



**CESSNA 172S NAV III
VFR CHECKOUT
POH EXAMINATION**

(Based on N1129K, serial no. 172S10315 - revised 10/05/06)

INTRODUCTION, POH

1. Rate of climb at sea level: _____
2. Service ceiling: _____
3. Takeoff performance, ground roll and over 50-foot obstacle: _____
4. Landing performance, ground roll and over 50-foot obstacle: _____
5. Stall speed, flaps up and down, power off: _____
6. Maximum baggage allowance: _____

GENERAL, POH Section 1

7. Engine model: _____
8. Engine horsepower rating: _____
9. Propeller: _____
10. Fuel type: _____
11. Fuel capacity, total and useable: _____
12. To ensure maximum fuel capacity when refueling: _____
13. Oil capacity, total and sump: _____
14. Maximum ramp weight, normal and utility category: _____
15. Maximum takeoff weight, normal and utility category: _____
16. Maximum landing weight, normal and utility category: _____

17. Baggage compartment weight, stations 82 to 108 and 108 to 142: _____

18. Standard empty weight: _____

19. Maximum useful load, normal and utility category: _____

LIMITATIONS, POH Section 2

20. V_{NE} , V_{NO} , V_A , V_{FE} , $V_{window\ open}$: _____

21. Maximum engine speed for takeoff and continuous operation: _____

22. Static rpm range at full throttle: _____

23. Flight Load factors, normal category, flaps up and flaps down: _____

24. Is the 24V standby battery required for a day VFR flight? _____

25. Is the beacon light required for a day VFR flight? _____

26. Fuel selector position for takeoff and landing? _____

27. Flap range for takeoff and landing: _____

28. Where do you find the current G1000 Reference Guide Part Number and System Software Version that must be available to the pilot during flight? _____

29. Can you use the NAVIGATION MAP page for pilotage navigation? _____

30. You cannot use the COM 1/2 function of the GMA 1347 Audio Panel. Why not?

31. Can you use the Bendix/King KAP 140 autopilot when the GMA 1347 audio panel is inoperative?

EMERGENCY PROCEDURES, POH Section 3

32. Maneuvering speed at 2,550, 2,200, and 1,900 lbs: _____

33. Best glide speed at 2,550 lbs [It too decreases as weight decreases]: _____

34. Power-off landing speeds: _____

35. Engine failure during flight (restart procedure): _____

36. Emergency landing without engine power procedure: _____

37. Electrical fire in flight procedure: _____

38. Immediate action steps if high volts annunciator comes on or M BAT (main battery) amps is more than 40 amp:

39. Immediate action steps if low volts annunciator comes on or does not go off at higher rpm [Does not apply when below 1,000 rpm]: _____

40. Air data system failure procedure (red X on PDF airspeed, altitude, attitude, or HSI):

41. PFD1 COOLING or MFD1 COOLING annunciator(s) on: _____

42. What are the airspeed and altitude variations when the alternate static air switch is on?

43. After 30 minutes of cruising flight, the M BAT (main battery) amps should be less than? _____

44. The overvoltage sensor circuit should automatically disconnect the alternator when system voltage reaches? _____.

45. If the alternator has been disconnected automatically, how do you attempt to reenergize the system?

46. If the alternator disconnects again, what do you do? _____

NORMAL PROCEDURES, POH Section 4

47. Normal, Vy, and Vx climb speeds at sea level: _____

48. Approach speeds. Flaps up, flaps full, and short-field: _____

49. Maximum demonstrated crosswind velocity, takeoff or landing: _____

50. During the preflight cockpit inspection, what two manuals must be on the airplane and accessible to the pilot in flight:

51. During the cockpit inspection, how do you check the cooling fans? _____

52. During the cockpit inspection, what annunciator light must be operating while the master switch is on?

53. What is the minimum oil quantity for engine operation? _____

54. Engine start procedure using the airplane's battery: _____

(continue on next page) _____

55. If engine is warm, how does start procedure change? _____

56. What POH WARNING statement applies to the engine start procedure with external power?

57. Is the G1000 altitude select feature connected to the KAP 140 autopilot altitude hold function? _____

58. The magneto check occurs at 1,800 rpm. What does 150/50 mean? _____

59. Does the G1000 have a warning flag if a valid navigation signal is not being received?

60. When the KAP 140 autopilot is engaged in the NAV, APR, or REV operating mode and the HSI navigation source is changed between NAV and GPS or vice versa, what will the autopilot do? _____

