



## C-172S CHECKLIST

### PREFLIGHT INSPECTION

#### CABIN

1. Documents .....ARROW
2. Flight Plan & Charts ..... AVAILABLE
3. Aircraft Wt & Balance ..... CHECK
4. Hobbs & Tach... NOTE IN CLIPBOARD
5. Control Wheel Lock ..... REMOVE
6. Ignition..... OFF
7. Avionics Master ..... OFF
8. Master (ALT & BAT) ..... ON
9. Lights & Pitot Heat..... CHECK / OFF
10. Fuel Quantity (L & R)..... CHECK
11. Flaps ..... EXTEND 10°
12. Master (ALT & BAT) ..... OFF
13. Circuit Breakers ..... CHECK IN
14. Fire Extinguisher ..... CHECK
15. Fuel Selector ..... BOTH
16. Alternate Static Air Valve..... OFF
17. Elevator Trim..... TAKEOFF POSITION

#### EMMPENAGE

1. Baggage Door ..... OPEN (LEAVE KEY)
2. Tail Tiedown ..... REMOVE
3. Rear Control Surfaces ..... CHECK
4. Elevator Trim Tab..... CHECK
5. Antennas ..... CHECK

#### RIGHT WING

1. Right Flap & Aileron ..... CHECK
2. Right Wing General Condition.. CHECK
3. Right Wing Tiedown ..... REMOVE
4. Right Main Wheel & Tire..... CHECK
5. Right Main Brake Condition..... CHECK
6. Right Wheel Chocks..... REMOVE
7. Right Wing Fuel Sumps..... DRAIN
8. Right Fuel Qty & Cap ..... CHECK

#### NOSE AREA

1. Nose Fuel Sumps .....DRAIN (3)
2. Engine Oil .....CHECK (6 qts min)
3. Nosewheel Tire & Strut..... CHECK
4. Nosewheel Chocks .....REMOVE
5. Cowl Plugs.....REMOVE
6. Engine Heater.. UNPLUG (if necessary)
7. Engine Cooling Air Inlets ..... CHECK
8. Alternator Belt..... CHECK
9. Propeller & Spinner ..... CHECK
10. Air Filter .....CHECK
11. Static Port .....CHECK

#### LEFT WING

1. Left Fuel Quantity & Cap ..... CHECK
2. Fuel Tank Vent Opening..... CHECK
3. Stall Warning Opening..... CHECK
4. Pitot Tube Cover.....REMOVE
5. Left Wing General Condition..... CHECK
6. Left Aileron & Flap ..... CHECK
7. Left Wing Tiedown .....REMOVE
8. Left Main Wheel & Tire ..... CHECK
9. Left Main Brake Condition ..... CHECK
10. Left Wheel Chocks .....REMOVE
11. Left Wing Fuel Sumps ..... DRAIN
12. Baggage Door .... CLOSED & LOCKED
13. Move a/c to check tires ..... CHECK

### BEFORE ENGINE START

1. Preflight Inspection ..... COMPLETE
2. Passenger Briefing:
  - a. Seat Adjustment..... CHECK
  - b. Seat Belts ..... LATCH / UNLATCH
  - c. Doors ..... OPEN / CLOSE / LOCK
  - d. Windows .... OPEN / CLOSE / LOCK
  - e. Off-airport landings..... BRIEF
  - f. Weather ..... BRIEF
  - g. Smoking..... NO
3. Seats & Seatbelts .. CHECK & ADJUST
4. Brakes ..... TEST & SET
5. Circuit Breakers ..... CHECK IN
6. Electrical Equipment..... OFF
7. Avionics Master ..... OFF
8. Fuel Shutoff Valve ..... ON (IN)
9. Fuel Selector ..... BOTH
10. Flight Controls .....FREE & CORRECT

### ENGINE START

1. Beacon.....ON
2. Master Switch (ALT & BAT).....ON
3. **Prime Engine** (omit if engine is warm)
  - a. Throttle..... OPEN (IN)
  - b. Fuel Pump ..... ON
  - c. Mixture ..... FULL RICH until stable fuel flow is indicated (3 to 5 seconds), then set to LEAN CUTOFF
  - d. Fuel Pump ..... OFF
4. Throttle..... ½" OPEN
5. Propeller Area ..... CLEAR
6. Ignition Switch..... START

#### NOTE: PROTECT YOUR STARTER!

Do NOT engage for more than 10 seconds! Allow 20 seconds to cool down between attempts.

Repeat up to 4 times, then let cool for at least **30 minutes** prior to another attempt.

