

CLIPPER



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Cessna 172N Skyhawk Quick Reference Manual



This maneuvers flow guide is intended to be used as a ready reference and provides only the basic steps and sequences. This guide should be used in conjunction with most current versions of FAA-H-8083-3, the FAA Airmen Certification Standards, Practical Test Standards, and the Pilot's Operating Handbook for the Cessna Skyhawk.



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Preflight/Normal Operations

Weight and Balance

1. Max Gross Weight..... 2550 lbs
2. Taxi Fuel Burn..... 8 lbs

V-Speeds

V _{S0}	41 kts
V _{S1}	47 kts
V _{FE}	85 kts
V _{NO}	128 kts
V _{NE}	160 kts
V _X	59 kts
V _G	65 kts
V _Y	73 kts
V _A	89-97 kts
X-Wind.....	17 kts

Leaning Procedures

1. Lean Assist..... Hold
2. Mixture Level..... Lean Until 1st Cylinder Peaks
3. Mixture Level..... Enrich 100°F





Engine Starting

Engine Start (Flooded)

1. Brakes..... Hold
2. Throttle..... Open Full
3. Fuel Pump..... On
4. Mixture..... Idle Cut-Off
5. Engine/PFD Indicators..... Monitor/DECIDE
6. Magnetos..... Select Both/Start
7. Mixture (On Start)..... Advance Full
8. Throttle..... Retard
9. Oil Pressure..... Check

- **If a Fire Begins, proceed to Engine Fire (Starting)**

Description:

Excessive priming can result in a fuel/air mixture that is too rich. Reducing the mixture (fuel) while increasing the amount of air (throttle) can equalize this imbalance and start the motor.

Common Errors:

- Not reducing the mixture to idle before starting
- Failure to reduce the throttle
- Failure to hold the brakes

Engine Start (Fouled Spark Plugs)

1. Brakes..... Hold
2. Throttle..... Open 2000 RPM
3. Mixture..... Lean 50° of Peak
4. Engine..... Run ~30 Seconds
5. Engine RPM/PFD Indicators..... Monitor/DECIDE
6. Magnetos (L/R)..... Max 175 RPM Drop / 50 RPM Difference
7. Throttle..... Retard
8. Mixture..... Advance to 100° Rich of Peak

- **If Roughness/RPM Differences Do Not Improve Seek Maintenance**

Description:

Fouling is created by excessively rich fuel/air mixtures during prolonged ground maneuvers and/or failure to properly lean the mixture during flight and causes a buildup of carbon deposits. If left unchecked, spark plug fouling results in engine roughness, hot spots, and detonation.

Common Errors:

- Not leaning the mixture while on the ground
- Engine overheating due to high oil temperatures during prolonged runup
- Failure to hold the brakes





Takeoff Operations

Normal Takeoff

1. Fuel Selector.....Both
2. Flaps..... Up
3. Rotate..... 55 KTS
4. Climb Out..... 73 KTS
5. Climb-Cruise Checklist.....1000' AGL

Soft Field Takeoff

1. Fuel Selector.....Both
2. Flaps..... 10°
3. Pitch..... Start Yoke Full Back
4. Lift Off..... Early as Able
5. Flaps..... 0° with Positive Rate
6. Flaps..... Up at 73 KTS
7. Climb Out..... 80 KTS

Description:

Soft or rough runway surfaces (grass, sand, snow) require getting the airplane airborne as quickly as possible to eliminate surface drag. Shift weight from the landing gear to the wings via a high AOA to accomplish this. Then fly within ground effect increases airspeed after takeoff.

Common Errors:

- Insufficient back pressure during roll resulting in inadequate AOA
- Poor directional control
- Climbing outside of ground effect too early
- Abrupt and/or excessive elevator control inputs
- Touching back down after lift-off
- Failure to adjust pitch outside of ground effect



Skyhawk

Short Field Takeoff

1. Fuel Selector.....Both
2. Flaps..... 10°
3. Full Stop..... Maximum Available Runway
4. Takeoff Power..... Verify Set
5. Brakes..... Release
6. Rotate..... 55 KTS
7. Climb Out..... 59 KTS until clear, then 73 KTS
8. Climb-Cruise Checklist.....1000' AGL

Description:

When the runway area is short or restricted by obstructions, the airplane must be flown precisely at its maximum limit of takeoff performance. This results in the shortest ground roll and steepest angle of climb.

