

**N103LF**

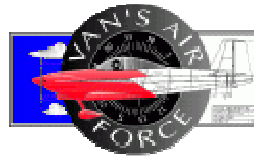


# **Van's Aircraft RV-9A**

## **Pilot's Operating Handbook**

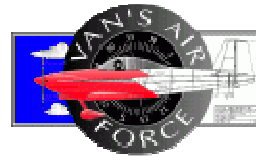
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## PERFORMANCE – SPECIFICATIONS

SPAN: .....	28' 0"
LENGTH: .....	20' 5"
HEIGHT: .....	7' 10"
SPEED:	
Maximum at Sea Level .....	194 MPH, 168 KTS
Cruise, 75% Power at 8,000 Ft .....	186 MPH, 157 KTS
RANGE (includes 3 gal. for taxi, takeoff & climb):	
75% @ 8000', no reserve .....	700 nm
55% @ 8000' no reserve .....	850 nm
75% @ 8000', one hour (8 gal) reserve .....	540 nm
55% @ 8000', one hour (8 gal) reserve .....	650 nm
RATE OF CLIMB AT SEA LEVEL .....	1,400 FPM
SERVICE CEILING .....	18,500 FT
TAKEOFF PERFORMANCE: .....	475 Ft
LANDING PERFORMANCE: .....	450 Ft
STALL SPEED (CAS) at Gross:	
Flaps Up, Power Off .....	54 MPH, 47 KTS
Flaps Down, Power Off .....	50 MPH, 43 KTS
MAXIMUM WEIGHT (Normal Category): .....	1750 Lbs
EMPTY WEIGHT .....	1084 Lbs
MAXIMUM USEFUL LOAD: .....	666 Lbs
BAGGAGE ALLOWANCE .....	75 Lbs
WING LOADING (Pounds/ Sq. Ft) .....	8.74 - 14.11 lb/sqft
POWER LOADING (Pounds/ HP) .....	6.78 - 10.93 lb/hp
FUEL: Capacity .....	36 gal Total
Type .....	100 LL
Not measurable .....	4.9 gal (Left), 2.2 gal (Right)
Not usable .....	0 gal
Fuel gage display (maximum) .....	13.2 gal (Left), 16 gal (Right)
OIL CAPACITY .....	8 Qts (change every 50 hrs)
Minimum Safe Quantity in Sump .....	2 Qts (fill 6 Qts)
Oil Filter .....	Champion CH48110-1
ENGINE: Aero Sport Power O-320-D2A (O784-SPE).....	January 3, 2006
PROPELLER:Sensenich .....	38548 K
Tire pressure    main .....	25-35 psi,
nose .....	20-25 psi



