

Lexington Flying Club
Pilot Checkout Exam – Diamond DA40-180

Pilot _____ Checkout CFI: _____ Date _____

General:

1. I have read the DA40 POH (see reference at bottom of page 3)? YES NO
2. Is this aircraft certificated for: IFR operations? YES NO
3. Spins? YES NO
4. Are aerobatics permitted in this aircraft? YES NO
5. What is the primary type of material used in the aircraft construction? ___
6. Are flaps required for take-off? YES NO
7. Flaps T/O position (one notch/two notches)?
8. Flaps LDG position (one notch/two notches)?
9. Is the seat position adjustable? YES NO
10. How are the rudder pedals adjusted? _

11. Where is the list of installed equipment located? _____
12. What chapter of the POH has the list of “Minimum operational equipment”? ____

Fuel System:

13. How many fuel tanks are there? ___
14. What is the total usable fuel capacity? ___ gallons
15. What is the correct fuel grade? ___ Color?
16. Where are the drains located? ____
17. When should a fuel sample be examined?_
18. What is the maximum permissible fuel difference between the right and left tank?_ _ gallons

Oil System:

19. What is the minimum oil level for VFR flight? ___ _ Max level? _ Normal Level? ___ _
20. What is the minimum oil level for IFR flight? ___ _ Max level? _ Normal Level? ___
21. What is the recommended oil ? _____

Weight and Balance:

22. What is the maximum take-off weight ? _ _lbs.
23. What is the maximum landing weight ? _ _lbs.
24. What is the empty weight of the aircraft to be flown ? _____
25. What is the weight of full fuel ? _
26. What is the aircraft useful load ? _____
27. What is the aircraft payload ? _____
28. Determine if the aircraft is within the weight and balance limitations given the following conditions: Full fuel, front passengers = 360 lbs., rear passengers = 170 lbs., baggage = 70 lbs. YES NO

Airspeeds: (Use indicated airspeeds, all speeds in kts)

29. Stall speed at gross weight? Flaps LDG (Vso)? _____ flaps TO_ _____ , flaps UP_ _____
30. Never exceed speed (Vne)? _____

Lexington Flying Club
Pilot Checkout Exam – Diamond DA40-180

31. Max structural cruising speed (Vno)? ___
32. Maneuvering speed (Va) at max gross weight? ___
33. Does Va **increase/decrease** as gross weight decreases?
34. Max flap extended speeds (Vfe)? TO position _____, LDG position _____
35. Normal rotation speed? ___
36. Short field take-off climb speed (gross weight)? ___
37. At what altitude should the flaps be retracted after departure? _____
38. Best rate of climb speed (Vy) at sea level (Flaps T/O, gross weight)? ___
39. Best angle of climb speed (Vx) at sea level? ___
40. Cruise climb speed (flaps up, gross weight)? _____
41. Demonstrated crosswind component? ___
42. Normal final approach airspeed (flaps LDG, gross weight)? ___
43. Short field final approach airspeed? ___
44. Best glide speed (gross weight, flaps up)? ___
45. What is the recommended continuous climb RPM? _____

Starting

46. I have reviewed the procedures for cold starting this aircraft found in the POH page 4A-13 & 4A-14) YES/NO.
47. I have reviewed the procedures for addressing a vapor lock and how to remedy the issue found in the POH page 4A-20, 4A-21, 4A26, and 4A27) YES/NO
48. I have reviewed the procedures for “hot starting” this aircraft found in the POH pages 4A-15 & 4A-16. (YES/NO).
49. I have reviewed the procedures for a flooded engine found in the POH pages 4A-17 & 4A-18. (YES/NO).
50. Do not overheat the starter motor. Do not operate the starter motor for more than 10 seconds. After operating the starter motor, let it cool off for 20 seconds. After 6 attempts to start the engine, let the starter cool off for 1/2 hour. (True/False)

Emergency procedures:

51. How would you detect an alternator failure, and what action would you take?

52. I have reviewed the procedures concerning actions to take if I experienced an engine problems or failure during taxi, takeoff, or flight as contained in the POH pages 3-5 thru 3-19. (YES/NO)
53. I have reviewed the procedures and actions to take if I experience high oil temperature. POH 3-11 (YES/NO)
54. I have reviewed the procedures and actions to take if I experience low oil pressure while in flight? POH 3-10 (YES/NO)
55. Describe the “go around” procedure.