Common Errors:

- Failure to utilize all available runway distance
- Failure to properly trim
- Premature lift-off resulting in high drag
- Prolonging ground roll
- Inability to hold V_x





Performance Maneuvers

CRAAC

1. Clearing Turns.....Perform
2. Reference Point.....Visual Established
3. AltitudeAs Required & Noted
4. Airspeed.....90kt & Noted
5. Configuration Flow.....Perform

Description:

Memory aid for preparing the airplane for any maneuver.

Configuration Flow

1. Fuel Selector..... Both
2. Throttle..... 2300 RPM
3. Mixture..... As Required
4. Carb Heat..... As Required
5. Fuel Pump..... As Required
6. Clearing Turns..... Complete

Description:

Necessary to safely prepare the aircraft for any maneuvers and ensure separation from other traffic.

Slow Flight

* Perform CRAAC

1. Altitude..... Above 3000' AGL
2. Throttle..... 1700 RPM
3. Flaps..... Full, Incrementally
4. Airspeed..... 47 KTS (Just Above Stall)
5. Throttle..... As Required (~2200 RPM)
6. Recovery
7. Throttle..... Full
8. Flaps..... Retract, Incrementally

Description:

Low airspeed and high AOA attitudes, while at altitude, simulates the flight characteristics, incipient stall-warnings, and control feel experienced during takeoff/departure and approach/landing phases of flight.

Common Errors:

- Incorrect elevator input resulting in an ascent or descent after power reduction
- Insufficient right rudder compensation
- Flight instrument fixation
- Failure to anticipate AOA changes with flap settings
- Lack of trim usage
- Delayed response to stall warnings



Performance Maneuvers

Steep Turns

* Perform CRAAC

1. Altitude..... Above 3000' AGL
2. Airspeed..... 90 KTS
3. Bank..... 45° or 50°

Through 30° of Bank

4. Trim..... 2 Full Swipes
5. Throttle..... Increase ~100 RPM

Recovery

6. Recover..... Wings Level, Remove Throttle and Trim

Description:

Pilot smoothness and coordination is tested throughout multiple 360° turns while banked at 45-60°. Management of bank, AOA (pitch), and power are critical to maintaining a consistent turn.

Common Errors:

- Inadequate pitch on entry or rollout
- Gaining/Losing altitude or airspeed
- Failure to maintain a constant bank angle

Power-On Stall

* Perform CRAAC

1. Altitude..... Above 3000' AGL
2. Throttle..... 1700 RPM
3. Airspeed..... 65 KTS
4. Throttle..... Full
5. Pitch..... As Required to Induce Stall

Recovery

6. Unload Wing..... Nose Down, Wings Level
7. Cram..... Full Throttle
8. Climb..... Pitch Just Above Horizon
9. Clean..... Flaps & Carb Heat, Incrementally

Description:

Practiced to develop awareness and corrective responses to excessive pitch attitudes during takeoff and climbs (typically over obstacles) that result in stalls.

Common Errors:

- Failure to properly configure the airplane (power, flaps, gear)
- Improper pitch, heading (straight-ahead stalls), and bank control
- Rough or uncoordinated control inputs
- Failure to recognize stall warnings or to achieve a stall
- Delayed recovery, excessive altitude loss, or entering a secondary stall

Skyhawk

Power-Off Stall

* Perform CRAAC

1. Altitude.....3000' AGL
2. Slow Flight..... Establish
3. Throttle..... 1700 RPM
4. Flaps..... Full, Incrementally
5. Airspeed..... Descend at 65 KTS
6. Throttle..... Idle
7. Calls..... Call out horn and Buffet
8. Pitch..... To Hold Altitude

Recovery

9. Unload Wing..... Nose Down, Wings Level
10. Cram..... Full Throttle
11. Climb..... Pitch Just Above Horizon
12. Clean..... Flaps Up (Incrementally) & Carb Heat Off

Description:

Practiced to develop awareness and corrective responses to improper control inputs during a turn (simulating landing) or when trying to stretch a glide, which results in a stall.