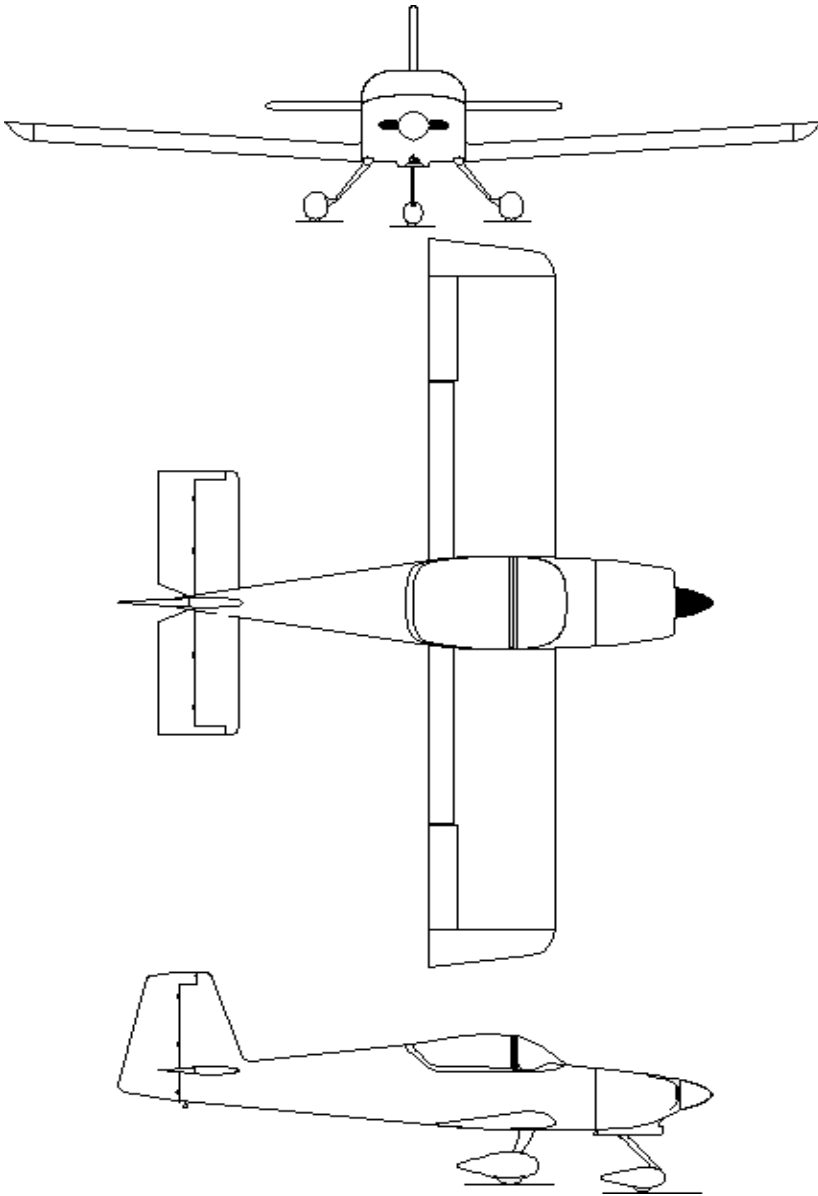
## AIRSPEED LIMITATIONS

	<b>SPEED</b>	<b>KIAS</b>	<b>REMARKS</b>
<b>V<sub>NE</sub></b>	Never Exceed Speed	<b>182 Kts</b>	Do not exceed this speed in any operations.
<b>V<sub>NO</sub></b>	Maximum Structural Cruising Speed	<b>156 Kts</b>	Exceed this speed only in smooth air.
<b>V<sub>A</sub></b>	Maneuvering Speed	<b>115 Kts</b>	Do not make full control movements above this speed. Full elevator deflection will result in a 6g load at this speed.
<b>V<sub>FE</sub></b>	Maximum Flap Extended Speed	<b>96</b> -20 deg <b>80</b> - Full	Do not exceed this speed with flaps down
<b>V<sub>y</sub></b>	Best Rate of Climb	<b>75 Kts</b>	Glide
<b>V<sub>x</sub></b>	Best Angle of Climb	<b>65 Kts</b>	
<b>V<sub>s</sub></b>	Stall Speed Clean	<b>47 Kts</b>	
<b>V<sub>so</sub></b>	Stall Speed Landing Configuration	<b>43 Kts</b>	

## AIRSPEED INDICATOR MARKINGS

<b>MARKING</b>	<b>KIAS VALUE OR RANGE</b>	<b>SIGNIFICANCE</b>
White Arc	<b>43 – 87 Kts</b>	Full Flap Operating Range. Lower limit is V <sub>so</sub> . Upper limit is maximum speed with flaps extended
Green Arc	<b>47 – 156 Kts</b>	Normal Operating Range. Lower limit is V <sub>s</sub> . Upper limit is maximum structural cruising speed
Yellow Arc	<b>156 – 182 Kts</b>	Operations must be conducted with caution and only in smooth air.
Red Line	<b>182 Kts</b>	Maximum speed for all operations

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## **PREFLIGHT INSPECTION**

### ***CABIN***

1. Documentation -- Available In Airplane
2. Aeronautical Charts – CURRENT AND APPROPRIATE TO FLIGHT
3. Seat Belt Securing Control Stick -- RELEASE
4. Ignition Switch -- OFF
5. E-bus and E-bus alternative feed – OFF
6. Master Switch – ON
7. Aux Switch - ON
8. Engine Monitor – RESET FLIGHT TIME
9. Fuel Quantity -- CHECK QUANTITY -- VERIFY ENGINE MONITOR RESET
10. Flaps – DOWN
11. Master Switch -- OFF

### ***EMPENNAGE***

1. Tail Tie-Down – DISCONNECT
2. Control Surfaces -- CHECK freedom of movement and security
3. Static Sources (both sides of fuselage) –CHECK for blockage

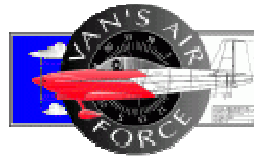
### ***RIGHT WING***

1. Aileron -- CHECK freedom of movement and security
2. Flap -- CHECK security
3. Wing Tie-Down – DISCONNECT
4. Main Wheel Tire -- CHECK for proper inflation
5. Chock – REMOVE
6. Right Wing Tank – SUMP
7. Taxi Light – CHECK condition
8. Lift Reserve Indicator – Check for blockage
9. Fuel Quantity -- CHECK VISUALLY
10. Fuel Filler Cap – SEC

### ***NOSE***

1. Engine Oil Level -- CHECK, do not operate with less than 4 quarts
2. Propeller and Spinner -- CHECK for nicks and security
3. Cowl Hinge Pins – CHECK for security
4. Air Inlet -- CHECK for restrictions

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5. Nose Wheel Tire -- CHECK for proper inflation
6. Chock -- REMOVE
7. Fuel Tank Vents -- CHECK for blockage

## ***LEFT WING***

1. Wing Tie-Down -- DISCONNECT
2. Main Wheel Tire -- CHECK for proper inflation
3. Chock -- REMOVE
4. Left Wing Tank -- SUMP
5. Fuel Quantity -- CHECK VISUALLY
6. Fuel Filler Cap -- SECURE
7. Pitot Tube Cover -- REMOVE and check for blockage
8. Landing Light -- CHECK condition
9. Aileron -- CHECK freedom of movement and security
10. Flap -- CHECK security

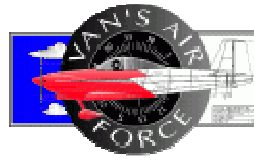
## **BEFORE STARTING ENGINE**

1. Preflight Inspection -- COMPLETE
2. Seat Belts and Shoulder Harnesses -- ADJUST and LOCK
3. Canopy -- OPEN OR CLOSED DEPENDING ON WEATHER
4. Fuel Selector Valve -- DESIRED TANK
5. Master, Aux, E-bus and E-bus Alt Feed-- OFF
6. Brakes -- Press toe brake then pull parking brake handle
7. Circuit Breakers -- CHECK IN

