GROUND PROCEDURES — Vans RV-12iS N262BS/N954B

CABIN

1. Canopy.....OPEN check condition
2. Required Documents.....A.R.O.W.
3. Ignition Switch ..... OFF
4. Spar pins.....CHECK
5. EFIS..... Master dependent
6. Flight Control Locks ..... REMOVE
7. Fuel tank.....CHECK FUEL LEVEL
   (Min fuel for take-off: 4 gallons)
8. Fuel Shut-Off Valve ..... OPEN (Push Down)
9. Pitot Cover.....REMOVED
10. Master switch..... ON
11. Hobbs/Engine(TACH in FSP) ..... RECORD
12. Avionics switch..... ON
13. Elevator trim .....T/O Position
14. Avionics (headset)..... ON
15. Stall warning vane..... ACTUATE, check ON
16. Strobes/Nav lights..... CHECK then OFF
17. Avionics ..... OFF
18. Master..... OFF
19. ELT..... OFF
20. Baggage..... RESTRAINED

Left Main Landing Gear

21. Tire .....CONDITION (25psi)
22. Brake ..... CHECK condition, no leakage
23. Axle Nut..... CHECK cotter pin installation
24. Wheel Bearings .....SHAKE WHEEL - CHECK
25. Wheel Chocks..... REMOVE

Left Wing

26. Wing .....CONDITION
27. Wing Hand Hold .....CHECK no free movement
28. Tie-Down ..... REMOVE
29. AOA and Static Port..... check
30. Flaperon .....condition, FOM
31. Flaperon Hinge Brackets .... BOLTS – CHECK

Fuselage (Left Side)

32. Controls..... CONNECTED
33. Static Port..... CLEAN & OPEN
34. Fuel Sample.....CHECK

Empennage

35. Vertical Stabilizer .....CHECK condition
36. Stab .....condition, attachment, FOM
37. Anti-Servo Tab.....condition, attachment
38. Rudder.....condition, attachment, FOM
39. Tie-Down..... DISCONNECT

Fuselage (Right Side)

40. Static Port..... CLEAN & OPEN
41. Comm. Antenna .....CHECK
42. Fuel and Fuel Air Vent Lines..... CLEAR
43. Fuel Cap.....SECURE & VENT OPEN
44. Controls..... CONNECTED

Right Wing

45. Flaperon.....CHECK condition, FOM
46. Flaperon Hinge Brackets..... BOLTS - CHECK
47. Wing..... CONDITION
48. Tie-Down .....REMOVE

Right Main Landing Gear

49. Tire..... CONDITION (25psi)
50. Brake.....CHECK condition, no leakage
51. Axle Nut .....CHECK cotter pin installation
52. Wheel Bearings..... SHAKE WHEEL - CHECK
53. Wheel Chocks .....REMOVE

Nose Section

54. Transponder Antenna..... CHECK
55. Muffler.....CHECK condition, attachment
56. Cowl Door .....OPEN
57. Coolant .....LEVEL CHECK
58. Engine Oil..... CHECK
    a. MASTER AND BOTH LANE A/B..... OFF
    b. Remove oil cap; place in holder on oil door
    c. Turn prop by hand in direction of prop rotation several times (could be 10 full rotations) to pump oil from engine into oil tank
    d. A gurgling sound will be heard
    e. Oil level.....Min: Bottom of flat dipstick
    Max: top of flat dipstick
    f. NOTE: Flat portion is worth one-half quart of oil
    g. Replace oil cap
59. Nose Landing Gear..... CHECK
60. Tire..... CONDITION (22psi)
61. Tow Bar.....disconnected and stowed
62. Wheel Chocks .....REMOVE
63. Cowling ..... CHECK condition
64. Right Air Inlet.....CHECK unobstructed
65. Propeller and Spinner ..... CHECK
66. Pitot .....CLEAN & OPEN
67. Oil & Coolant Air Duct.....CHECK clear
68. Left Air Inlet .....CHECK clear
69. Cowl Door ..... CLOSED

