Van's
RV-12iS LSA

CheckMate®

DYNASTY

INITIAL

Weather & Den. Alt.
Weight & Balance
Performance Req.
Papers – A.R.O.W.
Binder Document - Ck.
Canopy – Ck Operation
Master – On
Avionics – On
Flaps – Extend
Lights – Int. / Ext.
Pitot Heat & Stall Horn
Fuel Gauge – True
Master – Off
Avionics – Off
ELT – Off
Fuel Shutoff - Down/On

EXTERIOR SUMMARY
After Thorough Geographical Check

Fuel – Confirm Quality
Caps / Drains / Vents
Engine Oil As Described
Coolant / Radiators
Prop/Air Intakes/Cowl
Oil & Coolant Blockoffs
Exhaust System
Surfaces & Controls
Pitot Static Ports/AOA
Gear / Tires
Antennas
Ties / Chocks / Towbar

BEFORE START

Passenger Brief
Seat Track – Locked
Doors / Belts / Harness
Canopy – Latched
Fuel Shut-Off Valve – Down/On
Throttle – Friction
Park Brake
Master – On
Strobe Light – On
Fuses – None Lit
ELT – On
Bags & Misc – Secure

[1]ENGINE START

Brakes – Test & Hold
Fuel Pump 1– On
Fuel Pump 2 – Off
Lane A&B – Both On
Illuminate Properly
Fuel Pressure –Green
Throttle – 50% *Cold*
Throttle – 35% *Warm*
Prop – Clear
Ignition – Engage
Throttle – As Req.
Oil Pressure – MINIMUM *12 PSI Within 10 Seconds*
Throttle – 2500 RPM *5 Seconds*
Engine Gauges *Ck- Shift Gen B To Gen A*
Ammeter
Avionics – On
Fuel Pump 2 – On
Throttle – As Req.

BEFORE TAXI

Flaps – Retract
Engine Gauges
Flight Instruments
Avionics – On
ATIS / AWOS
Lights – As Req.
Heater/Def – As Need
COMM/NAV Radios
PTT - Test
Freq. - GND / CLNC
Taxi Diagram - Ready
Brake - Release & Test

RUN-UP

Brakes – Hold
Flight Controls – Free & Correct
Flight Instruments
Fuel Shut-Off Valve – Down/On
Fuel Quantity
Trim – T/O
Canopy – Ck Latched
Ctrl Stick – Full Aft
Throttle – Max Then 4000 RPM
Lane A – Off *Max Drop 180 RPM*
Lane A – On
Lane Fault Light
Lane B – Off *Max Drop 180 RPM*
Lane B – On
Throttle – Idle Ck. then 2000rpm
Engine Gauges
Fuel Pump 1 – On
Fuel Pump 2 – Off *Wait 5 Sec.- Ck Fuel Pressure*
Fuel Pump 2 – On
Fuel Pump 1 – Off *Wait 5 Sec.- Ck Fuel Pressure*
Fuel Pump 1 – On
Fuses – Extinguished
Freq. - Tower / CTAF

PRE-TAKEOFF

Flaps – Up
Belts / Harness
Brakes – Release

ABORT PLAN READY!

TAKEOFF

Brakes – Apply
Throttle – Full Power
Brakes – Release
Rotation – **50-55** *(57-63)*

CLIMB

Throttle – Full *5800 RPM < 5 Min. 5500 RPM Continuous*
75 *(86)*
Flaps – Up
Enroute – **85** *(98)*
Trim
Instruments
Flight Plan – Open

CRUISE

Throttle – Set RPM *To Cruise Power 5500 RPM Max*
Trim – As Required
Engine Gauges

LOCAL FREQUENCIES

ATIS	135.475
GND	120.45
TWR	132.10
TWR (Sec)	134.30

DESCENT

Throttle – As Req.
ATIS / AWOS
Altimeter
Instruments
Trim

PRE-LANDING

Belts & Harness – Pilot & PAX – Tighten
Brakes – Pedal Test
Lane A & B – Both On
Fuel Pumps – Both On
Lights – On Steady
Flaps – As Req. < **82** *(94)*
* **55-60** *(63-69)*
Trim – As Required
Throttle – As Required *To Control Rate of Descent*

LANDING

Touchdown – Mains 1st
After Touchdown – Stabilator Control - *Increase To FULL AFT As Speed Decreases*
Brake – As Required

GO-AROUND
Power – Full
Positive Rate Climb
Flaps – Retract Slowly

AFTER LANDING

After Clear Of Runway
Flaps – Retract
Lights – As Req.
Trim – Neutral
Freq. - Ground

SECURING

Exterior Lights – Off
Avionics Master – Off
ELT – Ck Off
Throttle – 2000 RPM
Lane A & B – Off
Throttle – Idle
Fuel Pumps – Off
Master – Off
Stick – Secured w/ Belt
Brakes
Wheel Chocks
Tow Bar
Tie-Downs – Secure

Cold Weather Shutdown Note:
Check Fuel For Water.