## **STARTING ENGINE**

1. Master Switch -- ON
2. Aux Switch -- ON
3. Low Volt/High Volt test button press -- Warning light flashing
4. Nav -- ON (night)
5. Flaps -- UP
6. Mixture -- Rich (IN)
7. Throttle -- ¼"
8. Propeller Area -- CLEAR
9. Ignition Switch -- START
10. Oil Pressure -- CHECK 25 psi at idle
11. Throttle -- 1,000 -- 1,200 rpm

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12. AutoPilot -- ON
13. E-Bus – ON
14. Strobe - ON
15. Wait for EFIS to boot

## **BEFORE TAKEOFF**

1. Brakes – Press toe brake
2. Canopy ----- Main Latch -- SECURE
3. Flight Controls -- FREE and CORRECT
4. Flight Instruments –Altimeter SET  
EFIS – CORRECT PRESSURE
5. Fuel Selector Valve -- DESIRED TANK
6. Elevator Trim – Neutral
7. Throttle -- 1700 RPM
8. Mag
  - a. Right – CHECK (no reading, use sound to determine rpm drop)
  - b. Left – CHECK
  - c. Both
9. Carb heat - CHECK
10. Engine Instruments -- CHECK
11. Throttle – 1,000 – 1,200 rpm
12. Radios – SET
13. TAKEOFF

## **TAKEOFF**

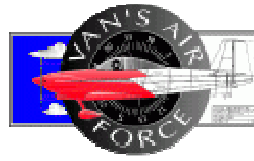
### **NORMAL TAKEOFF**

1. Wing Flaps – UP
2. Mixture -- RICH
3. Throttle -- FULL OPEN in 3 seconds, right rudder
4. Immediate after full throttle lift nose gear above ground
5. Apply forward stick to keep nose gear just few inches above runway
6. Climb Speed -- 110 KIAS

### **SHORT FIELD TAKEOFF**

1. Wing Flaps – 30 Deg
2. Prop – HIGH RPM
3. Brakes – APPLY
4. Throttle – FULL OPEN

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5. Stick – FULL BACK
6. Brakes – RELEASE
7. Climb Speed – 80 KIAS (Vy)
8. Retract flap at or above 100 AGL

## ENROUTE CLIMB

1. Airspeed – 110 - 130 KIAS
2. Throttle – full throttle
3. Fuel Pressure – CHECK

## CRUISE

1. Prop – 2300 RPM
2. Trim – ADJUST

## POSTFLIGHT

### AFTER LANDING

1. Keep nose up as long as possible

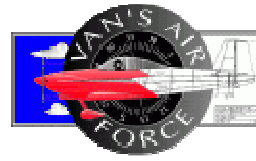
### ENGINE SHUTDOWN

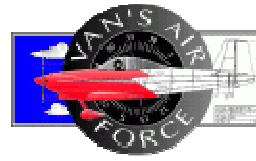
1. E-bus -- OFF
2. AUX - OFF
3. Throttle – 1,800 rpm for 15 – 20 seconds
4. Throttle – idle
5. Mixture – IDLE CUT OFF
6. Strobe off
7. Ignition – OFF
8. Master – OFF

### SECURING AIRCRAFT

1. Wheel Chocks – INSTALL
2. Wing & Tail Tie-Down – INSTALL AS REQUIRED
3. Pitot Tube Cover – INSTALL AS REQUIRED
4. Cockpit – CLEAN AND SECURE
5. Ignition Key – REMOVED
6. Master and Aux Switches – OFF
7. Engine Monitor Fuel Quantity – RESET AFTER REFUELING

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## ANNUAL CONDITION INSPECTION REPORT

**HOURS:**

**MAKE: RV-9A**

**SERIAL #: 91048**

**REGISTRATION #: N103LF**

**DATE:**

**DESCRIPTION :**

**COMMENTS**

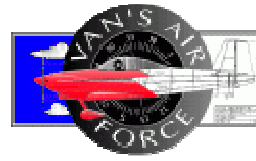
**PROPELLER GROUP**

1. Inspect spinner and back plate....
2. Inspect blades for nicks and cracks....
3. Check for grease and oil leaks....
4. Check spinner mounting brackets....
5. Check propeller mounting bolts and safety....
6. Inspect hub parts for cracks and corrosion....

**ENGINE GROUP**

1. Remove engine cowl....
2. Clean and check cowling for cracks, distortion and loose or missing fasteners....
3. Clean pressure oil strainer or change full flow oil filter element.....
4. Check oil temp. sender for leaks and security....
5. Check oil lines and fittings for leaks, chafing , security, dents and cracks....
6. Clean and check oil radiator cooling fins....
7. Fill engine with oil per lubrication chart...
8. Clean engine....
9. Check condition of spark plugs adjust gap....
10. Check ignition harness and insulators....
11. Remove air filter and clean....
12. Check emergency air inlet door
13. Drain carburetor and clean inlet line fuel strainer....
14. Check condition of carburetor heat air door and box....
15. Check intake seal for leaks and clamps for tightness....
16. Inspect condition of fuel lines....
17. Check fuel system for leaks.....
18. Check electric fuel pump for operation.....
19. Check engine control - throttle

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20. Inspect exhaust stacks, connections, gaskets....
21. Inspect heat exchange and baffles....
22. Check breather tube for obstructions and security....
23. Check crankcase for cracks, leaks, security of bolts....
24. Check engine mounts for cracks and loose mountings.....
25. Check firewall seals....
26. Check condition and tension of alternator and drive belt....
27. Check condition of starter....
28. Check fluid in brake reservoir....
29. Lubricate all controls....
30. Reinstall engine cowl....

