Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

V-SPEEDS

V_{SO}	**62 (54)**	**Stall – Full Flaps**
V_{S1}	**72 (63)**	**Stall – Clean**
V_R	**80 (70)**	**Takeoff Rotation – Flaps Up**
V_Y	**110 (96)**	**Best Rate – Gear Up & Flaps Up**
V_R	**70 (61)**	**Takeoff Rotation – Flaps Half**
V_X	**80 (70)[1]**	**Best Angle – Gear Up & Flaps Half**
V_{FE}	**120 (104)**	**Maximum Flap Extension**
V_{LO}	**140 (122)**	**Maximum Landing Gear Operation**
V_{LE}	**167 (145)**	**Maximum Landing Gear Extended**
V_A	**142 (123)**	**Design Maneuvering**
V_{NO}	**190 (165)**	**Maximum Structural Cruising**
V_{NE}	**226 (196)**	**Never Exceed**
	102 (89)	**Best Glide (– 1 MPH / 100 lbs under 3000 lb)**
	110 (96)	**Air Restart**
	87 (76)[2]	**Minimum Sink Rate**

Note 1: The information manual recommends 75 (65), but the club recommendation is higher because of the excessive angle of attack and proximity to a stall resulting from use of the lower speed.

Note 2: Estimated as mid-point between V_{S1} and Best Glide. Results in lowest sink rate, or maximum time in the air in an engine out situation.

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

NOTES REGARDING THIS CHECKLIST

This checklist is compiled from a variety of sources. Due to the age of the aircraft, the official POH contains very little operational data. In lieu of the official POH, data was taken from the information manuals of later model aircraft, from experienced pilots who fly the aircraft, and from general best practices. The order of precedence of these sources is as follows:

1. The official POH.
2. Other information manuals.
3. Input of experience pilots.
4. General best practices.

In a few cases, information from experienced pilots has been used in lieu of book numbers and these are so noted.

LEANING DURING GROUND OPERATIONS

The plugs are prone to fouling if the mixture is left in the full rich position during ground operations resulting in failure of the mag check. Immediately after startup, lean slightly past peak RPM. Likewise after landing, lean to avoid fouling which might cause a mag check failure for the next flight.

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

FUEL MANAGEMENT

CAUTION – Takeoffs and landings are always to be performed using a main tank that is at least ¼ full (5 gallons).

For normal operations, depart using the fullest main tank. Once in level flight, switch to an auxiliary tank and consume all of the usable fuel. Switch to the other auxiliary tank and consume all of its usable fuel. Last, consume the fuel in the main tanks leaving an adequate reserve. Land using the fullest main tank.

Do not intentionally run a tank dry. Significant time is required to reestablish continuous fuel flow through the system. If a tank is run dry, use the emergency air restart procedure. If a tank has been run dry or drained and refilled, at engine run up with a moderate power setting, the tank should be selected for at least 20 seconds to assure that all air has been purged from the lines.

Excess fuel from the injection system is returned to the selected tank. So in normal operation, there should be no cross feeding of the tanks.

USABLE FULE

2 Main Tanks @ 19 Gallons Each – 15.5 usable
2 Aux Tanks @ 17 Gallons Each – 15 usable
Flight Plan Total Fuel – 61 gallons

CAUTION – To completely fill the tanks, considerable time and refilling is required as the baffles in the tanks impede the flow of fuel. Fill each of the four tanks, then wait a few minutes and refill each tank. Repeat this process until no drop in the fuel level is observed.

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

CRUISE PERFORMANCE

Continental IO-520D (standard conditions)

Altitude	RPM	MP	% Max BHP	TAS	GPH
2,500 ft	2550	25	79	184 (160)	17.0
		24	70	180 (156)	15.1
		23	67	178 (155)	14.4
		22	63	175 (152)	13.6
		21	59	171 (149)	12.9
		20	55	168 (146)	12.1
		19	52	161 (140)	11.4
		18	47	153 (133)	10.5
		17	43	143 (124)	9.6
2,500 ft	2500	25	78	182 (158)	16.6
		24	69	179 (156)	15.0
		23	65	176 (153)	14.1
		22	61	172 (149)	13.2
		21	58	166 (144)	12.8
		20	53	161 (140)	11.7
		19	49	152 (132)	11.0
		18	42	140(122)	10.2
		17	41	136 (118)	9.3
2,500 ft	2400	24	65	176 (153)	14.1
		23	62	173 (150)	13.5
		22	58	166 (144)	12.8
		21	53	161 (140)	11.7
		20	50	153 (133)	11.1
		19	47	151 (131)	10.4
		18	42	140 (122)	9.4
		17	39	135 (117)	8.6
2,500 ft	2300	23	57	165 (143)	12.5
		22	54	162 (141)	11.8
		21	50	152 (132)	11.1
		20	47	150 (130)	10.4
		19	42	139 (121)	9.4
		18	39	134 (116)	8.9
		17	36	129 (112)	8.2
2,500 ft	2200	22	50	151 (131)	11.1
		21	47	149 (129)	10.4
		20	43	139 (121)	9.4
		19	40	133 (116)	9.1
		18	37	128 (111)	8.3
		17	33	124 (108)	7.5

