

RV-3B

Rev. 10/06/2010 Copyright © M. Kletzenbauer To-do:

- Collect final fuel consumption data for 55%/65%/75% power @ 8,000', 50 degrees LOP, enter in tables
- Extrapolate range data, enter in tables
- Collect rate of climb data, enter in table
- Finish power table, replace rule-of-48 table?

• ?

Table of contents

General Information	1
Specifications	2
Performance	3
Operating Speeds – MPH Operating Speeds – KNOTS	
Fuel consumption & range	5 6
Weight & Balance	7
W&B Worksheet Sample scenarios	8 8
Procedures	10
Normal Procedures	10
EMERGENCY PROCEDURES	13
Systems & Descriptions	15
Engine Operation Power Chart	15 16
Engine Start Procedures	17
Mixture management	18
Fuel system	
Electrical system	20
Ouick Peterongo Operating Instructions	41 20
Maintenance	23
Engine Information	23
Maintenance schedule	24
Propeller maintenance	32
Supplements	
List of manuals	33
Conversion Reference	
General info	
Computing descent point DISTANCE:	33 33

General Information

This aircraft is has been certificated with the FAA in the Experimental – Amateur Built category. This Pilot's Operating Handbook (POH) has been written for this aircraft specifically and should be considered an integral part of its operation.

This handbook, while believed to be complete and accurate at the time of publication, may not contain ALL of the information needed to safely operate the aircraft described. By virtue of its Experimental – Amateur Built status, all persons using this aircraft do so at their own risk.

Manual Revision Date:	10/06/2010
Kit Manufacturer/Model:	Van's Aircraft RV-3 B
Kit Serial Number:	10405
Aircraft Serial Number:	10405
Aircraft Registration:	PH-KLT
FAA identifier:	XXXXX
Airworthiness cert. date:	XXXXX
First flight:	XXXXX
Builder:	Mathias Kletzenbauer

Specifications

Dimensions	
Span:	19'11" 6.12m
Length:	19' 5.85m
Height:	5' 1.54m
Wing area:	90 sq.ft. 8.36m ²
Empty weight:	750 lbs 340 Kg
Gross weight (Utility Category):	1,300 lbs 590 Kg
Gross weight (Aerobatic):	1,100 lbs 500 Kg
Useful load:	550 lbs 250 Kg
Useful load, full fuel:	345 lbs 156.5 Kg
Baggage capacity, AFT:	50 lbs 22.6 Kg
Wing loading (Pounds/ Sq. Ft):	14.4 lbs/sq.ft. 70.57 kg/m²
Power loading (Pounds/ HP):	8.1 lbs/sq.ft. 3.93 kg/Ps.
Fuel	
Capacity, wing tanks	15 US gal. each / 56.7 Liter
Total Fuel	30 US gal. each / 113.4 Liter
Usable Fuel	14.5 gal. per wing tank
Туре:	80/87 OCT.
Engine	
Туре:	Lycoming O-320 C3B
Horsopowor	1001
	150 np
Max RPM:	2,700 RPM
Max RPM: Oil capacity:	2,700 RPM 8 qts
Max RPM: Oil capacity: Propeller	2,700 RPM 8 qts

Performance

Speed (TAS)	
Maximum at Sea Level	220 mph (190) kts
Cruise, 75% Power at 8,000 Ft	213 mph (185 kts)
Cruise, 55% Power at 8,000 Ft	182 mph (158 kts)
Gross weight:	
Stall speed (Vso)	60 mph (52 kts)
Stall speed (clean)	64 mph (55 kts)
Solo/light:	
Stall speed (Vso)	58 mph (50 kts)
Stall speed (clean)	62 mph (53 kts)
Range @ 8,000', 30 min. reserve	
75% power	595 sm (520 nm)
65% power	655 sm (569 nm)
55% power	715 sm (621 nm)
Rate of climb at sea level	
Gross weight	2,500 fpm
Service ceiling	
Gross weight:	23,500 ft
Takeoff distance (sea level)	
Gross weight:	400 ft
Landing distance (sea level)	
Gross weight:	400 ft

