

# RFC Dallas, Inc.

AIRCRAFT QUESTIONNAIRE (9/25/2016)

"A Safe Pilot Knows His Equipment"

NAME: \_\_\_\_\_

Date: \_\_\_\_\_

Aircraft: Cessna 182Q    Registration Number: **N631S**    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 Gross Take-Off Weight (MGTOW) for this aircraft? \_\_\_\_\_.
- 2) The Empty Weight of this aircraft is: \_\_\_\_\_ (Lbs). Empty Weight CG is: \_\_\_\_\_.
- 3) At gross weight, the Forward C.G. limit is \_\_\_\_\_. The Aft C.G. limit is \_\_\_\_\_.
- 4) The Useful Load of this aircraft is \_\_\_\_\_ Lbs.?
- 5) This aircraft is certified in the \_\_\_\_\_ category.
- 6) What type of fuel does this engine require? \_\_\_\_\_.
- 7) The fuel tanks hold \_\_\_\_\_ total gallons and \_\_\_\_\_ gallons are usable.
- 8) This aircraft has \_\_\_\_\_ fuel drains.
- 9) During fueling, to ensure tanks fill evenly, the fuel selector should be on the \_\_\_\_\_ or \_\_\_\_\_ position.
- 10) Where is the low point drain? \_\_\_\_\_.
- 11) By what method is fuel routed to the engine from the fuel tanks? \_\_\_\_\_.
- 12) During takeoff and landing the fuel selector should be on the \_\_\_\_\_ position.
- 13) With FULL fuel, the remaining useful load (passengers and bags) is \_\_\_\_\_ Lbs.?
- 14) During "cold" operations, the POH recommends \_\_\_\_\_ strokes of the primer.
- 15) Maximum engine horsepower is \_\_\_\_\_ @2400 RPM. It has \_\_\_\_\_ cylinders.
- 16) The engine holds a maximum of \_\_\_\_\_ quarts of oil. Add oil when the level is below \_\_\_\_\_ quarts.

17) For "normal" takeoff, use \_\_\_\_\_ or \_\_\_\_\_ degs of flaps. Use \_\_\_\_\_ degs of flaps for soft field takeoff.

18) Is "Lean Of Peak" operation approved for this aircraft? ( Yes / No ).

19) The recommended lean procedure is \_\_\_\_\_ degrees \_\_\_\_\_.

20) How do you prevent unbalanced fuel tanks while in extended cruise operations?

\_\_\_\_\_.

21) To recover from a spin:

a) \_\_\_\_\_ b) \_\_\_\_\_

c) \_\_\_\_\_ d) \_\_\_\_\_

e) \_\_\_\_\_

22) 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.

23) To achieve the charted performance in the CLIMB Chart (at sea level), the aircraft climb speed should be \_\_\_\_\_ Kts. (Care must be taken if maximum climb performance is needed to avoid maximum cylinder head temperatures.)

24) What is the Maximum Cylinder Head Temperature? \_\_\_\_\_ C; \_\_\_\_\_ F. The Club's recommended Maximum is? \_\_\_\_\_ C; \_\_\_\_\_ F.

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

26) Indicate airspeeds in KTS:

VA \_\_\_\_\_ (Max Wt.) \_\_\_\_\_ (2450 Lbs.) \_\_\_\_\_ (1950 Lbs.)

VFE \_\_\_\_\_ (Approach \_\_\_\_\_) VS \_\_\_\_\_

VSO \_\_\_\_\_ VNO \_\_\_\_\_

VNE \_\_\_\_\_ VX \_\_\_\_\_

Glide \_\_\_\_\_ VY \_\_\_\_\_

Balked landing \_\_\_\_\_

Maximum Demonstrated X-wind: Takeoff \_\_\_\_\_ Kts. Landing \_\_\_\_\_ Kts.

27) From 8,000 AGL, approximately how far can the aircraft glide (no wind)? \_\_\_\_\_.

