

Pre-Solo Written Test

7B2

Name _____ Date _____
Instructor _____ Reviewed _____
Grade (Reviewed) _____

Aircraft _____

Section 1 – General Aircraft Information

1. V-speeds

V_{NE}

V_{NO}

$V_{A/O}$

V_{FE} (Multiple)

V_{GLIDE}

V_Y

V_X

V_S

V_{SO}

2. Performance calculation 1: At your primary airport, on a day with temperature at 80 deg F, what is the take off distance over a 50ft obstacle?
3. Performance calculation 2: At your primary airport, on a day with temperature at 80 deg F, what is the landing distance over a 50ft obstacle?
4. Weight and balance calculation: At your personal weight, what is the full-fuel gross weight and cg for your aircraft? Is that within limits? If not, what can you do?

12. What are is the minimum fuel reserve for day VFR flight? Minutes?

13. What is the fuel burn in cruise for your aircraft?

14. What documents are required on board the aircraft (note LSA requirement is slightly different)?

15. How many fuel sump drains are there on your aircraft?

16. What would you do if you find water or contamination in the fuel?

17. What is the recommended tire inflation for your aircraft (POH chapter 8)?

18. What is the minimum oil temperature prior to taxi?

19. Show a diagram of control position, relative to wind for taxi:

20. What is the recommended climb speed?

21. What is the recommended approach speed?

22. What is the recommended procedure if you find you are high on final approach?

Section 4 - Emergency and Abnormal Procedures

23. In-flight engine failure procedures (ABCDE)?

24. Engine fire on the ground procedures when starting engine?

25. What is normal take off rpm in your airplane? What would you do if you see less than this on your takeoff roll?

26. What would you do if your engine quits at 300ft after takeoff on runway 14?

27. What would you do if your engine quits on downwind?

28. Why might you need to go to an alternate airport? What airport would you choose?

29. CTAF or CT frequency at alternate:

Section 5 - Weather Information and Minimums

30. How do you get weather information prior to arrival at the airport?

31. Student Solos minimums:

- Max wind
- Max gust
- Max x-wind
- Min visibility
- Min ceiling

32. Cross wind calculation: Wind is 200@20kts, which runway would you choose, what is x-wind component? Is this within limits of your solo endorsement?

Section 6 – Airspace, FARs and Operating Regulations

33. When you solo, are you PIC?

34. What is careless and reckless operation (cite FAR)?

35. Are you required to wear a safety belt (cite FAR)?

36. What equipment is required to be operative on your aircraft for day VFR flight (cite FAR)?

37. What is the operating requirement to operate in Class D airspace?

38. Show a diagram of the dimensions of any Class D or Class C airspace near 7B2.

39. Where is the closest Class B airspace? Are you allowed to fly in Class B airspace? If yes, under what conditions?

40. What is the minimum altitude for performing maneuvers?
41. What altitude is recommended for ground reference maneuvers?
42. If you see an aircraft below you in the pattern, who has the right of way?
What would you do to assure proper separation?
43. What are the recommended collision avoidance procedures for operating in the practice area?
44. If you notice that your radio is not working, what is likely the cause? How would you re-enter the pattern without an operative radio?