Common Errors:

- Failure to properly configure the airplane (power, flaps, gear)
- Improper pitch, heading (straight-ahead stalls), and bank control
- Rough or uncoordinated control inputs
- Failure to recognize stall warnings or to achieve a stall



Skyhawk

Accelerated Stall

* Perform CRAAC

1. Altitude..... Above 3000' AGL
2. Throttle..... 1700 RPM
3. Bank..... 45°
4. Throttle..... Idle
5. Pitch..... As Required to Induce Stall

Recovery

6. Unload Wing..... Nose Down, Wings Level
7. Cram..... Full Throttle
8. Climb..... Pitch Just Above Horizon
9. Clean..... Flaps & Carb Heat, Incrementally

Description:

At the same gross weight, airplane configuration, and power setting, an airplane will consistently stall at the same indicated airspeed. However, a stall will occur at a higher indicated airspeed with excessive maneuvering (load factor) imposed by abrupt control inputs to change direction.

Common Errors:

- Failure to properly configure the airplane (power, flaps, gear)
- Rough or uncoordinated control inputs
- Failure to recognize stall warnings or to achieve a stall
- Delayed recovery, excessive altitude loss, or entering a secondary stall



Skyhawk

Steep Spiral

* Perform CRAAC

1. Altitude..... Above 4500' AGL
2. Reference..... Under Main Tire or Storm Window
3. Throttle..... Idle
4. Carb Heat..... On
5. Airspeed..... 73 KTS
6. Throttle..... Clear engine every 1000'
7. Recover..... Above 1500' AGL

Description:

The objective is to rapidly dissipate excessive altitude, necessary during emergencies, while remaining over top of a selected landing spot.

Common Errors:

- Inadequate pitch on entry or rollout
- Gaining altitude or excessive airspeed
- Failure to compensate for wind by varying bank angles
- Uncoordinated Controls
- Ineffective use of trim
- Premature/Excessive rollout on heading
- Over-reliance on instrument instead of visual references



Skyhawk

Chandelles

* Perform CRAAC

1. Altitude..... Above 3000' AGL
2. Reference Point..... Abeam Wing
3. Airspeed..... 100 KTS
 - A. Entry to 45°
 - a) Throttle..... Full
 - b) Bank..... 30°
 - c) Pitch..... Smoothly Increased
 - d) Coordination..... Verify
 - B. 90°
 - a) Pitch Attitude..... Hold 15°
 - b) Bank..... Hold 30°
 - c) Coordination..... Verify
 - C. 90° to 180°
 - a) Pitch Attitude..... Decreasing
 - b) Bank..... Decreasing
 - D. 180°
 - a) Pitch Attitude..... Level
 - b) Bank..... Level
 - c) Airspeed..... Just Above Stall
 - d) Heading..... 180° From Entry
4. Resume Normal Cruise..... Establish

Description:

This maximum performance climbing turn finishes 180° from the initial altitude below and just above stalling speed. The goal is to obtain the most altitude given a specific bank angle and power setting.

Common Errors:

- Initial bank too shallow (stall) or too steep (lost performance)
- Bank angle exceeds 30°
- Not beginning rollout at 90° or rolling wings level before 180°
- Exceeding/altering pitch attitude once set
- Unsmooth or uncoordinated control inputs
- Excessive airspeed or stalling at recovery point
- Over-reliance on instrument instead of visual references



