FLIGHT SCHOOL

C172M N4922G

PREFLIGHT INSPECTIOIN

① CABIN

1. Pitot Tube Cover……..REMOVE
2. AROW Documents/Maint Log……CHECK
3. Emergency Equipment……CHECK
4. Control Wheel Lock……REMOVE
5. Ignition Switch……..OFF
6. Master Switch……..ON
7. Fuel Quantity……( )CHECKED/LIGHTS OUT
8. Avionics Master Switch……...ON/OFF
9. Static Selector……OFF
10. Annunciators……CHECK
11. Fuel Selector Valve……..ON
12. Pitot Heat……CHECK
13. Master Switch……..OFF
14. Elevator Trim……SET

② EMPENAGE

15. Baggage Door……CHECK
16. Tie-Down……DISCONNECT
17. Control Surfaces……..CHECK
18. Trim Tab……CHECK
19. Antennas……..CHECK

③ RIGHT WING

20. Flap……CHECK
21. Aileron……CHECK
22. Tie-Down……DISCONNECT
23. Main Wheel Tire……CHECK
24. Fuel Tank Sumps(1)……DRAIN
25. Fuel Quantity/Caps……..CHECK/SECURE

③ NOSE

26. Fuel Sumps(1) ……DRAIN
27. Engine Oil (6-7 Qts)……CHECK
28. Engine Cooling Inlets……CHECK/CLEAR
29. Propeller and Spinner……CHECK
30. Air Filter……CHECK
31. Nose Wheel Strut and Tire……CHECK
32. Left Static Source……..CHECK

④ LEFT WING

33. Fuel Quantity/Caps……CHECK/SECURE
34. Fuel Tank Sumps(1)……DRAIN
35. Pitot Tube……CHECK
36. Fuel Tank Vent……CHECK
37. Tie-Down……DISCONNECT
38. Main Wheel Tire……CHECK
39. Stall Warning……CHECK
40. Landing/Taxi Lights……CHECK
41. Aileron……CHECK
42. Flap……CHECK

BEFORE ENGINE START

1. Preflight Inspection……COMPLETE
2. Passenger Briefing……COMPLETE
3. Seats and Seat Belts……SET
4. Brakes……TEST
5. Circuit Breakers……...CHECK IN
6. Electrical Equipment……OFF
7. Avionics Master……OFF
8. Fuel Selector Valve……BOTH
9. Throttle……OPEN ¼ INCH
10. Mixture……RICH
11. Master Switch……ON
12. Beacon……ON
13. *Prime……..AS REQUIRED
14. Propeller Area……CLEAR

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WINGS FLIGHT SCHOOL

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AFTER START

1. Oil Pressure/Engine Instruments.....CHECK
2. Mixture.....LEAN
3. Flaps.....CHECK/UP
4. Avionics Master.....ON

BEFORE TAKE OFF

1. Flight Controls.....FREE/CORRECT
2. Fuel Quantity.....( )CHECK
3. Flight Instruments.....CHECK/SET
4. Mixture.....RICH
5. Fuel Selector Valve.....CHECK/BOTH
6. Runup (1800 RPM)
   - Magnetos (200 Max Drop/50Differencial).....CHECK
   - Oil Pressure/Engine Instruments.....CHECK
   - Carb. Heat.....CHECK
   - Idle.....CHECK
7. Elevator Trim.....SET
8. Flaps.....SET
9. Departure/Emerg. Briefing.....COMPLETE

RUNWAY ITEMS

1. Heading Indicator.....SET
2. Altitude XPDR.....SET
3. Lights.....SET
4. Fuel.....MIX FULL RICH
5. Time.....RECORD

CLIMB

1. Flaps.....UP
2. Airspeed.....80-90 KIAS
3. Throttle.....FULL OPEN

CRUISE

1. Power (2200-2400) (<75%).....( )SET
2. Trim.....SET
3. Mixture (Peak-75°).....LEAN
4. Engine Instruments.....CHECK

DESCENT

1. ATIS/ASOS.....ACUIRE
2. POWER.....CRUISE DESCENT SET
3. Mixture.....SET
4. Altimeter.....( ) SET
4. Fuel Selector.....BOTH
5. Approach Briefing.....COMPLETE

BEFORE LANDING

1. Mixture.....RICH
2. Carb. Heat.....ON
3. Lights.....SET
4. Flaps.....10° SET

AFTER LANDING

1. Lights.....SET
2. Flaps.....UP
3. Transponder.....STBY
4. Mixture.....LEAN
5. Carb. Heat.....OFF

SHUTDOWN

1. Avionics Master.....OFF
2. Lights OFF.....OFF
3. Mixture.....CUTOFF
4. Ignition.....OFF
5. Master Switch.....OFF

SECURING

1. Control Lock.....INSTALL
2. Fuel Selector Valve.....LEFT OR RIGHT
3. Pitot Cover.....INSTALL
4. Chocks.....LEFT MAIN
5. Tie-Downs.....SET
6. Paperwork/Flight Plan.....COMPLETE/CLOSED

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FLIGHT SCHOOL

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ENGINE FAILURE DURING TAKEOFF ROLL

1. **Trottle.....IDLE**
2. **Brakes.....APPLY**
3. Flaps.....RETRACT
4. Mixture.....CUTOFF
5. Ignition .....OFF
6. Master Switch.....OFF

