

NORTHWEST FLIGHT SCHOOL  
**SKYHAWK N738BS**

**EMERGENCY/ABNORMAL CHECKLIST**

For Use Only With an Approved C-172N POH/AFM  
 (Revised 9/28/13)

**NOTE:**

Immediate Action Items are Shown in **Bold**.

**ENGINE FAILURE DURING TAKEOFF ROLL**

- Throttle ..... **CLOSE**
- Brakes..... **APPLY**
- Wing Flaps ..... UP
- Mixture ..... IDLE CUT-OFF
- Ignition ..... OFF
- Master Switch ..... OFF

**ENGINE FAILURE**

**IMMEDIATELY AFTER TAKEOFF**

- Airspeed ..... LOWER NOSE & PITCH FOR BEST GLIDE**
- Land ..... STRAIGHT AHEAD/AVOID OBSTACLES
- Flaps..... (30° RECOMMENDED) AS REQUIRED
- Power..... AS AVAILABLE
- Time Permitting ..... DECLARE EMERGENCY
- Mixture ..... CUTOFF
- Fuel Selector Valve ..... OFF
- Ignition Switch ..... OFF
- Master Switch ..... OFF
- Doors ..... UNLATCH

**ENGINE FAILURE DURING FLIGHT (Restart)**

- Airspeed ..... BEST GLIDE**
- Note wind direction and speed,  
Pick & fly toward landing site*
- Carburetor Heat..... ON**
- Fuel Selector Valve ..... BOTH**
- Mixture..... RICH**
- Ignition Switch .....  
 ..... BOTH, CHECK L & R (START if prop not windmilling)
- Primer ..... IN & LOCKED

**PRECAUTIONARY LANDING**

**WITH ENGINE POWER**

- Airspeed..... BEST GLIDE
- Landing Area ..... SELECT & INSPECT
- Avionics Master Switch & Electrical Switches ..... OFF

**ON FINAL APPROACH**

- Wing Flaps ..... 30°
- Airspeed..... 60 KIAS
- Master Switch ..... OFF
- Doors ..... (Prior to Touchdown) UNLATCH
- Touchdown ..... SLIGHTLY TAIL LOW
- Ignition Switch ..... OFF
- Brakes ..... APPLY HEAVILY

**EMERGENCY LANDING NO ENGINE POWER**

- Airspeed..... BEST GLIDE
- Landing Area ..... SELECT & INSPECT
- Mixture ..... IDLE CUT-OFF
- Fuel Selector Valve ..... OFF
- Ignition Switch ..... OFF
- MAYDAY..... TRANSMIT (LAST KNOWN FREQ./121.5)
- Squawk ..... 7700
- Wing Flaps ..... (30° RECOMMENDED) AS REQUIRED
- Master Switch ..... OFF
- Doors ..... UNLATCH PRIOR TO TOUCHDOWN
- Touchdown ..... SLIGHTLY TAIL LOW
- Brakes ..... APPLY HEAVILY

**EMERGENCY DESCENT**

- Throttle ..... IDLE
- Mixture ..... FULL RICH
- Carburetor Heat..... ON
- Bank ..... 45°
- Airspeed..... PITCH FOR V<sub>no</sub>
- Forced Landing ..... EXECUTE

**ENGINE FIRE DURING START**

**Cranking ..... CONTINUE**  
*to get the engine started which would suck flames and  
 accumulated fuel through carburetor and into engine.*

**IF ENGINE STARTS**

- Power ..... 1700 RPM (for a few minutes)
- Engine ..... SHUTDOWN

**IF ENGINE FAILS TO START**

- Throttle ..... FULL OPEN**
- Mixture ..... IDLE CUT-OFF**
- Cranking ..... CONTINUE**
- Fire Extinguisher ..... OBTAIN
- Master Switch ..... OFF
- Ignition Switch ..... OFF
- Fuel Selector Valve ..... OFF
- Fire ..... EXTINGUISH
- Aircraft ..... EVACUATE

**ENGINE FIRE IN FLIGHT**

- Mixture..... IDLE CUT-OFF
- Fuel Selector Valve ..... OFF
- Master Switch ..... OFF
- Cabin Heat & Air..... OFF (Except Overhead Vents)
- Airspeed ..... AT LEAST 100 KIAS
- Forced Landing..... EXECUTE

**ELECTRICAL FIRE IN FLIGHT**

- Master Switch ..... OFF**
- Vents, Cabin Heat & Air ..... CLOSED**
- Fire Extinguisher ..... ACTIVATE**
- Avionics Power Switch ..... OFF
- All Other Switches (Except Ignition) ..... OFF