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

CRUISE PERFORMANCE

Continental IO-520D (standard conditions)

Altitude	RPM	MP	% Max BHP	TAS	GPH
5,000 ft	2550	24	75	189 (164)	16.6
		23	71	186 (162)	15.3
		22	68	184 (160)	14.6
		21	65	180 (156)	14.0
		20	58	174 (151)	12.7
		19	53	155 (135)	11.7
		18	49	150 (130)	11.0
		17	45	144 (125)	10.0
5,000 ft	2500	24	71	185 (161)	15.3
		23	68	183 (159)	14.5
		22	63	179 (156)	13.7
		21	60	174 (151)	13.0
		20	56	169 (147)	12.3
		19	51	156 (136)	11.3
		18	48	151 (131)	10.6
		17	44	143 (124)	9.7
5,000 ft	2400	24	67	182 (158)	14.3
		23	63	178 (155)	13.7
		22	59	173 (150)	12.9
		21	56	168 (146)	12.3
		20	52	155 (135)	11.4
		19	49	149 (129)	10.8
		18	44	142 (123)	9.7
		17	41	138 (120)	9.1
5,000 ft	2300	23	59	173 (150)	12.9
		22	56	167 (145)	12.3
		21	52	154 (134)	11.4
		20	49	150 (130)	11.0
		19	45	141 (123)	10.2
		18	41	137 (119)	9.3
		17	40	135 (117)	9.1
5,000 ft	2200	22	51	148 (129)	11.3
		21	48	146 (127)	10.6
		20	45	140 (122)	10.0
		19	41	136 (118)	9.3
		18	38	134 (116)	8.8
		17	35	130 (113)	8.1

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

CRUISE PERFORMANCE

Continental IO-520D (standard conditions)

Altitude	RPM	MP	% Max BHP	TAS	GPH
7,500 ft	2550	22	67	188 (163)	14.5
		21	64	184 (160)	13.9
		20	59	176 (153)	12.9
		19	56	172 (149)	12.3
		18	51	164 (143)	11.3
		17	48	157 (136)	10.6
7,500 ft	2500	22	65	184 (160)	14.1
		21	62	181 (157)	13.5
		20	58	176 (153)	12.6
		19	55	170 (148)	12.0
		18	50	163 (142)	11.1
		17	47	158 (137)	10.4
7,500 ft	2400	22	61	180 (156)	13.1
		21	58	175 (152)	12.6
		20	54	170 (148)	11.8
		19	50	163 (142)	11.1
		18	47	157 (136)	10.4
		17	43	149 (129)	9.6
7,500 ft	2300	22	57	176 (153)	12.5
		21	54	170 (148)	11.8
		20	50	163 (142)	11.1
		19	47	156 (136)	10.5
		18	43	148 (129)	9.6
		17	40	140 (122)	9.1
7,500 ft	2200	22	53	170 (148)	11.7
		21	50	162 (141)	11.1
		20	47	155 (135)	10.4
		19	44	147 (128)	9.7
		18	41	139 (121)	9.1
		17	37	134 (116)	8.3
10,000 ft	2550	20	61	187 (163)	13.3
		19	58	183 (159)	12.6
		18	55	175 (152)	12.0
		17	51	171 (149)	11.1
10,000 ft	2500	20	60	185 (161)	13.0
		19	56	181 (157)	12.3
		18	53	172 (149)	11.5
		17	49	169 (147)	11.0
10,000 ft	2400	20	57	184 (160)	12.5
		19	53	170 (148)	11.5
		18	49	168 (146)	11.0
		17	45	162 (141)	10.2
10,000 ft	2300	20	53	180 (156)	11.5
		19	48	168 (146)	10.8
		18	46	161 (140)	10.3
		17	42	155 (135)	9.3
10,000 ft	2200	20	48	176 (153)	10.8
		19	46	161 (140)	10.3
		18	42	154 (134)	9.3
		17	40	149 (129)	9.1

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

CRUISE PERFORMANCE

Continental IO-520D (standard conditions)

