

## C-172S In-Flight Emergencies

### ELECTRICAL PROBLEMS

#### AMMETER - Excessive Charge

*Ammeter - full scale deflection*

Alternator .....OFF  
Non-essential electrical equip.....OFF  
LAND

#### “VOLTS” - Annunciator on

*Low Voltage; Ammeter Discharge*

Avionics Master Switch .....OFF  
Circuit Breaker (ALT FLD)...CHECK IN  
Master Switch.....OFF (both sides)  
Master Switch.....ON  
Low Voltage Annunciator - (“VOLTS”) -  
-CHECK OFF  
Avionics Master Switch.....ON  
*If “VOLTS” annunciator illuminates  
again:*  
Alternator.....OFF  
Nonessential Electrical Equip.....OFF  
LAND

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### STATIC SOURCE

*Suspected Blockage*

*Erroneous Instrument Reading*

Alternate Static Source.....PULL ON  
Airspeed .....POH (Perf. Sect 5)

### ICING

*Inadvertent Icing Encounter*

Pitot Heat.....ON  
Escape.....180° turn/change altitude  
Cabin Heat/Defrost.....Full ON  
*if Rough Engine...change RPM/Mixture*  
Plan to LAND - possibly off-airport  
CAUTION:  
-Higher Stall Speed  
-Decreased elevator authority  
-**Leave flaps retracted**  
-Open left window, scrape windshield  
-Forward slip for visibility  
Approach.....65kts-75kts  
Landing ..... level attitude

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### ROUGH ENGINE

#### SLIGHT & GRADUAL

*Consider spark plug fouling:*

Ignition..... select L or R momentarily  
-Verify power loss  
Mixture.....LEAN  
*-if after several min's, still rough...*  
Mixture.....ENRICH  
*-if still not smooth...*  
LAND.....nearest airport for repairs

#### SUDDEN ROUGH/MISFIRE

*Consider magneto problem:*

Ignition.....select L or R momentarily to  
identify magneto  
Ignition.....BOTH  
RPM & Mixture..... adjust to different  
settings  
*if unable to obtain smooth engine...*  
MAGNETO..... select good side  
LAND..... nearest airport for repairs

## C-172S In-Flight Emergencies

### ENGINE FAILURE/RESTART

- Airspeed.....68KTS
- Fuel Shutoff Valve.....ON (push full in)
- Fuel Selector Valve.....BOTH
- Aux Fuel Pump.....ON
- Mixture.....RICH
- Ignition .....BOTH
- If prop is stopped*
  - Ignition.....START
- Aux Fuel Pump .....OFF (when engine starts)

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## C-172S In-Flight Emergencies

### SMOKE & FIRE

#### ENGINE

- Mixture.....IDLE CUTOFF
- Fuel Shutoff Valve.....OFF (pull out)
- Aux Fuel Pump.....OFF
- Master Switch.....OFF
- Cabin Heat/Air..OFF (except top vents)
- Airspeed.....100 KTS  
*(increasing speed may extinguish fire)*
- Forced Landing.....EXECUTE

#### ELECTRICAL

- Master Switch.....OFF
- Vents, Cabin Air, Heat.....CLOSED
- Fire Extinguisher.....ACTIVATE
- Avionics Master Switch.....OFF
- All elec switches (except ignition)..OFF

*If fire is out:*

-Vents, Cabin Air, Heat...OPEN

\*LAND at nearest suitable airport\*

#### CABIN

- Master Switch.....OFF
- Vents/Cabin Air/ Heat .....CLOSED
- Fire Extinguisher.....ACTIVATE

*If fire is out: -*

-Vents/Cabin Air/ Heat .....OPEN

LAND

## C-172S In-Flight Emergencies

### SMOKE & FIRE

#### WING

- Landing/Taxi lights.....OFF
- Nav lights.....OFF
- Strobe lights.....OFF
- Pitot Heat.....OFF
- (consider side slip to keep flames away from wing tank and cabin)*

### FORCED LANDING

- Airspeed.....70 KTS (flaps up)  
.....65 KTS (flaps dn)

#### **Select Landing Area**

- Seats & Belts.....UPRIGHT & SECURE
- Mixture .....IDLE CUTOFF
- Fuel Shutoff Valve.....OFF (Pull full out)
- Ignition.....OFF
- Flaps.....as req'd (30degrees recmnd)
- Master Switch (landing assured)...OFF
- Doors.....UNLATCH
- ATC....."Mayday"
- Touchdown.....tail low
- Brakes .....apply heavily