

Van's RV-12 with Dynon

Normal Procedures suggested flow

Rev.20150730

PREFLIGHT

CABIN
Canopy OPEN-CHECK OPERATION
Spar pins CHECK
Fuel tank CHECK FUEL LEVEL

TAKE OFF PROHIBITED WITH LESS THAN 4 GALLONS

Flight Control Lock. REMOVE
ELT CHECK OFF
Documents, AROW PRESENT
Weight & Balance PERFORMED
Master Switch ON
Hobbs RECORD
Gascolator DRAIN and CHECK for leaks
FUEL SAMPLE CHECK for water and contamination
Elevator trim TAKE OFF POSITION
Stall warning vane ACTUATE
Stall Warning horn CHECK ON
Master switch OFF

LEFT MAIN LANDING GEAR
Main Tire (25 PSI and tread condition) CHECK
Brake lines, leakages, pads & rotors. CHECK
Axle nut cotter pin CHECK
Wheel chokes REMOVE

LEFT WING
Leading edge condition Tie down, Strobes/Navigation Lights. CHECK
Flaperon freedom of movement , 3 hinge bolts CHECK

FUSELAGE left side
Flaperon actuator CONNECTED
Static port CLEAN & OPEN

EMPENAGE
Vertical Stabilizer condition CHECK
Stabilator CHECK condition and FREE of movement
Antiservo Tab Condition and attachment CHECK
Rudder CHECK condition and FREE of movement
Tail Tie down DISCONNECT

FUSELAGE right side
Static port CLEAN & OPEN
Comm. antenna condition CHECK
Fuel cap SECURE & VENT OPEN

Flaperon actuator CONNECTED

RIGHT WING
Flaperon freedom of movement , 3 hinge bolts CHECK
Strobes/Navigation Lights. CHECK
Leading edge condition CHECK
Tie down, DISCONNECT

RIGHT MAIN LANDING GEAR
Main Tire (25 PSI and tread condition) CHECK
Brake lines, leakages, pads & rotors. CHECK
Axle nut cotter pin CHECK
Wheel chokes REMOVE

RIGHT NOSE SECTION OPEN
Cowl inspection door Coolant level CHECK
Engine Oil level, color and clarity CHECK

WARNING: MAKE SURE MASTER AND BOTH IGNITION SWITCHES ARE OFF BEFORE TURNING PROPELLER BY HAND

Transponder antenna security CHECK
Muffler CHECK
Air Inlets & Oil and Water coolers CHECK
Nose gear CHECK
Nose Tire condition and 22 PSI CHECK
Wheel chocks REMOVE
Cowling condition and screws CHECK
Fresh Air Vent CHECK for Obstructions
Propeller & Spinner condition & security CHECK
Pitot tube CHECK CLEAN
Final walk around

TAKE OFF PROHIBITED WITH LESS THAN 4 GALLONS

BEFORE STARTING ENGINE

EFIS ON Press & Hold LEFT BUTTON
Passenger Briefing. PERFORM RESTRAINED
Baggage FASTENED
Seat Belts CLOSED & LATCHED
Canopy Fuel Valve CHECK PUSH ON
Throttle Friction Lock ADJUST
Brakes. TEST
MASTER ON
Ignition A & B Strobes ON
Lights ON

STARTING ENGINE

DO NOT START ENGINE WHEN OUTSIDE TEMP IS BELOW -13° F / -25° C or ABOVE 120° F / 50° C

Fuel Pressure NORMAL
Throttle Cold Start IDLE
Throttle Warm Start 1/8 OPEN
Choke Cold Start PULL DETENT SWITCH ON
Choke Warm Start OFF
Brakes HOLD CLEAR
Propeller Ignition Key START

LIMIT STARTER TO 10 SECONDS WITH 2 MINUTES COOL OFF

OIL PRESSURE CHECK
(Above 12 PSI within 10 second or shutdown)
Throttle IDLE <2500 RPM
Choke OFF
Ammeter CHECK Charging Rate
Avionics ON
ATIS/ASOS/Altimeter SET

TAXI

Lights AS NEEDED
Brakes. CHECK
Taxi RPM until Oil Temp above 122° F 1400-2500
Flight Instruments. VERIFY proper indications

RUN UP

Brakes SET
Flight Controls FREE and
Flight Instruments (PFD) CORRECT
Fuel Valve CHECK & SET
Fuel Quantity CHECK PUSH ON
Canopy CHECK
Elevator CHECK LATCHED
Oil Temp. above 122° F STICK BACK
Throttle in the GREEN BAND
Ignition Cycle A – B 4000 RPM
(Max 300 RPM drop or 120 RPM differential) BOTH ON
Engine Indications. CHECK
Ammeter CHECK
Throttle IDLE (< 2500rpm)
Friction Lock ADJUST
Fuses CHECK
Fuel Pressure 2.2PSI minimum CHECK
Seat belts and harness CHECK