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

a) \_\_\_\_\_ b) \_\_\_\_\_ c) \_\_\_\_\_

d) \_\_\_\_\_ e) \_\_\_\_\_

- 29) For an suspected Electrical fire in flight, the first two (2) appropriate actions are to:
- a) \_\_\_\_\_ b) \_\_\_\_\_
- 30) At gross weight with gear and flaps retracted and zero angle of bank, what is the power off stalling speed? \_\_\_\_\_ Kts.
- 31) In a 45° bank with gear and flaps retracted, what is the power off stalling speed? \_\_\_\_\_ Kts.
- 32) Is this aircraft approved for flight in known icing conditions? ( Yes / No )
- 33) Explain two methods to detect carburetor icing in this aircraft:
- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. If detected, the appropriate action should be to apply \_\_\_\_\_.
- 34) On final approach, check:
- a) \_\_\_\_\_ b) \_\_\_\_\_
- c) \_\_\_\_\_
- 35) On a go round, apply power and raise flaps to which position? \_\_\_\_\_.
- 36) After landing, when are the flaps raised? \_\_\_\_\_.
- 37) As you descend, manifold pressure will ( increase / decrease ).
- 38) Except in extremely low temperatures, the cowl flaps should be ( open / closed ) during:
- a) \_\_\_\_\_ b) \_\_\_\_\_
- c) \_\_\_\_\_
- 39) The external power receptacle is located on\_\_\_\_\_. The voltage on the Auxiliary Power Unit should be set to ( 14 / 28 ) volts.
- 40) What position is the Battery Switch prior to connecting the Auxiliary Power Unit? ( Off / On )
- 41) This aircraft ( is / is not ) certified for aerobatics.
- 42) Can the ELT be activated from the cockpit? ( Yes / No )
- 43) The Attitude Indicator is ( pressure / electrically ) powered.
- 44) The Turn Coordinator is ( pressure / electrically ) powered.
- 45) The GPS in this aircraft is WAAS capable? ( Yes / No ) and ( is / is not ) IFR certified?
- 46) This aircraft is equipped with an HSI. It is ( pressure / electrically ) powered; It is slaved? ( Yes / No )
- 47) The autopilot in this aircraft has an "Altitude Hold" mode? ( Yes / No )

48) The autopilot in this aircraft will fly the ILS glide slope? ( Yes / No )

49) Is this aircraft equipped with an "alternate static air source"? ( Yes / No )

50) How may an alternator problem be recognized by the pilot?

a) \_\_\_\_\_ b) \_\_\_\_\_

51) Can this aircraft depart with an inoperative alternator? ( Yes / No )

52) In what Section of the POH can you find the proper tire inflation information? \_\_\_\_\_.

53) There are \_\_\_\_\_ emergency exits. Name them:

\_\_\_\_\_.

54) How often does the Aircraft Registration on this aircraft expire? \_\_\_\_\_.

55) 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)

**Additional Pilot and Instructor TIPS for piloting N631J:** (you may keep this page)

- Due to the placement of the CHT probes on this engine, the CHT's displayed on the JPI Engine Analyzer are 25 to 30 degrees Fahrenheit higher than actual. While CHTs may exceed 400 degrees Fahrenheit on the JPI Engine Analyzer on climb out, upon leveling off, members are requested to keep CHTs at or below 400 degrees Fahrenheit on the JPI Engine Analyzer. This can be accomplished by:
  - keeping cowl flaps fully or partially open
    - and/or
  - with power/mixture management.
- At 1000 feet AGL, bring MP back to top of the green and props back to 2400 RPM.
- For cruise power, "23 squared" works well.
- Due to plane being nose heavy, keep a small amount of power ( 1300 – 1500 RPM ) on into the flare and until touchdown; Getting slow in this plane on final it is very easy to get behind the power curve.
- If during landing the nose drops and the plane bounces, apply full power and go-around (i.e., don't try to recover); Trim nose up on final and be aware of this if a go-around is necessary.
- Getting slow on approach (below 65 knots) will result in a large sink rate that will require the application of considerable power to recover. Avoid!
- **Avoid full power** during power-on stalls due to the propensity of the plane to drop a wing at the stall break (21" MP / 2300 RPM is suggested as a maximum).
- Upon engine shutdown open oil port door to help heat dissipate faster. Make sure door is closed prior to leaving plane. Do not leave open.
- Insert Cowl plugs after engine begins cooling down.