

PEAK AVIATION CENTER
1360 AVIATION WAY
COLORADO SPRINGS, CO 80916
CESSNA 177 CARDINAL CHECKLIST

BEFORE LANDING

1. Fuel Selector—**BOTH ON**
2. Mixture—**RICH**
3. Prop—**High RPM (Full in)**
4. Carb Heat—**FULL**
5. Airspeed—**80-90 MPH (Flaps Up)**
6. Flaps—**As desired (0 to 10 deg below 130 MPH, 10-30 deg below 105 MPH)**
7. Airspeed—**70-80 MPH (Flaps down)**
8. Stabilator and Rudder Trim—**ADJUST**

GO AROUND

1. Power—**FULL and PROP 2700**
2. Carb Heat—**IN (Cold)**
3. Flaps—**Retract to 20 deg (Retract Full SLOWLY at 75 MPH)**

NORMAL LANDING

1. Touchdown—**Main wheels first**
2. Wing Flaps—**WITHIN WHITE ARC: AS DESIRED**
3. Airspeed (Wing Flaps Down) - **65-75 MPH**
4. Touchdown—**MAIN WHEELS FIRST**
5. Braking—**MINIMUM REQUIRED**

AFTER LANDING

1. Wing Flaps—**UP**
2. Carb Heat—**COLD**
3. Unnecessary Lights—**OFF**
4. Transponder—**STBY**
5. Cowl Flaps—**OPEN**
6. If Landing was Hard: Comm. Radio—**121.5; CHECK FOR SIGNAL**

SHUT DOWN AND SECURING AIRPLANE

1. Avionics Switch—**OFF**
2. Intercom—**Turn OFF Switch**
3. Throttle—**1200 RPM**
4. Magnetos—**CHECK GROUNDING**
5. Mixture—**OUT—ENGINE CUTOFF**
6. Throttle—**IDLE**
7. Lights—**OFF**
8. Ignition Switch—**OFF**
9. Master Switch—**OFF**
10. Cowl Flaps—**CLOSED**
11. Fuel Selector—**LEFT TANK**
12. Control Wheel Lock—**INSTALL**
13. Flight Hour Recorder—**CHECK & RECORD**
14. Personal Items and Trash—**REMOVE**
15. Cabin & Baggage Compartment Doors—**LOCK**

Flight Plan—CLOSE

PREFLIGHT

CABIN

1. Parking Brake — **SET**
2. Flight Hour Recorder — **CHECK AND RECORD**
3. "AROW" Documents — **CHECK**
4. Control Wheel Lock — **REMOVE**
5. Fuel Selector Valve — **BOTH**
6. Fuel Shutoff Valve—**ON (PUSH FULL IN)**
7. Elevator and Rudder Trim Control — **CHECK OPERATION**
8. Static Pressure Alternate Source Valve —**CHECK OPERATION, OFF**
9. Ignition & Avionics Power Switches — **OFF**
10. Master Switch — **ON**
 - a. Fuel Gauges — **CHECK QUANTITY**
 - b. Lights — **CHECK**
 - c. Wing Flaps — **EXTEND**
11. Master Switch — **OFF**
12. Cowl Flaps—**OPEN**

AFT FUSELAGE AND EMPENNAGE

1. Fuel Tank Sumps Left Tank — **DRAIN & CHECK FUEL**
2. Baggage Door — **SECURE**
3. Antennas — **CHECK**
4. Horizontal and Vertical Stabilizers—**CHECK CONDITION**
5. Elevator & Rudder — **CHECK OPERATION & CONDITION**
6. Tail Tie Down — **DISCONNECT**
7. Elevator Trim Tab — **INSPECT**

RIGHT WING

1. Flap — **CHECK BACKLASH & CONDITION**
2. Aileron — **CHECK OPERATION & CONDITION**
3. Wingtip & Leading Edge — **INSPECT**
4. Wing Tie Down — **DISCONNECT**
5. Fuel Tank Vent Tube — **CHECK CLEAR**
6. Tire, Wheel, & Brake — **CHECK INFLATION & CONDITION**
7. Fuel Tank Sumps — **DRAIN & CHECK FUEL**
8. Fuel Tank — **CHECK FUEL QUANTITY & CAP SECURITY**

NOSE, ENGINE, PROPELLER, & COWLING

1. Engine Cowling — **CHECK SECURITY**
2. Nose Fuel Strainer— **DRAIN 3-5 SECONDS**
3. Exhaust Stack — **CHECK SECURE**

4. Oil Level — **CHECK (MIN: 6qt)**
5. Propeller— **CHECK LEADING EDGE & SECURITY**
6. Spinner/Hub—**INSPECT THOROUGHLY FOR CRACKS AND LEAKS**
7. Engine Cooling Air Inlets — **CHECK CLEAR**
8. Landing/Taxi Lights — **INSPECT**
9. Nose Wheel, Strut, & Tire — **CHECK INFLATION & CONDITION**
10. Cowl Flaps—**CHECK SECURITY**
11. Cowling — **SECURE**
12. Carburetor air filter (inside left nose cap opening)-**CHECK**
13. Static Air Source Opening — **CHECK CLEAR**

LEFT WING

1. Fuel Tank — **CHECK FUEL QUANTITY & CAP SECURITY**
2. Pitot Tube — **CHECK CLEAR**
3. Fuel Tank Vent Tube — **CHECK CLEAR**
4. Stall Warning Opening — **CHECK CLEAR**
5. Wing Tie Down — **REMOVE**
6. Leading Edge and Wingtip — **INSPECT**
7. Aileron — **CHECK OPERATION AND CONDITION**
8. Flap — **CHECK BACKLASH & CONDITION**
9. Tire, Wheel, & Brake — **CHECK INFLATION & CONDITION**