Operating Speeds – MPH

	Speed	mph IAS
Vne	Never Exceed	230 mph
Vno	Maximum Structural Cruising	193 mph
Va	Maneuvering	142 mph
Vfe	Maximum Flap Extended	$110 \text{ mph} - 20^{\circ}$
		100 mph – Full
Vy	Best Rate of Climb	125 mph
٧x	Best Angle of Climb	85 mph
Vs	Stall Speed Clean	62 mph
Vso	Stall Speed w/flaps	56 mph
Vbg	Best Glide	85 mph

Operating Speeds – KNOTS

	Speed	kts IAS
Vne	Never Exceed	200 kts
Vno	Maximum Structural Cruising	168 kts
Va	Maneuvering	124 kts
Vfe	Maximum Flap Extended	96 kts – 20°
		87 kts – Full
Vy	Best Rate of Climb	107 kts
Vx	Best Angle of Climb	73 kts
Vs	Stall Speed Clean	53 kts
Vso	Stall Speed w/flaps	49 kts
Vbg	Best Glide	73 kts

Aerobatic information

This aircraft has been approved for aerobatic flight maneuvers as provided in its FAA Operating Limitations. It is restricted to positive G maneuvers due to fuel and oil systems. Aerobatic maneuvers are only approved when operating within the aircraft's specific weight and balance parameters for aerobatic flight. When performing aerobatic maneuvers compliance with all applicable FARs should be observed.

Aerobatic Weight & CG Limitation

Aerobatic maneuvers generating more than 4.4 Gs must be flown with gross weight not exceeding 1050 lbs. (plus fuel, total weight not to exceed aircraft gross weight of 1,300 lbs) and C.G. not aft of 64.58".

Maneuver	Entry speed IAS
Aileron roll, Barrel roll	130 – 200 mph
Wingover, Chandelle	140 – 200 mph
Loops, Horizontal eights	160 – 200 mph
Immelman	160 – 200 mph
Split-S	90 – 110 mph

NOTE: Because of high ratio of top speed to stall speed and maneuvering speed relative to other aircraft, this aircraft is more susceptible to pilot induced overstresses than most other contemporary aerobatic airplanes. THE PILOT CAN THEREFORE EASILY IMPOSE DESTRUCTIVE LOADS ON THE AIRFRAME ABOVE THE RELATIVELY LOW MANUEVRING SPEED. NOTE LIMITATIONS, EXERT CAUTION, AND FLY ACCORDINGLY.

Fuel consumption & range

Fuel consumption can be minimized and efficiency improved via leaning techniques and reduced power settings.

8000' MSL				
Power	MAPxRPM	Mixture	Burn	Speed
75%	24x2400	75° LOP	7.8 gph	202 mph TAS
65%	22.5x2250	75° LOP	6.6 gph	193 mph TAS
55%	20.5x2050	75° LOP	5.2 gph	175 mph TAS

Weight & Balance

This aircraft's documentation includes a separate **Weight & Balance Data** sheet that must be kept in the aircraft at all times and is part of the documentation upon which its Airworthiness Certificate is conditioned. Information presented below should always be superceded by the FAA-approved **Weight & Balance Data** sheet onboard the aircraft.

Weights & Limits Summary	
Empty weight:	750 lbs
Gross weight (Normal Category):	1,300 lbs
Gross weight (Aerobatic Category):	1,100 lbs
Maximum useful load:	550 lbs
Maximum useful load with full fuel:	374 lbs
Baggage capacity (aft):	50 lbs
Forward CG limit:	59.72" aft of datum
Aft CG limit:	64.58" aft of datum
Aerobatic aft CG limit:	64.58" aft of datum



W&B Worksheet

Aircraft empty weight includes .5 gallons unusable fuel and 8 qts. oil. The following table may be used to compute W&B data for each flight.

	Weight	Arm	Moment
Empty aircraft:	741,2	55,74	41314,48
Fuel (29.4 gal.):		58.5	
Pilot:		81.0	
Aft baggage shelf:		112.5	
Total:			
CG:			

Sample scenarios

LIGHT - TAKEOFF			
	Weight	Arm	Moment
Empty aircraft:	741.2	55,74	41,314.48
Fuel (29.4 gal.):	176.4	58.50	10,319.40
Pilot:	220.0	81.00	17,820.00
Aft baggage:	0.0	112.50	0
Total:	1,137.6		69,453.88
CG:	61.05		