Skyhawk

Lazy Eights

* Perform CRAAC

1. Altitude..... Above 3000' AGL
2. Airspeed..... 97 KTS
3. Select Points..... 45°, 90°, 135°
4. Enter Climbing Turn..... Coordinated
 - A.** 45°
 - a) Bank..... Increasing
 - b) Pitch Attitude..... Maximum
 - B.** 90°
 - a) Pitch Attitude..... Hold
 - b) Bank..... Appx. 30°
 - c) Airspeed..... 5-10 KTS Above Stall
 - C.** 135°
 - a) Pitch Attitude..... Lowest Point
 - b) Bank..... Decreasing
 - D.** 180°
 - a) Pitch Attitude..... Level
 - b) Altitude..... Entry Level
 - c) Airspeed..... Entry Level
 - d) Heading..... 180° From Entry
 - E.** Reverse Direction..... Repeat Maneuver
5. Resume Normal Cruise..... Establish

Description:

Intended to enhance proper coordination of the flight controls throughout a wide range of airspeeds and attitudes. Substantial skill is required to coordinate aileron and rudder, which are at no time constant.

Common Errors:

- Asymmetry across each 180° points
- Improper/inadequate reference point selection or use
- Gain/loss of altitude at 180° points
- Airspeed or bank angle standards not met
- Unsmooth or uncoordinated control inputs
- Over-reliance on instrument instead of visual references





Ground Reference Maneuvers

Ground Reference Maneuvers

* Perform CRAAC

1. Altitude..... 1000' AGL

Turns Around a Point

1. Enter Downwind
2. Maintain Constant Radius by Changing Bank Angle
3. Complete 2 Turns or as Specified by Instructor/Examiner
4. Exit at Same Point of Entry

S-Turns

1. Enter on the Downwind
2. Maintain Constant Radius by Changing Bank Angle
3. Make Left or Right Turns as Specified by Instructor/Examiner

Rectangular Course

1. Enter 45° on the Downwind Leg
2. Establish Adequate Wind Correction Angle
3. Make Left or Right Turns as Specified by Instructor/Examiner

Eights on Pylon (Commercial)

1. Calculate Pivotal Altitude ($\text{Groundspeed}^2 / 11.3$) = Pivotal Altitude (AGL)
2. Airspeed Established at 90 kts
3. Identify two pylons by flying parallel to reference points. (Spaced 15-20 secs apart)
4. Enter 45° to the downwind, Between Pylons
 - A. **Above** pivotal altitude: reference line move rearward
 - B. **At** pivotal altitude: aircraft pivots on reference line
 - C. **Below** pivotal altitude: reference line moves forward

Description:

Intended to aid pilots in understanding the relationship of flight control inputs and their resulting attitude changes. Above all, these maneuvers require control coordination, timing, and attention to situational awareness to accurately and safely fly at low altitudes.

Common Errors:

- Failure to establish and then maintain a constant, level altitude
- Failure to properly assess and correct for wind changes
- Failure to smoothly coordinate controls
- Failure to properly divide attention between tasks
- Failure to accurately execute turns on time





Landing Operations

Pre-Landing Checklist (GUMPPS)

1. Gas On Fullest Tank
2. Undercarriage..... Down/Fixed
3. Mixture..... Full Rich
4. Power/Props..... Set As Required & Full
5. Fuel Pump..... On
6. Safety (Lights & Seatbelts)..... On

Normal Landing

* Pre-Landing **GUMPPS** Checklist

1. Abeam..... 15-1700 RPM, Flaps 10°, 85 KTS
2. Base..... Flaps 20°, 75 KTS
3. Final..... Flaps 40°, 65 KTS

Soft Field Landing

* Pre-Landing **GUMPPS** Checklist

1. Abeam..... 15-1700 RPM, Flaps 10°, 85 KTS
2. Base..... Flaps 20°, 75 KTS
3. Final..... 70 KTS
4. Throttle..... As Needed through Touchdown
5. Nose Wheel..... Hold Off Long as Possible

Description:

Soft or rough runway surfaces (grass, sand, snow) require slower and smoother landings. Pilots must use the wings, not the landing gear, to support the weight of the airplane (by holding backpressure) as long as practicable.