Close Flight Plan

* *Adjust Speed As Needed For Conditions.*
Check Your POH For Notes / Cautions Plus Manufacturer For Revisions.

Vr • Rotation – **50-55** *(57-63)*
Vx • Best Angle Climb – **60** *(69)*
Vy • Best Rate Climb – **75** *(86)* KCAS

Vs_0 • Stall With Flaps – **45** *(52)*
Vs • Stall w/o Flaps – **50** *(58)*
Best Glide *(850 lbs)* App. **54** *(62)*
Best Glide *(Full Gross)* – **63** *(72)*

Vo • Max Abrupt Ctrl *(850 lbs)* – **72** *(83)*
Vo • Max Abrupt Ctrl *(1320 lbs)* – **90** *(103)*
Vo • Max Abrupt *(Full Gross)* – **108** *(124)*
Vno • Max Structural Cruise – **108** *(124)*

Vne • Never Exceed – **136** *(150)*
Vfe • Max Flaps Operate – **82** *(94)*
X Wind • Max Demo'd – **11** *(13)*
Max Wind • Ground – **30** *(34)*

	KNOTS *(MPH)*	FLAPS °	– NOTES –
DEPARTURE			[1]BEFORE START: During High Ambient Temps Run Fuel Pump For 5 Minutes.
Rotation *	**50-55** *(57-63)*	Half	***Short Field***: **Flaps - Half.** Rotate * **50-55 KIAS** *(57-63)*
Best Angle Climb	**60** *(69)*	0	Then **60 KIAS** *(69)* Until Clear Obstacle.
Best Rate Climb KCAS	**75** *(85)*	0	***Soft Field***: **Flaps - Half. Raise Nose Higher.**
			After Breaking Ground Accelerate To Vx or Vy.
CRUISE *7,500' TAS*			
Economy	**92** *(106)*	0	4,500 RPM – 3.3 GPH
Normal	**103** *(118)*	0	5,000 RPM – 3.8 GPH
Maximum	**117** *(135)*	0	5,500 RPM – 4.8 GPH
ARRIVAL			
Approach	**75** *(86)*	As Required	Short Field Landing – **55** *(63)*
Short Final *	**60** *(69)*	Full	Flaps – Full

Specs Are Approximate Because Of Environment & Plane Model / Year Variables. Specs Are In: LBS, KIAS, Sea Level, Standard Day, Normal Category, Max.Gross Wt., No Wind, "Best ECONOMY", Wheel Pants, New Engine. ( ) = MPH.

VERTICAL SCALE = NAUTICAL MILES PER INCH: WAC = 14 SEC = 7 TAC = 3.5 NOS = 12 JEPP = 15 ELA = 12

~ *IMPORTANT... FREQUENTLY CHECK OUR WEBSITE & MANUFACTURER FOR UPDATES* ~ *COMPLETE CUSTOMIZATION AVAILABLE INCLUDING SIZES & FORMATS* ~ *PLEASE DO NOT COPY* ~

(IF UNABLE TO ABORT TAKEOFF)

POWER LOSS IMMEDIATELY AFTER TAKEOFF / NO RESTART

MAINTAIN AIRCRAFT CONTROL – MOVE CONTROL STICK FORWARD
60 KIAS *(69 MPH)*
THROTTLE – CLOSED
FUEL SHUT-OFF VALVE – OFF
FLAPS – DOWN
FUEL PUMPS – BOTH OFF
MASTER & IGNITION – OFF PROTECT BODY
EMS BACKUP BATTERY SWITCH – OFF
30 AMP GEN MAIN FUSE – PULL/REMOVE *ELT – Consider Activate*

POWER LOSS IN FLIGHT

60 KIAS *(69 MPH)*
SMART GLIDE – HOLD DIRECT-TO BUTTON *If Equiped With Garmin 3GX*
PICK LANDING SITE *Note Wind Direction & Velocity*
LANE A&B SWITCHES – BOTH ON
EMS BACKUP BATTERY – ON *Master – On?*
FUEL PUMPS – BOTH ON
FUEL SHUT-OFF VALVE – ON / DOWN *Note Gauges*
THROTTLE – 55% - 65% OPEN
SPAR PIN OVERRIDE SWITCH – HOLD DOWN
IGNITION – ENGAGE *Vary Throttle If Unable To Start*