Altitude	RPM	MP	% Max BHP	TAS	GPH
12,500 ft	2550	18	57	182 (158)	12.5
		17	52	169 (147)	11.4
12,500 ft	2500	18	54	173 (150)	11.8
		17	50	169 (147)	11.1
12,500 ft	2400	18	51	168 (146)	11.1
		17	47	165 (143)	10.5
12,500 ft	2300	18	47	164 (143)	10.4
		17	43	160 (139)	9.6
12,500 ft	2200	18	42	159 (138)	9.4
		17	40	152 (132)	9.1
15,000 ft	2550	16	49	167 (145)	10.8
		15	46	164 (143)	10.3
		14	41	153 (133)	9.3
15,000 ft	2500	16	48	166 (144)	10.6
		15	44	163 (142)	9.7
		14	39	152 (132)	8.9
15,000 ft	2400	16	46	165 (143)	10.3
		15	43	161 (140)	9.6
		14	40	151 (131)	9.1
15,000 ft	2300	16	42	151 (131)	9.3
		15	38	148 (129)	8.6
		14	34	146 (127)	7.5
15,000 ft	2200	16	39	148 (129)	9.0
		15	36	145 (126)	8.2
		14	32	143 (124)	7.3

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

PREFLIGHT INSPECTION

1. COCKPIT & CABIN

1. Weight and Balance – CHECKED
2. AROW Documents – IN AIRPLANE
3. Control Movement – NO BINDING OR NOISES
4. Mags – CONFIRM OFF
5. All Electrical Switches – OFF
6. All Radios – OFF
7. Intercom – OFF
8. Gear Selector – DOWN & LOCKED UNDER HOOK
9. Master Switch – ON
10. Fuel Gauges – VERIFY QUANTITY IN TANKS
11. Master Switch – OFF

2. FUEL

1. Main & Aux Tanks – LEVEL, COLOR, SMELL
2. Fuel Filler Well Drains – CLEAR
3. Fuel Caps & Covers – SECURED
4. Fuel Sumps (9 total; 2 per tank, 1 belly) – DRAINED
5. Fuel Sumps – VERIFY NOT LEAKING

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

PREFLIGHT INSPECTION

3. FUSELAGE & EMPENNAGE

1. Surfaces – NO DAMAGE, ICE, FROST, SNOW
2. Com Antennas – SECURE
3. Air Vent – CLEAR
4. Beacon – SECURE
5. Baggage Door – LOCKED
6. Right Static Port – CLEAR
7. VOR Antenna – SECURE
8. Stabilizer – NO DAMAGE, ICE, FROST, SNOW
9. Stabilizer Struts – SECURE
10. Strobe – SECURE
11. Elevator – SECURE, FREE, HINGES
12. Trim Tab – SECURE, HINGES
13. Rudder – SECURE, FREE, HINGES, CABLES
14. Nav Light – SECURE
15. Tail Tie Down – DISCONNECT
16. Left Static Port – CLEAR

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

PREFLIGHT INSPECTION

4. LEFT WING

1. Wing – NO DAMAGE, ICE, FROST, SNOW
2. Inboard Fuel Vent – OPEN
3. Flap – SECURE
4. Flap Control Linkage – SECURE
5. Brake Line – SECURE & NO LEAKS
6. Static Retraction Cable – SECURE
7. Outboard Fuel Vent – OPEN
8. Aileron – SECURE, FREE, HINGES
9. Aileron Control Linkage – SECURE
10. Navigation Lights – SECURE
11. Wing Tie-Down – DISCONNECT
12. Pitot Tube – CLEAR
13. Taxi & Landing Lights – COVER CLEAN & SECURE
14. Stall Warning – MOVES FREELY
15. Fuel Tanks – COVERS SECURE
16. Chocks – REMOVE
17. Main Wheel Tire – CONDITION & INFLATION
18. Brake – PAD & FLUID LINE CONDITION, NO LEAKS
19. Main Gear Strut – PROPER INFLATION
20. Gear Linkages – SECURE
21. Gear Hydraulics – LINES SECURE & NO LEAKS
22. Limit Switch & Wiring – SECURE & CONNECTED
23. Leading Edge Air Vent – CLEAR

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

PREFLIGHT INSPECTION

5. NOSE SECTION

1. Transponder & Loran Antennas – SECURE
2. Left Exhaust Stack – CLEAR & SECURE
3. Windshield – CLEAN
4. Left Cowling – SECURE & NO DAMAGE
5. Engine Oil – 8 QUARTS; RESEAT DIPSTICK
6. Engine Oil Access Doors (2) – SECURE
7. Prop and Spinner – CHECK NICKS, CRACKS, & SECURE
8. Cooling Air Inlets – CLEAR; NO FOREIGN MATERIAL UNDER COWLING
9. Air Filter – CLEAR
10. Nose Gear Strut – PROPER INFLATION
11. Nose Wheel Tire – CONDITION & INFLATION
12. Chocks – REMOVE
13. Gear Linkages – SECURE
14. Gear Hydraulics – LINES SECURE & NO LEAKS
15. Right Cowling – SECURE & NO DAMAGE
16. Exhaust Stack – SECURE & UNOBSTRUCTED
17. Crankcase Vent – CLEAR

