

Aero Atlanta Flight Center – Cessna 172S Questionnaire

Name: _____ Date: _____

Using the Cessna Pilot Operating Handbook, answer the following questions:

General

Who is the manufacturer of the engine? _____

What is the horsepower rating for the engine? _____ At what RPM? _____

What is the total capacity of the oil sump? _____

What is the total fuel capacity? _____ How much is usable? _____

Limitations

What is the never exceed speed (Vne)? _____

What is the max structural cruising speed (Vno)? _____

What is the max window open speed? _____

What is the maximum flap extended speed for 10 degrees of flaps (Vfe)? _____ for 20 or 30 degrees of flaps? _____

What is the maximum maneuvering speed at 2550 pounds (Va)? _____ at 2200 pounds? _____ at 1900 pounds? _____

What is the normal operating range on the oil pressure gauge? _____

What is the maximum recommended rpm at SL, 5,000 and 10,000 ft? _____

Is the Cessna 172S aircraft approved for acrobatics/spins? _____

List the following weights:

Weights:

Max Ramp: _____ Max Takeoff: _____ Max Landing: _____ Standard Empty: _____

Max Useful: _____ Baggage Area 1: _____ Baggage Area 2: _____

Emergency Procedures

What is the best glide speed for the Cessna 172S (Vg)? _____

If the Low Voltage Annunciator illuminates during flight, what should you do? _____

If the LH Vacuum Annunciator illuminates during flight, what should you do? _____

What is the emergency frequency? _____

What is the emergency squawk code? _____

What airspeed should be used if you encounter an in-flight engine fire? _____

Normal Procedures

What is the speed for the best rate of climb (Vy)? _____

What is the speed for the best angle of climb (Vx)? _____

What is the maximum demonstrated X-wind component for the Cessna 172S? _____

Describe the steps for engine starting under the following conditions:

Cold Start: _____

Hot Start: _____

Flooded Start: _____

Describe the leaning procedures using the EGT for RECOMMENDED LEAN and BEST ECONOMY:

RECOMMENDED LEAN: _____

BEST ECONOMY: _____

The recommended starter duty cycle is _____ seconds of cranking followed by _____ seconds of cool down.

What are the three recommended fuel savings procedures in the POH? (Summary accepted)

1. _____

2. _____

3. _____

What is a recommended step for starting on cold mornings for breaking loose the oil? _____

Performance

Use the following information to answer questions.

Weather conditions

KRYY 101250Z 3320KT 010SCT 15/10 A29.82

- What will be your takeoff distance from McCollum Airport? _____
- What will you have for a crosswind component if RWY 27 is in use? _____
- What will be your calculated KTAS and fuel flow for cruise at 8,000 MSL? _____
- What will you have for landing distance at KRYY? (Landing roll and distance to clear a 50' obstacle)? _____
- What is the aircraft stall speed with the flaps up and a bank angle of 0? _____
- What is the aircraft stall speed with the flaps at 30 degrees and a bank angle of 0? _____

Weight & Balance

Aircraft – C172S
Basic Empty Weight 1,718
Payload

Pilot	170lbs
Front Passenger	160lbs
Rear Passenger	160lbs
Baggage	20lbs
Fuel	318lbs

- What is your ramp weight? _____
- What is your aircraft's zero fuel weight? _____
- What will be you're aircraft's gross takeoff weight? _____
- How much fuel will you have on board in gal and lbs before takeoff? _____
- Will you're aircraft be within CG limits? _____

Systems

- What condition will cause the oil pressure annunciator light to illuminate? _____
- What is the minimum amount of oil that is recommended in the crankcase? _____
- What two conditions cause the LOW FUEL annunciator light to illuminate? _____
- How many fuel drain valves are there and where are they located? _____
- What is the voltage of the electrical system? _____ What is the voltage of the battery? _____
- What condition will cause the low voltage light to illuminate? _____
- What causes the ALT FLD circuit breaker to open? _____
- When does the annunciator panel indicate a low vacuum indicator light? _____
- How many vacuum pumps are there? _____

Handling, Service & Maintenance

- What tire pressure should be maintained in the nose tire and main tires respectively? _____
- What should you never use to clean the windshield and windows on the aircraft? _____
- What should you use in lieu of windshield cleaner? _____