1. ENGINE FAILURE DURING TAKEOFF ROLL
   1. Throttle...................... IDLE
   2. Brakes........................ APPLY
   3. Wing Flaps.................... RETRACT
   4. Mixture........................ CUT-OFF
   5. Ignition Switch................ OFF
   6. Master Switch.................. OFF

2. ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF
   1. Airspeed....................... 86 MPH
   2. Mixture........................ CUT-OFF
   3. Fuel Selector Valve........... OFF
   4. Ignition Switch................ OFF
   5. Wing Flaps.................... AS REQUIRED
   6. Master Switch.................. OFF

3. PARTIAL ENGINE LOSS
   1. Fuel Selector Valve...SWITCH TO OPPOSITE TANK for 60 sec.
   2. Fuel Selector Valve........... SELECT

4. ENGINE FAILURE DURING FLIGHT
   1. Airspeed ...................... 86 MPH
   2. Primer......................... CHECK IN
   3. Carburetor Heat.............. ON
   4. Mixture ....................... FULL RICH
   5. Fuel Selector Valve........... BOTH
   6. Throttle & Mixture TRY DIFFERENT SETTINGs

If Power is Not Restored
Execute EMERGENCY LANDING WITHOUT ENGINE POWER

5. EMERGENCY LANDING WITHOUT ENGINE POWER
   1. Airspeed ...................... 86 MPH
   2. Ignition Switch............. OFF
   3. Mixture........................ CUT-OFF
   4. Fuel Selector Valve........... OFF
   5. Squawk ........................ 7700
   6. Radio Call .................... MAYDAY
   7. Seat Belts & Harnesses........ TIGHTEN
   8. Cabin Doors ................ UNLATCH PRIOR TO TOUCHDOWN

   Once Landing is Assured
   9. ELT Remote Switch .............. ON
   10. Final Approach Speed ....... 70 MPH
   11. Master Switch ................ OFF
   12. Touchdown ................... SLIGHTLY TAIL LOW
   13. Brakes ........................ AS REQUIRED

6. PRECAUTIONARY LANDING WITH ENGINE POWER
   1. Seat Belts & Harnesses........ TIGHTEN
   2. Squawk ........................ 7700
   3. Radio Call ..................... MAYDAY
   4. ELT Remote Switch .......... ON
   5. Wing Flaps.................... 20°
   6. Airspeed...................... 76 MPH
   7. Selected Field ...OVER FLY AND INVESTIGATE
   8. Wing Flaps .................. UP WHEN SAFE TO DO SO
   9. Avionics Power & Electrical SwitchesOFF

   Once Landing is Assured
   10. Flaps .......................... 30° ON FINAL APPROACH
   11. Final Approach Speed ....... 70 MPH
   12. Master Switch .. OFF PRIOR TO TOUCHDOWN
   13. Cabin Doors Unlatch Prior to Touchdown
   14. Touchdown .................. SLIGHTLY TAIL LOW
   15. Ignition Switch ............. OFF AT TOUCHDOWN
   16. Mixture .......... IDLE CUT-OFF AT TOUCHDOWN
   17. Brakes ........................ AS REQUIRED

7. DITCHING
   1. Squawk ........................ 7700
   2. Radio Call ..................... MAYDAY
   3. ELT Remote Switch .............. ON
   4. Loose Objects ............... secured or jetison
   5. Seat Belts & Harnesses........ TIGHTEN

   Approach
   6. High Winds, Heavy Seas .... INTO THE WIND
   7. Light Winds, Heavy Swells Parallel to Swells
   8. Flaps .......................... 20° - 30°
   9. Throttle 300'/MIN DESCENT AT @ 76 MPH*

   *If engine power is not available, approach at 86 mph with flaps up or 81 mph with 10° flaps

   Touchdown
   11. Cabin Doors Unlatch Prior to Touchdown
   12. Touchdown Level Attitude - MINIMIZE DESCENT
   13. Face ................ CUSHION AT TOUCHDOWN