LIGHT - LANDING			
	Weight	Arm	Moment
Empty aircraft:	741.2	55.74	41,314.48
Fuel (5 gal.):	30.0	58.50	1,755.00
Pilot:	220.0	81.00	17.820.00
Aft baggage:	0.0	112.50	0
Total:	991.0		60.889,48
CG:	61.43		

GROSS WEIGHT - TAKEOFF			
	Weight	Arm	Moment
Empty aircraft:	741.2	55.74	41.314,48
Fuel (29.4 gal.):	176.4	58.50	10,319.40
Pilot:	220.0	81.00	17.820.00
Aft baggage:	60.0	112.50	6,750.00
Total:	1.197,6		76.203,88
CG:	63.63		

GROSS WEIGHT - LANDING (most aft C.G.)			ft C.G.)
	Weight	Arm	Moment
Empty aircraft:	741,2	55.74	41.314,48
Fuel (5 gal.):	30.0	58.50	1.755,00
Pilot:	220.0	81.00	17.820,00
Aft baggage:	60.0	112.50	6,750.00
Total:	1.051,0		67.639,48
CG:	64.35		

Smoke oil CG			
	Weight	Arm	Moment
Empty aircraft:	741,2	55.74	41.314,48
Fuel (29.4 gal.):	176.4	58.50	10,319,40
Pilot:	220.0	81.00	17.820,00
Aft baggage:	0.0	112.50	0.00
Smoke tank:	11.0	112.50	1,237,50
Smoke fuel:	30.0	112.50	3.375,00
Total:	1.181,6		74.066,38
CG:	62,68		

AEROBATIC WEIGHT & C.G. LIMITS

Aerobatic maneuvers generating more than +4.4 Gs must be flown with gross weight not exceeding 1100 lbs. (plus fuel, total weight not to exceed aircraft gross weight of 1,300 lbs) and C.G. not aft of 64.58".

Procedures

Normal Procedures

PREFLIGHT

- Control surfaces SECURE
- Tires CHECK PRESSURE (31 psi/ 2.14 bar)
- Fuel levels CHECKED
- Fuel drains SUMPED
- Engine oil 5 QTS MIN.
- Pitot tube COVER REMOVED
- Cowling SECURE
- Oil door SECURE

START

- Breakers ALL IN
- Switches ALL OFF
- Lights ALL OFF
- Fuel selector RIGHT/LEFT
- Mixture FULL RICH
- Throttle 1" OPEN
- Master switch ON
- Boost pump APPROPRIATE
- Brakes SET
- Propeller area CLEAR
- START
- Oil pressure POSITIVE
- Avionics master ON
- Lights AS NEEDED

PRE-TAKEOFF

- Seat belts FASTENED
- Canopy LATCHED
- Brakes SET
- Engine run-up 1,800 rpm
 - ➢ L /R magnetos CHECK
 - > Prop CYCLE
 - > Fuel pressure CHECK
 - Oil pres/temp CHECK
 - Voltage CHECK 14V
 - > Fuel tank SELECT
- Avionics:
 - COM FREQ SET
 - > ALTIMETER SET
 - ➢ GPS − WAYPOINT SET
- Strobes ON
- Mixture FULL RICH
 - (or set for density altitude)
- Trim SET TAKEOFF
- Flaps AS NEEDED
- Flight controls FREE
- Boost pump ON

CLIMBOUT

- Flaps UP
- Boost pump OFF
- Power reduction
- Maintain >120 mph IAS
- Monitor CHTs

CRUISE

- Prop 2,200-2,600 rpm
- Lean to 50-75° LOP

PRE-LANDING

- Seat belts FASTENED
- Fuel selector RIGHT/LEFT
- Mixture FULL RICH
- Boost pump ON

LANDING SEQUENCE

• Pattern entry – 120 mph

Abeam numbers

- Pull power, slow to 100 mph
- Extend Flaps
- Power to 14"
- Trim for 90 mph
- Base 85 mph
- Final 80 mph, power as needed
- Over fence 75 mph
- Roundout 65-70 mph
- Boost pump OFF
- Flaps RETRACT
- Trim NEUTRAL

SHUTDOWN

- Lights/Strobes OFF
- Flaps EXTENDED?
- Mixture IDLE CUTOFF
- Avionics OFF
- Master OFF
- Ignition switch OFF
- Hobbs RECORD

EMERGENCY PROCEDURES

- **AVIATE** Establish best glide 85 mph
- NAVIGATE Select landing area
- **COMMUNICATE** Contact ATC or 121.5
- ACTIVATE PLB if appropriate

AIRSPEEDS

- Best glide 85 MPH
- Normal approach 80 MPH
- Short/soft field 70 MPH

ENGINE OUT

- CHECK:
 - > Mixture
 - > Fuel selector
 - > Boost pump
 - > Ignition switch
- Activate PLB
- Shut down fuel supply and electrical

ATC

IMMEDIATE URGENT	A situation is imminent Action is needed, priority over other aircraft
EMERGENCY	Absolute priority
TRANSPONDER	
Emergency	7700

Emergency	7
Lost	

Lost	7600
communication	
Hijack	7500

LIGHT SIGNALS

Green	CLEARED TO LAND
Red	CIRCLE
Flashing Red	UNSAFE

AIRSPEEDS FOR EMERGENCY OPERATIONS

90 mph
80 mph
142 mph
85 mph

Systems & Descriptions

Engine Operation

For full information on engine operation, maintenance, and troubleshooting see "Operators Manual, Lycoming Aircraft Engines, O-320 Series",

Oil pressure:	55-95 psi cruise
	25 psi idling.
Oil temperature:	Maintain between 180° - 245° F.
Cylinder head	Maximum temp 500°. For
temperature:	maximum service life maintain
	below 435° F during high-
	performance climb operation and
	400° F during continuous
	operation.

Normal Lycoming power charts based on altitude cannot be used with RV aircraft built using Van's Filtered Airbox (FAB) due to the ram-air effect and efficiency of the intake design. Consequently the following power chart may be used to approximate percent engine power based on a combination of manifold pressure and engine speed.

Power Chart

Formula: MAP + RPM/100 = X

X = 48 = 75%

X = 45 = 65%

X = 42 = 55%

MAP	RPM	POWER
24"	2300	72%
23"	2300	69%
22"	2300	65%
21"	2300	62%
20"	2300	59%
19"	2300	55%
18"	2300	53%
17"	2300	

MAP	RPM	POWER
24"	2400	75%
23"	2400	72%
22"	2400	69%
21"	2400	65%
20"	2400	62%
19"	2400	59%
18"	2400	55%
17"	2400	53%

MAP	RPM	POWER
24"	2500	79%
23"	2500	75%
22"	2500	72%
21"	2500	69%
20"	2500	65%
19"	2500	62%
18"	2500	59%
17"	2500	55%

Engine Start Procedures

COLD:

- Throttle closed, mixture to "Full Rich"
- Boost pump 2 to 4 seconds
- Throttle cracked, mixture "Full Rich"
- Ignition ON
- Engage starter, when engine starts:
 - Adjust throttle for proper idle
 - Check for oil pressure

WARM (shut down more than a few minutes):

- Throttle closed, mixture to "Full Rich"
- Boost pump on 1-2 seconds
- Throttle cracked, mixture to "Idle Cut-Off"
- Ignition ON
- Engage starter, when engine starts:
 - o Move mixture control smoothly to "Full Rich"
 - o Adjust throttle to proper idle

HOT (shut down within a few minutes):

- Throttle cracked, mixture to "Idle Cut-Off"
- Ignition ON
- Engage starter, when engine starts:
 - Move mixture control smoothly to "Full Rich"
 - Adjust throttle to proper idle

HOT (when/if flooded):

- Throttle wide open, move mixture control to "Full Rich" return throttle to "Closed" and return mixture control to "Idle Cut-Off".
- Throttle cracked.
- Ignition ON
- Engage starter, when engine starts:
 - o Move mixture control smoothly to "Full Rich"
 - Adjust throttle to proper idle

Mixture management

To prolong engine life, avoid detonation, and operate at maximum efficiency, the following mixture management guidelines should be followed:

- Never operate leaner than 100° ROP when above 75% power (exact EGT will vary with altitude and humidity)
- Avoid operation at peak EGT, always ROP or LOP
- Operate LOP only below 75% power

Peak EGT:	Stoichometric combustion, maximum combustion chamber pressures, <i>avoid</i> when over 75% power.
Best power:	100° ROP (fastest flame front)
Best	50-75° LOP (slower flame front).
economy:	Operate LOP only below 75% power

Fuel system

Fuel is contained in two wet wing tanks of 14.7 US gallons each of which 14.5 each is usable. Fuel is drawn from the tanks to the fuel selector valve where either the LEFT or RIGHT tank can be selected. From the fuel selector valve fuel is fed to the engine via one elektric pump configured in line and an engine driven pump. The engine driven pump functions at all times, the auxiliary pump is switched on for priming, take-offs and landings, and combating vapor in fuel lines in high ambient temp conditions. The pumps are redundant so that the aircraft can be flown in an emergency with either pump not functioning.