BEFORE STARTING ENGINE

1. Brakes — **TEST & SET PARKING BRAKE**
2. Cabin Doors — **CLOSED & LOCKED**
3. Passenger Brief —
 - a. Expected WX and Flight Conditions
 - b. Seatbelt Operations, Wear at All Times
 - c. Headset Operation
 - d. Looking for Aircraft
4. Seatbelts & Shoulder Harnesses — **ADJUST & LOCK**
 - e. Sick Sacks
 - f. Ventilation
 - g. How to Radio for Help
 - h. Emergency Situations

STARTING ENGINE

1. Fuel Selector Valve — **RECHECK BOTH**
2. Mixture — **FULL RICH**
3. Propeller—**High RPM**
4. Throttle — **CLOSED**
5. Carburetor Heat— **COLD**
6. Beacon — **ON**
7. Circuit Breakers — **CHECK IN**
8. Avionics Switch — **OFF**
9. Propeller Area — **VISUAL CHECK AND YELL CLEAR**
10. Master Switch — **ON**
11. Priming Procedure:
 - a. Primer— **One to six strokes depending on engine temperature**
 - b. Throttle— **Cracked open 1/2 inch**
12. Ignition Switch — **START, RELEASE WHEN ENGINE STARTS**
13. Throttle — **800 RPM**
14. Oil Pressure — **CHECK**
15. Mixture — **ABOVE 3,000 FT. MSL, LEAN FOR GROUND OPS**
16. Flaps — **UP**
17. Avionics — **ON**
18. Intercom— **ON**
19. Starter — **CHECK DISENGAGED (AMMETER NORMAL)**

TAXI

1. Flight Instruments—**SET**
2. Taxi Path — **CLEAR**
3. Parking Break — **OFF**
4. Brakes — **TEST**
5. Flight Controls—**POSITIONED FOR WIND DIRECTION**

BEFORE TAKEOFF—RUNUP

1. Nose Wheel — **STRAIGHT**
2. Parking Brake — **SET**
3. Seats, Seatbelts, & Shoulder Harnesses— **SECURE**
4. Cabin Doors — **RECHECK CLOSED & LOCKED**
5. Flight Controls — **FREE & CORRECT MOVEMENT**
6. Fuel Gauges — **RECHECK QUANTITY ADEQUATE FOR INTENDED FLIGHT**
7. Fuel Selector Valve — **RECHECK BOTH**
8. Trim Control(s) — **SET FOR TAKEOFF**
9. Throttle — **1800 RPM**
 - a. Mixture — **ADJUST FOR ALTITUDE ABOVE 3,000 FT**
 - b. Propeller—**CYCLE 3 TIMES (CHECK MP, RPM, OIL PRESSURE)**
 - c. Circuit Breakers — **RECHECK IN**
 - d. Carburetor heat — **CHECK OPERATION**
 - e. Magnetos — **CHECK (150 RPM MAX. DROP; 50 RPM DIFF.)**
 - f. Alternator — **CHECK (AMMETER & VOLTAGE INDICATOR)**
 - g. Engine Instruments & Suction Gauge — **CHECK**
 - h. Aux. fuel pump — **CHECK OPERATION**
 - i. Suction gauge — **4.6 - 5.4 inches HG**
10. Throttle — **IDLE**
11. Flight Instruments — **CHECK AND SET —**
 - a. Heading Indicator
 - b. Altimeter
 - c. Transponder - **ALT AND CORRECT CODE**
12. Lights—**SET FOR TAKEOFF**
13. Radios — **SET FOR DEPARTURE**
14. Parking Brake — **RELEASE**

NORMAL TAKEOFF

1. Wing Flaps — **0-10° (10° PREFERRED)**
2. Propeller—**FULL RPM**
3. Throttle — **FULL OPEN**
4. Elevator Control — **BEGIN ROTATION AT 60 MPH**
5. Climbing Airspeed — **75-85 MPH**
6. Wing Flaps—**RETRACT**

MAXIMUM PERFORMANCE TAKEOFF

1. Wing Flaps — **10-15°**
2. Cowl Flaps—**OPEN**
3. Brakes — **APPLY & HOLD**
4. Propeller—**FULL RPM**
5. Throttle — **FULL OPEN**
6. Mixture—**ADJUST FOR ALTITUDE**
7. Brakes — **RELEASE**
8. Elevator Control — **SLIGHTLY TAIL LOW, ROTATE AT 60 MPH**
9. Climbing Airspeed — **69 MPH**
10. Wing Flaps—**RETRACT AFTER ALL OBSTACLES ARE CLEARED**

CLIMB

1. Airspeed — **90-100 MPH**
2. Power—**Manifold Press 24 in to full throttle**
3. Propeller—**2500 TO 2700 RPM**
4. Mixture—**ADJUST FOR ALTITUDE**
5. Cowl Flaps—**OPEN AS REQUIRED**
6. Landing Light—**OFF**

MAX PERFORMANCE CLIMB

1. Airspeed—**92 MPH**
2. Power—**Full Throttle and 2700 RPM**
3. Mixture—**Lean as required**
4. Cowl Flaps—**Full OPEN**

CRUISE

1. Throttle — **15 TO 24 IN MP**
2. Propeller—**2100-2500 RPM**
3. Trim(s) — **ADJUST AS REQUIRED**
4. Mixture — **ADJUST FOR ALTITUDE**
5. Cowl Flaps—**CLOSED, OPEN IF CHT IS HIGH**