**WHEN FIRE IS OUT**

- Cabin ..... Ventilate
- IF FIRE APPEARS OUT & ELECTRICAL POWER REQUIRED**
- Master Switch ..... ON
- Circuit Breakers ..... CHECK FAULTY CIRCUIT, DO NOT RESET
- Avionics Power Switch ..... ON
- Radios & Electrical Switches..... ON (One at a Time)

**LAND AS SOON AS POSSIBLE**



**NORTHWEST**  
 FLIGHT SCHOOL

### CABIN FIRE

Master Switch .....OFF  
Vents, Cabin Air/Heat.....CLOSED  
Fire Extinguisher..... **ACTIVATE**  
Cabin ..... VENTILATE (When Fire is Out)

**LAND AS SOON AS POSSIBLE**

### WING FIRE

Navigation Light Switch .....OFF  
Pitot Heat Switch .....OFF  
Strobe Light Switch .....OFF  
*Perform sideslip to keep flames away from the fuel tank and cabin, and land as soon as possible using flaps only as required for final approach and touchdown.*

### AMMETER: EXCESSIVE RATE OF CHARGE

*For Ammeter Full-Scale Deflection*

Alternator.....OFF  
Nonessential Radio/Electrical Equipment .....OFF  
Flight ..... TERMINATE AS SOON AS PRACTICAL

### OVER-VOLTAGE LIGHT ILLUMINATES

Avionics Power Switch .....OFF  
Master Switch .....OFF (Both Sides)  
Master Switch .....ON  
Over-Voltage Light ..... CHECK OFF  
Avionics Power Switch .....ON

#### **IF OVER-VOLTAGE LIGHT ILLUMINATES AGAIN**

Flight ..... TERMINATE AS SOON AS POSSIBLE

### AMMETER SHOWS DISCHARGE

Alternator.....OFF  
Nonessential Radio/Electrical Equipment .....OFF  
Flight ..... TERMINATE (As Soon as Practical)

### CLEANING FOULED SPARK PLUGS

#### AFTER EXCESSIVE RPM DROP

*(CAUTION: Hold brakes securely and remain vigilant for aircraft movement; only perform runup on surface free from gravel/dirt)*

Throttle ..... FULL  
Mixture .....LEAN FOR RPM RISE  
*Maintain for 30 Seconds*  
Mixture ..... FULL RICH  
Throttle .....1700  
*Perform Mag Check*

#### **NOTE:**

*While performing the above checklist, do not allow oil temperature to reach redline and be vigilant of oil pressure.*

### VACUUM SYSTEM FAILURE

Vacuum Gauge .....CHECK  
*If vacuum is not within normal operating limits, a failure has occurred in the vacuum system and partial panel procedures may be required for continued flights.*

### SPIN RECOVERY

Throttle ..... IMMEDIATELY CLOSED  
Ailerons ..... NEUTRALIZE  
Rudder ..... FULL, OPPOSITE ROTATION  
*Turn Coordinator Indicates Direction of Rotation*  
Elevator Control ..... BRISKLY FORWARD  
**WHEN ROTATION STOPS**  
Rudder ..... NEUTRALIZE  
*Make Smooth Recovery From Resulting Dive*

### INADVERTENT ICING ENCOUNTER

Pitot Heat ..... ON  
Course/Altitude ... REVERSE/CHANGE FOR BETTER O.A.T.  
Cabin Heat/Defrost ..... FULL ON  
Throttle..... FULL (Minimize Ice Buildup on Propeller)  
Carburetor Heat .....AS REQUIRED  
*Unexplained loss of engine speed could be caused by carburetor ice or intake filter ice.*  
Wing Flaps .....LEAVE RETRACTED  
Windscreen ..... REMOVE ICE  
*Reach through side window and scrape ice from a portion of the windscreen for visibility in the landing approach.*  
Approach .....65-75 KIAS (Depending on Ice Accumulation)  
Touchdown ..... LEVEL FLIGHT ATTITUDE  
*With ice accumulations of 1/4" or more on the wing leading edges, be prepared for significantly higher stalling speeds.*

### STATIC SOURCE BLOCKAGE

Alternate Static Source Valve ..... PULL ON  
Airspeed ..... CONSULT TABLES IN POH SECTION 5

### LANDING WITH A FLAT MAIN TIRE

Approach ..... NORMAL  
Touchdown .....GOOD TIRE FIRST  
*Hold airplane off flat tire as long as possible.*

### LANDING WITH A FLAT NOSE TIRE

Approach ..... NORMAL  
Flaps ..... AS REQUIRED  
Touchdown .....ON MAINS (HOLD NOSE OFF)  
Elevator Control ..... FULL AFT UNTIL AIRCRAFT STOPS