High Performance Addendum for Aircraft Checkout

1. What are the following power settings departing from sea level on a standard day?
   Takeoff MP _____ RPM _____
   Enroute Climb MP _____ RPM _____

2. What are the following power settings departing from Truckee if local altimeter setting is 29.62 and temperature is 16° C?
   What is density altitude? _____
   Takeoff MP _____ RPM _____
   Enroute Climb MP _____ RPM _____

3. What is the preferred oil level? _____

4. At what dipstick indication should you add a quart of oil? _____

5. While preflighting, you notice the fuel tanks are indicating ¾ full and the fuel dipstick agrees. How much total weight (you, passengers & bags) can you take on board?

6. During climb out on a hot day, you notice oil temp is more than ¾ of the way toward max temp and CHTs are over 400° F. What should you do?

7. Despite initially planning on a short flight to Watsonville at 5500' MSL, you decide to cruise around the local area at 3000' MSL on a hot summer day. OAT is showing 35° C.
   a. What is the maximum % of power you should use? _____
   b. Where do you set the following engine controls:
      i. Throttle _____" MP
      ii. Prop _____RPM
      iii. Mixture (circle one) rich, leaned some, leaned to rich of peak, or lean of peak.
      iv. Cowl flaps _____
   c. What is the percent of power at these settings? _____%
   d. What approximate engine temperatures should you expect to see?
      Oil temp _____ EGTs _____ CHTs _____
   e. What should fuel burn be? _____ gal/hr
   f. What other impacts can this change of altitude have on fuel reserve and performance?

Pilot's Initials _____

8. During the descent, the engine should be slowly cooled by reducing MP _____" per _____ minute(s) with cowl flaps (circle one) open or closed.

9. During the descent you realize you are higher and faster than you want to be. What are some options to help you get back to a stabilized approach?

10. Why should you avoid prolonged or rapid descents below the green arc or at idle?

11. What could cause a propeller underspeed condition?

12. Describe how the governor corrects an underspeed condition:

13. What could cause a propeller overspeed condition?

14. Describe how the governor corrects an overspeed condition:

15. If we lose oil pressure, will the propeller increase or decrease pitch and what will this do to RPM?

16. (Cessna 182) In an engine failure scenario, the checklist recommends reducing the prop to high pitch, low RPM by pulling the prop lever all the way aft. Why should we do this and what is happening mechanically?

Pilot's Initials _____