Common Errors:

- Unstable approach (excessive descent rate or airspeed)
- Round out too high
- Poor power management during round out and touch down
- Hard touchdown
- Transferring weight to the wheels (letting the nose wheel fall) after touchdown



Skyhawk

Short Field Landing

* Pre-Landing GUMPPS Checklist

1. Abeam..... 15-1700 RPM, Flaps 10°, 85 KTS
2. Base..... Flaps 20°, 75 KTS
3. Final..... Flaps 40°, 62 KTS

After Touchdown

4. Flaps..... Up
5. Brakes..... Maximum
6. Yoke..... Max Aerodynamics Braking

Description:

To a short runway, one with obstacles, or both, pilots must precisely control inputs to produce a rate of descent and airspeed resulting in no floating during round out and the shortest stopping distance.

Common Errors:

- Unstable approach (excessive descent rate or airspeed)
- Low airspeed resulting in flare inability and a hard landing
- Poor power management, resulting in hard landings
- Excessive braking (lock ups)
- Failure to maintain directional control
- Failure to abort an unsafe approach

Power-Off 180°

* Pre-Landing GUMPPS Checklist

1. Abeam..... Power Idle, 65 KTS, Trim
2. Base..... Flaps 10° (as Necessary)
3. Final..... 65 KTS, Flaps (as Necessary)
4. Landing..... On Pre-Specified Point/ Just Beyond

Description:

This approach is executed by gliding with the power off from the downwind leg to a preselected landing spot or 200 feet beyond. The objective is to instill good judgment and procedures necessary for accurately flying without power.

Common Errors:

- Downwind leg is too far from the runway
- Overextension of the downwind leg due to tailwinds
- Inadequate crosswind compensation
- Uncoordinated turns
- Failure to lower landing gear
- Premature flap / landing gear extension
- Attempting to "stretch" gliding distance
- Using the throttle
- Forcing the airplane on to the runway to avoid overshooting the landing spot



Skyhawk

Go-Around

1. Cram..... Full Power
2. Climb..... Pitch Just Above Horizon
3. Clean..... Flaps 20° Immediately
 - A. Carb Heat..... Off
 - B. Flaps Up 10° Positive Climb
 - C. Flaps Up Full..... 73 KTS
4. Call..... Announce Go Around
5. Climb Out..... 80 KTS

Description:

When airport and/or landing configuration conditions cannot safely be assured, a landing must be aborted. The earlier a go-around can be initiated the safer its execution becomes.

Common Errors:

- Pride - believing a rejected landing is an admission of failure.
- Indecision
- Delay in initiating a go-around
- Failure to apply full power smoothly
- Improper pitch attitude
- Failure to configure the airplane properly
- Inadequate right rudder
- Loss of aircraft control





Instrument Procedures

Instrument Procedures

Precision Approach

1. When directed to IAF or Vectored.....Load & Activate Approach
2. Approach Checklist / Identify Localizer.....Early As Possible
3. Localizer moves towards center.....“Localizer Alive”
4. Airspeed.....90kts
5. Glideslope moves towards center.....“Glideslope Alive”
6. ½ dot below GS intercept.....Slow 80kts, flaps 10°, “Pre-Landing Checklist”
7. GS Intercept.....Power ~1500RPM
8. Descend.....On GS at 80kts
9. 1000ft above DA.....“1000 to go”
10. 200ft above DA.....“Approaching Minimums”
11. At Descion Height/Altitude.....“Minimums”
12. If runway in Sight.....Flaps 20°, Slow to 70kts
13. Short Final.....Slow to 65kts

- **At DA**, if runway is in sight (per 91.175), continue and land. **If requirements are not met at the DA - EXECUTE MISSED APPROACH INSTRUCTIONS.**

Missed Approach

1. Click.....Go Around Button
2. Cram.....Full Power
3. Climb.....Establish Vy
4. Clean..... Flaps Up at 73 KTS
 - A. Carb Heat..... Off
5. Call.....Report Going Missed
6. Configure.....Navs/Radials/Radios



