Aircraft Checkout Written Test: Van's RV-12is

CHI Aerospace - REV01 APR2022

Pilot Name: _____ Date: _____

Instructor: _____

I - Airspeeds (KIAS)

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

VA _____ VFE _____ VNO _____ VNE _____

Normal T/O VR:_____

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

Total Usable Fuel: _____ Gallons _____lbs

Total Unusable Fuel: _____ Gallons _____lbs

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 and how many?

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 engine horsepower and at what RPM?

How many alternators are there?

Alternator voltage is _____ volts, and current is _____ amps.

Battery voltage is _____ volts, and capacity is _____amp-hours.

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

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

What would alert you to an alternator failure?

How many batteries are there?

Where is the main battery located?

Where is the static port located? Is there more than one? If so, how many and where are they?

What type of landing gear system is on the aircraft?

What type of flaps does the aircraft have?

Flap setting for normal takeoff: _____

Flap setting for short-field takeoff: _____

Flap setting for soft-field takeoff: _____

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 (including initial response, field selection, troubleshooting, communication, and forced landing)?

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

ITEM	ARM (in limits 80.49-85.39)	WEIGHT (LBS)	MOMENT (IN-LB)
Empty Weight			
Pilot	78.85		
Passenger	78.85		
Baggage	114.42		
Fuel	100.83		
Takeoff Weight & Moment			

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

Takeoff distance over a 50' obstacle: _____ feet

Landing Distance over a 50' obstacle: _____ feet

Per CHI policy, what are the runway minimums for this aircraft?

Length: _____

Surface: _____

TEST HAS BEEN REVIEWED AND CORRECTED TO 100% WITH A CHI CFI:

Instructor Signature: _____ Date: _____

Pilot Signature: _____ Date: _____