7. Mixture ..... ADVANCE as engine starts
8. Throttle..... 1000 RPM
9. Oil Pressure ..... CHECK
10. Mixture ..... SET FOR ALTITUDE
11. Voltmeter ..... 28V ± 0.5V

#### HOT START PROCEDURE:

1. Mixture ..... LEAN
2. Throttle..... Full OPEN (IN)
3. Aux Fuel Pump Switch..... ON for 20 s
4. Mixture ..... RICH momentarily
5. Mixture ..... LEAN
6. Auxiliary Fuel Pump Switch ..... OFF
7. Throttle..... Half OPEN
8. Starter ..... ENGAGE until engine fires, ..... **then release!**
9. Mixture ..... RICH
10. Aux Fuel Pump Switch. ON (if required)
11. Throttle..... 1000 RPM
12. Mixture ..... SET FOR ALTITUDE
13. Auxiliary Fuel Pump Switch ..... OFF

### BEFORE TAXI

1. Avionics Master ..... ON
2. Flaps ..... RETRACT
3. VOR Test Page..... VERIFY
4. GPS ..... ENTER FLIGHT PLAN
5. Weather / ATIS ..... LISTEN / RECORD
6. COM & NAV Radios ..... SET

7. Lights ..... AS REQUIRED
8. Taxi Area ..... CLEAR
9. Brakes ..... TEST IMMEDIATELY
10. Taxi Clearance ..... OBTAIN

### TAXI INSTRUMENT CHECK

1. Mag Compass ..... fluid, rotates freely
2. Altimeter ..... SET
3. Attitude Indicator ..... CHECK and SET
4. Airspeed ..... ZERO
5. Turn Coordinator ..... CHECK
6. Heading Indicator ..... SET to compass
7. VSI ..... NOTE LEVEL
8. Marker Beacon ..... ON and TEST
9. Alternate Static Source ..... CHECK

### BEFORE TAKEOFF CHECK

1. Brakes ..... SET
2. Seats, Seat backs, Seatbelts ... CHECK
3. Doors ..... CLOSED & LOCKED
4. Altimeter ..... SET
5. Heading Indicator ..... SET
6. Fuel Quantity ..... CHECK
7. Fuel Selector ..... BOTH
8. Elevator Trim ..... SET
9. Annunciator Panel ..... TEST

#### 10. ENGINE RUNUP

- a. Mixture ..... RICH
- b. Throttle ..... 1800 RPM
- c. Mixture ..... SET FOR ALTITUDE
- d. Magnetos ..... CHECK 150 max drop, 50 max difference
- e. Annunciators ..... OFF
- f. Engine Instruments ..... CHECK
- g. Vacuum ..... CHECK
- h. Ammeter and Volt Meter ..... CHECK

11. Throttle ..... CHECK IDLE
12. Throttle ..... 1000 RPM or less
13. Throttle Friction ..... SET
14. NAV Radios ..... SET
15. COM Radios ..... SET
16. GPS Flight Plan ..... VERIFIED
17. Transponder ..... CHECK SQUAWK
18. Takeoff Clearance ..... OBTAINED

## TAKEOFF

Flaps..... SET  
 Lights..... ON  
 Camera (Transponder)..... AUTO  
 Action:  
 Time..... RECORD  
 Heading..... CHECK  
 Throttle..... FULL POWER  
 Oil Pressure..... CHECK  
 Climb Airspeed (V<sub>Y</sub>)..... 75 KIAS  
 Climb Airspeed (V<sub>X</sub>)..... 65 KIAS

## CLIMB

Airspeed..... 75 to 85 KIAS  
 Throttle..... RETARD SLIGHTLY  
 Mixture..... AS REQUIRED FOR MAX RPM  
 Transponder..... VERIFY ALT

## CRUISE

Throttle..... SET (2400 RPM)  
 Elevator Trim..... ADJUSTED  
 Mixture..... SET FOR ALTITUDE  
 Engine Gauges..... CHECK  
 Heading Indicator..... SET TO COMPASS  
 Flight Plan..... OPEN

## DESCENT

Throttle..... 2500 RPM (Max)  
 Mixture..... ADJUST AS REQUIRED  
 Altimeter..... SET  
 Fuel Selector..... BOTH  
 Wing Flaps..... AS DESIRED  
 Switches (lights, etc)..... AS DESIRED

## BEFORE LANDING

Fuel (Gas)..... BOTH  
 Undercarriage..... DOWN AND LOCKED  
 Mixture..... SET  
 Power..... SET  
 Seats & Seatbelts..... CHECK & ADJUST

## LANDING

Downwind..... 90 KIAS MAX  
 Abeam Numbers..... 85 KIAS / FLAPS 10°  
 Base Leg..... 75 KIAS / FLAPS 20°  
 Final Leg..... 65 KIAS / FLAPS AS DESIRED

## AFTER LANDING

Flaps..... RETRACT  
 Transponder..... VERIFY STBY  
 Ground Clearance..... OBTAIN  
 Pitot Heat..... OFF  
 Lights..... AS REQUIRED

## ENGINE SHUTDOWN

1. Throttle..... 1000 RPM
2. Avionics Master..... OFF
3. Mixture..... LEAN CUTOFF
4. Ignition..... OFF (Keys on panel)
5. Elec Equip..... OFF (except BEACON)
6. Fuel Quantity..... NOTE
7. Master Switch..... OFF

