NOTE: This is a Flight School Guide Only
Check the aircraft POH for specific details

C172S (**G1000**)
EMERGENCY Checklists
(Items in bold should be memorized)

ENGINE FAILURES

ENGINE FAILURE DURING TAKEOFF ROLL

1. **Throttle -- IDLE**
2. **Brakes-- APPLY**
3. Wing Flaps -- RETRACT
4. Mixture -- IDLE CUT OFF
5. Ignition Switch -- OFF
6. STBY BATT Switch -- OFF
7. Master Switch -- OFF

ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF

1. **Airspeed -- 70 KIAS (flaps UP), 65 KIAS (flaps DOWN)**
2. Mixture -- IDLE CUT OFF
3. Fuel Shutoff Valve -- OFF (Pull Full Out)
4. MAGNETOS Switch -- OFF

5. Wing Flaps -- AS REQUIRED (full recommended)
6. STBY BATT Switch -- OFF
7. Master Switch (ALT and BAT) -- OFF
8. Cabin Door -- UNLATCH
9. Land -- STRAIGHT AHEAD

ENGINE FAILURE DURING FLIGHT (Restart Procedures)

1. Airspeed -- 68 KIAS
2. Fuel Shutoff Valve -- ON (push full in)
3. Fuel Selector Valve -- BOTH
4. Fuel PUMP Switch -- ON
5. Mixture -- RICH (if restart has not occurred)
6. MAGNETOS Switch -- BOTH (or START if propeller is stopped)
7. Fuel Pump Switch -- OFF

FORCED LANDINGS

EMERGENCY LANDING WITHOUT ENGINE POWER

1. Pilot & Passenger Seat Backs -- MOST UPRIGHT POSITION
2. Seats and Seat Belts -- SECURE
3. Airspeed -- 70 KIAS (flaps UP); 65 KIAS (flaps DOWN)
4. Mixture -- IDLE CUT OFF
5. Fuel Shutoff Valve -- OFF (Pull Full Out)
6. Ignition Switch -- OFF
7. Wing Flaps -- AS REQUIRED (FULL recommended)
8. STBY BATT Switch -- OFF
9. Master Switch (ALT and BAT) -- OFF (when landing is assured)
10. Doors -- UNLATCH PRIOR TO TOUCHDOWN
11. Touchdown -- SLIGHTLY TAIL LOW
12. Brakes -- APPLY HEAVILY

PRECAUTIONARY LANDING WITH ENGINE POWER

1. Passenger Seat Backs -- MOST UPRIGHT POSITION
2. Seats and Seat Belts -- SECURE
3. Airspeed -- 65 KIAS
4. Wing Flaps -- 20°.
5. Selected Field -- FLY OVER, noting terrain and obstructions, then retract flaps upon reaching a safe altitude and airspeed
6. Avionics Master Switch and Electrical Switches -- OFF
7. Wing Flaps -- 30° (on final approach)
8. Airspeed -- 65 KIAS
9. STBY BATT Switch -- OFF
10. Master Switch (ALT and BAT) -- OFF
11. Doors -- UNLATCH PRIOR TO TOUCHDOWN
12. Touchdown -- SLIGHTLY TAIL LOW
13. Mixture Control -- IDLE CUTOFF
14. MAGNETOS Switch -- OFF
15. Brakes -- APPLY HEAVILY

FIRES

DURING START ON THE GROUND

1. **MAGNETOS Switch -- START**
   Continue Cranking to get a start which would suck the flames and accumulated fuel into the engine.

If engine starts:

2. **Power -- 1800 RPM** for a few minutes
3. **Engine -- SHUTDOWN** and inspect for damage

If engine fails to start:

4. **Throttle - - FULL OPEN**
5. **Mixture -- IDLE CUT OFF**
6. **Cranking -- CONTINUE**
7. **Fuel Shutoff Valve -- OFF (Pull Full Out)**
8. **Fuel Pump Switch -- OFF**
9. **MAGNETOS Switch -- OFF**
10. **STBY BATT Switch -- OFF**
11. **MASTER Switch (ALT and BAT) -- OFF**
12. Fire Extinguisher -- ACTIVATE
13. Engine -- SECURE
14. Master Switch -- OFF
15. Ignition Switch -- OFF
16. Parking Brake -- RELEASE
17. Airplane -- EVACUATE
18. Fire -- EXTINGUISH using fire extinguisher, wool blanket, or dirt
19. Fire Damage -- INSPECT

ENGINE FIRE IN FLIGHT

1. **Mixture -- IDLE CUT OFF**
2. **Fuel Shutoff Valve -- Pull Out (OFF)**
3. **Auxiliary Fuel Pump Switch -- OFF**
4. **Master Switch -- OFF**
5. Cabin Heat and Air -- OFF (except overhead vents)

6. Airspeed -- 100 KIAS (If fire is not extinguished, increase glide speed to find an airspeed - within airspeed limitations - which will provide an incombustible mixture)
7. Forced Landing -- EXECUTE

ELECTRICAL FIRE IN FLIGHT

1. **STBY BATT Switch -- OFF**
2. **Master Switch -- OFF**
3. **Vents, Cabin Air, Heat -- CLOSED**
4. **Fire Extinguisher -- ACTIVATE**
5. AVIONICS Switch (BUS 1 and BUS 2) -- OFF
6. All Other Switches (except MAGNETOS switch) -- OFF
7. Vents/Cabin Air/Heat -- OPEN when it is ascertained that fire is completely extinguished
8. Circuit Breakers -- CHECK for faulty circuit, do not reset
9. Master Switch (ALT and BAT) -- ON
10. STBT BATT Switch -- ON
11. Avionics Master Switch (BUS 1 and BUS 2) -- ON

CABIN FIRE

1. **STBT BATT Switch -- OFF**
2. **Master Switch (ALT and BAT) -- OFF.**
3. **Vents/Cabin Air/Heat -- CLOSED (to avoid drafts)**
4. **Fire Extinguisher -- ACTIVATE**
5. Vents/Cabin Air/Heat -- Open when it is ascertained that fire is completely extinguished
6. Land the airplane as soon as possible to inspect for damage.

WING FIRE

1. **Landing&Taxi Light Switches -- OFF**
2. **Navigation Light Switch -- OFF**
3. **Strobe Light Switch -- OFF**
4. **Pitot Heat Switch -- OFF**

INADVERTENT ICING ENCOUNTER

1. **Turn pitot heat switch ON**
2. **Turn back or change altitude to obtain an outside air temperature that is less conducive to icing**
3. **Pull cabin heat control full out and open defroster outlets**

LOW VOLTAGE ANNUNCIATOR (VOLTS) ILLUMINATES DURING FLIGHT (Ammeter Indicates Discharge)

1. Master Switch -- OFF (ALT Only)
2. Alternator Circuit Breaker (ALT FLD) -- CHECK IN
3. Master Switch (ALT and BAT) -- ON
4. Low Voltage Annunciator (LOW VOLTS) -- CHECK OFF
5. M BUS VOLTS -- CHECK 27.5V min
6. M BAT AMPS -- CHECK CHARGING (+)
7. If low voltage annunciator (LOW VOLTS) remains on -- SEE POH