

**AIRPLANE QUESTIONNAIRE  
KENTUCKY WING**

**Cessna 182R**

1. Approved fuel grades and colors are: 100 (Green) 100LL (Blue)
2. Location/capacity of each fuel tank is: Wings (One Ea.) 46 Gallons Ea. (44 Usable)
3. Total usable fuel under all flight conditions is 88 gallons.
4. Endurance at 75% power, 7,500-foot MSL, with a 45-minute reserve is 6.5 hours.
5. What make and grade oil is used? Winter - Aeroshell 15W50 Summer - Aeroshell 15W50 (Per CAP Spec)
6. Oil capacity is 12 quarts. Minimum oil quantity for takeoff is 9 quarts.
7. Minimum oil pressure is 10 psi. Maximum oil pressure is 100 psi.
8. Maximum oil temperature is 240 degrees (F or C) F
9. Magnetos are checked at 1700 RPM. RPM drop should not exceed 150 RPM on either magneto or 50 RPM differential between magnetos.
10. Maximum RPM and MP for takeoff are 2400 and Full Throttle in/Hg.
11. Maximum gross takeoff weight is 3100 pounds. Empty weight is 1901.4 pounds.  
Useful load is 1198.6 pounds. Maximum landing weight is 2950 pounds.
12. Baggage compartment locations/weights are: Rear/200 Lbs. Max
13. Give the IAS at maximum gross weight for:
  - a. Va (maneuvering speed) 111 KIAS
  - b. Vso (stall, landing config, power off) 40 KIAS
  - c. Vs1 (stall, cruise config, power off) 49 KIAS
  - d. Vy (best rate of climb, sea level) 81 KIAS
  - e. Vx (best angle of climb, sea level) 59 KIAS
  - f. Vmc (minimum control speed - multi-engine only) N/A
  - g. Best glide speed 76 KIAS
14. Give the immediate action/memory items for:
  - a. Engine failure immediately after takeoff:  
Best Glide Speed / Fuel Selector Off / Mixture Idle Cutoff / Flaps Down/Magnetos & Master Off / Land +/- 30° L or R
  - b. Fire during cranking and engine fails to start:  
Cont Cranking 30 Sec – If Start Run, Shutdown, Inspect  
If No Start Mixt Idle Cutoff, Fuel Sel Off, Throttle Full Open, Cont to Crank 30 Sec, Mags & Master Off / Exit w/ Extinguisher
  - c. Engine fire in flight:  
Mixture Idle Cutoff / Fuel Selector Off / Magnetos & Mast Off / Cabin Heat & Air Off / 100 KIAS until Fire is Out  
Best Glide Speed / Emergency Landing Procedure
  - d. Electrical fire in flight:  
Master Off / All Electric Devices Off / Extinguish / Master On, Then 1 Electric Item at a Time

15. Normal takeoff flap setting is 0°, short field takeoff setting is 20°, and soft field takeoff flap setting is 20°.
16. Maximum demonstrated takeoff/landing crosswind component is 15 knots.
17. Given: PA = 4,000 feet; Temp = 86° F; Runway 27; Wind 320° at 14 knots; runway is paved, level, and dry; aircraft is at maximum takeoff weight.  
Find: Total takeoff distance to clear a 50-foot obstacle 2259 Feet.
18. Given: PA = 6,000 feet; Temp = 68° F; wind calm; runway is paved, level, and dry; aircraft is at maximum landing weight.  
Find: Total landing distance to clear a 50-foot obstacle 1615 Feet.
19. Landing runway 22; wind 190° at 22 gusting to 30 knots. Will the maximum demonstrated crosswind component for this aircraft be exceeded? No (15 Knots.)