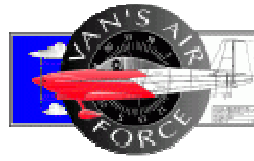
## **CABIN GROUP**

1. Inspect canopy and windows....
2. Check upholstery for tears....
3. Check seats, seat belts, shoulder straps....
4. Check trim operation...
5. Check rudder pedals....
6. Check control column, systems and connection....
7. Check landing, nav, cabin, and instrument lights...
8. Check instrument, lines and attachments....
9. Check turn and bank....
10. Check altimeter....
11. Check operation of fuel selector valve....
12. Check condition of cabin heat controls....
13. Check condition and operation air vents....

## **FUSELAGE AND EMPENNAGE GROUP**

1. Remove inspection plates and panels...
2. Check battery box, battery and cables...
3. Check electronic installations....
4. Check bulkheads and stringers for damage...
5. Check antenna mounts and wiring....
6. Check fuel lines and valves....
7. Check vertical fin and rudder surfaces....
8. Check rudder horn and attachment....
9. Check vertical fin attachments....
10. Check rudder bolts for wear...

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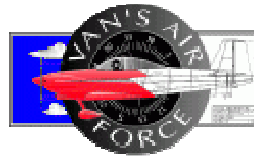


11. Check horizontal stabilizer and elevators...
12. Check horizontal stabilizer attachment...
13. Check elevator horn...
14. Check elevator bolts for wear...
15. Check elevator bell cranks and controls....
16. Lubricate all bearings as needed.....
17. Reinstall inspection plates and panels....

## WING GROUP

1. Remove inspection plates...
2. Check surfaces and tip for damage and loose rivets and condition of walkways....
3. Check aileron mounts and attachments....
4. Check aileron bellcrank and control tubes....
5. Check flaps and attachment for damages....
6. Check all wing attachment bolts....
7. Check fuel tanks and lines for leaks and....
8. Check fuel tank vents....
9. Reinstall inspection plates....
10. Check LRI probe

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## LANDING GEAR GROUP

1. Check nose gear travel and damper tightness....break out force 22 lb,
2. Check main gear attachments...
3. Check tires for cuts and wear....
4. Remove wheel, clean, and repack bearings...
5. Check wheels for cracks, corrosion and broken bolts....
6. Check tire pressure.... nose: 20-25 psi, Main 25-35 psi
7. Check brake lining and disc....
8. Check brake lines....
9. Axal bolt, 7-10lb torque

## OPERATIONAL INSPECTION

1. Check fuel pump and fuel tank selector....
2. Check fuel pressure....
3. Check oil pressure and temperature....
4. Check alternator output....
5. Check manifold pressure....
6. Check cabin heat operation....
7. Check throttle and mixture operation....
8. Check propeller smoothness....
9. Check electronic equipment operation....

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## Performance

Without wheel pants and gear fairings.

**Cruise Performance at 9,500 ft:**

KTAS	RPM	MAP	Fuel Flow	% Power
153	2530	21.1"	8.1 GPH	73%
150	2480	20.8"	7.2 GPH	70%
	2200	21"	6.3 GPH	

**Cruise Performance at 7,500 ft:**

KTAS	RPM	MAP	Fuel Flow	% Power
149	2460	21.8"	8.1 GPH	73%
		20.8"	7.2 GPH	70%
		21"	6.3 GPH	

**Cruise Performance at 2,600 ft:**

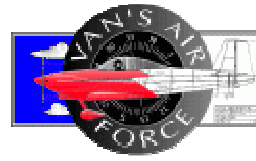
KTAS	RPM	MAP	Fuel Flow	% Power
130	2200	21.4"	9.2 GPH	63%
143	2300	22.5	10 GPH	70%
154	2580	27.2"	13.2 GPH	95%

### Wheel pants on and polished

8,500 ft, Throttle wide open (TWO), 2,550 rpm, 12 gph, 161 ktas

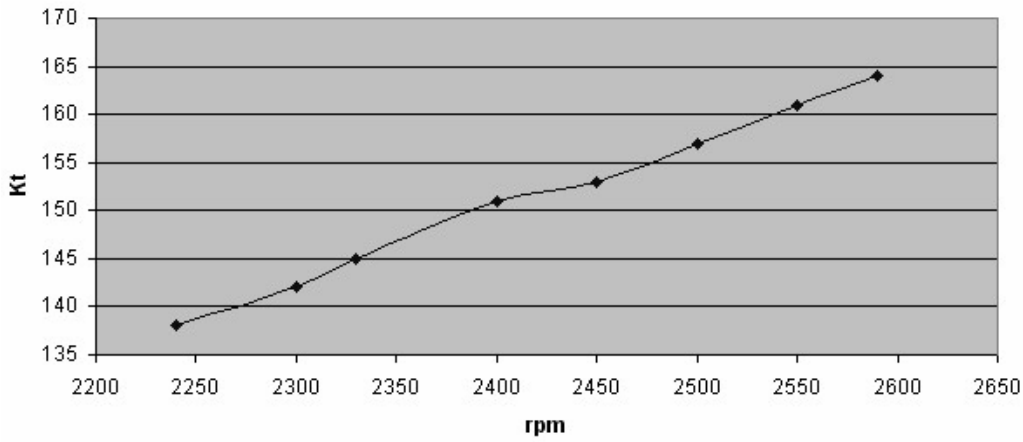
5,500 ft, TWO, 2,590 rpm, 12.3 gph, 164 ktas