56. I understand that IFR flights are not permitted when the seal on the emergency switch is broken. (YES/NO)

Aircraft Performance:

57. Using the POH, what are the power setting, fuel consumption and true airspeed for cruising at 75% power at 5,000 feet with standard temperature (lean to Best Power)? RPM _____ MP _____ TAS _____ Fuel Consumption _____ GPH
58. Using the POH, what are the takeoff distances to clear a 50’ obstacle when using maximum performance procedures with the aircraft at gross weight into a 8 knot headwind under the following conditions: Sea level, temperature= 60 deg F? _____ feet . Pressure altitude = 4,000’, Temperature = 90 deg F? _____ feet

Lexington Flying Club
Pilot Checkout Exam – Diamond DA40-180

Aircraft Care:

- 59. I understand that there is **“NO SMOKING ALLOWED”** in this aircraft. (YES/NO)
- 60. I understand that **“ANIMAL PETS MY NOT BE CARRIED”** in this aircraft (YES/NO)
- 61. I understand that **“beverages must be in a resealable plastic bottles (no cups, cans, or glass containers)”** (YES/NO)
- 62. I understand that **if ice or snow is present on the aircraft, it CANNOT be scraped off.** The aircraft must be placed in a heated hanger and the snow/ice allowed to melt (YES/NO)
- 63. I understand that the proper procedure for boarding or exiting the aircraft **does not require the feet to be placed on the seats** (YES/NO)
- 64. I understand that I **must use the nose wheel tow bar for manual movement** of the aircraft on the ground and that I am not to push on the airframe. (YES/NO)
- 65. I understand that that the **wing is not to be used as a shelf of workbench** to store flight bags, oil, tools, parts, etc. and it is not to be sat on (YES/NO)
- 66. I understand that I am responsible for the removal of all trash, used rags, used paper towels, empty plastic bottles, and all other debris when I conclude the flight of this aircraft (YES/NO)

Flight Checkout:

- 67. Pilot Requirements: Private pilot or better, and LFC full membership.
- 68. Complete “Pilot Checkout written Exam” with at least 80%. Missed questions to be reviewed with CFI
- 69. Minimum 2 hour aircraft flight with LFC Flight Instructor, to include slow flight, power off stalls, power on stalls with no flaps and with T/O flaps, and engine failure procedures. Emphasis also on constant speed propeller, Garmin 530/430, KAP 140 and VM 1000 Engine instrument cluster.
- 70. For instrument rated pilots, checkout will include holding patterns and approaches.
- 71. For an instrument cross country, three instrument approaches in type to touchdown within the previous 30 days or one instrument approach to touchdown in type in the last 10 days.

Pilot Acknowledgments:

- 72. I acknowledge that I have reviewed the DA40 POH (available at: www.diamond-air.at/da40-180_afm_bas+M52087573ab0.html) and am familiar with its content. Pilots Initials_____
- 73. I acknowledge that I meet the minimum qualification to act as PIC of this aircraft. Pilots Initials_____ (Private pilot or better, LFC full membership)
- 74. I acknowledge that I have reviewed the operations of the DA40 with a qualified instructor. Pilots Initials_____
- 75. I acknowledge that I feel I am personally qualified to safely operate the DA40 as PIC. Pilots Initials_____

Pilots signature: _____

Date: _____

Checkout CFI signature: _____

Date: _____

Make copy for club member: