

# Aircraft Quiz

Name: \_\_\_\_\_

Aircraft Make and Model : \_\_\_\_\_

Date: \_\_\_\_\_

Answer all questions that apply to the type of aircraft that you are being checked out in.

1. Type of Engine(s): \_\_\_\_\_ Horsepower: \_\_\_\_\_
2. Fuel Capacity: Total \_\_\_\_\_ Per Tank \_\_\_\_\_ Useable \_\_\_\_\_
3. Fuel Grade: \_\_\_\_\_ Color: \_\_\_\_\_
4. Describe the Electrical System:
  
5. Recommended Oil: \_\_\_\_\_ Oil Capacity: \_\_\_\_\_ Minimum Quantity: \_\_\_\_\_
6. Describe the Landing Gear System:
7. Weight and Balance:
  - a. Current BEW: \_\_\_\_\_ Useful Load: \_\_\_\_\_
  - b. Max TOW: \_\_\_\_\_ Max Landing Weight: \_\_\_\_\_
  - c. C.G. Range Forward: \_\_\_\_\_ C.G. Range Aft: \_\_\_\_\_

Calculate a sample weight and balance on the back of this worksheet with the following conditions: You as the pilot, two passengers weighing 170 lbs. each, and 30 lb. of baggage. How much fuel can you take and still remain within weight and cg limits?

8. Performance:
  - a. Calculate a takeoff and landing distance calculation for the following conditions: 30 degrees Celsius temperature, HGR airport, standard pressure, no wind, and MTOW.
9. Maximum demonstrated crosswind component: \_\_\_\_\_ How do we know what the actual maximum component is? \_\_\_\_\_
10. Aircraft V Speeds:  
 $V_y$  \_\_\_\_\_  $V_x$  \_\_\_\_\_  $V_s$  \_\_\_\_\_  $V^{s0}$  \_\_\_\_\_  $V^{fe}$  \_\_\_\_\_  $V^{no}$  \_\_\_\_\_  $V^{ne}$  \_\_\_\_\_  $V^a$  \_\_\_\_\_ Best Glide \_\_\_\_\_  
 $V^r$  \_\_\_\_\_ Multi-Engine only:  $V^{mc}$  \_\_\_\_\_  $V^{yse}$  \_\_\_\_\_  $V^{xse}$  \_\_\_\_\_  
Which of the above speeds need to be memorized? \_\_\_\_\_
11. Explain the emergency gear extension procedure (if applicable). \_\_\_\_\_  
\_\_\_\_\_
12. Explain carburetor ice indications (if applicable) and how you would eliminate the problem. \_\_\_\_\_  
\_\_\_\_\_
13. Explain vapor lock on the start in fuel injection airplanes (if applicable) and how it's prevented.  
\_\_\_\_\_

14. What is an indication of alternator failure? \_\_\_\_\_
15. Is there an alternate static source on this aircraft? \_\_\_\_ If so, where is it located? \_\_\_\_\_
16. What is the go-around procedure for this aircraft? \_\_\_\_\_
17. List the following frequencies for HGR airport:
- a. ASOS: \_\_\_\_\_
  - b. Ground: \_\_\_\_\_
  - c. Tower: \_\_\_\_\_
18. Explain what P-40 is, its location, and describe its boundaries. \_\_\_\_\_
- \_\_\_\_\_
- Do its boundaries ever change and if so, how do we know? \_\_\_\_\_
- \_\_\_\_\_
19. If you ever lose radio communications, what would your procedures be? \_\_\_\_\_
- \_\_\_\_\_
20. Describe your procedures for the following:
- a. Power loss in an engine: \_\_\_\_\_
  - \_\_\_\_\_
  - b. Wake turbulence encounter and how you can avoid one: \_\_\_\_\_
  - \_\_\_\_\_
  - c. Stall recovery: \_\_\_\_\_
  - d. Spin Recovery: \_\_\_\_\_