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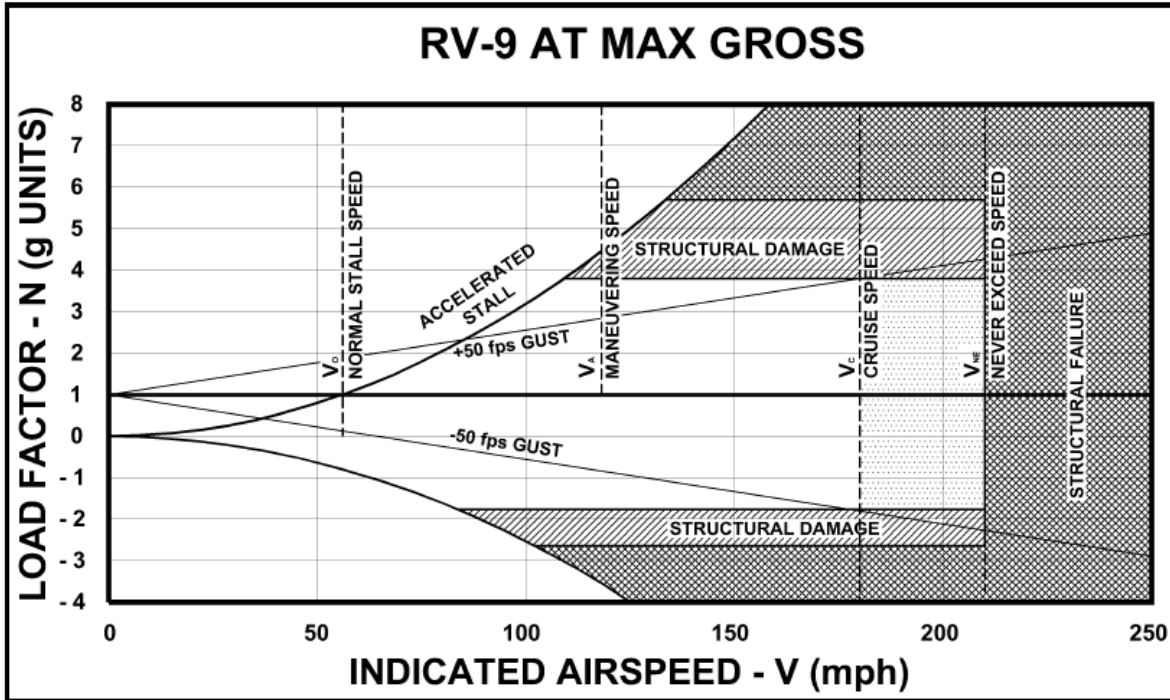
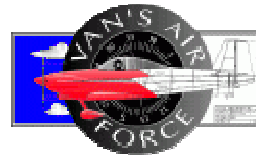


After polished

True Airspeed



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source: Ken Krueger, Flying High and Fast, another reason why more power is not always a good thing.

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**Fuel Flow Chart**

**Best Power**

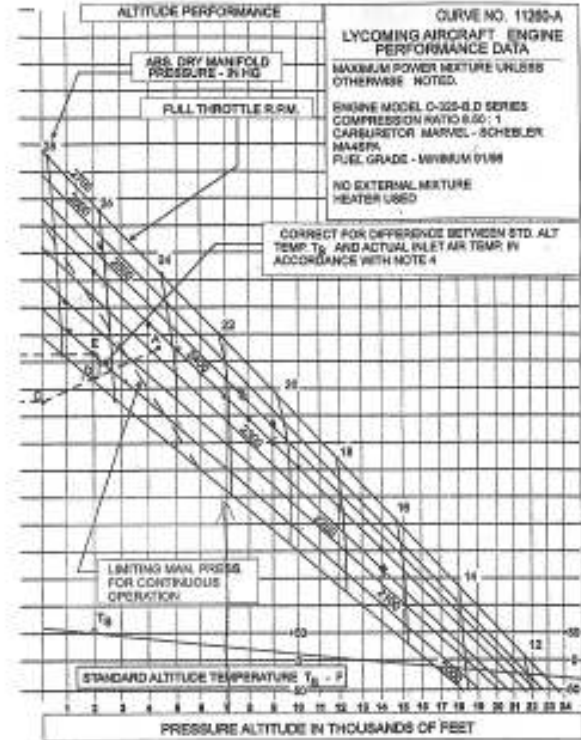
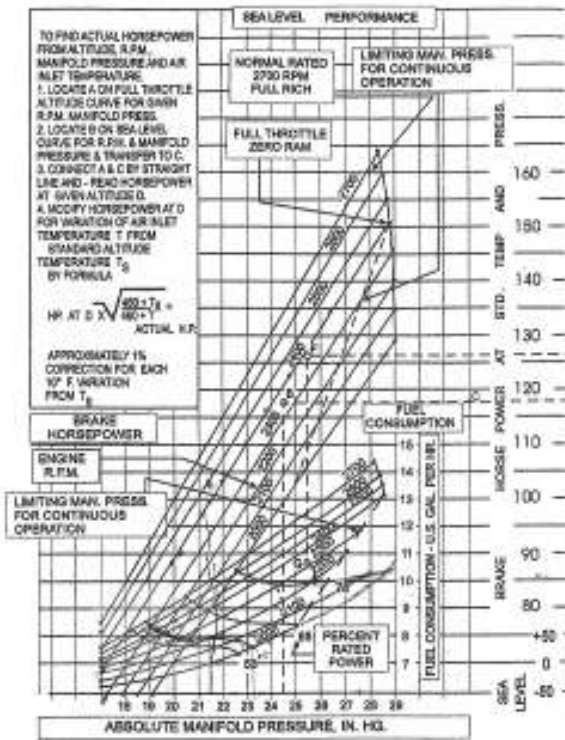
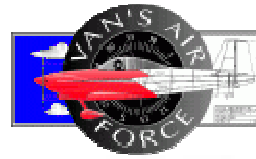
<b>RPM</b>	<b>45%</b>	<b>55%</b>	<b>65%</b>	<b>75%</b>	<b>80%</b>	<b>90%</b>
2000	6.3	7.3	8.5			
2100	6.4	7.4	8.6			
2200	6.5	7.6	8.6	9.7		
2300	6.7	7.7	8.7	9.9		
2400	6.8	7.8	8.8	10.0	10.6	11.7
2500	7.1	8.1	9.0	10.1	10.7	11.8
2600	7.3	8.3	9.2	10.2	10.8	11.9

**Fuel Flow Chart**

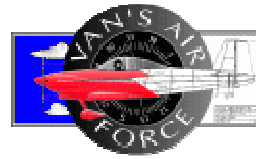
**Best Economy**

<b>RPM</b>	<b>45%</b>	<b>55%</b>	<b>65%</b>	<b>75%</b>
2000		6.2	7.1	
2100		6.4	7.2	
2200	5.5	6.5	7.3	8.3
2300	5.7	6.6	7.5	8.5
2400	5.8	6.7	7.6	8.6
2500	5.9	6.8	7.7	8.7
2600	6.0	6.9	7.8	8.8

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## WEIGHT AND BALANCE DATA

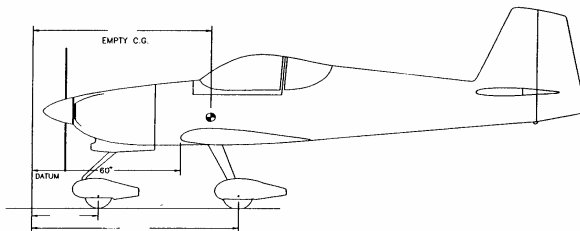
Make: Tien-Chien Chang                      Model: RV-9A  
Serial: 91048                                      Registration: N103LF

Maximum Weights:  
Aerobatic Category ..... N/A  
Utility Category ..... N/A  
Normal Category ..... 1750 Lbs

Datum= 70 inches forward of wing leading edge (L.E.)  
Design C.G. Range =     15% to 28% of wing chord  
                                  7.95" to 14.84" from L.E.  
                                  77.95" to 84.84" aft of Datum

Wing L.E. = 70.0 inches aft of datum  
Main wheel right = 91.19" aft of datum  
Main wheel left = 91.13" aft of datum  
Nose wheel =     34.5" aft of datum

Fuel ..... 76.75" aft of datum  
Pilot and Passenger ..... 92.7" aft of datum  
Baggage ..... 122" aft of datum  
Oil ..... 36" aft of datum



Aircraft weighed empty in level flight attitude. (no oil, no fuel)

	Weight	Arm	Moment
Right Wheel	402	91.13	36,634
Left Wheel	402	91.13	36,634
Nose Wheel	280	33.69	9,433
Total	1084		82.697

Empty CG = 76.29 aft of datum

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## WEIGHT AND BALANCE DATA

Sample:

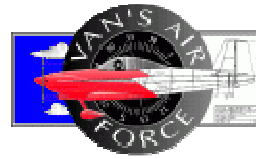
	Weight	Arm	Moment
Aircraft	1084	76.29	82,697
Oil (1.87 lbs/qt)	_____	36.00	_____
Fuel (6lbs/gal)	_____	76.75	_____
Pilot	_____	92.70	_____
Passenger	_____	92.70	_____
Baggage	_____	122	_____
Total	_____		_____

CG = Total Moment / Total Weight

CG = \_\_\_\_\_ in aft of datum

CG Range = 77.95 to 84.84 in aft of datum

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## WEIGHT AND BALANCE DATA

\*With a CG Range of 77.95 to 84.84 in., all foreseeable loading configurations are within limitations

Max. Gross Weight			
Item	Weight	Arm	Moment
Aircraft	1,084	76.3	82,698
Oil (1.87lb/q)	15	36.0	539
Fuel (6 lbs/gal)	216	76.8	16,578
Pilot	170	92.7	15,759
Passenger	170	92.7	15,759
Baggage	75	122.0	9,150
<b>Total</b>	<b>1,730</b>		<b>140,483</b>
<b>CG:</b>	<b>81.21</b>		
<b>Zero Fuel CG</b>	<b>81.84</b>		

Full Baggage, No Pax			
Item	Weight	Arm	Moment
Aircraft	1,084	76.3	82,698
Oil (1.87lb/q)	15	36.0	539
Fuel (6 lbs/gal)	216	76.8	16,578
Pilot	170	92.7	15,759
Passenger	0	92.7	0
Baggage	72	122.0	8,784
<b>Total</b>	<b>1,557</b>		<b>124,358</b>
<b>CG:</b>	<b>79.87</b>		
<b>Zero Fuel CG</b>	<b>80.38</b>		

