

Baron B55 (T42)

Normal Procedures Test

Rocky Mountain Flight Center



(Ref: T42 Operator's Manual TM55-1510-208-10)

Please do not mark on booklet

1. The landing gear is driven by _____ and actuated by a _____ wheel-shaped handle on the right side of the center pedestal.
 - a) hydraulic pump, hydraulic
 - b) reversible electric motor, two positions
 - c) non-reversible electric motor, three position
 - d) electrically driven hydraulic pump, hydraulic

2. A safety switch (squat switch) is provided on the _____ to prevent the gear from being retracted when the aircraft is on the ground.
 - a) right main shock strut
 - b) nose gear shock strut
 - c) left flap actuator rod
 - d) left main shock strut

3. The landing gear will extend or retract in approximately _____ seconds.
 - a) 10
 - b) 8
 - c) 5
 - d) 3

4. The landing gear emergency hand crank is located _____ and is used for manually lowering the gear by cranking in a _____ direction.
 - a) below center pedestal, clockwise
 - b) pilot's left sidewall, counterclockwise
 - c) under instrument panel left side, clockwise
 - d) at the rear of the front seats, counterclockwise

5. Brake fluid for the main wheels is supplied to the system from a reservoir located _____.
 - a) in the nose avionics compartment
 - b) below the co-pilot's seat
 - c) in the aft baggage compartment
 - d) in the right engine nacelle

6. The parking brake handle may be pulled in flight because the brakes will not set until pedals are pushed. True or False?
 - a) True
 - b) False

7. The IO-520E engines (colemill conversation) are limited to _____ and are rated at 300hp at sea level.
- a) 2850 RPM for 5 minutes and 2700 RPM maximum continuous
 - b) 2900 RPM for 5 minutes and 2800 RPM maximum continuous
 - c) 2850 RPM
 - d) 2700 RPM
8. The engine oil capacity is _____ qts.
- a) 9
 - b) 10
 - c) 12
 - d) 14
9. The engine tachometers do not need aircraft electrical power to operate. True or False?
- a) True
 - b) False
10. Total fuel in the two independent (left and right) systems is _____.
- a) 40 gal, 37gal usable
 - b) 71 gal, 68 gal usable
 - c) 142 gal, 140 gal usable
 - d) 142 gal, 136 gal usable
11. During crossfeed operation with the left engine shut down to feed left main tank fuel to right engine, the fuel controls should be set as follows:
- a) Left selector to "off" and right selector to "main"
 - b) Right selector to "main" and left selector to "crossfeed"
 - c) Left selector to "main" and right selector to "off"
 - d) Left selector to "main" and right selector to "crossfeed"
12. Intermediate flap settings are adjusted by visual markings on the leading edge of the left flap. These are _____ and _____ with the read light indicating a full down indication of _____.
- a) 10, 15, 25
 - b) 10, 20, 28
 - c) 15, 30, 40
 - d) 15, 20, 45

13. During normal shutdown, latch bars automatically engage the propeller piston to prevent feathering below _____ RPM.
- a) 500
 - b) 600
 - c) 800
 - d) 1000
14. For de-ice boot operation, momentary engagement of the "auto" position of the de-ice switch will cause the boots to inflate for _____.
- a) as long as switch is held
 - b) 5-8 seconds
 - c) 10 seconds
 - d) a pulsing of 20 seconds duration
15. The oxygen system supply cylinder is normally charged to _____ PSI and will provide _____ hrs of oxygen for 2 persons (95% cyl volume) at 15,000 ft cabin altitude.
- a) 1800', 5.7
 - b) 1800', 3.6
 - c) 1500', 4.5
 - d) 1500', 2.2
16. Electrical power is provided by a _____ volt battery and two _____ volt _____ ampere hour alternators.
- a) 12, 14, 50
 - b) 12, 28, 25
 - c) 24, 14, 50
 - d) 24, 28, 50
17. Landing lights may be used for taxiing without regard for time limits. True or False?
- a) True
 - b) False
18. When refueling the aircraft do not insert the fuel nozzle more than three inches into the fuel tank. True or False?
- a) True
 - b) False
19. The dipsticks to measure oil level are interchangeable between left and right engines. True or False?
- a) True
 - b) False

20. The correct Vyse airspeed shown on the airspeed indicator (blue line) is _____ kts.
- a) 80
 - b) 83
 - c) 100
 - d) 101
21. The panel installed, Hoskins Computerized Fuel Totalizer Management System, takes the place of:
- a) RPM indicators
 - b) Fuel quantity indicator
 - c) Fuel pressure gages
 - d) Engine tachometer
22. When the aircraft battery is turned on, the fuel totalizer will indicate _____ initially.
- a) a test pattern
 - b) fuel remaining after last flight
 - c) aircrafts total usable fuel (as programmed)
 - d) fuel flow at idle
23. With regard to the fuel totalizer, fuel flow is displayed only after the engines have been started. True or False?
- a) True
 - b) False
24. The automatic function of "low fuel" warning on the Hoskins totalizer is designed to come on when current selected engine power setting results in time remaining to fly is less than _____.
- a) 30 minutes
 - b) one hour
 - c) one hour and 10 minutes
 - d) There is no low fuel warning.
25. The maximum gross weight of the aircraft is _____.
- a) 4850 lbs
 - b) 4900 lbs
 - c) 5000 lbs
 - d) 5100 lbs

26. Up to 95 lbs of baggage is allowed in the nose avionics compartment. True or False?
- a) True
 - b) False
27. The fuel system has _____ drain points to drain sediment and moisture condensate from the fuel system.
- a) 8
 - b) 5
 - c) 4
 - d) 2
28. Positive locking of the rudder, elevator and aileron control surfaces (when securing the aircraft for parking) is provided by _____.
- a) There is no positive way of locking the controls.
 - b) engaging lock handle on center console
 - c) tying the yoke with lap belts
 - d) a removable control lock assembly
29. A diaphragm type accumulator is located in each engine nacelle to provide air pressure for unfeathering the propellers. True or False?
- a) True
 - b) False
30. An emergency static source level for the instruments is located _____.
- a) on instrument panel above throttle quadrant
 - b) on lower center pedestal
 - c) on cabin lower left sidewall
 - d) There is no emergency static source.
31. The oxygen system may be activated by opening the supply valve alongside the pilot and _____.
- a) switching on "oxy" switch
 - b) sucking on oxygen outlets
 - c) plugging an oxygen mask hose coupling into individual valve
 - d) opening outlet cover
32. To prevent ice formation in the stall warning vane, an electrically operated heating element is installed which is controlled by the pitot heat switch. True or False?
- a) True
 - b) False

33. If either vacuum pump fails, the failure will be indicated by _____.

- a) lower than normal vacuum pressure
- b) one of two red buttons on vacuum gage extended
- c) one gage will read zero
- d) No provisions are made for indicating this failure.

34. The maximum maneuvering speed (V_a) is _____.

- a) 122 KIAS
- b) 125 KIAS
- c) 143 KIAS
- d) 156 KIAS

35. Given the following:

		<u>Moment/100</u>
Basic empty weight	3410 lbs	2611.2
2 pilots	400 lbs	
2 pax (seat forward)	300 lbs	
Baggage (in rear bag comp)	150 lbs	
Fuel 142 gal (40 ea main 31 ea aux)		

Compute the weight and balance

- a) Over max gross weight; outside the CG envelope.
- b) Over max gross weight; Okay with 20 less gal of fuel.
- c) With gross weight, utility category CG.
- d) Within gross weight, normal category CG.