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

PREFLIGHT INSPECTION

6. RIGHT WING

1. Wing – NO DAMAGE, ICE, FROST, SNOW
2. Fuel Tanks – COVERS SECURE
3. Leading Edge Air Vent – CLEAR
4. Chocks – REMOVE
5. Main Wheel Tire – CONDITION & INFLATION
6. Brake – PAD & FLUID LINE CONDITION, NO LEAKS
7. Main Gear Strut – PROPER INFLATION
8. Gear Linkages – SECURE
9. Gear Hydraulics – LINES SECURE & NO LEAKS
10. Limit Switch & Wiring – SECURE & CONNECTED
11. Navigation Lights – SECURE
12. Wing Tie-Down – DISCONNECT
13. Aileron – SECURE, FREE, HINGES
14. Aileron Control Linkage – SECURE
15. Outboard Fuel Vent – OPEN
16. Flap – SECURE
17. Flap Control Linkage – SECURE
18. Static Retraction Cable – SECURE
19. Brake Line – SECURE & NO LEAKS
20. Inboard Fuel Vent – OPEN

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

PREFLIGHT INSPECTION

7. ELECTRICAL SYSTEMS

1. Turn Coordinator – FLAG SET
2. Master Switch – ON
3. Gear Down Lights – THREE GREEN*
4. Gear Up Light – PUSH TO TEST RED*
5. Nav Lights – ON
6. Beacon/Strobe – ON
7. Landing Light – ON
8. Taxi Light – ON
9. Pitot Heat – ON
10. Walk Around – VERIFY: LIGHTS; PITOT HEAT; STALL WARNING
11. All Electrical Switches – OFF
12. Turn Coordinator – GYRO RUNNING
13. Master Switch – OFF

* Gear indicator lights are “push to test” and “twist to dim”.

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

BEFORE STARTING ENGINE

1. Preflight inspection – COMPLETE
2. Towbar – STOWED
3. Passenger Briefing – COMPLETE
4. Seats and Seat Belts – ADJUST & LOCKED
5. Cabin Door – CLOSE & SECURE
6. VOR – CHECKED WITHIN 30 DAYS
7. Clock – WIND, SET, RUNNING
8. Master Switch – OFF
9. Mags – OFF
10. Electrical Equipment – OFF
11. Autopilot – OFF
12. Radios – OFF
13. Circuit Breakers – CHECK IN
14. Fuel Selector Valve – FULLEST MAIN TANK
15. Gear Lever – DOWN & UNDER LOCKED HOOK
16. Flap Lever – UP
17. Brakes – CHECK FIRM
18. Brakes – SET

STARTING ENGINE WHEN COLD

1. Mags – BOTH
2. Throttle – FULL OPEN
3. Prop – FULL RPM (FORWARD)
4. Mixture – FULL RICH
5. Master Switch – ON
6. Aux Fuel Pump – ON; STABLE FUEL FLOW; OFF
7. Throttle – MIN
8. Throttle – OPEN 1½ TURNS
9. Prop – CLEAR
10. Starter – ENGAGE
11. Oil Pressure – VERIFY RISING
12. Throttle – 1000 - 1200 RPM
13. Mixture – LEAN TO PREVENT FOULING

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

STARTING ENGINE WHEN HOT

1. Mags – BOTH
2. Prop – FULL RPM
3. Mixture – FULL RICH
4. Master Switch – ON
5. Throttle – OPEN 2½ TURNS
6. Prop – CLEAR
7. Starter – ENGAGE
8. Aux Fuel Pump – ON UNTIL ENGINE FIRES
9. Oil Pressure – VERIFY RISING
14. Throttle – 1000 - 1200 RPM
15. Mixture – LEAN TO PREVENT FOULING

STARTING ENGINE WHEN FLOODED

1. Mags – ON
2. Throttle – FULL OPEN
3. Prop – FULL RPM
4. Mixture – IDLE CUT OFF
5. Master Switch – ON
6. Prop – CLEAR
7. Starter – ENGAGE UNTIL ENGINE FIRES
8. Mixture – FULL RICH
9. Throttle – 1000 - 1200 RPM
10. Mixture – LEAN TO PREVENT FOULING

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

PRE-TAXI

1. Beacon, Landing Light – ON AS NEEDED
2. Clock – WIND & SET
3. Radios – ON, CHECK (tune VOR, ILS), & SET
4. Radios – VERIFY ELT OFF @ 121.5
5. Transponder – STBY
6. Transponder Panel Switch – ON
7. Intercom – ON
8. Wind – SET HEADING BUG
9. Heading Indicator – SET
10. Altimeter – SET & VERIFY +/- 75 FT OF FIELD ELEV
11. Compass – VERIFY HEADING
12. Airspeed and VSI – VERIFY ZERO

TAXIING

1. Taxi Area – CLEAR
2. Brakes – OFF (TAP TO RELEASE)
3. Prop—FULL FORWAD (High RPM).
4. Throttle – APPLY SLOWLY (USE VERNIER)
5. Brakes – CHECK
6. Steering – VERIFY NOSE WHEEL TURNING
7. Instruments – VERIFY WORKING (Heading Indicator, Turn Coordinator, Attitude Indicator - 5° max indication in taxi turns)

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

GROUND CHECK (RUN-UP)

1. Parking Brake – SET
2. Propeller – FULL FORWARD
3. Fuel Selector – FULLEST MAIN TANK
4. Mixture – ENRICHEN ONLY AS NEEDED FOR SMOOTH OPERATION
5. Throttle – 1800 RPM:
    a. Mags – 175 RPM MAX DROP; 50 RPM MAX DIFFERENTIAL
    b. Propeller – CYCLE (500 RPM MAX DROP) [Repeat 3 times in Cold Weather]
    c. Fuel Selector – VERIFY FLOW FROM EACH TANK (AT LEAST 20 SEC ON ANY TANK RUN DRY)
    d. Vacuum – 4.8” Hg. To 5.2” Hg.
    e. Oil Pressure – IN GREEN RANGE
    f. Oil Temperature – IN GREEN RANGE
    g. Ammeter – CHARGING 1 TO 5 AMPS
    h. Ammeter – VERIFY SAME CHARGE WITH LANDING LIGHT & PITOT HEAT
6. Throttle – RETARD to 1000 RPM
7. Mixture – LEAN
8. Controls – FREE & PROPER MOVEMENT
9. Flaps – CYCLE

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

BEFORE TAKEOFF

1. Trim Tab – ONE NOTCH AFT WITH LOAD IN FRONT
   NEUTRAL WITH LOAD IN REAR
2. Beacon, Nav, Landing Lights – ON AS NEEDED
3. Autopilot – OFF
4. Turn Coordinator – NO FLAG
5. Airspeed and VSI – VERIFY ZERO
6. Altimeter – COMPARE TO TDZE (max 75 ft error)
7. Heading Indicator – SET; NO DRIFT DURING TAXI
8. Engine Gauges – VERIFY NORMAL
9. Fuel Selector – FULLEST MAIN TANK
10. Flaps – SET (Up for Normal Take Off)
11. Seatbelts – FASTENED & ADJUSTED
12. Door – LATCHED & SECURE
13. Pilot Vent Window – CLOSED

TAXI INTO TAKEOFF POSITION

1. Beacon/Strobe – ON
2. Pitot Heat – ON AS NEEDED
3. Prop – FULL RPM (FORWARD)
4. Mixture – FULL RICH (LEAN AT HIGH DEN-ALT)
5. Transponder – ALT
6. Time Off – RECORD

TAKEOFF (NORMAL)

1. Heading Indicator – VERIFY RUNWAY HEADING
2. Throttle – FULL OPEN (apply slowly)
3. Engine Gauges – VERIFY NORMAL
4. Airspeed – VERIFY WORKING
5. Rotate – 80 MPH (70 KTS)
6. Gear Up – CLEAR OF RUNWAY; RED LIGHT ON
7. Power/Prop – 25/25 AT SAFE ALTITUDE & 110 MPH (96 KTS)
8. Landing & Taxi Lights – OFF

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

TAKEOFF (SHORT FIELD)

1. Flaps – SET HALF & VERIFY
2. Heading Indicator – VERIFY RUNWAY HEADING
3. Throttle – FULL OPEN (apply slowly)
4. Engine Gauges – VERIFY NORMAL
5. Airspeed – VERIFY WORKING
6. Rotate – 70 MPH (61 KTS)
7. Climb – 80 MPH (70 KTS)
8. Gear Up – CLEAR OF RUNWAY; RED LIGHT ON
9. Flaps – UP WHEN CLEAR OF OBSTACLES
10. Power/ Prop – 25/25 AT SAFE ALTITUDE & 110 MPH (96 KTS)
11. Landing & Taxi Lights – OFF

TAKEOFF (SOFT FIELD)

1. Taxi – ELEVATOR FULL AFT
2. Flaps – SET HALF & VERIFY
3. Heading Indicator – VERIFY RUNWAY HEADING
4. Elevator – BACK PRESSURE TO RAISE NOSE WHEEL
5. Throttle – FULL OPEN (apply slowly)
6. Engine Gauges – VERIFY NORMAL
7. Airspeed – VERIFY WORKING
8. Lift Off – ASSIST WITH ELEVATOR BACK PRESSURE
9. Accelerate – TO 80 MPH (70 KTS) IN GROUND EFFECT
10. Gear Up – CLEAR OF RUNWAY; RED LIGHT ON
11. Flaps – UP WHEN CLEAR OF OBSTACLES
12. Power/Prop – 25/25 AT SAFE ALTITUDE & 110 MPH (96 KTS)
13. Landing & Taxi Lights – OFF

Checklist for Bellanca Viking N4880V

(Speeds in MPH (KTS) IAS)

CLIMB

1. Power & Prop – 25/25
2. Mixture – FULL RICH > 75% POWER
3. Airspeed:
   120 – 130 MPH (104 – 113 KTS) < 10,000 FT
   110 – 120 MPH (96 – 104 KTS) > 10,000 FT
4. Engine Instruments – VERIFY IN GREEN ARC

CRUISE

1. Level Off – TRIM
2. Fuel Selector – AUX TANK
3. Throttle & Prop – SET FOR DESIRED POWER
4. Mixture – LEAN 75-125 RICH OF PEAK
5. Engine Instruments – VERIFY IN GREEN ARC

DESCENT

1. Mixture – STAY RICH OF PEAK
2. Throttle – MAINTAIN CHT AND OIL TEMP IN GREEN
3. Fuel Selector – FULLEST MAIN TANK

APPROACH

1. **GUMPS** Check
2. Fuel Selector – FULLEST MAIN TANK
3. Mixture – RICH
4. Seats and Seat Belts – ADJUST & LOCKED
5. Landing & Taxi Lights – ON
6. Marker Beacon –TEST and SPKR or HEADPHONE
7. Brakes – TEST FIRMNESS
8. Power – 18 in for 120 MPH (104 KTS)

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

LANDING (NORMAL)

1. Autopilot – OFF
2. Downwind
    a. **GUMPS** Check
    b. Gear – PUSH DOWN & RELEASE
    (140 MPH (122 KTS) MAX)
    c. Gear – VERIFY 3 GREENS
    d. Gear – PUSH DOWN ADDITIONAL 3 SECONDS
    AND RELEASE UNDER HOOK
    e. Prop – 2400 RPM Min
    f. Airspeed – 120 MPH (104 KTS)
3. Base
    a. **GUMPS** Check
    b. Gear – VERIFY 3 GREENS
    c. Airspeed – 120 MPH (104 KTS)
4. Final
    a. **GUMPS** Check
    b. Gear – VERIFY 3 GREENS
    c. Flaps – FULL
    d. Airspeed – 100 MPH (87 KTS)
5. Touchdown
    a. Throttle – CLOSED
    b. Attitude – NOSE HIGH; MAIN GEAR FIRST
    c. Braking – MINIMUM REQUIRED

LANDING (SHORT FIELD)

Airspeed on Final – 90 MPH (78 KTS)

LANDING (CROSSWIND OR GUSTY)

Airspeed on Final – 100 MPH (87 KTS) + ½ GUST FACTOR

Flaps – HALF

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

BALKED LANDING (GO-AROUND)

1. Mixture – FULL RICH
2. Propeller – FULL RPM
3. Throttle – FULL
4. Flaps – RETRACT TO HALF
5. Airspeed – 80 MPH (70 KTS)
6. Climb – ESTABLISH POSITIVE RATE
7. Gear – UP
8. Flaps – RETRACT AT SAFE ALTITUDE
9. Airspeed – 110 MPH (96 KTS)
10. Power/Prop – 25/25 AT SAFE ALTITUDE & 110 MPH (96 KTS)
11. Landing & Taxi Lights – OFF

AFTER LANDING

1. Flaps – UP
2. Transponder – STANDBY
3. Flight Plan – CLOSE

Checklist for Bellanca Viking N4880V
(Speeds in MPH (KTS) IAS)

SHUTDOWN

1. Brakes – SET
2. Throttle – IDLE
3. Propeller – FULL RPM
4. Electrical Equipment – OFF
5. Radios – OFF
6. Mixture – IDLE CUT OFF
7. Mags – OFF
8. Master Switch – OFF

SECURING AIRCRAFT

1. Wheel Chocks – SET
2. Tie Downs – SECURE
3. Parking Brake – RELEASE
4. Door – LOCKED
5. Baggage Compartment – LOCKED
6. Prop – HORIZONTAL POSITION

Emergency Procedures for Bellanca Vikng N4880V
(Speeds in MPH (KTS) IAS)

ENGINE FIRE DURING START

CONFINED TO INTAKE OR EXHAST

1. Continue cranking engine with starter
2. Aux Fuel Pump – OFF
3. Mixture – IDLE CUT OFF
4. Throttle – FULL OPEN
5. Electrical Equipment – OFF
6. Fuel Selector – OFF
7. Inspect for damage prior to restart

BEYOND INTAKE OR EXHAST

1. Mixture – IDLE CUT OFF
2. Fuel Selector – OFF
3. Master Switch – OFF
4. Mags – OFF
5. Exit Aircraft
6. Use fire extinguisher as necessary