BEFORE TAKE OFF

TAKE OFF PROHIBITED WITH LESS THAN 4 GALLONS

Strobes/Landing Lights	ON
XPDR	ALT & SQWAK
Elevator Trim	SET for T/O
Flaps	As Required
Canopy	LATCHED
Brakes	RELEASE
Take Off/Abort Plan	BRIEF

NORMAL TAKE OFF

Throttle-Apply smoothly	FULL
Engine Instruments	CHECK
Stabilator	NOSE in TAKE OFF attitude
Rotate CLIMB Vy	50/55 KTS

TAKE OFF with OBSTACLE

Brakes	APPLY
Throttle-Apply smoothly	FULL
Engine Instruments	CHECK
Stabilator	NOSE in TAKE OFF attitude
ROTATE	50 KTS
CLIMB Vx	60 KTS
Flaps	RETRACT

TAKE OFF SOFT FIELD

Throttle-Apply smoothly	FULL
Engine Instruments	CHECK
Stabilator	NOSE in TAKE OFF attitude
Rotate	50 KTS
After Lift Off	LEVEL OFF until Safe Airspeed
CLIMB Vx	60 KTS
CLIMB Vy	75 KTS
Flaps	RETRACT

CLIMB

Throttle	5500 RPM
Airspeed	75Kts.
Landing Light	OFF
Engine Instruments	CHECK
Flight Plan	OPEN
Cruise Climb	85KTS

CRUISE

Airspeed	ACCELERATE to desired Speed
Throttle	5000 RPM
Trim	As required
Flaps	CHECK UP
Engine Gauges	CHECK

DESCENT

Power.	AS REQUIRED
ATIS/AWOS/Altimeter	SET
Engine Instruments	CHECK
Maintain Cylinder head and Oil Temperatures in GREEN	
arc. Avoid Propeller wind milling.	

PRE LANDING

Landing Light	ON
Fuel	CHECK
Seat Belts	CHECK
Auto Pilot	OFF
Wing Flaps.	below 82 KIAS

SHORT FIELD / OBSTACLE LANDING

Wing Flaps.	below 82 KIAS FULL
Airspeed.	55 KIAS until flare

GO AROUND

THROTTLE	FULL
FLAPS	Retract to 1 st DETENT
AIRSPPEED	Vx 60 KCAS until clear of obstacles then Vy 75 KCAS with flaps up

AFTER LANDING

Once clear of the Runway	
Wing Flaps.	RETRACT
Landing Lights	AS NEEDED
TRIM	T/O
XPDR	GROUND

SHUT DOWN & SECURING

Throttle	IDLE CHECK
ELT	OFF
Ignition A OFF - Ignition B OFF	
Hobbs	RECORD
Avionics Master	OFF
Master	OFF

POST IGNITION DUE TO HOT WEATHER (DIESELING)	
Ignition	BOTH ON
Choke	ON
Ignition ON for 3 Seconds then	BOTH OFF

Control Lock/Chocks	INSTALL
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POWER LOSS AFTER TAKE OFF

IMMEDIATELY PITCH FORWARD FOR AIRSPEED!	
AIRSPPEED	60 KTS
IF SUFFICIENT RUNWAY REMAINS:	
THROTTLE	CLOSE
BRAKES	APPLY

POWER LOSS IN FLIGHT

AIRSPPEED-BEST GLIDE	60 KTS CHECK
FUEL CUT OFF VALVE	ON CHECK
IGNITION	BOTH
FUEL PUMP FUSE	CHECK
CHOKE	CHECK OPEN

FORCED LANDING

IF ENGINE RESTART IS NOT POSSIBLE	
AIRSPPEED-BEST GLIDE	60 KTS
FLAPS	UP FOR MAXIMUM RANGE
RADIO MAYDAY	121.5
SQUAWK	7700
FUEL CUT OFF VALVE	OFF BOTH
IGNITION SWITCHES	OFF
MASTER SWITCH	OFF

ELECTRICAL FIRE

ELECTICAL SWTCHES	OFF BOTH
IGNITION	ON
AIR VENT	OPEN
FIRE EXTINGUISHER	USE IF AVAILABLE
LAND AS SOON AS PRACTICAL	

ENGINE FIRE DURING START

CONTINUE CRANKING WITH STARTER	
CHOKE	PUSH OPEN
THROTTLE	FULL OPEN
IF FIRE IS EXTINGUISHED:	
SHUT DOWN AND INSPECT DAMAGE	
IF FIRE PERSISTS:	
FUEL SHUT OFF VALVE	OFF
ELECTRICAL AND IGNITION	OFF
EXIT AIRCRAFT AND USE FIRE EXTINGUISHER	
THROUGH AIR OUTLET IN THE BOTTOM OF COWL	

ENGINE FIRE IN FLIGHT

FUEL SHUT OFF VALVE	PULL OFF
ELECTRICAL AND IGNITION	OFF
PERFORM AN EXPEDITED DESCENT USING	
FORCED LANDING PROCEDURES.	
CONSIDER FORWARD SLIP TO DIVERT SMOKE	
RADIO MAYDAY	121.5
ON FINAL APPROACH	MASTER SWTCH OFF
AIRSPPEED	60 KIAS