The fuel pump and filter are from Airflow Performance. The fuel filter can be replaced with a Carter P74015 if the AFP unit is not available. The aircraft is equipped with a Marvel-Schebler carburater.

Fuel instrumentation

Fuel quantity is shown via a single Van's Aircraft Fuelgauge with a rockeswitch below to see Left or Right Fuel tank quantity.



Fuel quantity can also be verified with the aircraft's calibrated fuel tank dip stick.



Electrical system

The electrical system is 12 volt DC and conventional in basic configuration with a modern recombinant gas battery and engine driven alternator.. All major devices are on separate circuits, as are most instruments, to provide excellent fault tolerance and easy troubleshooting. Single point ground architecture has been employed for the same reasons and also to reduce the possibility of system noise.

Fuse blocks

Most electrical items are supplied power and fused via two ATO / ATC standard 1/4" blade type fuse blocks located just behind the panel on the right side of the cockpit.

Main	fuse	block:
------	------	--------

15A	10A	10A
Boost fuel	Lights	Aux power plug
pump		

Avionics fuse block:

2A	2A	2A
(spare fuse)	(spare fuse)	GPS
3A	3 A	
Transponder	Com radio	

Avionics

All avionics are supplied 12 volts DC via the panel mounted avionics master breaker/switch that in turn energizes the Avionics fuse block indicated above.

Lighting

Personal Locator Beacon

Quick Reference Operating Instructions

Maintenance

Engine Information

Aero Spo	ort Power	O-320 C3B
(Superio	r/Lycoming)	
Compres	ssion ratio:	7.0-1
Oil press	ure:	25-95 psi
Oil Sump	Capacity:	8 US quarts
Minimum	ı safe quantity in	2 US quarts
sump:		
Recomm	ended add point:	5 US quarts
Recomm	ended oils:	
	Average	MIS-L-22851
	Ambient	Ashless Dispersant
	temperature	Grades
	All temperatures	SAE 15W50, 20W50
	Above 80° F.	SAE 60
	Above 60° F.	SAE 50
	30° F to 90° F.	SAE 40
	0° F. to 70° F.	SAE 20
Oil filter:		Champion CH48108-1
Idle spee	ed:	650 rpm
Spark Plu	ıgs:	Unison UREM37BY
		Champion REM37BY
Gap:		.016022"
Torque:	Torque: 420 in-lb.	
Lead nut torque: 80-90		80-90 in-lb.
Alternator belt:		Gates #7355 or equivalent,
		3/8" x 35.5"
Ν	OTE: Dipstick is cali	brated with filter, cooler full.

Maintenance schedule

Contents:	Section	Page
Checklist for 25Std, 50Std and co	ntrol 100Std	
Engine and fuel system	1	25-26
Fuselage and cabin	2	27
Wing structure	3	27
Controls	4	28
Suspension	5	29
Equipment	6	30
Grease	7	31
Final	8	31

Here, the maintenance records are to be observed by built-in components, This applies in particular to: Engine (Lycoming O320 C3B) Brake System (Cleveland, various components) Important note:

"The life of the aircraft is provisionally estimated at 20 years or 3000 Hours, calculated limits (see data sheet). On reaching the first Limit is part of a comprehensive review on the basis Framework Programme for a further decide to use. " This standard formulation, as appropriate, eg in accordance with building regulations proven life time, up or lower.