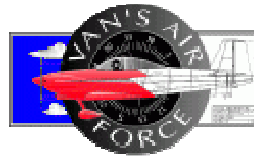
Full Baggage			
Item	Weight	Arm	Moment
Aircraft	1,084	76.3	82,698
Oil (1.87 lb/q)	15	36.0	539
Fuel (6 lbs/gal)	216	76.8	16,578
Pilot	170	92.7	15,759
Passenger	170	92.7	15,759
Baggage	75	122.0	9,150
<b>Total</b>	<b>1,730</b>		<b>140,483</b>
<b>CG:</b>	<b>81.21</b>		
<b>Zero Fuel CG</b>	<b>81.84</b>		

Full Baggage, No Pax, No Skis			
Item	Weight	Arm	Moment
Aircraft	1,084	76.3	82,698
Oil (1.87 lb/q)	15	36.0	539
Fuel (6 lbs/gal)	216	76.8	16,578
Pilot	170	92.7	15,759
Passenger	0	92.7	0
Baggage	75	122.0	9,150
<b>Total</b>	<b>1,560</b>		<b>124,724</b>
<b>CG:</b>	<b>79.95</b>		
<b>Zero Fuel CG</b>	<b>80.47</b>		

Pilot, Pax, No Baggage			
Item	Weight	Arm	Moment
Aircraft	1,084	76.3	82,698
Oil (1.87 lb/q)	15	36.0	539
Fuel (6 lbs/gal)	216	76.8	16,578
Pilot	170	92.7	15,759
Passenger	170	92.7	15,759
Baggage	0	122.0	0
<b>Total</b>	<b>1,655</b>		<b>131,333</b>
<b>CG:</b>	<b>79.36</b>		
<b>Zero Fuel CG</b>	<b>79.75</b>		

Pilot, No Pax, No Baggage			
Item	Weight	Arm	Moment
Aircraft	1,084	76.3	82,698
Oil (1.87 lb/q)	15	36.0	539
Fuel (6 lbs/gal)	216	76.8	16,578
Pilot	170	92.7	15,759
Passenger	0	92.7	0
Baggage	0	122.0	0
<b>Total</b>	<b>1,485</b>		<b>115,574</b>
<b>CG:</b>	<b>77.83</b>		
<b>Zero Fuel CG</b>	<b>78.01</b>		

# N103LF



## Engine Information

Model: ..... Aero Sport Power O-320-D2A  
HP: ..... 160  
Fuel: ..... 100LL  
Oil Filter: ..... Champion CH48110

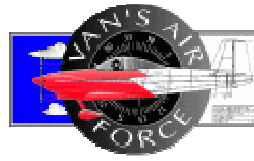
OIL: Mobil One Synthetic 5-50

Below 10F      SAE 20  
SAE 30

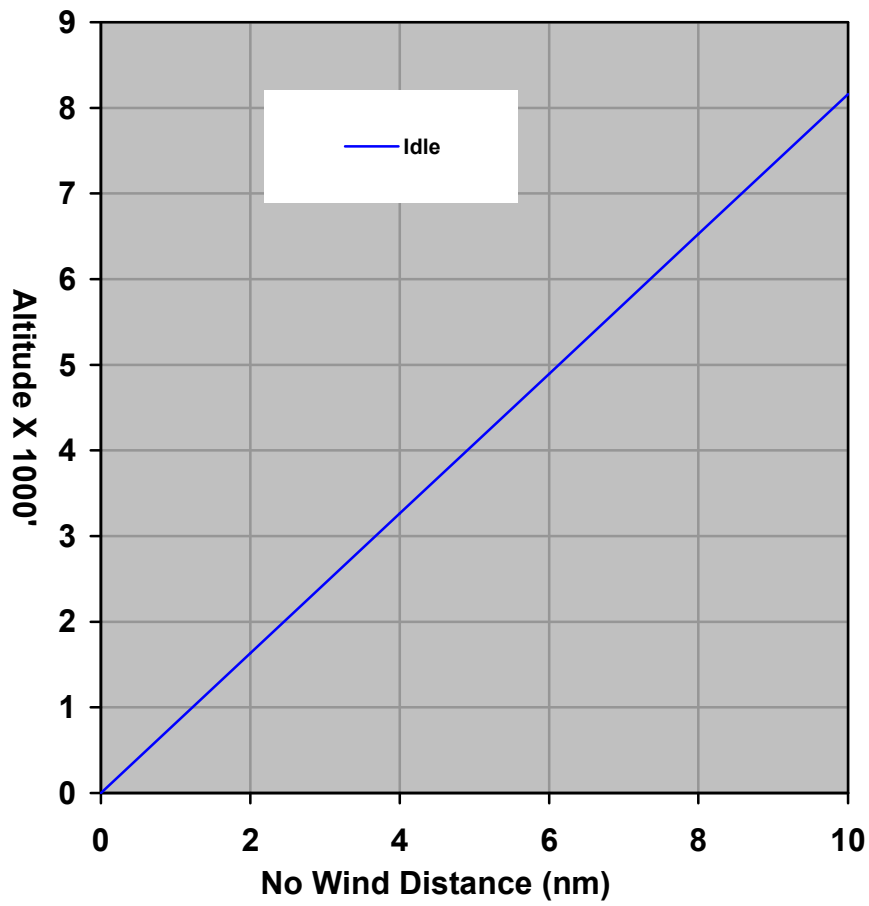
Oil Sump Capacity ..... 8 U.S. Quarts  
Minimum Safe Quantity ...2 U.S. Quarts