EMPLOYEES' Boeing FLYING ASSOCIATION

GROUND PROCEDURES — Vans RV-12iS N262BS/N954B

BEFORE STARTING ENGINE

1. Passenger Briefing ..... PERFORM
2. Baggage .....RESTRAINED
3. Safety Belts ..... FASTENED
4. Canopy.....CLOSED and LATCHED
5. Fuel Shutoff Valve.....ON (push down)
6. Throttle..... CHECK FRICTION
7. Master Switch.....ON
8. Fuses ..... CHECK
9. Strobe Lights.....ON

STARTING ENGINE

DO NOT START ENGINE WHEN
OIL TEMP IS BELOW -13º F / -20 º C or
AMBIENT TEMP ABOVE 120 º F / 50 º C

1. PFD.....On ELECTRICAL page
2. Brakes ..... TEST and HOLD
3. Fuel Pump 1 .....ON
4. Fuel Pump 2 .....OFF
5. LANE A & B..... BOTH ON, warn lamps illuminate & extinguish after 3 secs.
6. Throttle ..... SET
   Cold 50% +/ -5%
   Warm 35% +/ -5%
7. Brakes .....HOLD
8. Propeller .....CLEAR
9. Ignition Key..... ENGAGE (10 sec max)
10. Throttle.....REDUCE AS REQ'D
11. Oil Pressure.....CHECK 12 psi in 10 sec or immediately shutdown engine
12. Throttle..... > 2500 RPM until ammeter is active (approx. 5 sec)
13. Ammeter..... CHECK FOR CHARGING
14. Avionics Switch .....ON
15. **Fuel Pump 2 ..... ON**
16. Throttle.....< 2500 RPM until Oil Temp > 120F
17. Engine Gauges ..... CHECK
18. Flight Instruments (PFD/MFD)..... SET
19. Transponder ..... SET
20. GPS..... Runway diagram
21. ATIS / Altimeter ..... SET
22. Lights.....ON as REQ'd

FIRE DURING START

1. **Ignition Switch....START, continue cranking**
2. **Throttle ..... FULL OPEN**
3. **Fuel Shutoff Valve.....PULL UP – OFF**
4. **Fuel Pump Switches .....BOTH OFF**

IF Fire Extinguished: shutdown & inspect
If Fire Persists:

5. **Electrical Switches ..... ALL OFF**
6. **Lane A & B .....BOTH OFF**
7. **Exit Aircraft**

RUNUP

1. Brakes..... HOLD
2. Flight Controls ..... FREE & CORRECT
3. Flight Instruments .....CHECK & SET
4. Fuel Shutoff Valve .....CHECK DOWN - ON
5. Fuel Quantity.....CHECK (min 4 gal)
6. Pitch Trim .....SET for takeoff
7. Canopy ..... CHECK Latched
8. Oil Temp .....> 120° F
9. LANE & IGNITION CHECK
   a. Control Stick..... FULL BACK
   b. Throttle.....4000 RPM
   c. Lane A ..... OFF / ON (*Max drop 180 RPM*) *wait for warn light to extinguish*
   d. Lane B ..... OFF / ON (*Max drop 180 RPM*) *wait for warn light to extinguish*
10. Throttle .....2000 RPM
    a. Engine Instruments.....CHECK
    b. Volts..... = / > 13 VDC
    c. Ammeter.....CHECK + CHARGE
11. Fuel Pressure.....CHECK 40.6 to 50.8
12. Fuel Pump 1 ..... OFF, wait 5 sec *CHECK 40.6-50.8 psi*
13. Fuel Pump 1 ..... ON
14. Fuel Pump 2 .....OFF, wait 5 secs *CHECK 40.6-50.8 psi*
15. Fuel Pump 2 ..... ON
16. Throttle .....1800 - 2000 RPM
17. Seat Belt .....FASTENED & SNUG
18. Take Off Briefing .....REVIEW
19. Brakes.....RELEASE

