NORMAL PROCEDURES — CESSNA-172XP on WHEELS

BEFORE STARTING ENGINE
1. Preflight Inspection -- **COMPLETE**
2. Seats/belts/straps -- **BRIEF/ADJUST/ LOCK**
3. Fuel Shutoff Valve -- **ON** (push full in)
4. Fuel Selector Valve -- **BOTH**
5. Avionics Switch, Electrical Equipment -- **OFF**
6. Cowl Flaps - **OPEN**
7. Circuit Breakers -- **CHECK IN**

STARTING ENGINE
1. Mixture -- **RICH**
2. Propeller -- **HIGH RPM**
3. Throttle -- **CLOSED**
4. Master -- **ON**
5. Aux Fuel Pump -- **HIGH**
6. Throttle -- **ADVANCE, 8-10 GPH, CLOSED**
7. Aux fuel Pump -- **OFF**
8. Propeller Area -- **CLEAR**
9. Ignition Switch -- **START**
10. Throttle -- **IDLE, 1000 RPM or less**
11. Oil Pressure -- **CHECK**
12. Beacon, nav, strobe lights -- **ON, as REQ'D**
13. Avionics Switch & Radios -- **ON**
14. Transponder -- **ALT**

BEFORE TAKEOFF/RUNUP
1. **Doors & Windows*** -- **CLOSED/LOCKED**
2. Flight Controls -- **FREE and CORRECT**
3. Flight Instruments -- **SET**
4. **Fuel Selector Valve*** -- **BOTH**
5. **Elevator and Rudder Trim*** for -- **TAKEOFF**
6. Mixture -- **RICH**
7. **Throttle -- 1800 RPM**
   a. Magnetos -- **CHECK (150/50), BOTH**
   b. Propeller -- **CYCLE** high-low-high
   c. Engine Instruments -- **CHECK**
   d. Suction Gage -- **CHECK**
   e. Alternator -- **CHECK**
   f. Throttle -- **IDLE, 1000 RPM or less**
8. Radios -- **SET**
9. Throttle Friction Lock -- **ADJUST**

NORMAL TAKEOFF
1. Prop -- **FULL**
2. Mixture -- **ESTIMATED FOR DENSITY ALT**
3. Wing flaps -- **0° to 10° (10° Preferred)**
4. Cowl Flaps -- **OPEN**
5. Throttle -- **SMOOTHLY ADVANCE FULL**
6. Mixture -- **LEAN per fuel flow placard**
7. Elevator -- **LIFT NOSE WHEE**L at 55 KIAS
8. Prop -- **2600 RPM** unless obstacles
9. Climb speed:
   a. Obstacles -- **Flaps 10°, 59 KIAS, 65 at 10,000'**
   b. No Obstacles -- **Vy = Flaps 0°, 81 KIAS**
10. Prop -- **2600 RPM when over obstacles**
11. Wing flaps -- **UP over obstacles and > 70 KIAS**
12. Noise abatement -- **MP 25", PROP 2200**

***Re-check before takeoff after landing**

Vs0 = 46 Vs1 = 54 Vg = 75
Va = 105/96/87 @ (2550/2150/1750)

ENROUTE CLIMB
1. Fuel Selector Valve -- **BOTH**
2. Cowl flaps -- **OPEN, as REQ'D**

MAXIMUM PERFORMANCE CLIMB
3. Power -- **FULL THROTTLE and 2600 RPM**
4. Airspeed -- **81 KIAS ==> 76 KIAS (10,000')**
5. Mixture -- **LEAN per fuel flow placard**

NORMAL CLIMB
3. Power -- **25" MP and 2500 RPM**
4. Airspeed -- **85 KIAS**
5. Mixture -- **LEAN per POH (11.5 gph)**

ECONOMY/NOISE ABATEMENT CLIMB
3. Power -- **25" MP and 2200 RPM**
4. Airspeed -- **85 KIAS**
5. Mixture -- **LEAN per POH (9.4 gph)**

CRUISE
1. Power -- **15-25"MP, 2200-2600 RPM (<=80%)**
2. Elevator/rudder trim -- **ADJUST**
3. Mixture -- **LEAN via JPI or POH**
4. Cowl Flaps - **CLOSED, as REQ'D**

DESCENT
1. Fuel Selector -- **BOTH**
2. Cowl Flaps -- **CLOSED**
3. Power -- **AS DESIRED**
4. Mixture -- **ENRICHEN,** as req'd for smoothness

BEFORE LANDING
1. **B**elts/straps/seats -- **SECURE**
2. **C**owl Flaps -- **CLOSED**
3. **G**as (Fuel Selector Valve) -- **BOTH**
5. **M**ixture -- **SET for balked landing per placard**
6. **P**ropeller -- **HIGH RPM (after MP reduction)**

NORMAL LANDING
1. Airspeed -- **65-75 (flaps UP)**
2. Wing flaps -- **0°-10°<110 KIAS, 10°-40°<85 KIAS**
3. Airspeed -- **60-70 KIAS (Flaps down)**
4. Elevator & Rudder Trim -- **ADJUST**
5. Touchdown -- **MAIN WHEELS FIRST**
6. Landing Roll - **LOWER NOSE WHEEL GENTLY**
7. Braking -- **MINIMUM REQUIRED**

BALKED LANDING
1. Power -- **FULL PROP and FULL THROTTLE**
2. Wing Flaps -- **RETRACT to 20°**
3. Airspeed -- **55 KIAS**
4. Wing Flaps -- **RETRACT slowly after 65 KIAS**
5. Cowl Flaps -- **OPEN**

AFTER LANDING
2. Cowl Flaps -- **OPEN**
3. Wing Flaps -- **UP**

SHUTDOWN
1. Throttle -- **1500 RPM**
2. Mixture -- **LEANED**
3. ELT - **CHECK 121.5**
4. Avionics -- **OFF**
5. Throttle -- **IDLE**
6. Magneto Ground -- **CHECK**
7. Mixture -- **IDLE CUT-OFF**
8. Ignition Switch -- **OFF**
9. Master Switch -- **OFF**
10. Fuel Selector Valve -- **RIGHT TANK**
11. Control Lock/Pitot Cover -- **INSTALLED**