

Pilot: _____ Licence #: _____

Instructor: _____ Date: _____

Reference: DA20-C1 POH, Dispatch form, and DA20-C1 Aircraft Handling Guide

General:

1. Is this aircraft certified for: ▶ Steep turns more than 60° ? YES / NO ▶ Spins? YES / NO

2. Are aerobatics permitted in this aircraft? ▶ YES / NO

3. What is the primary type of material used in the aircraft's construction?

4. Are flaps required for take-off? ▶ YES / NO

5. How are the rudder pedals adjusted?

6. What chapter of the POH lists the "Minimum Operational Equipment"? _____

Fuel System:

1. What is the total usable fuel capacity? _____

2. What is the correct fuel grade? _____ Colour? _____

3. Where are the drains located? _____

Oil System:

1. What is the minimum oil level? _____ Max level? _____

2. What is the recommended oil? _____ Where does Sea Land Air list this information? _____

Weight and Balance:

1. What is the maximum take-off weight? _____ lbs.

2. What is the maximum landing weight? _____ lbs.

3. What is the basic empty weight of the aircraft to be flown? _____ lbs.

4. What is the weight of full usable fuel? _____ lbs.

5. What is the aircraft useful load? _____ lbs.

6. Determine if the aircraft is within the weight and balance limitations given the following conditions:

Full fuel, front passengers = 360 lbs, baggage = 40 lbs.

▶ YES / NO

Airspeeds:

Use indicated airspeeds.

1. Stall speed in the landing configuration (V_{so})? _____
2. Never exceed speed (V_{ne})? _____
3. Max structural cruising speed (V_{no})? _____
4. Manoeuvring speed (V_a) at max gross weight? _____
Does V_a **increase / decrease** as gross weight decreases?
5. Max flap extended speeds (V_{fe}) for T/O flaps? _____ LDG flaps? _____
6. Normal rotation speed? _____
7. Short field take-off climb speed? _____
8. At what altitude should the flaps be retracted after departure? _____
9. Best rate of climb (V_y) at sea level? _____ flaps @ T/O _____ flaps @ CRUISE
10. Maximum demonstrated crosswind component? _____
11. Short field final approach airspeed? _____ Aircraft configuration? _____
12. Best power off glide speed with flaps CRUISE? _____

Starting Engine:

Describe the procedures for starting this aircraft in cold temperature.

Emergency Procedures:

1. What would you do if the Generator Annunciator illuminated?
2. What actions would you take if you experienced an engine failure during flight?
3. What actions would you take if you noticed high oil temperature?
4. What actions would you take if you noticed low oil pressure while in flight?
5. Describe the "Go Around" procedures.

Aircraft Performance:

1. What is the power setting, fuel consumption and true airspeed for cruising with 70% BHP at 4,000 feet with standard temperature (lean to Best Power)?

RPM _____ TAS _____ Fuel Consumption _____

2. What is the required take-off distance to clear a 50ft obstacle using maximum performance procedures with the aircraft at gross weight and an eight knot headwind under the following conditions:

▶ Sea level, standard temperature? _____ feet

▶ Pressure altitude = 4,000ft, temperature = 32°C? _____ feet

Winter Operations:

1. At what temperature should the baffles be installed? _____ °C **Ground / Air**
2. What is the recommended oil to be used during winter? _____

Aircraft Handling

1. Why is it important to know the current and forecasted temperature during a walk around for DA20-C1?
2. Under what conditions do the inlet baffles need to be removed?
3. You observe "high oil temperature and low oil pressure" in flight with inlet baffles installed. What should you do?
4. Cylinder Head Temperature is indicating lower than 300°F (green range is between 300°F and 420°F) What should you do?
5. When should you release ignition switch from "START" position to start engine?
6. What checklist should you use when starting a Hot Engine?
7. If you prime a hot engine accidentally, what could happen?
8. What should you confirm on Cylinder Head Temperature and oil temperature gauges before takeoff?
9. Why should you plan a power assist approach?

10. What are the three steps to achieve a power assisted approach on final leg?
11. What will happen if you have higher than 55kt for your final approach speed?
12. What method should you use for cross-wind landing?
13. How can you prevent engine stoppage while turning to taxi out from the runway (especially with a tailwind)?
14. What should your mixture setting be while taxing?

Defect Control Procedures:

1. What should you do if you suspect a defect?
2. How do you snag an aircraft?
3. If you have discovered a defect that does not affect the airworthiness of your aircraft, are you allowed to fly the aircraft immediately? Why?

➤ **DA20-C1 Type Exam Completed Satisfactorily**

Flight Instructor's Signature

Date

Pilot's Signature

Date