

BEFORE STARTING ENGINE

1. Preflight (incl. documents)..... COMPLETE
2. Fuel Quantity ADEQUATE
3. Seats and Belts ADJUST AND LOCK
4. Avionics/Radio Master..... OFF
5. Electrical Equipment..... OFF
6. Circuit Breakers..... CHECK IN
7. Brakes TEST AND SET
8. Passenger Briefing COMPLETE

STARTING ENGINE

1. Magneto Key IN (mags off)
2. Fuel Selector 2nd TANK
3. Throttle OPEN 1/2 INCH
4. Mixture RICH
5. Carb Heat OFF
6. BAT & ALT Masters..... ON
7. Annunciator Lights..... 2 ON
8. Beacon ON
9. Fuel Pump ON
10. Prime AS REQUIRED AND LOCKED
11. Propeller Area CLEAR
12. Ignition Switch START
13. Throttle 1,000 RPM
14. Oil Pressure..... CHECK
15. Fuel Pump OFF
16. Avionics/Radio Master..... ON
17. Transponder ALT
18. Lights AS NEEDED
19. Mixture..... LEAN
20. Parking Brake OFF
21. Before Taxi CLEARANCE / PLAN
22. Brake and Steering..... UPON TAXI
23. IFR Taxi Checks UPON TAXI

GROUND CHECK

1. (IFR Taxi Checks..... COMPLETE)
2. Flight Controls FREE AND CORRECT
3. Flight Instruments SET
4. G5 ESP Mode CHECK(OFF if desired)
5. Radios SET
6. Flaps UP
7. Electric Trim TEST
8. Auto Pilot TEST and OFF
9. Mixture..... RICH
10. Fuel Selector 1st tank
11. Throttle 2,000 RPM
 - a) Magnetos (175 max drop) CHECK
 - b) Carb Heat CHECK (CYCLE/OFF)
 - c) Engine Instruments CHECK
 - d) Ammeter CHECK
 - e) Throttle 1,000 RPM
12. Circuit Breakers..... CHECK
13. Annunciator Lights..... OFF
14. Mixture LEAN for TAXI

BEFORE TAKEOFF

1. Auto Pilot OFF
2. Door & Storm Window LATCHED
3. Elevator Trim SET FOR TAKEOFF
4. Mixture..... RICH
5. Fuel Pump ON
6. Lights and Strobes AS DESIRED
7. Parking Brake..... OFF
8. Departure Time NOTED
9. Pilot Briefing NORMAL AND EMERGENCY

NORMAL TAKEOFF

1. Flaps RETRACTED
2. Rotate 55 KIAS
3. Initial Climb Speed 80 KIAS

SHORT FIELD TAKEOFF

1. Flaps 25°
2. Brakes HOLD UNTIL FULL
..... POWER DEVELOPED
3. Rotate 52 KIAS
4. Initial Climb 52 KIAS
5. After Obstacle..... 80 KIAS FLAPS UP

SOFT FIELD TAKEOFF

1. Flaps 25°
2. Stabilator AFT (Hold Nose Up)
3. Accelerate IN GROUND EFFECT
4. Climb 80 KIAS

NOTE: Hold nose up until liftoff. Accelerate in ground effect until normal climb speed achieved, then rotate to normal climb attitude, depart ground effect, and retract flaps

CLIMB

1. Best Rate (flaps up)..... 79 KIAS
2. Best Angle (flaps up) 63 KIAS
3. Cruise Climb 87 KIAS
4. Fuel Pump OFF
5. Systems and Engine Instruments CHECK

CRUISE

1. Accelerate TO CRUISE SPEED
2. Throttle 2300-2500 RPM
3. Trim LEVEL
4. Mixture..... LEAN (at all altitudes)
5. Fuel Pump CONFIRM OFF
6. Systems & Engine Instruments CHECK

IN RANGE

1. AWOS / ATIS / ADVISORIES RECEIVED
2. RadioCTAF OR ATC
3. Approach or Pattern Entry..... BRIEFED

NORMAL APPROACH & LANDING

1. Seats & Belts ADJUSTED AND LOCKED
2. Fuel.....ON DESIRED TANK
3. Mixture..... RICH
4. Fuel Pump ON
5. Carb Heat ON IF REQUIRED
6. Flaps.....AS DESIRED
7. Airspeed70 KIAS (FLAPS 25°)

SHORT/SOFT FIELD LANDINGS

1. Flaps..... 40°
2. Airspeed63 KIAS
 - a) Short.....MINIMUM FORWARD SPEED
 - b) SoftMINIMUM VERTICAL SPEED

AFTER LANDING (clear of runway)

1. Flaps.....RETRACTED
2. Carburetor Heat.....OFF (cold)
3. Switches and Lights AS REQUIRED
4. Trim RESET FOR TAKEOFF
5. Fuel PumpOFF
6. Mixture..... LEAN

SHUTDOWN

1. Throttle 1,000 RPM
2. Avionics/Radio Master.....OFF
3. Mixture..... CUT OFF
4. Throttle CLOSED
5. Magnetos..... OFF (REMOVE KEY)
6. Lights & ElectricalsOFF
7. Master Switch.....OFF

SECURE AIRCRAFT

1. Record Hobbs Time
2. Install Control Wheel Harness
3. Fasten Seat Belts
4. Remove Trash
5. Tie Down Aircraft
6. Secure Cover if Available
7. Return Binder to WCFC Office
8. Close Flight Plan / Cancel IFR

NOTE: Abnormal and Emergency Procedures may be referenced in the Pilot's Operating Handbook. Critical items should be memorized.

Student Limitations

<i>(Currently reported @ TTA)</i>	<u>Ceiling</u>	<u>Visibility</u>
Traffic Pattern =	2000'	5 sm
Practice Area =	3000'	5 sm
Cross Country =	4000'	>6 sm*

(* Current and predicted at all destinations)

Max Crosswind ≤ 6 knots
 Winds or Gusts ≤ 15 knots
 Or as endorsed by instructor

CRITICAL SPEEDS

Vx = 63 KIAS

Vy = 79 KIAS

Va (maneuvering speed) = 111 KIAS

Best glide speed = 73 KIAS

Max Demonstrated Crosswind = 17 knots