

AIRCRAFT QUESTIONNAIRE

821CP

Name C.M. LAIN Grade ILT CAPSN 299670 Unit IL-274 Date 12/30/04
 Check Pilot MICHAEL R. LEDER Grade 34637 CAPSN 100 Score _____ Type/Model Acft 182T

Complete this open book questionnaire using the *Flight Manual/Pilot's Operating Handbook*. If a question or part of a question is not applicable, write in NA. The check pilot will review and grade the questionnaire. Minimum passing score is 80%. The completed questionnaire will be filed in the pilot's flight records.

1. Approved fuel grades and colors are: **100LL Blue**
2. Location/capacity of each fuel tank is: **46 Gal. Tank on each wing 92 Gal. Total**
3. Total usable fuel under all flight conditions is 87.0 gallons.
4. Endurance at 75% power, 7,500-foot MSL, with a 45-minute reserve is 6'06" hours. $5.4 @ 80\%$
 $45/60 = 0.75 \times 12.8 = 9.6 - 88 = 78.4 - 3.5$ (TO CLIMB) $= 74.9/12.8 = 6.125$
5. What make and grade oil is used? Winter 15W50 or sae 30wt Summer 15w50 or sae 40 WT
6. Oil capacity is 9 quarts. Minimum oil quantity for takeoff is 8 4 quarts.
7. Minimum oil pressure is 20 psi. Maximum oil pressure is 115 psi.
8. Maximum oil temperature is 245 degrees (F or C) F
9. Magnetos are checked at 1800 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/lig.
11. Maximum gross takeoff weight is 3100 pounds. Empty weight is 1918 pounds.
12. Useful load is 1192 pounds. Maximum landing weight is 2950 pounds.
13. Baggage compartment locations/weights are: **Aft of rear seat /200lbs. A-120 B-80 80 total B&C**
 - a. Give the IAS at maximum gross weight for:
 - b. Va (maneuvering speed) 110 KIAS
 - c. Vso (stall, landing config, power off) 41 KIAS
 - d. Vs I (stall, cruise config, power off) 51 KIAS
 - e. Vy (best rate of climb, sea level) 82 KIAS
 - f. Vx (best angle of climb, sea level) 65 KIAS
 - g. Vmc (minimum control speed - multi-engine only) N/A
 - h. Best glide speed 75 KIAS FLAPS UP 70 FLAPS DOWN
14. Give the immediate action/memory items for:
 - a. Engine failure immediately after takeoff 70 KIAS flaps down mixture, fuel, inition, master off
 - b. Fire during cranking and engine falls to start: throttle full open-mixture cut off- selector off -pump off- Keep cranking throttle full or exit A/C
 - c. Engine fire in flight: Fuel, fuel pump and Master off, vents closed, dive 100+ knots
 - d. Electrical fire in flight: Master and all switches off, vents closed and land
15. Normal takeoff flap setting is 0-20, 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 aircraft is at maximum takeoff weight.
 Find: Total takeoff distance to clear a 50-foot obstacle 2263
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
19. Landing runway 22; wind 190° at 22 gusting to 30 knots. Will the maximum demonstrated crosswind component for this aircraft be exceeded? NO