Skyhawk

Instrument Procedures

Non-precision Approach

1. When directed to IAF or Vectored.....Load & activate approach
 2. Airspeed.....90kts
 3. Just prior to FAF (0.5NM).....Slow 80kts, flaps 10°, “Pre-Landing Checklist”
 4. At the FAF.....Descend at required FPM at 80kts
 5. 1000ft above MDA.....“1000 to go”
 6. 200ft above MDA.....“Approaching Minimums”
 7. At MDA.....Level off without descending to MAP/Runway
 8. If runway in Sight.....Flaps 20°, Slow to 70kts
 9. Short Final.....Slow to 65kts
- **At MDA**, if runway is in sight (per 91.175), continue and land.. **If requirements are not met by the missed approach point (MAP) - EXECUTE MISSED APPROACH INSTRUCTIONS.**

Missed Approach

7. Click.....Go Around Button
8. Cram.....Full Power
9. Climb.....Establish Vy
10. Clean..... Flaps Up at 73 KTS
 - A. Carb Heat..... Off
11. Call.....Report Going Missed
12. Configure.....Navs/Radials/Radios

Reaching MDA & Level Off

1. Throttle.....As Required
2. Pitch.....Level Flight
3. Trim.....Adjust
4. Time.....Monitor





Emergency Procedures

Emergency (ABCD) Checklist

1. Airspeed Pitch Best Glide (65 KTS)
2. Best Place to Land..... Fly Toward
3. Checklist (Above 500' AGL Only)..... Memory Items/List
4. Declare Emergency..... Call ATC / 121.5, Transponder 7700

Engine Fire (During Start)

1. Start Switch..... Continue to Crank
2. Mixture..... Cut-Off
3. Throttle..... Open
4. Fuel Pump..... Off
5. Fuel Selector..... Off
 - Abandon if Fire Continues

Engine Power Loss (Takeoff)

1. Sufficient Runway Remains
 - A. Power..... Idle
 - B. Landing..... Land/Stop Ahead
 - C. Brakes..... As Required
2. Insufficient Runway Remains
 - A. Landing..... Straight Ahead / Avoid Obstacles
 - B. Establish Glide.....65 KTS
 - C. Power.....As Available
 - D. Time permitting.....Declare an Emergency
 - E. Mixture.....Cutoff
 - F. Fuel Selector.....Off
 - G. Magnetos.....Off
 - H. Flaps..... As Necessary
 - I. Master Switch.....Off
3. Sufficient Altitude Gained (Attempt Restart)
 - A. Perform ABCD Checklist
 - B. Fuel Selector.....Both
 - C. Fuel Pump..... On
 - D. Mixture..... Rich
 - E. Carb Heat.....On
 - F. Magnetos.....Attempt Restart
 - If Power is Not Regained, Proceed with Landing (No Engine Power)



Skyhawk

Engine Power Loss (In Flight)

* Perform **ABCD** Checklist

1. Airspeed..... 65 KTS
2. Fuel Selector.....Both
3. Fuel Pump..... On
4. Mixture..... Full Rich
5. Carb Heat..... On
6. Magnetos..... Off, then Individually On
 - **When Power is Restored**
7. Primer.....In and Locked
8. Carb Heat..... Off
9. Fuel Pump..... Off
 - **Land as Soon as Practical**

Landing (No Engine Power)

* Perform **ABCD** Checklist

1. Airspeed..... 65 KTS
2. Landing Pattern..... Established 1000' AGL
 - **When Committed to Landing**
3. Airspeed..... 65 KTS
4. Flaps..... As Necessary
5. Throttle..... Idle
6. Mixture..... Cut-off
7. Magnetos..... Off
8. Master Switches..... Off
9. Fuel Selector..... Closed
10. Seatbelts..... Secure

Engine Fire (In Flight)

* Perform **ABCD** Checklist

1. Mixture..... Cut-Off
2. Fuel Selector..... Off
3. Master Switch.....Off
4. Vent/Defroster..... Closed/Off
 - **If Fire Continues:**
5. Airspeed/Attitude..... Increase/Pitch Down
 - **Proceed with Landing (No Engine Power)**



Skyhawk

Emergency Descent

1. Power..... Idle
2. Mixture..... Full
3. Carb Heat..... On
4. Airspeed..... 100kts
5. Bank..... 35-45°
6. Landing Spot..... Recover from Descent Downwind
 - **Prepare for Landing (No Engine Power)**

Description:

A spiraling descent is made as rapidly as possible to lower altitude or to the ground for an emergency landing. A fire, sickness, loss of cabin pressurization, or other situations may demand this maneuver.