## SECURING AIRCRAFT

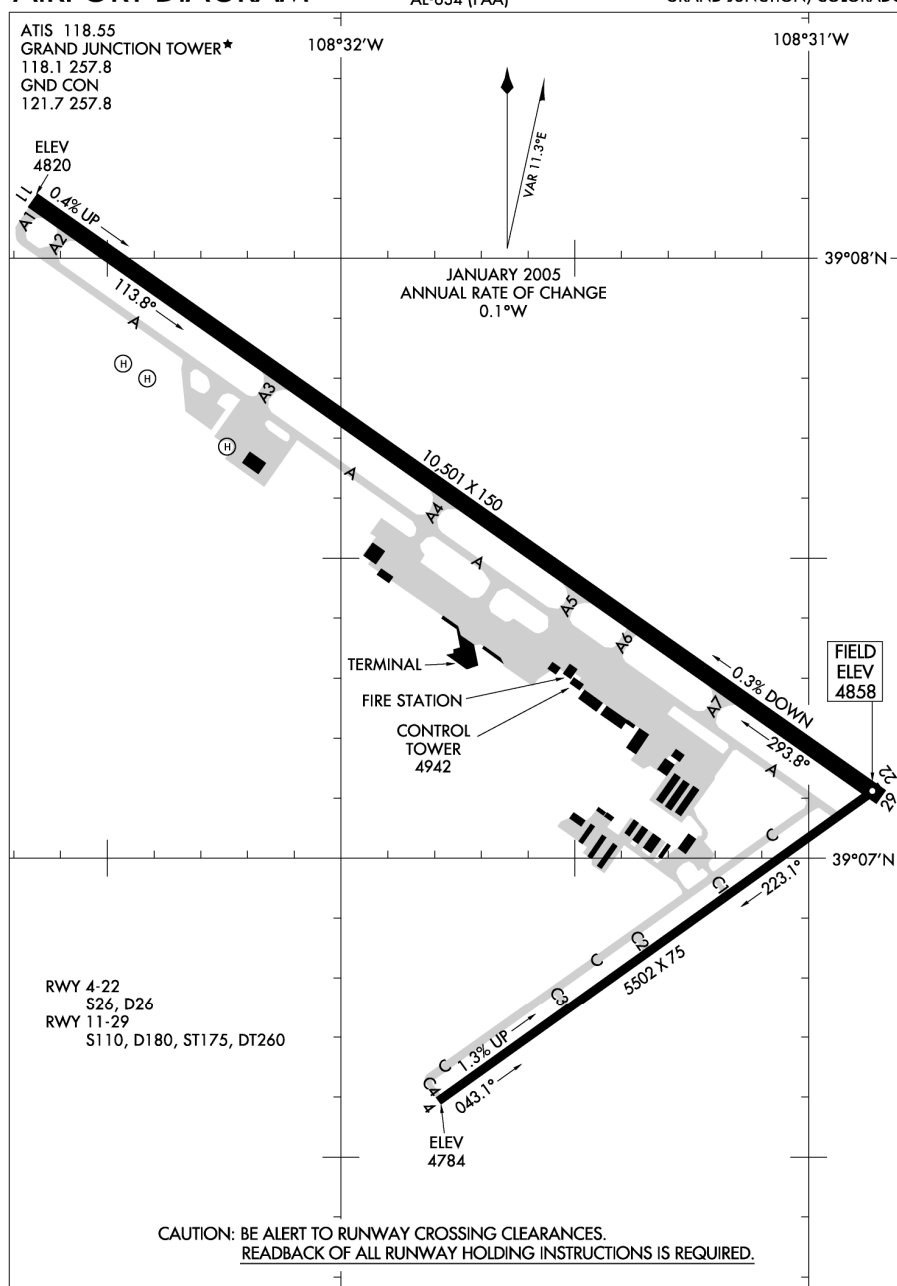
1. Control Lock..... INSTALL
2. Fuel Selector..... LEFT or RIGHT
3. Hobbs & Tach Times..... RECORD
4. Sunscreen..... INSTALL
5. Wheels..... CHOCK
6. Tiedowns..... SECURE
7. Engine Heater..... PLUG IN (in Winter)
8. Cowl Plugs..... INSTALL
9. Pitot Tube Cover..... INSTALL
10. Flight Plan..... CLOSE

### AIRCRAFT SPEEDS

V<sub>A</sub>..... 90 to 105 KIAS  
 V<sub>FE</sub>..... 85 KIAS  
 V<sub>NO</sub>..... 129 KIAS  
 V<sub>NE</sub>..... 163 KIAS  
 V<sub>S1</sub>..... 48 KIAS  
 V<sub>SO</sub>..... 40 KIAS  
 V<sub>X</sub>..... 65 KIAS  
 V<sub>Y</sub>..... 75 KIAS  
**Best Glide..... 68 KIAS**

07242

## AIRPORT DIAGRAM



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GRAND JUNCTION, COLORADO  
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**Colorado Flight Center**  
 800 Heritage Way, Grand Junction, CO 81506  
 Ph: (970) 254-0444 Fx: (970) 254-0445  
[www.ColoradoFlightCenter.com](http://www.ColoradoFlightCenter.com)



If you are unable to return to Grand Junction when expected, please call us toll-free at **1-866-897-7910** to advise us of your new ETA. You may also reach **Collin Fay** at (970) 260-6547 or **Bradley Sullivan** at (970) 210-5527.