1963 Baron 95-A55 (N102FA)

1. Recite the V Speeds.
2. What is the maximum demonstrated crosswind component?
3. Describe the Baron 95-A55 (IO-470-L) engine.
4. How many cylinders?
5. Who is the manufacturer?
6. What is the horsepower rating?
7. Does it have fuel injectors or a carburetor?
8. Is the engine turbo-charged or normally aspirated?
9. How is ignition provided?
10. What are the maximum and minimum oil capacities?
11. Describe the propeller system.
12. Who makes the propellers?
13. What does oil pressure do to the propellers?
14. Which lever regulates oil pressure to the propeller?
15. Which unit regulates oil to the propeller?
16. What is the function of the nitrogen cylinder?
17. What is the purpose of the spring in the prop dome?
18. Define constant speed.
19. What unit adjusts the propeller to maintain a constant RPM and how does it do it?
20. Define full feathering?
21. Does this aircraft have prop un-feathering accumulators?
22. Will the propeller always feather?
23. What are centrifugal stop pins?
24. What is the true purpose of the centrifugal stop pins?
25. What is the correct action for a propeller overspeed?
26. Describe the electrical system
27. What are the indications of a failed alternator?
28. Will the engines continue to run with the alternator and battery master switches turned off?
29. Describe the vacuum system.
30. Which instruments are vacuum operated?
31. What are the vacuum normal operating limits?
32. How many vacuum pumps does the BE 95-A55 have?
33. What indications would occur in the event of a vacuum pump failure?
34. Describe the stall warning system.
35. Describe the fuel system.
36. Describe the landing gear system.
37. How is the landing gear actuated?
38. What keeps the gear in the up position?
39. What keeps the gear in the down position?
40. What unit will not allow the gear to be retracted on the ground?
41. What is the procedure to extend the gear manually (Emergency Gear Extension)?
42. What airspeed is of importance during manual gear extension?
43. What type of braking system is used by a BE 95-A55? Where is it serviced?
44. What type of flaps does this BE 95-A55 have?
45. What are the flap settings on the BE 95-A55?
46. What are the maximum ramp, takeoff, and landing weights?
47. What is the maximum baggage capacity?
48. Define VSSE .
49. What are the drag factors on light twins?
50. Who determines VMC for a particular aircraft?
51. Define VMC
52. Why is aft CG used in determining VMC ?
53. What are the factors in determining VMC ?
54. Define critical engine and list the factors used to determine it.
55. What causes an aircraft to sideslip with the loss of an engine, and what action is required to correct this?
56. How much climb performance is lost when an engine fails?
57. What aircraft equipment checks are required under FAR part 91?
58. Define absolute and single-engine service ceiling.
59. What documents are required to be in the aircraft?
60. Explain lost communications procedures.
61. Will the propeller feather below 950 RPM. Why or why not?
62. Explain the pitot static system.
63. Does the BE 95-A55 have an alternate static source? If so, how is it activated? What actions are necessary to acquire the most accurate reading?
64. What instruments are pitot static?
65. Where is the pitot static port located?
66. Where is the cabin heater, and how does it operate?
67. What prevents it from overheating?
68. What is the fuel capacity? How many gallons are unusable?
69. What grade fuel is to be used in a BE 95-A55?
70. How many fuel pumps are on this aircraft?
71. When are the electric fuel pumps to be used?
72. What are the various positions of the fuel selector control?
73. Explain the procedure for cross-feeding fuel when operating the right engine from the left tank.
74. If the cylinder head temp and oil temp approach the caution range, what can be done to assist in cooling?
75. Why does manifold pressure decrease approximately 1” for every 1,000’ during climb?
76. When an engine is inoperative or feathered, what indication will be observed on the manifold pressure gauge?
77. Why is the manifold pressure gauge not necessarily a good indicator in determining an inoperative engine?