Issue 1 / 2010-10-15

Checklist for 25Std, 50Std 100Std (100 Houres=Anualy)

Checklist control of hou	rs; date 25 h !	e 50 h	loo h
 Engine and Fuel system 1.1 Motor warmup to oil temperature of 40 ° Drain engine oil and check for foreign objects 		x	X
1.2 Oil filter removal, cutting, for foreign bodies under Seeking and use new filter		x	x
1.3 Oil drain bolt insert and new Oil Fillup		Х	х
1.4 lubricant lines to state, in particular Chafing and tight control connections	x	X	x
1.5 oil cooler on the seat and leaks	Х	х	Х
 1.6 Motor Block Hard seat, state, and in particular the formation of cracks and density of housing and connections 	X	x	x
1.7 cylinder and paint condition check, check the cooling fins	x	х	x
1.8 Engine mounts Tightness, cracks, tightening torques and Corrosion test	x	X	x
1.9 engine mounts (shock mounts) on Hard seat, safety and condition	x	X	x
1:10 fire wall cracks, condition rivet connection and condition of the bushings checked	x	х	x
1:11 exhaust system for tightness, cracks, and burn-through-Check symptoms, leaking exhaust gaskets, Check condition of suspension	i X	x	x
1:12 heat exchangers are tight, tightness and Condition, air hoses check, replace if necessary	x	х	x
1:13 Intakesystem for tightness, leaks and Cracking test	x	х	x
1:14 Clean air filter and replace if necessary	х	х	х

RV-3 B

Pilot's Operating Handbook			RV-3 B
	25 h	ι 50 h	loo h
1:15 compression test			Х
1:16 baffles on the seat, chafing, Cracking and condition of the seals examined	X	x	x
1:17 clean spark plugs, ceramic parts and Connections to the integrity and corrosion		x	х
1:18 Setting the electrode gap (0.4 - 0.5 mm) Renew if necessary		x	x
1:19 Install spark plugs 1:20 (tightening torque 40 Nm))	Х	х
1:20 Ignition condition and state of Check bushings	x	х	x
1:21 magnetos on state (housing plans, Traces of oil) examine	X	x	x
1:22 Setting the ignition timing 25 v OT		Х	Х
1:24 check valve rocker and feathers		Х	Х
1:25 starter for wear and tightness test	х	Х	х
1:26 ring gear and pinion for wear	х	Х	х
1:27 Check condition of generator	х	Х	х
1:28 V-belt tension and condition	х	Х	х
1:29 propeller for damage control Defects in painting	X	x	x
1:30 Propeller runout		х	х
1:31 spinner for wear and tightness test	х	х	Х
1:32 fuel hoses for condition and leaks	х	х	х
1:33 fuel filter (inside)	х	х	х
1:34 carburetor and solid state cultivation Check	х	Х	х
1:35 carburetor ports Control	х	х	х
1:36 fuel pump for wear and tightness test	х	х	х

Pilot's Operating Handbook		RV	-3 B
	25 h	. 50 h	loo h
2. fuselage and cabin			
2.1 planking on state		v	v
2.2 mainting		л	л
2.2 painting and lettering control if necessary, repair		x	x
2.2 furniture nuts and holts of the fuselose ports			
of wing, tail, engine mount on state			
Seating and corrosion			Х
2.4 Check the inside hull coating / corrosion protect	ion		
if necessary, repair			Х
2.5 Control of the cavities under the seats and			
look for foreign body's, dirt, the permeability			v
of the drainage holes			X
6.2 canopy on condition and cleanliness Check	Х	х	Х
2.7 Functions of the locking mechanism check	Х	Х	Х
2.8 hoses for leaks		Х	Х
3. Wing Structure			
3.1 planking for dents, cracks and state	v	v	77
Check the riveting	X	X	X
3.2 painting and lettering control		37	v
ii fiecessary, repair		A	Λ
3.3 wingtips for condition, fit and cracking	Х	Х	Х
3.4 wings connect to the main bulkhead			
State of the connection boards, state and Check the seat bolt			x
			v
3.5 Rear wing itting seat and check condition			л
3.6 flaps planking check for dents, cracks,	v	v	v
	л	л	л
3.7 flap hinges on state seat	v	v	v
	21	21	21
o.o nap lever for cracks, seat and Game of the bolts and joints examine		x	x
2 9 Flan Charle drive for attachment		v	v
		 Pac	 ie 27