SHUTDOWN - SECURING AIRPLANE

1. Engine Cool Down ...(If WX hot) 2500 RPM – 2min
2. NAV & Land Light Switches ..... OFF
3. Avionics Switch..... OFF
4. ELT.....CHECK OFF
5. Throttle ..... IDLE
6. Lane B..... OFF
7. Lane A..... OFF
8. Fuel Pumps..... BOTH OFF
9. HOBBS/ENGINE(TACH in FSP)..... Record
10. Master Switch ..... OFF
11. Aircraft Keys ..... ON KNOB
12. Gust Lock..... INSTALLED
13. Pitot Cover..... INSTALLED
14. Wheel Chocks..... INSTALLED
15. Tie Downs..... INSTALLED
16. Tires and Aircraft.....INSPECTED
17. Shade/Canopy Cover..... INSTALLED

NORMAL TAKEOFF

1. *Canopy* ..... *CLOSED/LOCKED*
2. *Fuel Quantity* ..... *CHECK*
3. *Elevator Trim* ..... *set for TAKEOFF*
4. *Lights* ..... *As REQ'D*
5. Wing flaps ..... Up or 50%
6. Control Stick ..... ½ Neutral - Aft
7. Throttle ..... Smoothly FULL OPEN
8. Nose to take-off attitude .... ASAP and HOLD
9. Take-off ..... Allow plane to fly off runway
10. Climb Speed ... Vx = **60 KIAS;** Vy **= 75KIAS**
11. Wing Flaps ..... Up
12. Engine Gauges ..... CHECK

SHORT / SOFT FIELD TAKEOFF

1. *Normal take off procedure except*
2. Flaps 50%
3. Elevator Control ..... SLIGHTLY TAIL LOW
4. After Liftoff ..... Accelerate to safe airspeed
5. Climb Speed ..... Vx **60 KIAS**

CRUISE

1. Flaps ..... Verify Up
2. Throttle ..... AS Desired (< 5500 RPM)
3. Engine Gauges ..... CHECK

DESCENT

1. Throttle ..... as REQ'd
2. ATIS/Altimeter ..... SET
3. Flight Instruments ..... ADJUST
4. Engine Gauges ..... CHECK

BEFORE LANDING

1. Seat Belt ..... FASTENED
2. Brakes ..... CHECK
3. LANE A & B ..... BOTH ON
4. Fuel Pump Switches ..... BOTH ON
5. Lights ..... ON
6. Flaps ..... < 82 KIAS
7. Autopilot ..... DISCONNECT

LANDING

1. Wing flaps ..... as DESIRED **(< 82 KIAS)**
2. Airspeed ..... **65 - 70 KIAS (flaps UP)**
3. Airspeed ..... **55 - 60 KIAS (flaps down)**
4. Short Field ..... Flaps Full, 55 KIAS

AFTER LANDING

1. Flaps ..... UP
2. Lights ..... ON as REQ'd
3. Trim ..... T/O
4. Transponder ..... ALT

BALKED LANDING

1. Throttle ..... FULL
2. Flaps ..... HALF
3. Climb speed ..... Vx **60 KIAS**
4. Wing Flaps ..... **Yy 75 KIAS, FLAPS UP**

V speeds		Info	
Vso	**41**	**Oil** (full/min)	**Flat part**
Vs1	**45**	**Fuel** [use]	**20.2**
Vr	**55**	**Weight TO**	**1320**
Vx	**60**	**Weight Lnd**	**1320**
Vy	**75**	**Max Xwind**	**11**
Vg	**63**		
Vfe	**82**	**App FL DN**	**55-60**
Va	**72 / 90**	**App FL UP**	**65-70**
Vno	**108**		
Vne	**136**		