IF NO RESTART & TIME PERMITS

BEST GLIDE – 63 KIAS *(72 MPH)* *Minimum Rate Of Descent* – 59 KIAS *(68)*
SMART GLIDE – HOLD DIRECT-TO BUTTON *If Equiped With Garmin 3GX*
SQUAWK 7700
DECLARE EMERGENCY *TWR, APP, Unicom, 121.5*
FUEL PUMPS – BOTH OFF
FUEL SHUT-OFF VALVE – OFF
SEATBELTS / HARNESS
FLAPS – AS NEEDED *Full Flaps When Field Assured*
LANE A&B SWITCHES – BOTH OFF
MASTER & IGNITION – BOTH OFF *EMS Backup Battery – Off*
30A GEN MAIN BUS FUSE – PULL / REMOVE *ELT – Consider Activating*
55-60 KIAS *(63-68 MPH)* PROTECT BODY

ELECTRICAL FIRE IN FLIGHT

ELECTRICAL SWITCHES – ALL OFF *Leave Lane / Ignition Switches – On*
30A "GEN MAIN BUSS" FUSE – PULL – REMOVE
AIR VENT – OPEN IF NECESSARY
USE FIRE EXTINGUISHER
LAND ASA POSSIBLE

ENGINE FIRE IN FLIGHT

FUEL SHUT-OFF VALVE – PULL UP – OFF
FUEL PUMPS – BOTH OFF
LANE A&B *(OR IGNITION SWITCHES)* – BOTH OFF
AIR VENTS & CABIN HEAT – BOTH CLOSED
AIRSPEED – INCREASE IN AN ATTEMPT TO EXTINGUISH FIRE
PROCEED WITH POWER OFF LANDING

ENGINE FIRE DURING START

FUEL PUMPS – OFF
– IF FIRE PERSISTS –
ELECTRICAL SWITCHES – ALL OFF
LANES A & B – BOTH OFF
EVACUATE AIRCRAFT. IF AVAILABLE EXTINGUISH FIRE THROUGH AIR OUTLET TUNNEL AT THE BOTTOM OF THE COWL.

LOW OIL PRESSURE INDICATION

PERFORM PRECAUTIONARY LANDING
THROTTLE – RPM MINIMUM ADJUSTMENT

HIGH OIL PRESSURE INDICATION

PERFORM PRECAUTIONARY LANDING
THROTTLE – REDUCE RPM TO MINIMUM NECESSARY

HIGH OIL TEMPERATURE

ON GOUND: THROTTLE – 2500-3000 RPM, TURN INTO WIND IF POSSIBLE
IN FLIGHT: REDUCE PITCH ANGLE, INCREASE AIRSPEED

GENERATOR A OR B FAILURE

NON-ESSENTIAL ELECTRICAL EQUIPMENT – OFF
LAND AS SOON AS POSSIBLE
NOTE: GENERATOR A IS ABLE TO SUPPLY A LIMITED AMOUNT OF POWER TO THE MAIN BUS IF THE EMS BACKUP BATTERY SWITCH IS TURNED ON.
Turn Off All Non-Essential Electrical Equipment First.

GENERATOR A & B FAILURE

Failure Of Both Generators Will Result In Engine Stoppage.
NON-ESSENTIAL ELECTRICAL EQUIPMENT – OFF
EMS BACKUP BATTERY – ON
FOLLOW ENGINE FAILURE IN FLIGHT
LAND AS SOON AS POSSIBLE

UNICOM:	122.7 122.725 122.8 122.975 123.0 123.05
MULTICOM:	122.9 *(CTAF)* 122.75 *(Air To Air)*
FSS:	122.2
GROUND:	121.3 121.7 121.9 123.5 123.9
EMERGENCY:	121.5

RADIO OUT: CHECK CIRCUIT BREAKERS & VOLUME RECYCLE ALTERNATOR SWITCH IF IFR & STILL OUT, SET XPDR TO 7600. *(Suggested For VFR If In B, C, D Airspace.)*

* *Every Plane Has A Different Empty Weight And Useful Load.*
Van's RV-12iS LSA ~ Rotax 100 HP

* **Empty Weight:** _____ LBS *(Specific Plane Weight)*
* **Max. Useful Load:** _____ LBS *(Including Fuel @ 6 lbs/gal)*
Max. Baggage Area: 75 LBS *(Included In Useful Load)*
Max. T.O. Weight: 1320 LBS

Fuel Type: 100LL or *UL94 or 91 AKI Prem. Unleaded Auto*
Usable Fuel: 19.7 Gallons *(Max 10% Ethanol Allowed)*
Oil Capacity: 3 Liters *(.8 Gallons)*
Electrical: 12 VOLT / 30 AMP
Tire Pressure: Nose - 22 PSI / Main - 25 PSI