Cessna N761GG Aerobat A152 Checkout Quiz (V3.0)

AIRSPEEDS

Vr: Vx : Vy:(max gross weight): Va (1670 lbs): Va (1350 lbs):

Vso: Vne: Best glide @ max gross weight: Vno: Max speed, window open: Vfe:

Normal app. speed (30° flaps): No-flap app. speed: Short field app. speed:

Max demonstrated crosswind component:

1. Describe the go-around procedure from an approach using 30° flaps
2. Discuss how you might adjust your approach speed and/or configuration during gusty wind conditions
3. What is the approved flap takeoff range?

LIMITATIONS

1. Are spins approved in the A-152?
2. Describe the spin recovery procedure.
3. What are the maximum positive and negative load factors (G limits) for the A152:

EMERGENCY PROCEDURES

What should you do in the event of an inadvertent encounter with icing conditions?

WEIGHT & BALANCE

Empty weight: Max ramp weight: Max takeoff weight:

Useful load: Max landing weight: Max baggage weight:

Problem solving: *Use the table on the following page to determine whether or not this flight is within safe limits.*

Fuel ..... Full

Useful load .....20 pounds of luggage

Pilot ..... 175 pounds

Passenger ..... 150 pounds

Flight time .....2.5 hours

Fuel consumption ..6 gph

	Weight	Arm	Moment
Basic empty weight			
Fuel			
Pilot and front passenger			
Baggage area #1			
Ramp weight			

Taxi fuel burn			
Takeoff weight			

Location of take-off CG:

En-route fuel burn			
Landing weight			

Location of landing CG:

Conclusion?

TAKEOFF AND LANDING PERFORMANCE

Problem solving: *Using the information below, find the different takeoff and landing distances.*

Takeoff weight ..... Maximum

Temperature ..... 20° C

Pressure altitude ..... 5,000'

Wind ..... 9 knot headwind

Takeoff roll:

Takeoff distance to clear a 50' obstacle:

Landing roll:

Landing distance to clear a 50' obstacle:

In percentage terms, what would be a good safety margin to add to these numbers?

What should you do with the mixture to achieve max power for this takeoff?

CROSS COUNTRY PERFORMANCE

Problem solving: *Using the information below, find the cruise performance numbers and endurance with 45min reserve.*

Cruising altitude ..... 6,000'

Temperature ..... 3° C

Power output 67%

Fuel consumption per hour: TAS: RPM:

Endurance:

(N176GG will be different due to climb prop)

ENGINE AND PROPELLER

1. Briefly describe the type of engine:

2. Describe the propeller fitted to N761GG:

3. What is the max continuous power setting for noise purposes?

4. During takeoff roll, describe the engine indications you are looking for to ensure it is operating properly (and developing full power).

5. If the air filter for the induction system becomes completely blocked, what can you do to ensure the engine continues to operate?

6. What actions will you perform if an engine failure occurs immediately after takeoff?

7. What actions must you perform if an engine fire develops on the ground while starting the engine?

8. With regard to emergency procedures, how do you identify those you must commit to memory?

9. What are the leaning procedures for this airplane?

FUEL AND OIL

Total fuel capacity? Usable fuel?

Which types of fuel are approved?

Where are the drains located and how many are there?

Maximum oil capacity? Minimum (safe) oil level?

Which grade/type of oil is approved for all temperatures?

How many fuel vents are there?

Why is it necessary to ensure that the fuel vents are not blocked?

ELECTRICAL SYSTEM

1. Briefly describe the electrical system.
2. What are the indications of an alternator failure?

3. Why must the avionics master switch remain in the OFF position prior to turning on the master switch, starting the engine, or using an external power source?

4. Other than an alternator failure, when else might the red annunciation of the VOLTS light illuminate? Is this cause for terminating the flight?

5. When might it be necessary to start the engine using an external power source?

GENERAL SYSTEMS

1. Where is the external static port located?
2. What changes in the pitot-static instruments would you expect if you were using the alternate static source?

3. What are some of the indications of an impending brake failure?

4. Where are the brake master cylinders located?

5. To raise the temperature within the cabin, should you pull the CABIN AIR or CABIN HT knob? What is the potential hazard when using this system?

6. When will you use the CARB HEAT control?

7. In the event that smoke starts to inexplicably fill up the cabin while in flight, describe the steps you will take to eliminate/ reduce the smoke.

Pilot's name	**Instructor's name**
Pilot's signature	**Instructor's signature**
Date	**Date**