Aircraft Checkout Written Test: Vans RV-12

CHI Aerospace

Pilot Name: _____ Date: _____

Instructor: _____

I - Airspeeds (KIAS)

VS0 _____ VS1 _____ VR _____ VX _____ VY _____ VGLIDE _____

VA _____ VFE _____ VNO _____ VNE _____

Short Field VR: _____ Max Allowable Short Field Flap setting: _____

Soft Field VR: _____ Max Allowable Soft Field Flap setting: _____

Cruise Climb Speed: _____

Approach Speed: _____

Short Field Approach Speed: _____

II - Fuel and Oil

Total Fuel: _____ Gallons _____lbs

Unusable Fuel in Level Flight: _____ Gallons
Unusable fuel in V_X Climb: _____ Gallons
Unusable fuel in Climbs: _____ Gallons

What are the approved fuel grades for the aircraft?

How many fuel sumps are there on the aircraft?

Why is there unusable fuel?

What is the max fuel burn for the aircraft?

What are the minimum reserve fuel requirements for day and night?

Day:

Night:

How would you monitor your fuel burn?

The engine has an oil capacity of _____ quarts, and _____ quarts are considered the minimum for normal flight per the POH.

What would be the minimum oil level you would fly with and why?

Minimum allowable oil pressure is _____ psi; Maximum allowable oil pressure is _____ psi.

You check the oil and it's a bit low. What type of oil would you add? _____

III - Weight and Balance

Maximum Ramp Weight: _____ lbs

Maximum Take-Off Weight (MTOW): _____ lbs

Maximum Baggage Weight: _____ lbs

Weight of Useable Fuel: _____ lbs

Weight of Oil: _____ lbs per quart

Max Forward CG at MTOW: _____ inches

Max Aft CG at MTOW: _____ inches

What is the definition of licensed empty weight?

What is the definition of Basic empty weight?

What is the definition of useful load?

What is the definition of payload?

IV - Aircraft Systems

How is fuel supplied to the engine?

Does the airplane have an electric fuel pump?

Is the aircraft carbureted or fuel injected?

What is the cold start procedure for this aircraft ?

What is the warm start procedure for this aircraft?

Describe the engine. Make, model, cylinders, etc...

What is the Max Engine Power and at what RPM? How long can you remain at Max Engine Power?

Generator voltage is _____ volts

Battery voltage is _____ volts

The output of the generator is maintained at _____ volts by the _____

How is the generator checked during the engine run-up before takeoff?

What would alert you to a generator failure?

Where is the static port located? How many are there and where are they located?

What type of landing gear system is on the aircraft?

What type of flaps does the aircraft have?

Flap setting for short-field takeoff (detent): _____

Flap setting for soft-field takeoff (detent): _____

V - Emergency Procedures

What is the correct spin recovery procedure for the aircraft?

What is the proper procedure for remedying engine roughness and/or power loss in flight?

What is the emergency procedure for engine loss during cruise flight?

What are the corrective actions taken when there is an excessive rate of charge on the ammeter?

What are the corrective actions taken when there is an excessive rate of discharge on the ammeter?

What action should the pilot take in the event of an engine fire during engine start?

What action should the pilot take in the event of an engine fire during flight?

What is the procedure for a balked landing (go-around)?

Is a go-around considered an emergency procedure? If so, why?

VI - Performance & Weight and Balance Computations

CFI weight: _____ lbs

Pilot's weight: _____ lbs

Fuel: _____ gallons = _____ lbs

Baggage: _____ lbs

Weight and Balance Computation:

Total weight: _____ lbs

Total moment: _____ in-lbs

Where is the center of gravity? _____ Does it fall within the CG envelope? _____

Using the following conditions, compute the takeoff and landing distance over a 50 ft obstacle:
Today's temperature: _____°C
Surface wind: _____ degrees at _____ knots
Altimeter setting: _____ in Hg
Pressure altitude: _____ feet
Density altitude: _____ feet

Takeoff distance over a 50' obstacle: _____ feet

Landing Distance over a 50' obstacle: _____ feet

Instructor Signature: _____

Pilot Signature: _____

Date: _____