ENGINE FIRE IN FLIGHT

1. Mixture – IDLE CUT OFF
2. Fuel Selector – OFF
3. Mags – OFF
4. Master Switch – OFF
5. Cabin Heat – OFF (to prevent smoke induction)
6. Land using “FORCED LANDING”
7. Do not attempt air restart of the engine

Emergency Procedures for Bellanca Vikng N4880V
(Speeds in MPH (KTS) IAS)

FUSELAGE FIRE IN FLIGHT

1. Reduce airspeed
2. Cabin Heat & Fresh Air Controls – CLOSED
3. Master Switch – OFF
4. Use fire extinguisher as necessary
5. If fire continues, land using “FORCED LANDING”

ELECTRICAL FIRE IN FLIGHT

1. Master Switch – OFF
2. Generator Circuit Breaker – PULL OUT
3. All Electrical Equipment – OFF
4. Cabin Heat & Ventilation – CLOSED
5. Use fire extinguisher as necessary
6. If fire continues, land using “FORCED LANDING”

If fire or smoke stops:

7. Master Switch – ON
8. Alternator Circuit Breakers – RESET
9. Turn on desired electrical equipment one at a time to isolate faulty circuit.

SMOKE ELIMINATION FROM CABIN

1. Heating and Ventilation Controls – CLOSE
2. Fresh Air Eyelets – OPEN
3. Pilot’s Side Vent – OPEN BELOW 140 MPH
4. Baggage Compartment Exhaust Vent – CLEAR
5. Cabin Main Door – OPEN TO TRAIL POSITION IF NECESSARY

Emergency Procedures for Bellanca Vikng N4880V
(Speeds in MPH (KTS) IAS)

LOSS OF RADIO EQUIPMENT

1. Master Switch – CYCLE OFF THEN ON
2. Circuit Breakers – CHECK IN

ALTERNATOR FAILURE

1. Alternator Circuit Breakers – CHECK IN
2. Master Switch – CYCLE OFF THEN ON

If excessive battery discharge continues:

3. Shut off all non-essential electrical equipment to conserve battery power
4. Land as soon as practical

COMPLETE ELECTRICAL FAILURE

1. Follow procedure for Alternator Failure

AUTOPILOT MALFUNCTION

1. Apply required control forces to maintain desired flight attitude
2. Autopilot – OFF
3. Master Switch – OFF IF NECESSARY

Emergency Procedures for Bellanca Vikng N4880V
(Speeds in MPH (KTS) IAS)

ENGINE FAILURES ON TAKEOFF

ON TAKEOFF ROLL

1. Throttle – CLOSED
2. Brakes – APPLY MAXIMUM
3. Flaps – RETRACT
4. Mixture – IDLE CUT OFF
5. Mags – OFF
6. Fuel Selector – OFF
7. Master Switch – OFF

AIRBORNE AND SUFFICIENT RUNWAY REMAINS

1. Gear – DOWN
2. Land – STRAIGHT AHEAD ON RUNWAY
3. Throttle – CLOSED
4. Brakes – APPLY MAXIMUM
5. Flaps – RETRACT
6. Mixture – IDLE CUT OFF
7. Mags – OFF
8. Fuel Selector – OFF
9. Master Switch – OFF

AIRBORNE AND INSUFFICIENT RUNWAY REMAINS
TOO LOW FOR RESTART ATTEMPT

1. Airspeed – 102(89) BEST GLIDE
2. Landing straight ahead if possible
3. Shallow turns only to avoid obstacles
4. Follow FORCED LANDING procedure

Emergency Procedures for Bellanca Vikng N4880V
(Speeds in MPH (KTS) IAS)

FORCED LANDING

1. Airspeed – 102 MPH (89 KTS) BEST GLIDE
2. Mixture – IDLE CUT OFF
3. Fuel Selector – OFF
4. Throttle – FULL OPEN (to reduce engine drag)
5. Prop – MIN RPM (to reduce prop drag)
6. Master Switch – ON (unless fire hazard exists)
7. Flaps – UP (to maximize glide range)
8. Radio – MAYDAY 121.5 or ATC FACILITY
9. Gear – DOWN
   EMERGENCY EXTENSION IF NECESSARY
10. Cabin Door – OPEN (in trail position)
11. Flaps – FULL DOWN (when landing assured)
12. Master Switch – OFF (just prior to touchdown)
13. Touchdown – MINIMUM AIRSPEED
14. ELT – ON
15. EXIT AIRCRAFT

PRECAUTIONARY LANDING

A precautionary landing approach should be used whenever power is still available but a complete power failure is considered imminent.

