- ELECTRICAL POWER SUPPLY SYSTEM MALFUNCTIONS -

- AMMETER SHOWS EXCESSIVE RATE OF CHARGE (Full Scale Deflection) -

Alternator . . . . . OFF
Alternator Circuit Breaker . . . . . PULL
Nonessential Electrical Equipment . . . . . OFF
Flight . . . . . LAND ASAP

- LOW-VOLT LIGHT ILLUMINATES DURING FLIGHT (Ammeter shows discharge) -

Avionics Power Switch . . . . . OFF
Alternator Circuit Breaker . . . . . CHECK IN
Master Switch . . . . . OFF
Master Switch . . . . . OFF
Low-Voltage Light . . . . . CHECK OFF
Avionics Power Switch . . . . . ON

If low-voltage light illuminates again

Alternator . . . . . OFF
Nonessential Radio & Electrical Equip . . . . . OFF
Flight . . . . . LAND ASAP

NOTE: Illumination of low-voltage light may occur during low RPM conditions with an electrical load on the system such as during a low RPM taxi. Under these conditions, the light will go out at higher RPM. The master switch need not be recycled since an over-voltage condition has not occurred to de-activate the alternator system.

- STATIC SOURCE BLOCKAGE -

Static Pressure Alt Source Valve . . . . . FULL ON
Cabin Heat & Air . . . . . ON
Vents . . . . . CLOSED
Airspeed . . . . . CONSULT CALIBRATION TABLES

- SPIN RECOVERY -

Power . . . . . IDLE
Ailerons . . . . . NEUTRAL
Rudder . . . . . FULL OPPOSITE
Elevator . . . . . BRISKLY FORWARD

Return to desired altitude, attitude, airspeed, & heading

Vr: 55 kts
Vx: 65 kts
Vy: 72 kts
Vg: 68 kts
Va $_{@2550lbs}$: 105 kts
Va $_{@1900lbs}$: 90 kts
Vs_0: 40 kts
Vs_1: 48 kts
Vno: 129 kts
Vne: 163 kts

This checklist is only for training purposes and is not intended to replace the POH.
Revised 05/26/2020

SPRINGS AVIATION

CESSNA 172R 180HP
N9895F
EMERGENCY PROCEDURES CHECKLIST

- ENGINE FAILURES -

- DURING TAKEOFF ROLL -

Throttle . . . . . IDLE
Brakes . . . . . APPLY
Wing Flaps . . . . . RETRACT
Mixture . . . . . IDLE CUTOFF
Ignition Switch . . . . . OFF
Master Switch . . . . . OFF

- IMMEDIATELY AFTER TAKEOFF -

Airspeed . . . . . 68 KIAS (flaps up)
. . . . . 60 KIAS (flaps down)
Mixture . . . . . IDLE CUTOFF
Fuel Selector. . . . . FUEL SHUTOFF
Ignition Switch . . . . . OFF
Wing Flaps . . . . . AS REQUIRED
Master Switch . . . . . OFF

- DURING FLIGHT (RESTART PROCEDURES) -

Airspeed . . . . . 68 KIAS
Carburetor Heat . . . . . ON
Fuel Selector Valve . . . . . BOTH
Mixture . . . . . RICH (or set for alt)
Ignition Switch . . . . . BOTH
. . . . . *(or start if prop is stopped)*
Primer . . . . . IN & LOCKED

- FORCED LANDINGS -

- EMERGENCY LANDING WITHOUT ENGINE POWER -

Seats, Seat Belts/Harness . . . . . SECURE
Airspeed . . . . . 68 KIAS (flaps up)
. . . . . 60 KIAS (flaps down)
Mixture . . . . . IDLE CUTOFF
Fuel Selector Valve . . . . . BOTH
Ignition Switch . . . . . OFF
Wing Flaps . . . . . AS REQ. (30° recommended)
Master Switch . . . . . OFF
Doors . . . . . UNLATCH prior to touchdown
Touchdown . . . . . SLIGHTLY TAIL LOW
Brakes . . . . . APPLY HEAVILY

- PRECAUTIONARY LANDING WITH ENGINE POWER -

Seats, Seat Belts/Harness . . . . . SECURE
Wing Flaps . . . . . 20°
Airspeed . . . . . 60 KIAS
Selected Field . . . . . FLY OVER
. . . . . *noting terrain & obstructions*
retract flaps upon reaching safe altitude & airspeed
Avionics Power Switch . . . . . OFF
Electrical Switches . . . . . OFF
Wing Flaps . . . . . 30° (on final app)
Airspeed . . . . . 60 KIAS
Master Switch . . . . . OFF
Doors . . . . . UNLATCH prior to touchdown
Touchdown . . . . . SLIGHTLY TAIL LOW
Ignition Switch . . . . . OFF
Brakes . . . . . APPLY HEAVILY

- FIRES -

- DURING START ON GROUND -

Cranking . . . . . CONTINUE
. . . to get a start which would suck the flames and accumulated fuel through the carburetor and into the engine
If engine starts:
Power . . . . . 1700 RPM for a few mins
Engine . . . . . SHUTDOWN & inspect for damage
If engine fails to start:
Throttle . . . . . FULL OPEN
Mixture . . . . . IDLE CUTOFF
Cranking . . . . . CONTINUE
Fire Extinguisher . . . . . OBTAIN
Engine . . . . . SECURE
Master Switch . . . . . OFF
Ignition Switch . . . . . OFF
Fuel Selector Valve . . . . . OFF
Fire . . . . . EXTINGUISH
Fire Damage . . . . . INSPECT

- ENGINE FIRE IN FLIGHT -

Mixture . . . . . IDLE CUTOFF
Fuel Selector . . . . . OFF
Master Switch . . . . . OFF
Cabin Heat & Air . . OFF (except overhead vents)
Airspeed . . . . . 100 KIAS
. . . . . *if fire isn't extinguished, increase speed to find airspeed which will provide an incombustible mixture*
Forced Landing . . . . . EXECUTE

- CABIN FIRE -

Master Switch . . . . . OFF
Vents/Cabin Air & Heat . . . . . CLOSED
Fire Extinguisher . . . . . ACTIVATE
When Fire Extinguished . . . . . VENTILATE
Land . . . . . ASAP

- FIRES -

- ELECTRICAL FIRE IN FLIGHT -

Master Switch . . . . . OFF
Vents/Cabin Air & Heat . . . . . CLOSED
Fire Extinguisher . . . . . ACTIVATE
When Fire Extinguished . . . . . VENTILATE
Avionics Power Switch . . . . . OFF
All Other Switches (except ignition) . . . . . OFF
Master Switch . . . . . ON
Circuit Breakers . . . . . CHECK (do NOT reset)
Radio Switches . . . . . OFF
Avionics Power Switch . . . . . ON
Radio/Electrical Switches . . . . . ON
. . . . . *one at a time, with delay after each until short circuit is localized*

- WING FIRE -

Landing/Taxi Light . . . . . OFF
Pitot Heat Switch . . . . . OFF
Navigation Light . . . . . OFF
Strobe Light . . . . . OFF
Perform sideslip to keep flames away from fuel tank and cabin. Land ASAP. Use flaps only as required for final approach and touchdown.

- CLEANING FOULED SPARK PLUGS -

Magnetos . . . . . BOTH
Throttle . . . . . 1700 RPM
Mixture . . . . . LEAN
Run at lean/hot mixture for 30-60 seconds. Test magnetos again. If drop is still too high, cancel flight and squawk issue.