

| |
|------------|
| Name _____ |
| Date _____ |

AIRCRAFT FAMILIARIZATION

Note: If this information is not provided in the aircraft's flight manual give it your best guess.
Some questions may not apply to the aircraft you are flying.

Make _____ Model _____

Note: all questions, unless otherwise specified, reference this airport's elevation and standard conditions

SPEEDS: KTS / MPH / CAS?

V_{SO} _____

V_S _____

V_{S1} _____

V_R _____

V_X _____

V_Y _____

V glide _____

V_{FE} _____

V_A (gross wt) _____

V_{NO} _____

V_{NE} _____

V_H _____

| Airspeed Limitations | |
|----------------------|-------|
| White Arc | _____ |
| Green Arc | _____ |
| Yellow Arc | _____ |
| Red Line | _____ |

| Traffic Pattern Reference | |
|--------------------------------|-------------------|
| Airspeeds | |
| Downwind | _____ @ _____ RPM |
| Abeam the #'s | _____ |
| Base | _____ |
| Final Approach without flaps | _____ |
| Final approach with full flaps | _____ |

How far will this aircraft glide if you are 3000' AGL? _____

What is the minimum sink rate speed?

How does Min. Sink rate differ from best glide speed?

What is the stall speed in a 60-degree bank with no flaps? _____

What is the approach to landing speed with no flaps? _____

What is the approach to landing speed with full flaps? _____

What is the maximum demonstrated crosswind component? _____

Note: If this information is not provided in the aircraft's flight manual give it your best guess.

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AIRCRAFT WEIGHT & BALANCE

What is the aircraft's basic empty weight? _____

What is the maximum weight (payload) you can carry in the aircraft assuming full fuel?

What is the aircraft's maximum takeoff weight? _____

Is there a minimum cockpit weight? _____ If so, what is it? _____

What is the maximum allowable weight the aircraft can carry in its baggage compartment? _____

Please complete the following weight and balance problem:

- Yourself and a 190-pound passenger in the front seats.
- One 180-pound passenger in the rear seat (*if more than 2 place aircraft*)
- 15 pounds in baggage compartment.
- Full Fuel

What is the total weight? _____

What is the center of gravity? _____

Is the weight and balance within the C.G. envelope? _____

List some of the flight and performance characteristics this C.G. location would exhibit:

GENERAL AIRCRAFT INFORMATION

Is the propeller fixed pitch or variable pitch? _____

What engine model is in the aircraft? _____

What is the horsepower output of the engine? _____. At what RPM? _____

Is the fuel induction system carbureted or fuel injected? _____

What are the proper tire pressures?

Mains: Left and Right _____ Nose Gear _____

What is the proper cold engine start procedure? _____

What is the proper hot start or flooded start procedure? _____

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FUEL / OIL /AND/OR COOLANT

What is the grade of fuel used? _____ The color? _____

Is there an approved alternate fuel? _____ If so what is the color? _____

List the location, and capacity of fuel tank(s):

| | Location | Total Gallons | Usable Gallons |
|--------------|----------|---------------|----------------|
| Main tank(s) | _____ | _____ | _____ |
| Other | _____ | _____ | _____ |

How many fuel sumps are there? _____ Where are they located? _____

What type of Oil should be used used? _____ or _____

What is the minimum and maximum oil level for the aircraft's engine?

Min _____ Max _____

What is the Minimum Oil Temp for run-up and flight? _____ (Rotax)

If coolant is used, is it 100% Glyco or a 50/50 water/glyco mix? _____ (Rotax)

Where is the information on which coolant mix is in use kept? (Rotax)

What is Maximum coolant temp? _____ (Rotax)

PERFORMANCE PLANNING *Note: If information is not provided in aircraft's flight manual give it your best guess.*

What is the TAS at 5,000 ft PA and 65% power? _____

What RPM or combination of RPM and Manifold Pressure yields 75% power at 7500' PA, standard conditions? RPM? _____ MP? _____

What is the fuel burn per hour at 75% power, 5000 PA, standard conditions? _____

Using: **OAT 85F, PA 7500, max gross weight, 5 knots headwind, level/hard runway**

answer the following questions:

What is the takeoff ground roll? _____

What is the total takeoff distance to clear a 50' obstacle? _____

What is the climb performance? _____

What is the landing ground roll? _____

What is the total distance to land over a 50' obstacle? _____

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DENSITY ALTITUDE PERFORMANCE PLANNING

What is the density altitude at Creswell using today's current conditions? _____

What would the density altitude be for the Sun River Airport if the temperature was 20C and the pressure was 30.5 HG? _____

Would high humidity and temperature increase or decrease density altitude? _____

Traffic Pattern Procedures and Speeds: Using the runway diagram below, indicate the traffic pattern altitude at Creswell and the airspeeds/power/flap settings, for downwind, base, and final approach.

TPA:

Downwind airspeed _____ @ _____ RPM
Airspeed on Base _____
Final Approach without flaps _____
Final approach with full flaps _____

OTHER AIRCRAFT NOTES AND STC'S (THESES WILL BE DISCUSSED DURING YOUR CHECK-OUT)

| |
|------------------------------|
| Pilot's signature _____ |
| Instructor's signature _____ |

Name _____

Date _____

C-172D Skyhawk N6163M

Horsepower: 145 Gross Weight: 2300 lbs

Empty Weight: 1423.7 lbs

Empty Wt. CG: 37.90

Cruise Speed: 119 MPH

Fuel Capacity: 39 gal / Useable Fuel 36 gal

Stall Speed (dirty): 49 MPH 40 degrees of flaps

Stall Speed (clean) 57 MPH

Takeoff rotation speed: 60 MPH

Over 50 ft obstacle (sea level): 1525 ft

Rate Of Climb: 500 - 600 fpm

C-172D Skyhawk N3713F

Horsepower: 145 Gross Weight: 2300 lbs

Empty Weight: 1375.90 lbs

Cruise Speed: 119 MPH

Fuel Capacity: 39 gal / Useable Fuel 36 gal

V_{s0} Stall Speed (40 degree flaps): 49 MPH 40 degrees of flaps

Stall Speed (clean) 57 MPH

V_r Takeoff rotation speed: 60 MPH

Over 50 ft obstacle (sea level): 1525 ft

Rate Of Climb: 500 - 600 fpm

Ikarus C42E N420MS and N162DH (S-LSA)

Rotax 912ULS Engine

Maximum Take Off Weight 1144 lbs

Empty Wt. 615 lb (OMS)

Fuel consumption. 4.5 gals/hr at 4500 rpm

Climb 800 fpm

Vs 45 kts

Best Glide 58kts /11:1 ratio

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