Flaps 25°

Final

- Flaps 40°
- Airspeed..... 75 MPH

Touchdown

- Main wheels first..... Slowest Possible
Airspeed
- Brakes..... As Required

Normal Procedures

Landing – Soft Field

Downwind

- Throttle..... 2100 RPM
- Flaps 10°
- Trim Level Flight

Abeam Touchdown Point

- Throttle..... 1600 RPM
- Airspeed..... 90 MPH

Base

- Flaps 25°

Final

- Flaps 40°
- Airspeed..... 75 MPH

Touchdown

- Main Wheels First..... Slowest Possible
Airspeed
- Yoke..... Full Aft

Normal Procedures

After Landing

- Runway Exit
- Flaps Retract
- Fuel Pump..... Off
- Pulse Lights..... Off
- Transponder Standby
- Mixture Lean for Taxi
- Lights As Required
- Ground Control..... Contact

Shut Down

- Avionics..... Off
- Trim Neutral
- Throttle..... Idle
- Mixture Lean
- Magneto Off
- Master Off
- Lights Off
- Control Lock..... Install
- Hobbs Time..... Record