Maintain a higher and closer than normal pattern to remain within gliding distance of the intended point of landing. Use normal landing procedures with the following exceptions:

1. Airspeed – 100 MPH (87 KKTS) MINIMUM
2. Throttle – CLOSED (within gliding distance of runway)
3. Flaps – AS NEEDED

Emergency Procedures for Bellanca Vikng N4880V
(Speeds in MPH (KTS) IAS)

ENGINE AIR RESTART

1. Airspeed – 110 MPH (96 KTS) MINIMUM
2. Mags – BOTH
3. Mixture – FULL RICH (or lean at high altitude)
4. Fuel Selector – OTHER FULLEST TANK
5. Aux Fuel Pump – ON; STABLE FUEL FLOW; OFF
6. If engine restarts but does not continue to run, the engine driven fuel pump may have failed. Hold Aux Fuel Pump on and reattempt. Mixture adjustment may be necessary for smooth operation.
7. If restart fails, vary throttle and mixture settings
8. Follow FORCED LANDING procedure if necessary

ENGINE POWER LOSS / ROUGH RUNNING

1. Airspeed – 110 MPH (96 KTS) MINIMUM
2. Mixture – FULL RICH
3. Mags – CHECK BOTH
4. If no improvement, vary mixture, throttle, and RPM settings and check mags L, R, & BOTH
5. Land

HIGH OIL TEMPERATURE

1. Power – REDUCE
2. Mixture – FULL RICH
3. Airspeed – NORMAL CRUISE (for best cooling)
4. Execute PRECAUTIONARY LANDING as soon as practical
5. If oil pressure subsequently drops, engine damage or complete failure is likely imminent.

Emergency Procedures for Bellanca Vikng N4880V
(Speeds in MPH (KTS) IAS)

LOW OIL PRESSURE

1. Execute PRECAUTIONARY LANDING as soon as practical
2. Minimize throttle and RPM changes as prop control may be lost

UNCONTROLLABLE OR RUNAWAY PROP

1. Throttle – REDUCE to control RPM
2. Airspeed – REDUCE
3. Prop – CYCLE in attempt to regain control
4. Execute PRECAUTIONARY LANDING as soon as practical

LOW VACUUM

Low vacuum can be caused by a clogged filter. In this case, vacuum can be restored by removing the filter located on the firewall above the pilot's right rudder pedal. Remove the two thumb screws on the bottom of the filter and lower the element. Only use this in emergencies since unfiltered air is harmful to the gyro instruments.

LOSS OF PITOT STATIC INSTRUMENTS

1. Pitot Heat – ON
2. Alternate Static Source – ON if Pitot Heat has no effect

Emergency Procedures for Bellanca Vikng N4880V
(Speeds in MPH (KTS) IAS)

EMERGENCY GEAR EXTENSION

1. Gear Lever – DOWN
2. Emergency Gear Extension Lever – PUMP UP & DOWN UNTIL THREE GREENS

LANDING GEAR UNSAFE INDICATION

1. Green Lights – PRESS TO TEST
2. If THREE GREENs are showing, gear can be considered DOWN and LOCKED regardless of red UNSAFE light
3. If THREE GREENs can not be obtained, follow EMERGENCY GEAR EXTENSION procedure

LANDING WITH GEAR FULLY RETRACTED

1. Approach – NORMAL LANDING
2. Flaps – UP for hard surface runway
   HALF for unimproved runway
3. Cabin Door – OPEN in trail position
4. Master Switch – OFF
5. When touchdown area is in gliding distance:
   Throttle – CLOSED
   Mixture – IDLE CUT OFF
   Fuel Selector – OFF
6. Speed – MINIMUM for touchdown
7. Exit aircraft immediately after coming to a stop

Emergency Procedures for Bellanca Vikng N4880V
(Speeds in MPH (KTS) IAS)

LANDING WITH ONE MAIN GEAR RETRACTED

1. Approach – NORMAL LANDING
2. Cabin Door – OPEN in trail position
3. Flaps – HALF
4. After touchdown:
   Mixture – IDLE CUT OFF
   Fuel Selector – OFF
   Master Switch – OFF
5. Hold wing with retracted gear off ground as long as possible with ailerons
6. Use maximum breaking action and rudder after wing contacts ground
7. Exit aircraft immediately after coming to a stop

LANDING WITH NOSE GEAR RETRACTED

1. Approach – NORMAL LANDING
2. Cabin Door – OPEN in trail position
3. Flaps – UP
4. After touchdown:
   Mixture – IDLE CUT OFF
   Fuel Selector – OFF
   Master Switch – OFF
5. Hold nose off runway as long as possible
6. Exit aircraft immediately after coming to a stop

Emergency Procedures for Bellanca Vikng N4880V
(Speeds in MPH (KTS) IAS)

UNLATCHED DOOR IN FLIGHT

If the door is not properly latched, it normally will open to the trail position just after takeoff. Flight characteristics are not affected. Return to the field for a normal landing rather than attempting to close the door in flight.

If the door must be closed in flight, proceed as follows:

1. Airspeed – 80 MPH (70 KTS)
2. Power – IDLE
3. BANK RIGHT & LEFT RUDDER
4. Pull and latch door closed
5. Do not stall aircraft