Common Errors:

- Failure to respond quickly to the emergency
- Failure to properly configure the airplane
- Lack of coordination and control (airspeed or rate of descent)
- Loss of reference point or becoming disoriented
- Failure to aviate, navigate, communicate

Engine Roughness

1. Carb Heat..... On
 - **If Roughness Continues After 1 Minute:**
2. Mixture..... Max Smoothness
3. Carb Heat..... Off
4. Fuel Pump..... On
5. Fuel Selector..... Switch Tanks
6. Engine Indicators..... Monitor/DECIDE
7. Magnetos..... Verify Singularly
 - **Prepare for Engine Power Loss (In Flight)**

Description:

Engine roughness can be caused by several factors including carburetor or intake icing, ice build up over the air intake, carbon build up on the spark plugs, fuel contamination, fuel deficiencies, excessive leaning, and more.

Common Errors:

- Failure to respond quickly to engine roughness
- Misdiagnosis of the prevailing issues
- Lack of planning for emergency maneuvers
- Failure to aviate, navigate, communicate



Skyhawk

Cabin Fire

* Perform **ABCD** Checklist

1. Master Switch.....Off
2. Vents/ Cabin Air/ Heat.....Closed
3. Fire Extinguisher.....Acitvate
4. Cabin Vents.....Ventilate Cabin
5. Land.....As Soon as Possible

- **Prepare for Landing (No Engine Power)**

Description:

A cabin fire is an urgent situation where smoke and flames can take over the cabin. It can be caused by a multitude of reasons but is most commonly the result of an electrical fault. It requires a swift and urgent response to avoid damaging the flight controls and Carbon Monoxide poisoning.

Common Errors:

- Failure to respond quickly to the emergency
- Misdiagnosis of the emergency
- Failure to properly extinguish the flames
- Loss of reference point or becoming disoriented
- Failure to aviate, navigate, communicate
- Failure to aviate, navigate, communicate

Wing Fire

* Perform **ABCD** Checklist

1. Nav Light.....Off
2. Pitot Heat.....Off
3. Strobe Light.....Off
4. Perform Side-Slip.....As Necessary
5. Land.....As Soon as Possible

Description:

Engine roughness can be caused by several factors including carburetor or intake icing, ice build up over the air intake, carbon build up on the spark plugs, fuel contamination, fuel deficiencies, excessive leaning, and more.

Common Errors:

- Failure to respond quickly to the emergency
- Misdiagnosis of the emergency
- Performing side-slip in the wrong direction
- Failure to aviate, navigate, communicate



Skyhawk

Electrical Failures

Over-Volts Light

1. Avionics.....Off
2. Master Switch.....Off
3. Master Switch.....On
4. Avionics.....On
 - **If Light Re-Illuminates:**
5. Land.....As Soon as Possible

Low-Volts Light

1. Avionics.....Off
2. Master Switch.....Off
3. Master Switch.....On
4. Low Voltage Light.....Check Off
5. Avionics.....On
 - **If Light Re-Illuminates**
6. Alternator.....Off
7. Non Essential Equipment.....Off
8. Land.....As Soon as Possible

Description:

Engine roughness can be caused by several factors including carburetor or intake icing, ice build up over the air intake, carbon build up on the spark plugs, fuel contamination, fuel deficiencies, excessive leaning, and more.

Common Errors:

- Misdiagnosis of the prevailing issues
- Failure to recognize essential / non-essential equipment for type of flight
- Failure to troubleshoot through electrical failure
- Failure to aviate, navigate, communicate

