

RFC Dallas, Inc.

AIRCRAFT QUESTIONNAIRE (6/3/2018)

"A Safe Pilot Knows His Equipment"

NAME: _____

Date: _____

Aircraft: Bonanza Registration Number: _____ Serial Number: _____

The purpose of this questionnaire is to aid the pilot in their understanding of the airplane and its specific systems and procedures. No attempt has been made to cover in depth all the information contained in the POH/AFM but this questionnaire will provide a review of the basic information a pilot should know prior to being certified for solo flight by a Club Checkout Instructor. This questionnaire along with the ground and flight instruction you will receive by a Club Instructor and your continued review of the POH/AFM will enable you to maintain a high degree of knowledge and safety regarding this specific airplane.

Using all available manuals and documentation, complete each question by providing the most appropriate response. Upon completion, contact a Club Checkout Instructor to schedule a review of your responses. Following this review, please place a signed copy (with corrected responses) in the red folder in the club lockbox and notify the Club Safety and Training Officer.

- 1) What is the Maximum Ramp Weight for this aircraft? _____.
- 2) What is the Maximum Gross Take-Off Weight (MGTOW) for this aircraft? _____.
- 3) The Empty Weight of this aircraft is: _____(lbs). Empty Weight CG is: _____.
- 4) The Forward C.G. limit at gross weight is _____. Aft C.G. limit is _____.
- 5) This aircraft is certified in the _____ category.
- 6) What type of fuel does this engine require? _____.
- 7) Each "Main" fuel tank holds _____ total gallons, _____ gallons usable.
 - a. If a tank is filled to the bottom of the tab, it has _____ usable gallons. If a tank is filled to the slot on the tab, it has _____ usable gallons.
- 8) Does this aircraft have "Tip Tanks"? (Yes / No)
If Yes:
 - a. Each Tip Tank holds _____ total gallons and _____ usable gallons.
 - b. When either tip tank is selected, the excess unburned fuel is pumped into the _____. This tank should have approximately _____ gallons of fuel burned prior to selecting Tip Tank fuel while in flight.
 - c. How do you prevent air in the fuel lines between the tip tanks and the engine from causing a fuel starvation situation? _____.
 - d. Tip Tank fuel should only be used in level flight? (True / False)
 - e. The "Cross Feed" switch on the fuel selector allows fuel to flow from the Right Tip Tank to the Left Tip Tank to resolve a fuel imbalance situation? (True / False)

- 9) This aircraft has _____ fuel drains.
- 10) Where is the low point drain? _____.
- 11) Minimum fuel in each Main tank for takeoff is _____ gallons.
- 12) The auxiliary fuel pump is (mechanical / electrical) and is used for:
 a. _____
 b. _____
 c. _____
- 13) The engine horsepower is _____ @2700 RPM.
- 14) The engine holds a maximum of _____ quarts of oil. Add oil when the level is below _____ quarts.
- 15) On takeoff, use _____ deg of trim when only the front seats are occupied. Use _____ deg of trim when both front and back seats are occupied.
- 16) After takeoff, raise the gear when _____.
- 17) If the door should open on takeoff:
 a. _____
 b. _____
 c. _____

18) Calculate the following at 7,000' with 45 minutes reserve on a standard day:

	RPM	MP	GPH	TAS KTS	RANGE NM
75%	_____	_____	_____	_____	_____
65%	_____	_____	_____	_____	_____
55%	_____	_____	_____	_____	_____

- 19) Is "Lean Of Peak" operation approved for this aircraft? (Yes / No)
- 20) Emergency descent procedure is:
 a) _____ b) _____
 c) _____ d) _____
- 21) To recover from a spin:
 a) _____ b) _____
 c) _____ d) _____

22) To manually extend the landing gear:

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____
- f) _____
- g) _____

23) On a 100° F day with no wind, what is the distance required to clear a 50-foot obstacle at gross weight and 4,000' pressure elevation? _____ ft.