61. After takeoff when and how should you lean the engine? _____

62. What three electrical switches must be turned off when securing the airplane? _____

63. What is the starter motor duty cycle? _____

64. How do you lean the mixture for ground operations? _____

65. How do you perform an alternator and alternator control unit check during the runup at 1,800 rpm?

66. How do you lean the engine using exhaust gas temperature (EGT)? _____

67. How would you know if fuel was vaporizing during ground operations when temperatures are above 80°F? What would you do?

PERFORMANCE DATA, POH Section 5

68. TAKEOFF PERFORMANCE — Airplane is at maximum gross weight; airport elevation is 1,000 feet msl. There is no wind and the temperature is 10 degrees above the standard Celsius temperature.

Compute the following takeoff information: Ground roll is _____ feet, total distance to clear a 50-foot obstacle is _____ feet, and the rate of climb is _____ feet per minute.

69. CLIMB AND EN ROUTE PERFORMANCE — You are departing from the airport used in the last problem, and you plan to cruise at 7,500 feet msl using 75% power. The temperature at 7,500 feet is 10 degrees above standard.

Compute the following climb information: Time _____ minutes, fuel _____ gallons, and _____ miles to reach cruise altitude.

Compute the following cruise information: The power setting will be _____, and this will yield a speed of _____ KTAS and a fuel burn of _____ GPH.

70. LANDING PERFORMANCE — You are 200 pounds below the maximum allowable landing gross weight; airport elevation is 3,000 feet msl. You plan a full flap landing with a 10 knot headwind component, and the temperature is 10 degrees above standard.

Compute the following landing information: Ground roll is _____ feet, and total distance to clear a 50-foot obstacle is _____ feet.

WEIGHT AND BALANCE, POH Section 6

71. WEIGHT AND BALANCE COMPUTATION — All seats are full. The pilot weighs 200 pounds, copilot 150 pounds, and each remaining passenger 120 pounds. There is 100 pounds of baggage.

Compute the following information (basic empty weight 1,642 lbs, moment 62.6 lb-in/1,000): The fuel you can carry and still remain within the allowable gross weight? _____ gallons. Is the airplane within its CG limits with this fuel load? _____. What is the actual CG location? _____ in.

AIRPLANE AND SYSTEMS DESCRIPTION, POH Section 7

72. What is the Primary Flight Display (PDF)? _____

73. When is the Engine Indication System (EIS) displayed on the PDF? _____

74. Where is the DISPLAY BACKUP pushbutton switch located and what is its function?

75. What is the Multifunction Display (MFD)? _____

76. What is the standby instrument cluster? _____

77. What is the data source for the PFD's attitude indicator? _____

78. What is the data source for the PFD's airspeed indicator, altimeter, and vertical speed indicator?

79. What is the data source for the PFD's HSI? _____

80. If a cabin door opens in flight, what procedure must you use? _____

81. Describe the three EIS pages? _____

82. What is the alternate air door? _____

83. When will the left or right fuel low quantity annunciator light illuminate? _____

84. Where are the fuel drains? _____

85. Describe the fuel system. _____

86. Where are the fuel tank vents? _____

87. If fueled to the bottom of the filler tab, a fuel tank's useable fuel capacity is? _____

88. Describe the electrical system. _____

89. What does the Essential Bus power? _____

90. Describe the three functions of the standby battery switch? _____

91. What supplies outside air to the six upper, adjustable air outlets in the cabin? _____

92. What supplies conditioned air to the cabin and defroster? _____

93. Describe the function and location of the AHRS? _____

94. Describe the function and location of the Magnetometer? _____

95. Describe the function and location of the Air Data Computer (ADC)? _____

96. List the fire extinguisher type and preflight procedures. _____

SUPPLEMENTS, POH Section 9

Bendix/King KAP 140 2-Axis Autopilot — Supplement 3

97. Takeoff and landing limitations. _____

98. Airspeed limitations. _____

99. Maximum flaps extension limitation. _____

100. Minimum altitude limitations. _____