## Operating Conditions:

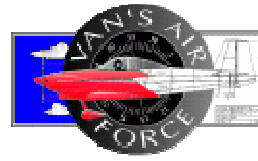
Oil Inlet Temp:    82 deg C desired, 118 deg C Maximum  
Oil Pressure:     90 psi max;    60 psi min;    25 psi idle  
Fuel Pressure:    15 psi max;    2 psi min;     psi desired

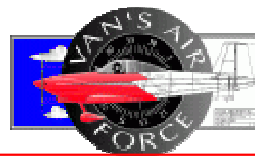


## Engine Out Glide Performance Airspeed 75 Kts



**N103LF**





## EMERGENCY PROCEDURES

### AIRSPEEDS FOR EMERGENCY OPERATIONS

Engine Failure After Takeoff:

Wing Flaps Up ..... 80 Kts  
Wing Flaps Down ..... 70 Kts

Maneuvering Speed (Va) ..... 115 Kts

Maximum Glide ..... 80 Kts

Air filter ice up

Pull emergency air knob (reset on the ground)

Carb icing

Carb heat up



## **EMERGENCY PROCEDURES**

### **ENGINE FAILURES**

#### **ENGINE FAILURE DURING TAKEOFF RUN**

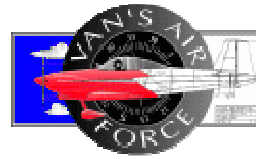
1. Throttle –IDLE
2. Brakes – APPLY
3. Wing Flaps – RETRACT
4. Ignition Switch – OFF
5. Master Switch – OFF
6. Aux Switch -- OFF

#### **ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF**

1. Airspeed – 70 KIAS
2. Fuel Selector Valve – OFF
3. Ignition Switch – OFF
4. Wing Flaps – AS REQUIRED
5. Master Switch – OFF
6. Aux Switch -- OFF

#### **ENGINE FAILURE DURING FLIGHT**

1. Airspeed –80 MPH
2. Fuel Selector – SWITCH TANK
3. Transponder – 7700



## EMERGENCY PROCEDURES

### FIRES

#### DURING START ON GROUND

1. Cranking – CONTINUE, to get a start which would suck the flames and accumulated fuel through the carb and into the engine.

If engine starts:

2. Power – 1700 RPM for a few minutes
3. Engine – SHUTDOWN and inspect for damage

If engine fails to start:

1. Throttle – FULL OPEN
2. Cranking – CONTINUE
3. Fire Extinguisher – OBTAIN
4. Engine – SECURE

#### ENGINE FIRE IN FLIGHT

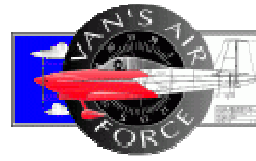
1. Fuel Selector Valve – OFF
2. Master Switch – OFF
3. Aux Switch -- OFF
4. Cabin Heat and Air – OFF

#### ELECTRICAL FIRE IN FLIGHT

1. Master Switch – OFF
2. Aux Switch -- OFF
3. Avionics – OFF
4. All Other Switches (except ignition) – OFF
5. Vents/ Cabin Air/ Heat – CLOSED
6. Fire Extinguisher – ACTIVATE (if available)

#### CABIN FIRE

1. Master Switch – OFF
2. Aux Switch -- OFF
3. Vents/ Cabin Heat – CLOSED
4. Fire Extinguisher – ACTIVATE (if available)



## EMERGENCY PROCEDURES

### WING FIRE

1. Nav Lights – OFF
2. Landing Light – OFF

### ELECTRICAL / Low Voltage

1. E-Bus –OFF
2. Master Switch – OFF
3. Master Switch – ON

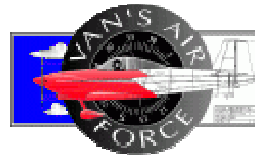
IF ALTERNATOR IS STILL OFF-LINE:

1. E-Buss Alt feed -- ON
2. Master Switch – OFF
3. Electrical Switches – OFF
4. Alternator Breaker – Pull off
5. Electrical Equipment – ON, as required
6. When voltage drops below 12 V, AUX -- ON
7. Flight – TERMINATE as soon as practical, aircraft is on battery reserves only.

### ELECTRICAL/ High Voltage (above 17 V)

1. Pull ALT breaker
2. E-Buss Alt feed – ON
3. Master and Aux – OFF
4. All Electrical but E-Buss – OFF
5. When voltage drops below 12 V, Aux – ON
6. Flight – TERMINATE as soon as practical

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## Maintenance

- 10 hr Oil change, AEROSHELL 100 SAE 50 MNRL-CS S
- 25 hr Oil change
- 50 hr May use synthetic oil, W100 SAE 50
- Annual Condition Inspection
- Bi-annual Alt, Xponder inspection
- 3 month ELT inspection (mark expiration date on maintenance record)

<b>Oil Change</b>	<b>50 hr</b>	61.1 hr
<b>VOR</b>	<b>1 month</b>	
<b>Alt/Static Check</b>	<b>24 month</b>	9/11/2006
<b>ELT test</b>	<b>3 month</b>	
<b>Condition Inspection</b>	<b>12 month</b>	8/12/2006
<b>Spark plug cleaning</b>	<b>100 hr</b>	
<b>Spark plug swap</b>	<b>50 hr</b>	
<b>ELT battery change</b>	<b>12 month</b>	