ENGINE FAILURE DURING FLIGHT

1. **Airspeed ..... 63 KIAS**
2. **Fuel Cut Off Valve ..... CHECK ON**
3. **LANE A&B ..... CHECK**

ENGINE FAILURE ON TAKE-OFF (airborne)

1. **Airspeed ..... 60 KIAS (55 min)**
2. **Suitable Landing Area ..... Select**
3. **Flaps ..... FULL DOWN**
4. **Fuel Shut-Off Valve ..... OFF**
5. **Lanes A & B ..... BOTH OFF**
6. **Fuel Pump Switches ..... BOTH OFF**
7. **Master Switch ..... OFF**

ENGINE FIRE IN FLIGHT

1. **Fuel Shutoff Valve ..... PULL UP - OFF**
2. **Fuel Pump Switches ..... BOTH OFF**
3. **Lane A & B ..... BOTH OFF**
4. **Air Vents and Cabin Heat ..... CLOSED**
5. **Airspeed Increase**
6. **Consider side slip to divert smoke**
7. **Radio MAYDAY 121.5**
8. **Follow Forced Landing Procedure**

ENGINE AIR RESTART

1. Maintain Airspeed ..... 60 KIAS min
2. Smart Glide ... Hold Direct-To Button on G3X
3. Lane A & B switches ..... BOTH ON
4. EMS Backup Battery Switch ..... ON
5. Fuel Pump Switches ..... BOTH ON
6. Fuel Shut-Off Valve ..... CHECK ON – DOWN
7. Throttle ..... SET to 55%-65%
8. Spar Pin Override Switch ..... HOLD DOWN
9. Ignition Key ..... ENGAGE

If restart not possible, change throttle settings

EMERGENCY LANDING NO POWER

1. If engine restart is not possible
2. Airspeed-best glide ..... 63 kts
3. Smart Glide ..... Hold Direct-To Button on G3X
4. Fuel Shutoff Valve ..... PULL UP – OFF
5. Fuel Pump Switches ..... BOTH OFF
6. Flaps ..... UP for max range
7. Squawk 7700
8. ELT ..... ACTIVATE for off airport landing
9. Radio ..... MAYDAY 121.5
10. Lane A & B switches ..... BOTH OFF
11. Final Approach ..... 55-60 KIAS
12. Flaps ..... DOWN when landing assured
13. Master Switch ..... OFF
14. 30A "Gen Main Bus" Fuse .... PULL-REMOVE

ELECTRICAL FIRE IN FLIGHT

1. Electrical Switches ..... ALL OFF
2. 30A "Gen Main Bus" Fuse .... PULL - REMOVE
3. Air Vent ..... OPEN if necessary
4. Fire Extinguisher ..... ACTIVATE

DITCHING

1. Smart Glide ... Hold Direct-To Button on G3X
2. ELT ..... ACTIVATE
3. Transponder ..... SQUAWK 7700
4. Radio ..... MAYDAY 121.5
5. Seats and Seat Belts ..... SECURE
6. Fuel Pump Switches ..... BOTH OFF
7. Lane A & B ..... BOTH OFF
8. Flaps ..... DOWN
9. Master Switch ..... OFF
10. 30A "Gen Main Bus" Fuse .... PULL-REMOVE
11. Approach:

High winds, heavy seas ..... INTO THE WIND
Light winds, heavy swells ... PARALLEL TO SWELLS

12. Canopy ..... UNLATCH
13. Touchdown ..... LEVEL ATTITUDE
14. Face ..... CUSHION at touchdown
15. Life Vests/Raft ..... CLEAR of A/C INFLATE

Partial Power Loss

Follow the "Engine Air Restart: procedure

BUS A and B Indicator Lights

1. Either light flashing ..... LDG Recommended
2. Either light continuous on ..... Land ASAP

SEE CHECKLIST IN AIRCRAFT FOR ADDITIONAL EMERGENCY PROCEDURES