   Evacuation
   14. Airplane ....................... EVACUATE
   15. Life Vests ....................... INFLATE

8. ENGINE FIRE DURING START ON GROUND
   1. Starter ......................... CONTINUE CRANKING
   2. Throttle ........................ FULL OPEN

   If Fire Continues
   3. Power ....................... 1700 RPM FOR A FEW MINUTES
   4. Engine ....................... SHUTDOWN

   If Engine Fails to Start
   5. Throttle ....................... FULL OPEN
   6. Mixture ....................... IDLE CUT-OFF
   7. Cranking ....................... CONTINUE
   8. Master Switch ............... OFF
   9. Ignition Switch ............... OFF
   10. Fuel Selector Valve ........ OFF
   11. Abandon Aircraft and use Fire Extinguisher

9. ENGINE FIRE WHILE ON GROUND
   1. Fuel Selector Valve .......... OFF
   2. Mixture ....................... IDLE CUT-OFF
   3. Ignition Switch ............... OFF
   4. Master Switch ................ OFF
   5. Abandon Aircraft and use Fire Extinguisher

10. ENGINE FIRE IN FLIGHT
   1. Mixture ....................... IDLE CUT-OFF
   2. Fuel Selector Valve .......... OFF
   3. Ignition Switch ............... OFF
   4. Master Switch ............... OFF
   5. Cabin Heat / AIR ............. OFF
   6. Airspeed ...................... 110 MPH

   Execute EMERGENCY LANDING WITHOUT ENGINE POWER

11. WING FIRE
   1. Landing/ Taxi Lights .......... IF LEFT Wing AFFECTED
   2. Pitot Heat Switch OFF IF Left Wing AFFECTED
   3. Navigation Light Switch .... OFF
   4. Strobe Light Switch ............ OFF
   5. Slip to keep flames away from fuel tanks and cabin
12. CABIN OR ELECTRICAL FIRE WHILE IN FLIGHT
1. MASTER SWITCH................................. OFF
2. Wiring Root Vents................................ CLOSED
3. CABIN AIR / HEAT.......................... OFF
4. VENTS & CABIN AIR/HEAT OPEN WHEN FIRE IS OUT
5. LAND...........................................AS SOON AS PRACTICABLE

If Fire Appears Out and Electrical Power is Necessary for Continued Flight
6. ALL SWITCHES BUT IGNITION.................. OFF
7. CIRCUIT BREAKERS..................... CHECK (DO NOT RESET)
8. MASTER SWITCH.............................. ON
9. ELECTRICAL SWITCHES..................... ON, ONE AT A TIME

13. LOW OIL PRESSURE WITH NORMAL OIL TEMPERATURE
1. Throttle...Make Minimum Power Changes
2. Conserve Altitude Until Landing is Assured
3. Land as Soon as Practicable

14. LOW OIL PRESSURE WITH HIGH OIL TEMPERATURE
1. THROTTLE .... REDUCE POWER TO MINIMUM NECESSARY
2. execute .. PRECAUTIONARY LANDING WITH POWER

15. AMMETER INDICATES EXCESSIVE RATE OF CHARGE
1. ALTERNATOR CIRCUIT BREAKER ............... PULL
2. NONESSENTIAL EQUIPMENT ................. OFF
3. FLIGHT ..... TERMINATE AS SOON AS PRACTICAL

16. AMMETER INDICATES DISCHARGE
1. AVIONICS SWITCH.............................. OFF
2. ALTERNATOR CIRCUIT BREAKER, CHECK/RESET
3. MASTER SWITCHES............................. OFF THEN ON
4. AMMETER,....... CHECK BATTERY IS CHARGING
5. AVIONS SWITCH.............................. ON

If Low-Voltage Light Remains On or Ammeter Still Indicates Discharge
6. NONESSENTIAL EQUIPMENT .................. OFF
7. LAND .. AS SOON AS PRACTICAL

Note: If Master Switch is turned OFF after battery has drained below current level to activate battery controller, subsequent activation of Master Switch will be ineffective.