Pilot's Operating Handbook		R	RV-3 B
	25 h	50 h l	oo h
 4. Controls 4.1 tail surfaces, rudders and flaps on Stone chips, cracks, deformation and loose Riveting check 	x	x	x
4.2 Touch up paint if necessary		х	X
4.3 tightly fitted to the spar fittings on the Fuselage check			X
4.4 Control system well running, game Rowing and trim to consider while doing on friction the oars, bumpers and ropes	on X	x	x
4.5 Control Stick seat, control for play Check bolts on seat		x	x
4.6 Control Rod and elevator Rod ends have play, easy action and seat Check the bolts		x	X
4.7 Cross-lever and the elevator State and fastening			х
4.8 Pedal lever for cracks and internal clearance Check, Check for friction points		x	x
4.9 Check the control cables wire breaks Cable outlet for wear Connections to the rudder pedals and examine		x	x
4.10 aileron, rudder and elevator control surfaces Ease, check out and attacks	s to	x	x
4.11 trim to wear on the bushings, Pin play and actuation force test		x	x

Pilot's Operating Handbook			RV-3 B	3
	25 h	50 ł	1 loo h	
5. Suspension				
5.1 Check tail tire for wear	Х	Х	х	
5.2 tailspring on condition and fastening	х	х	Х	
5.3 Mounting points of the main landing gear legs Check	8	x	x	
5.4 Condition of coatings especially at the Chafing check		x	x	
5.5 tires for wear and slippage control	X	X	х	
5.6 Check tire air pressure (2.5 bar)	Х	Х	Х	
5.7 Check wheel bearing play and adjust if neces	sary		Х	
5.8 Functions of the brake system test	х	х	Х	
5.9 Check brake fluid level	х	х	Х	
5.10 leaks and mounting point of the Master brake Cylinder Control	х	x	X	
5.11 Check condition of brake lines	х	х	x	
5.12 Brake lining thickness check (at least 2 mm)	х	х	х	
5.13 seat and check the wheel cylinder clearance	X	х	Х	
5.14 condition and wear of the brake discs		Х	х	

Pilot's Operating Handbook			RV-3 B
6. Equipment	25 h	.50 h :	loo h
6.1 Battery mounting and connections control, possibly with terminal grease fat	x	x	x
6.2 installation and condition of the wiring , In particular look for chafing		x	x
3.6 ammeter function check	х	x	X
6.4 Pitot tube and static pressure holes for condition, tightness and cleanliness Check	x	x	X
6.5 Check the instrument ports		х	х
6.6 Engine Monitoring Instruments Condition, cleanliness, tightness and Tightness of the cables		x	x
6.7 Compass check if nachkompensieren deviation table and renew			х
6.8 altimeter setting check			Х
6.9 Check operation of radio	Х	х	Х
6.10 tightness and condition of the antenna test		Х	Х
6.11 collision warning light Check operation and cleanliness	x	х	X
6.12 belts condition, cleanliness and fastening	x	х	Х
6.13 signage and marking is complete and readability test			x

Pilot's Operating Handbook			RV-3 B
	25 h	50 h	loo h
7. Grease 7.1 Wheel bearing grease			x
7.2 joint heads of all control rods oils		Х	х
7.3 hinges and rod ends of the flaps Oil and rowing		x	x
7.4 Storage of the brake pedal and the main brake cylinder oil		x	x
7.5 All engine oil operations		Х	х
7.6 Grease hood closure		х	х
 8. Final 8.1 Check for foreign objects in the rear fuselage the flap levers, two steering wheels, Cabin and engine room after each service perform 	e to X	x	x
8.2 linings for wear and function of Plant closures and tested. Access panels close	x	X	x
8.3 Aircraft Cleaning	Х	Х	Х
8.4 Aircraft preserve			Х
8.5 fuel tank filling up and check the function and proper display of the fuel gauges control			x
 8.6 Engine running and state, the control of Fuelvalve Mixture Primer heating Fuel pump Alternator Hydraulic pressure check 8.7 Ceckflight perform 	x x	X X	x x

Propeller maintenance

Maintenance to be performed in accordance with manufacturer's recommendations as detailed in the propeller Owner's Manual

Supplements

List of manuals

Separate manuals exist for the following items and should be considered an integral part of this aircraft's documentation:

- Lycoming O-320 Operator's Manual
- Flightline 760 Com
- Pocket FMS Handbook

Conversion Reference

MPH to KNOTS	MPH x .87
KNOTS to MPH	KNOTS x 1.15

General info

Computing descent point DISTANCE:

Take the altitude you need to lose, drop the zeros, multiply by 3. That equals your distance in miles to begin descent. **Computing descent point RATE:**

Take half of groundspeed and add a zero, this is your rate of descent.

###