



VANS RV-12 CHECKLIST (NOV 2021) B19

P.A.V.E.

- P**.....PERSONAL / PILOT
Illness/Meds/Stress/Alcohol/Fatigue/Emotion
- A**.....AIRCRAFT
Air Worth / Registration / Ops Limits / W&B
Air Speed / Tach / Oil Press / Manifold Press /
Altimeter / Temp Gauge / Oil Temp / Fuel
Gauge / Land Gear Indicator / Anti-Collision /
Mag Compass / ELT / Safety Belts
- V**.....ENVIRONMENT
NOTAMS / WX / Known ATC / Runway Length /
Alternates / Fuel Req / TO+Lnd Data / (TFR)
- E**.....EXTERNAL
Invulnerability / Impulse / Macho / Get Home

PREFLIGHT INSPECTION

- WX/NOTAM/TFR.....CHECK
- FRAT.....COMPLETE
- Weight/Balance.....COMPUTE
- Aircraft Binder.....OBTAIN
- Rudder Lock.....REMOVE
- Fuel Quantity.....CHECK

Interior

- Canopy.....OPEN check condition
- Flt Control Locks.....REMOVE
- Spar Pins.....CHECK
- EFIS.....POWER UP (N/A 922CA)

- ELT.....OFF
Documents (AROW).....PRESENT
- Master + Avionics.....ON
- Stall Vane + Horn.....ACTUATE/ON
- Avionics Switch.....OFF
- Fuel Shut-off.....OPEN
- Gascolator.....DRAIN & CHECK
- Lights / Strobes....CHECK, then OFF
- Trim.....TAKEOFF POSITION
- HOBBS.....RECORD
- Master Switch.....OFF
- Baggage.....RESTRAINED
- FOD.....CHECK
- Fire Extinguisher.....IN GREEN

Left Main Landing Gear

- Tire.....CHK CONDITION (25 psi)
- Brake Assembly.....CHECK
- Axle Nut Cotter Pin.....CHECK
- Wheel Bearings.....SHAKE, CHECK
- Chocks/Tie Down.....REMOVE



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Left Wing

- Leading Edge.....CHECK CONDITION
- Wing Hand Hold.....CHECK
- Flaperon.....FREE
- Flaperon Hinge Brackets.....SECURE

Empennage

- L Static Port.....CLEAR & OPEN
- Vert Stab.....CHECK
- Stabilator....CHECK FREE & SECURE
- Anti-Servo Tab.....CHECK
- Rudder.....CHECK FREE
- Tie-Down.....CONFIRM UNTIED
- R Static Port.....CLEAR & OPEN
- Comm. Antenna.....CHECK
- Fuel Vent Lines.....CLEAR
- Fuel Cap.....SECURE & VENT OPEN

Right Wing

- Flaperon.....FREE
- Flaperon Hinge Brackets.....SECURE
- Wing Hand Hold.....CHECK
- Leading Edge.....CHECK CONDITION

Right Main Landing Gear

- Tire.....CHK CONDITION (25 psi)
- Brake Assembly.....CHECK
- Axle Nut Cotter Pin.....CHECK
- Wheel Bearings.....SHAKE, CHECK
- Chocks/Tie Down.....REMOVE

Nose Section

- Transponder Antenna.....CHECK
- Muffler.....CHECK
- Coolant.....CHECK LEVEL
- WARN: MASTER & IGNITIONS OFF**
- Oil Level.....CHECK LEVEL
- Nose Landing Gear.....CHECK



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Tire.....CONDITION (22 psi)
 Wheel
 Chocks.....REMOVE
 Cowling.....
 .CHECK
 Air
 Inlets.....C
 HECK
 Prop and
 Spinner.....CHECK
 Pitot.....CLEAN &
 OPEN

PRE-START

Passenger
 Brief.....S.A.F.E.TY
 - §91.327(e) special airworthiness
 Master.....
ON
 Nav /
 Strobe.....ON
 Canopy.....
 ...DOWN
 Safety
 Belts.....FASTENED/SECURE
 Fuel
 Valve.....OPEN
 Throttle.....ADJUST
 FRICTION
 Brakes.....
TEST
 Ignition A &
 B.....ON

ENGINE START

CAUTION: No Start < -17°C / > 32°C
 Fuel Press (2.2 psi min)....NORMAL
 Cold Start.....THROTTLE
 CLOSED
CHOKE PULL &
 SET
 Warm:THROTTLE 1/8 inch OPEN
CHOKE IN &
 LOCKED
 Brakes.....
HOLD
 Propeller....."CLEAR
 PROP"

Ignition
 Key.....ENGAGE
CAUTION: 10 sec max, wait 2 mins
 Choke.....IN &
 LOCKED
 Throttle.....2,000
 RPM
 Oil
 Pressure.....Ch
 eck
 -- 12 psi min w/in 10 seconds
 Ammeter.....CHAR
 GING

AFTER START

Avionics.....
ON
 Autopilot.....
ON
 Headset.....
ON



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COMMS.....AS
 REQ'D
KPWM ASOS: 120.025 KSFM
AWOS:119.05 CTAF: 123.0
 Altimeter.....
SET
 XPDR.....
CHECK
 Flight
 Instruments.....CHECK
 Flight
 Plan.....LOA
 D

TAXI

Airport Diagram.....AS
 REQ'D
 Landing
 Light.....STEADY
 Taxi
 Area.....CL
 EAR
 Brakes.....
 ..TEST
 Taxi
 Clearance.....OBTAIN
 During
 Taxi.....VERIFY
 -- Flt Instruments move in turns
 -- 1800-2500 RPM until Oil 120°F
 -- Controls: Climb Into/Dive Away

CROSSWIND ROT'S

30° = 50% / 45° = 75% / 60° = 100%

ENGINE RUNUP

PSM TWR: 128.4

Brakes.....
HOLD
 Flight
 Controls.....CHECK
 Flight Instruments.....CHECK & SET
 Fuel Quantity (4 gal min)....CHECK
 Canopy.....LATC
 HED
 Oil Temp.....120°F
 min
 Stick.....
BACK
 Run Up Area.....CLEAR
 BEHIND
 Throttle.....4,000
 RPM
 -- Ignition.....CYCLE A
 & B
 -- 300 max RPM Drop /115 DIFF
 -- Engine
 Instrument.....CHECK
 --
 Ammeter.....CHECK
 Throttle.....IDLE (GENTLY)
 Throttle.....2,000
 RPM
 Throttle
 Friction.....ADJUST
 Fuses.....
CHECK
 Fuel Press (2.2 psi min)....NORMAL



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Seat Belt.....FASTENED &
SNUG

PRE-TAKEOFF BRIEF

Engine Fail/Abnormal on T/O Roll
- Throttle IDLE / Stop St-Ahead

Engine Fail: Liftoff w/ RWY remain
-- Airspeed.....**60**

KIAS
--

Throttle.....I
DLE

-- Land.....MAX

BRAKING

--
Flaps.....RETR

ACT

Airborne: Insufficient Runway

--
Airspeed.....**60**

KIAS
-- Landing

Area.....SELECT

-- Flaps.....FULL

DOWN

-- Fuel Shutoff

Valve.....CLOSED

-- Ignition

Switches.....OFF

--

Master.....

.....OFF

-- Land.....MIN

AIRSPEED

-- 180 Min Alt / Direction of Turn?

Takeoff ROT...70% Spd NLT 50%

Rwy

BEFORE TAKEOFF

PORT DEPT: 119.75

Pre-Takeoff

Brief.....COMPLETE

Landing

Light.....PULSE

XPDR.....

SET

Fuel

QTY.....CHE

CK

Fuel

Valve.....OP

EN

Trim.....

.....SET

Flaps.....**1ST**

DETENT

Engine

Instruments.....CHECK

Canopy.....LA

TCHED

Takeoff

Procedures.....REVIEW

-- Stab.....RAISE NOSE

SLIGHTLY

-- Rotate.....**50 - 55**

KIAS

-- Climb.....**75 KIAS**

(Vy)

-- Flaps.....UP @ 500'

AGL

SHORT FIELD TAKEOFF



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Flaps.....**1ST**

DETENT

Brakes.....HOLD until FULL Power

Rotate.....**50-5**

5 KIAS

Climb.....**60 KIAS (Vx)** until

Clear

SOFT FIELD TAKEOFF

Flaps.....**1ST**

DETENT

Stabilator.....RAISE

NOSE

After Lift Off.....LEVEL

FLIGHT

-- Attain Vx or Vy as Req'd

ENROUTE CLIMB (> 1000' AGL)

Flaps.....CHE

CK UP

Airspeed.....

85 KIAS

Throttle (**5,800 max 5 mins**)...FULL

Oil

Temp.....MONITOR

CRUISE

Level

Off.....ACCELERATE

Flaps.....CH

ECK UP

Throttle (**5,500 max**

CONT).....SET

Engine

Instruments.....CHECK

Exterior

Lights.....A/R

Fuel.....

MONITOR

CRUISE ROT (RPM/TAS/GPH/ENDR)

2.5K: 5,000 /103kts / 4.4gph /4:25

5K: 5,000 / 101 kts / 4.0gph / 4:53

DESCENT (APPROX 15 - 20 NM)

KPWM ASOS: 120.025 KSBM

AWOS:119.05 / B19 CTAF: 123.0

ATIS/AWOS.....

....CHECK

Altimeter.....

.....SET

Airport

Diagram.....BRIEF

Runway Review / Field Elevation / Pattern

Altitude / Winds / Touchdown Point /

Turnoff Side / Taxi Route / Parking Location

Flt / Nav

Instruments.....SET

Fuel

Quantity.....CHECK

Landing

Light.....PULSE

Min

Altitude.....CONFIRM

Descent.....500 fpm @ **100**

KIAS

Engine

Instruments.....MONITOR

BEFORE LANDING

Fuel

Shutoff.....OP

EN

Seat

Belts.....FASTENED

Normal.....FLAPS A/R (<

82)



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-- Speed.....**55 – 60 KIAS**
Short Field.....FLAPS 2ND DETENT
 --
 Speed.....**55 KIAS**
 -- Touchdown.....FLAPS RETRACT
 --
 Brakes.....
 ...MAX
Soft Field.....FLAPS A/R (< 82)
 -- Speed.....**55 – 60 KIAS**
 -- Touchdown.....POWER ON
 -- Nose Wheel.....LOWER GENTLY

BALKED LANDING / GO AROUND

Throttle.....F
 ULL
 Airspeed.....**60 KIAS**
 Flaps.....1ST DETENT
 Airspeed.....**75 KIAS (Vy)**
 Flaps.....UP @ 500' AGL

CROSSWIND ROT'S

30° = 50% / 45° = 75% / 60° = 100%

AFTER LANDING

B19 CTAF: 123.0

Clear of Runway

Flaps.....
UP
 Trim.....
SET

Landing
 Light.....STEADY
 XPDR.....
CHECK
 Flt Controls...Climb Into/Dive Away

SHUTDOWN / SECURE AIRPLANE

Throttle.....
IDLE
 ELT.....LIGHT OFF + **121.5**
 Ignition
 Switches.....OFF
 When Prop Stops.....KEY REMOVE
 Autopilot.....
 ...OFF
 Avionics.....
OFF
 Landing and
 Strobes.....OFF
 HOBBS.....
 RECORD
 Master.....
OFF
 FLT Control
 Lock.....SECURE
 Chocks.....
 INSTALL
 Post Flt
 Walkaround.....COMPLETE
 Rudder
 Lock.....INSTALL

FIRES

ENGINE FIRE DURING START

Key.....CONT
 CRANKING



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Choke.....P
 USH OFF
 Throttle.....F
 ULL
 Fuel Shutoff Valve.....PULL UP-OFF
 Fuel Pump
 Fuse.....PULL-REMOVE
 Ignitions.....BOTH
 OFF
 Master.....
OFF
 Aircraft.....I
 NSPECT

ENGINE FIRE – IN FLIGHT

Fuel Shutoff.....PULL UP/CLOSED
 Ignition Switches.....BOTH
 OFF
 Air
 Vents.....CLOSE
 D
 Cabin
 Heat.....CLOSED
 Airspeed.....INC
 REASE
 -- Do not exceed **Vne (136 KIAS)**
 Forced
 Landing.....PERFORM
 Radio.....MAYDAY on
121.5
 XPDR.....
**7700**
WARN: DO NOT RESTART ENGINE
BEFORE TOUCHDOWN
 Master
 Switch.....OFF

Airspeed.....**60 KIAS** (55 Min)
 Flaps.....DOWN (Land assured)

ELECTRICAL FIRE – IN FLIGHT

Electrical Switches.....ALL
 OFF
 -- **Leave Ignition Switches ON**
 Air Vents.....AS
 REQ'D
 -- Open if for smoke removal
 Fire
 Extinguisher.....ACTIVATE
 Land.....AS SOON AS
POSSIBLE
IF ELEC POWER ESSENTIAL
 Master
 Switch.....O
 N
 Fuses.....CHECK TO
 ISOLATE
 Electrics.....1 AT TIME, CHECK FUSE
 Air Vents.....OPEN w/FIRE
 OUT

WING FIRE

Lights/Strobes.....
OFF
 Side
 Slip.....PERFOR
 M
 Land.....AS SOON AS
POSSIBLE

ENGINE



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ENGINE FAILURE – REJECT

Throttle.....
IDLE
 Brakes.....
APPLY
 Flaps.....RETRACT
 Ignition Switches.....BOTH OFF
 Master Switch.....OFF
 Takeoff ROT...70% Spd NLT 50% Rwy

ENGINE FAILURE - AFTER TAKEOFF

Airspeed.....**60 KIAS** IMMEDIATELY

Engine Fail: Liftoff w/ RWY remain

Throttle.....
 .IDLE
 Land.....MAX
 BRAKING
 Flaps.....RETRACT
 RACT

Airborne: Insufficient Runway

Landing Area.....SELECT
 Flaps.....FULL
 DOWN
 Fuel Shutoff Valve.....CLOSED
 Ignition Switches.....OFF
 Master Switch.....OFF

Land.....MIN
 AIRSPEED
 180 turn MIN ALT/ Direction of Turn

ENGINE (CONT)

ENGINE RESTART – IN FLIGHT

Airspeed.....**60 KIAS** (55 Min)
 Best Place to Land.....CHOOSE
 Checklist.....PERFORM
 Ignition Switches.....BOTH ON
 Fuel Pump.....CHECK FUSE -(On=Blown)
 Fuel Shut-off.....OPEN (DOWN)
 Choke.....OPEN (Push)
IF ENGINE DOES NOT START
 Throttle & Choke.....CHANGE
 Forced Landing.....PERFORM

NOTE

Engine starter may be engaged in flight should prop stop windmilling.
 Prop will not windmill < 80 KIAS

PARTIAL POWER / RUN ROUGH

-- Follow Engine Air Restart
 -- Land As Soon as **POSSIBLE** using Precautionary Landing Approach



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ABNORMAL OIL PRESS / TEMP

RPM.....REDUCE MIN NECESSARY
 Precautionary Landing.....ASAP

POH NOTES

- Check other Engine instruments
- Hi Temp: Loss of oil or Overheat (Check CHT). Land **PRACTICAL**.
- Lo Press: loss of oil / defective gauge. Land **PRACTICAL**.
- Engine Fail possible at any time**
- Hi Press: Cold? Land **PRACTICAL**

DESCENT / LANDING

EMERGENCY DESCENT

Throttle.....
IDLE
 Stick.....Bank 30° - 45°
 Speed.....INCREASE
 -- Do not exceed **Vne (136 KIAS)**
 Throttle.....(every 1,000 ft) CLEAR

FORCED LANDING – NO POWER

Airspeed (Max Glide).....**63 KIAS**
 -- Min rate of descent.....**59 KIAS**
 Fuel Shutoff.....PULL UP/OFF

Flaps.....UP
 Radio.....MAYDAY on **121.5**
 XPDR.....**7700**
 Ignition Switches.....BOTH OFF

FINAL APPROACH

Airspeed.....**55-60 KIAS**
 Flaps.....DOWN (Land assured)
 Master Switch.....OFF
 Seat/Harness.....CHECK SECURE

PRECAUTION APPROACH / LAND

Airspeed.....**60 KIAS** (55 Min)
 Throttle.....
IDLE
 Flaps.....LOWER AS NEEDED

LOSS OF BRAKE

Landing Spot.....LONG RUNWAY

NOTE

X-Wind from Inop brake side
 Touch Down.....MIN AIRSPEED
 When Stop.....SHUTDOWN ENGINE

NOTE

Good Brake (Drag) in the middle



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ELECTRICAL

LOW VOLTAGE DISCHARGE (<12V)

Non Essential Elec
Equip.....OFF
Avionics
Switch.....OFF
Land.....AS SOON AS
POSSIBLE

HIGH VOLTAGE (> 15V)

Master
Switch.....OFF
30A Main Bus
Fuse.....REMOVE
Avionics
Switch.....OFF
Land.....AS SOON AS
POSSIBLE

LOSS OF FLIGHT INSTRUMENTS

Throttle.....AS
REQ'D
-- Maintain present throttle posit
-- Engine Noise

POH NOTE

Stall Warning aural warn will still
function with Master + Avionics ON

EFIS REBOOT PROCEDURES

DYNON SKYVIEW

Buttons 1,2,5 Press Simultaneously
GARMIN G3X
Master Switch.....OFF, then
ON

FLIGHT CONTROLS

RUNAWAY TRIM

Trim Fuse..REMOVE IMMEDIATELY
Autopilot
Switch.....OFF
Stabilator.....
....HOLD
Airspeed.....R
EDUCE
Land.....AS SOON AS

PRACTICAL

Flaps.....UP (For
landing)

LOSS OF TRIM TAB

Airspeed.....R
EDUCE
Stick.....FIR
M GRIP
Land.....AS SOON AS
POSSIBLE

LOSS OF AILERON CONTROL

Rudder..USE FOR LOW RATE TURN
Autopilot.....MAY BE
USED
Speed.....70
CIAS

LOSS OF RUDDER CONTROL

Runway.....INTO
WIND
X-Wind.....OPP WORKING
RUDDER
Speed.....70
CIAS



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After Land.....SHUTDOWN
ENGINE

LOSS OF STABILATOR CONTROL

Trim.....AS
REQ'D
Flaps.....A
S REQ'D
Throttle.....AS
REQ'D

WHEN LANDING

Throttle.....RED
UCE
Airspeed.....75
CIAS
Flaps.....1st
POSITION
-- More nose wheel clearance
Airspeed.....TRIM TO 60

CIAS

Throttle.....USE FOR
GLIDEPATH

SHORT FINAL

Airspeed.....50
CIAS
Touchdown....USING POWER +
TRIM

POH NOTE

-- Go-around: advance throttle
slowly to avoid sudden pitch up

LOSS OF FLAP CONTROL

Speed.....
65 KIAS

FLIGHT CONTROLS (CONT)

SPINS

Throttle.....
....IDLE
Rudder.....FULL
OPPOSITE
Stabilator.....SLT FWD OF
NEUTRAL
Ailerons.....NE
UTRAL
Flaps.....
.....UP

WHEN ROTATION STOPS

Rudder.....NEUTR
ALIZE
Attitude.....RAISE NOSE
SMOOTHLY

INFLIGHT OVERSTRESS

Throttle.....RED
UCE
Airspeed.....65 -
75KIAS
Flaps.....
.....UP
Land.....AS SOON AS **PRACTICAL**

WARNING

DO NOT make large control
movements or subject the aircraft
to additional G loadings.

WEATHER



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UNINTENTIONAL FLT INTO ICING

- Icing Area.....LEAVE ASAP
- Cabin
- Heat.....ON
- AutoPilot.....
-OFF
- RPM.....INCREASE
- Flaps.....LEAVE RETRACTED
- ATC.....
- ...ADVISE

CAUTION

Ice increases stall speed. Carry extra speed on final. Stall warning horn may not function.

SEVERE TURBULENCE

- Airspeed.....< **108 KIAS**
- <**90 KIAS** Personal Discomfort
- Attitude.....LEVEL FLIGHT
- Visually. EFIS may be erratic.

SULLY MANEUVER

DITCHING

- Approach.....AS REQ'D
- Hi Wind/Hvy Sea: INTO WIND
- Lt Wind/Hvy Swell: PARALLEL



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- Airspeed (Max Glide).....**63 KIAS**
- Min Rate Descent.....**59 KIAS**
- Fuel Shutoff.....PULL UP / OFF
- Flaps.....
-UP
- Radio.....MAYDAY on **121.5**
- XPDR.....
-**7700**
- Ignition Switches.....BOTH OFF
- Canopy.....U NLATCH
- Seat/Harness.....CHECK SECURE
- Touchdown.....NOSE HIGH

POH NOTE

Aircraft cannot be depended upon to provide flotation after contacting the water.