24) To achieve the charted performance in the CLIMB Chart, the aircraft climb speed should be _____ Kts. (Care must be taken if maximum climb performance is needed to avoid maximum cylinder head temperatures.)

25) What is the Maximum Cylinder Head Temperature? _____ C. What is the Club's recommended Maximum? _____ C.

26) While performing the "Before Takeoff Checklist", maximum Magneto RPM drop is _____. When testing the propeller control, the recommended RPM drop is _____.

27) During cold weather, exercise the propeller _____ times before takeoff.

28) Indicate airspeeds in KTS:

- | | |
|----------------------------|--------------------------------------|
| VA _____ | VNO _____ |
| VFE _____ (Approach _____) | VS _____ |
| VLO _____ | VSO _____ |
| VNE _____ | VX _____ |
| Glide _____ | VY _____ |
| Balked landing _____ | Maximum demonstrated crosswind _____ |

29) What is the "slip limitation" in this aircraft? _____.

30) From 8,000 AGL, approximately how far can the aircraft glide (no wind)? _____.

31) What is the Maximum Glide Configuration in this aircraft?

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____

32) At gross weight with gear and flaps retracted and zero angle of bank, what is the power off stalling speed? _____

33) In a 45° bank with gear and flaps retracted, what is the power off stalling speed? _____

- 34) Is this aircraft approved for flight in known icing conditions? (Yes / No)
- 35) On final approach, check:
- a) _____ b) _____
- c) _____ d) _____
- 36) On a go round, apply power and raise (gear / flaps) first.
- 37) After landing, when are the flaps raised? _____.
- 38) In the event of a propeller over speed, what action should you take?
- a) _____ b) _____
- c) _____
- 39) Can the landing gear be raised with the hand crank? (Yes / No)
- 40) The gear warning horn will sound when the gear is up and _____.
- 41) The gear warning horn will sound when the gear is up and any flap selection is made (True / False).
- 42) To avoid thermal stress in the engine, avoid _____ descents.
- 43) As you descend, manifold pressure will (increase / decrease).
- 44) Except in extremely low temperatures, the cowl flaps should be (open / closed) during:
- a) _____ b) _____
- c) _____
- 45) The external power receptacle is located on_____. The voltage on the Auxiliary Power Unit should be set to (14 / 28) volts.
- 46) What position is the Battery Switch prior to connecting the Auxiliary Power Unit? (Off / On)
- 47) The landing gear is operated by (electric / hydraulic) power.
- 48) The three GREEN landing gear lights indicate _____.
- 49) The RED landing gear light illuminates when _____.
- 50) All gear lights out occurs when _____.
- 51) This aircraft (is / is not) certified for aerobatics.
- 52) Can the ELT be activated from the cockpit? (Yes / No)
- 53) The Attitude Indicator is (pressure / electrically) powered.
- 54) The Turn Coordinator is (pressure / electrically) powered.

- 55) This aircraft is equipped with a backup Alternator? (Yes / No)
- 56) This aircraft is equipped with a backup Pressure System? (Yes / No)
- 57) The GPS in this aircraft is WAAS capable? (Yes / No) and (is / is not) IFR certified?
- 58) This aircraft is equipped with an HSI? (Yes / No)
 a. If Yes, the HSI is (pressure / electrically) powered.
- 59) The autopilot in this aircraft has an "Altitude Hold" mode? (Yes / No)
- 60) Is this aircraft equipped with a Flight Director? (Yes / No)
- 61) Is this aircraft equipped with an "alternate static air source"? (Yes / No)
- 62) How may an alternator problem be recognized by the pilot?
 a) _____ b) _____
- If installed, how can a voltage meter be used to indicate an electrical/alternator problem?
 c) _____
- 63) Can this aircraft depart with an inoperative alternator? (Yes / No)
- 64) There are _____ emergency exits. Name them:
 _____.
- 65) How often does the Aircraft Registration on this aircraft expire? _____.
- 66) According to FAR Part 91, the _____ is responsible for determining whether the aircraft is safe and airworthy for flight.

Reviewed by: _____ Date: _____
 (Authorized Club Checkout Instructor)