17. LANDING GEAR – FLAT MAIN TIRE
Use Fuel Selector to Reduce Weight on the Side of the Flat Tire
If Practicable, Land with Crosswind From the Side Opposite the Flat Tire
1. FLAPS...........................................30° (FULL DOWN)
2. ALIGN WITH THE SIDE OF THE RUNWAY OF THE GOOD TIRE
3. TOUCHDOWN SLIGHTLY WIND-LONG ON SIDE OF GOOD TIRE
4. LOWER NOSE WHEEL FOR DIRECTIONAL CONTROL
5. AILERON... WEIGHT OFF FLAT TIRE AS LONG AS POSSIBLE
6. BRAKING ..................................ON GOOD WHEEL ONLY

18. LANDING GEAR – FLAT NOSE TIRE
1. FLAPS...........................................30° (FULL DOWN)
2. TOUCHDOWN..............................ON RUNWAY CENTERLINE
3. YOKE...FULL ART - MINIMIZE WEIGHT ON NOSE WHEEL
4. BRAKING ..................................MINIMUM REQUIRED

19. SPIN
1. THROTTLE.......................... IDLE
2. ALERONS.............................. NEUTRAL
3. RUDDER FULL OPPOSITE DIRECTION OF THE SPIN
4. CONTROL WHEEL................. FORWARD – BREAK STALL
5. RUDDER NEUTRALIZE WHEN ROTATION STOPS
6. ELEVATOR RECOVER SMOOTHLY FROM ENSUING DIVE

20. EMERGENCY DESCENT
1. CARB HEAT................................. ON
2. THROTTLE.......................... IDLE
3. MIXTURE................................. FULL RICH
4. FLAPS................................. DOWN
5. AIRSPEED.......................... 100 MPH

21. CABIN DOOR OPEN IN FLIGHT
1. Fly the AirplaneThis is not an emergency
2. Land .... Close Door After Aircraft Stops

If Landing is Impractical
3. CLIMB SAFE ALTITUDE W/AIRCRAFT UNDER CONTROL
4. AIRSPEED.......................... 76 MPH
5. CABIN VENTS ......................... CLOSED
6. WINDOW ................................... OPEN
7. PUSH DOOR OPEN...... THEN SLAM IT CLOSED

22. AFTER EMERGENCY LANDING
1. MASTER SWITCH........................ CONFIRM OFF
2. ELT ............................... ACTIVATE
3. ABANDON AIRCRAFT UNTIL ALL DANGER OF FIRE IS PASSED

When it is safe to return to the aircraft
4. ELT REMOVE AND INSTALL ANTENNA – TURN ON

(ELT is behind the rear panel in the baggage area)
5. MAKE PERIODIC MAYDAY CALLS AND MONITOR 121.5 FOR INSTRUCTIONS

23. AUTOPILOT FAILURE
1. AUTOPILOT MASTER SWITCH .......... Off
2. AUTOPILOT CIRCUIT BREAKER......... PULL

24. RADIO FAILURE
1. AUDIO CONTROLS ............... CHECK VOLUME/SQUELCH/ALL
2. GARMIN 430 ................. CONFIRM AUTOSQUELCH ON
3. CIRCUIT BREAKERS................. CHECK

 Allow breakers to cool 3 minutes before resetting. Never reset a breaker more than ONCE

4. ALL CONNECTIONS ....................... CHECK
5. ATTEMPT CONTACT ON ANOTHER FREQUENCY
6. SPEAKER ................................. CHECK
7. TRANSPONDER ....................... 7600
8. CONTINUE TRANSMISSIONS (ONLY RECEIVER MAY BE INOP)

1. Monitor Airport Traffic Pattern activity.
2. Descend and maintain 1500 feet MSL.
3. Enter midpoint west side downwind leg.
4. Wait for light signals from Tower.

IF ANY DISCREPANCIES ARE FOUND, PLEASE NOTIFY THE AERO CLUB STAFF AND ANNOTATE DISCREPANCIES ON MAINTENANCE FORM AND DISPATCH PROGRAM.