ENGINE FAILURE DURING CLIMB

1. **Airspeed…65 KIAS (Flaps UP) 60KIAS (Flaps Down)**
2. Mixture.....CUTOFF
3. Fuel Selector Valve.....OFF
4. Ignition .....OFF
5. Flaps.....AS REQUIRED
6. Master Switch.....OFF
7. Cabin Door.....UNLATCH
8. Land.....STRAIGHT AHEAD

ENGINE FAILURE DURING FLIGHT

1. **Airspeed.....65 KIAS**
2. **Fuel Selector Valve.....BOTH**
3. **Carb. Heat.....ON**
4. **Mixture.....RICH**
5. Ignition .....BOTH (or START if propeller is stopped)

EMERGENCY LANDING WITHOUT ENGINE POWER

1. Passenger Seat Backs.....MOST UPRIGHT POSSITION
2. Seats and Seat Belts.....SECURE
3. Airspeed....65 KIAS (Flaps UP) 60 KIAS (Flaps Down)
4. Mixture.....CUTOFF
5. Fuel Selector Valve.....OFF
6. Ignition .....OFF
7. Flaps.....AS REQUIRED
8. Master Switch.....OFF
9. Cabin Door.....UNLATCH

ENGINE FIRE DURING START

1. **Ignition Switch .....START, Continue Cranking**

If engine starts:

2. Power.....1800 RPM
3. Engine.....SHUTDOWN

If engine fails to start

4. **Throttle.....FULL OPEN**
5. **MIXTURE.....CUT OFF**
6. **Cranking.....CONTINUE**
7. **Fuel Selector Valve.....OFF (Pull Full Out)**
8. Engine.....SECURE
   a. Master Switch…OFF
   b. Ignition Switch…OFF
10. Airplane.....EVACUATE
11. Fire.....EXTINGUISH

ENGINE FIRE IN FLIGHT

1. **Mixture.....CUT OFF**
2. **Fuel Selector Valve.....OFF**
3. **Auxiliary Fuel Pump.....OFF**
4. **Master Switch.....OFF**
5. Cabin Heat and Air.....OFF
6. Airspeed…+-.....110 – 160 KIAS
7. Forced Landing.....EXCECUTE

ELECTRICAL FIRE IN FLIGHT

1. **Master Switch.....OFF**
2. **Vents, Cabin Air, Heat.....CLOSED**
3. **Fire Extinguisher.....ACTIVATE**
4. Avionics.....OFF
5. All other switches (except ignition switch).....OFF

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PRECAUTIONARY LANDING WITH ENGINE POWER

1. Passenger Seat Back…MOST UPRIGHT POSSITION
2. Seats and Seat Belts……..SECURE
3. Airspeed……70MPH
4. Flaps……20°
5. Selected Field……FLY OVER
6. Avionics Master Switch and Electrical Switches.OFF
7. Flaps……..30° (on final approach)
8. Airspeed……70MPH
9. Master Switch……OFF
10. Doors……UNLATCH
11. Touchdown……SLIGHTLY TAIL LOW
12. Ignition Switch……OFF

DITCHING

1. Radio……TRANSMIT MAYDAY on 121.5 MHz, giving location and intentions and SQWAK 7700
2. Heavy Objects (in baggage area)……SECURE OR JETTISON
3. Passenger Seat Backs..MOST UPRIGHT POSSITION
4. Seats and Seat Belts……SECURE
5. Flaps……20° to 30°
6. Power…ESTABLISH 300 FT/MIN DESSCENT AT 70MPH
   If no power is available, approach at 80 MPH with flaps up or at 70MPH with 10° flaps
7. Cabin Doors……UNLATCH
8. Touchdown……LEVEL ATTITUDE
9. Face……CUSHION
10. ELT……ACTIVATE
11. Airplane……EVACUATE
    If necessary open window to flood cabin to equalize pressure so doors can be opened.
13. Life Vests and Raft…….INFLATE WHEN CLEAR OF AIRPLANE

LANDING WITH A FLAT MAIN TIRE

1. Approach……NORMAL
2. Flaps……30°
3. Touch Down……..GOOD MAIN TIRE FIRST, hold airplane off flat tire as long as possible with aileron control
4. Directional Control……..MAINTAIN

LANDING WITH A FLAT NOSE TIRE

1. Approach……..NORMAL
2. Flaps……30°
3. Touch Down……ON MAINS, hold nose wheel off the ground as long as possible, when nose wheel touches the ground maintain full up elevator.
4. Directional Control……MAINTAIN

AMMETER – EXCESSIVE RATE OF CHARGE

1. Alternator……OFF

LOW VOLTAGE ANNUNCIATOR (VOLTS) DURING FLIGHT

May occur during low RPM, Annunciator will go out at higher RPM

1. Avionics Master……OFF
2. Alternator Circuit Breaker (ALT FLD)…….CHECK IN
3. Master Switch……OFF (both sides)
4. Master Switch……ON
5. Low Voltage Annunciator (VOLTS)…….CHECK OFF
6. Avionics Master……ON

If low voltage annunciator (VOLTS) illuminates again:

7. Alternator……OFF
8. Nonessential Radio and Electrical Equiptment……OFF
9. Flight……TERMINATE as soon as practical

VACCUM SYSTEM FAILURE (L VAC) or (R VAC) Annunciator

1. Vacuum Gauge……..CHECK

If vacuum is not within normal limits partial panel procedures maybe required.

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