



### DFC Barron N555ET Aircraft Quiz

1. Total fuel capacity: \_\_\_\_\_ Usable: \_\_\_\_\_  
Number of tanks: \_\_\_\_\_ Usable Capacity of each tank: \_\_\_\_\_
2. Location of fuel drains:
3. What fuel octane rating is specified? \_\_\_\_\_ Color? \_\_\_\_\_
4. How do you switch tanks?
5. When should you switch tanks?
6. What is the endurance with a one hour reserve at 75% power at 8000' MSL?
7. What is fuel cross feed and when is it used?
8. Explain how to cross feed fuel.
9. When are the electric fuel pumps used?
10. Describe four fuel system limitations.
11. Describe starting procedures for normal: \_\_\_\_\_  
Flooded: \_\_\_\_\_ Hot Start: \_\_\_\_\_
12. When should you add oil? \_\_\_\_\_ Maximum oil level: \_\_\_\_\_
13. Maximum take-off weight: \_\_\_\_\_ Maximum landing weight: \_\_\_\_\_
14. Calculate W&B for yourself and four passengers each weighing 180# and full fuel with 40# baggage.
15. How much fuel can you carry under the following conditions: total front seat occupants 400#; seats 3/4 weight 300#; total aft baggage 70#.
16. Referring to the previous question, with that fuel and cabin loading, after burning 80 gal of fuel, will the CG be within limits?
17. What are the baggage compartment capacities?
18. With full fuel, how many lbs. of people and bags can you take?
19. What is the engine type and hp?

20. Describe the landing gear system.
21. What is  $V_{le}$  \_\_\_\_\_  $V_{lo}$  \_\_\_\_\_ What do they signify?
22. What are the landing gear unsafe indications?
23. When will the gear warning horn sound?
24. What should you do if the green gear-down light doesn't come on with the gear selected down?
25. Describe procedures for emergency landing gear extension.
26. What is the procedure for an unlatched cabin door on takeoff? In flight?
27. What is the flap extension speed,  $V_{fe}$ ?
28. Describe trim control surfaces.
29. How is cabin heat supplied?
30. How is cabin ventilation supplied?
31. Describe operation of the heater fan switch.
32. What are the following, and what does each signify: (KIAS)
 

$V_r$ _____	$V_x$ _____
$V_y$ _____	$V_{xse}$ _____
$V_{yse}$ _____	$V_{mc}$ _____
$V_{so}$ _____	$V_{s1}$ _____
$V_a$ _____	
33. Describe traffic pattern procedures, configuration, power settings, speeds.
34. When should you retract flaps after landing?
35. How will you lean the mixture for takeoff? Climb? Cruise? Descent? Landing?
36. What is the normal approach speed?
37. What is the en route climb speed?
38. Describe the go-around procedure.
39. Describe engine out procedures, inflight: \_\_\_\_\_  
 On departure \_\_\_\_\_ Before rotation: \_\_\_\_\_
40. Which engine is the critical engine, and why?
41. Maximum demonstrated crosswind component?

42. What are the procedures for engine fire on the ground?

In flight?

43. Describe the electrical system.

44. What are the indications of an alternator malfunction and what are the procedures?

45. Describe symptoms and procedures for an electrical fire.

46. Calculate:

	Takeoff	Landing	Acc-Stop	Two Engine Climb	S.E.Climb
2500' P.A. 25 ° C 4600#					
2500' P.A. 43° C 4880#					

47. What are the FAA requirements for ME currency?

DFC requirements?