

Figure B-3. Sample Amateur-Built Aircraft Fabrication and Assembly Checklist (2009) (Fixed-wing)

**Amateur-Built Aircraft Fabrication and Assembly Checklist (2009)
(Fixed-wing)**

Name(s):.....
 Address:.....
 Aircraft Model:.....
 Date:.....
 Remarks:.....

NOTE: This checklist is applicable only to fixed-wing aircraft. Evaluation of other types of aircraft (that is, rotorcraft, balloons, lighter than air) will not be accomplished with this form.

NOTE: This checklist is invalid for and will not be used to evaluate an altered or modified type-certificated aircraft with the intent to issue an Experimental Amateur-Built Airworthiness Certificate. Such action violates FAA policy and DOES NOT meet the intent of 14 CFR § 21.191(g).

Note: Enter “N/A” in any box where a listed task is not applicable to the particular aircraft being evaluated. Use the “Add item” boxes at the end of each section to add applicable unlisted tasks and award credit.

FABRICATION AND ASSEMBLY TASKS		A	B	C	D
		Mfr Kit/Part/Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
Task #	Fuselage — 24 Listed Tasks				
F1	Fabricate Longitudinal Members				
F2	Fabricate Composite Cores or Shells, Skins				
F3	Fabricate Bulkheads or Cross-members				
F4	Fabricate Control Yokes/Sticks				
F5	Assemble Control Yokes/Sticks				
F6	Fabricate Flt Control Push Pull Tubes/Cables				
F7	Assemble Flt Control Push Pull Tubes/Cables				
F8	Assemble Fuselage Basic Structure				
F9	Fabricate Brackets and Fittings				
F10	Assemble Brackets and Fittings				
F11	Fabricate Cables, Wire, and Lines				
F12	Assemble Cables, Wire, and Lines				

F13	Fabricate Fuselage Fuel System Components				
F14	Assemble Fuselage Fuel System Components				
F15	Fabricate Fuselage Covering or Skin				
F16	Assemble Fuselage Covering or Skin				
F17	Fabricate Windshield				
F18	Assemble Windshield to Fuselage				
F19	Fabricate Windows				
F20	Assemble Windows to Fuselage				
F21	Fabricate Doors/Canopy				
F22	Assemble Doors/Canopy to Fuselage				
F23	Fabricate Mast and Strut Assembly				
F24	Assemble Mast and Strut Assembly				
	Add item:				
	Add item:				
	Add item:				
	Add-item:				
Total of # Fuselage Tasks	<u>Fuselage Subtotal</u>	Mfr Kit/Part/ Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
	<u>Fuselage Total Points</u> ▶				

FABRICATION AND ASSEMBLY TASKS		A	B	C	D
		Mfr Kit/Part/ Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
Task #	Wings — 51 Listed Tasks				
W1	Fabricate Wing Spars				
W2	Assemble Wing Spars to Wing				
W3	Fabricate Wing Ribs or Cores				
W4	Assemble Wing Ribs or Cores to Wing				
W5	Fabricate Composite Cores				
W6	Assemble Composite Cores to Wing				
W7	Fabricate Wing Leading and Trailing Edges				
W8	Assemble Wing Leading & Trailing Edges to Wing				
W9	Fabricate Drag/Anti-drag Truss Members				
W10	Assemble Drag/Anti-drag Truss Members to Wing				
W11	Fabricate Wing Brackets and Fittings				
W12	Assemble Wing Brackets and Fittings to Wing				
W13	Fabricate Wing Tips				
W14	Assemble Wing Tips to Wings				
W15	Fabricate Special Tools or Fixtures				
W16	Fabricate Aileron Spars				
W17	Fabricate Aileron Ribs or Cores				
W18	Assemble Aileron Ribs or Cores to Aileron				

W19	Assemble Aileron Primary Structure				
W20	Fabricate Aileron Leading and Trailing Edges				
W21	Assemble Aileron Leading and Trailing Edges				
W22	Fabricate Aileron Brackets and Fittings				
W23	Assemble Aileron Brackets & Fittings to Aileron				
W24	Fabricate Aileron covering or Skin				
W25	Assemble Aileron Covering or Skin to Aileron				
W26	Fabricate Aileron Roll Trim				
W27	Assemble Aileron Trim Tab/Roll Trim to Aileron				
W28	Assemble Aileron to Wing				
W29	Fabricate Flap Spars				
W30	Assemble Flap Spars to Flap				
W31	Fabricate Flap Ribs or Cores				
W32	Assemble Flap Ribs or Cores to Flap				
W33	Assemble Flap Primary Structure				
W34	Fabricate Flap Leading and Trailing Edges				
W35	Assemble Flap Brackets and Fittings to Flap				
W36	Fabricate Flap Covering or Skin				
W37	Assemble Flap Covering or Skin to flap				
W38	Assemble Flaps to Wing				
W39	Fabricate Wing External Lighting Components				
W40	Assemble Wing Ext Lighting Components to Wing				
W41	Assemble Basic Wing Structure				
W42	Fabricate Wing Fuel System components				
W43	Assemble Wing Fuel System Components to Wing				
W44	Fabricate Cables Wires and Lines				
W45	Assemble Cables Wires and Lines to Wing				
W46	Fabricate Wing Covering or Skin				
W47	Assemble Wing Covering or Skin to Wing				
W48	Fabricate Wing Struts/Wires				
W49	Fabricate Fuel Tank				
W50	Assemble Fuel Tank to Wing				
W51	Calibrate Fuel System Components				
	Add item:				
	Add item:				
	Add item:				
	Add item:				
Total # of Wings Tasks	<u>Wings Subtotal</u>	Mfr Kit/Part/ Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
	<u>Wings Total Points ►</u>				

FABRICATION AND ASSEMBLY TASKS		A	B	C	D
		Mfr Kit/Part/ Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
Task #	Empennage — 57 Listed Tasks				
E1	Fabricate Horizontal Stabilizer Spars				
E2	Assemble Horizontal Stabilizer Spars to Stabilizer				
E3	Fabricate Ribs or Cores				
E4	Assemble Horizontal Stabilizer Ribs or Cores to Stabilizer				
E5	Fabricate Horizontal Stabilizer Leading and Trailing Edge				
E6	Assemble Horizontal Stabilizer Leading and Trailing Edges to Stabilizer				
E7	Fabricate Horizontal Stabilizer Brackets & Fittings				
E8	Assemble Horizontal Stabilizer Brackets and Fittings to Stabilizer				
E9	Assemble Horizontal Stabilizer Structure				
E10	Fabricate Horizontal Stabilizer Lead/Trailing Edges				
E11	Assemble Horizontal Stabilizer Lead/Trailing Edges to Stabilizer				
E12	Fabricate Horizontal Stabilizer Cables, Wires and Lines				
E13	Assemble Horizontal Stabilizer Cables, Wires and Lines to stabilizer				
E14	Fabricate Horizontal Stabilizer Empennage Covering or Skin				
E15	Assemble Horizontal Stabilizer Empennage Covering or Skin to Stabilizer				
E16	Assemble Horizontal Stabilizer Structure to Fuselage				
E17	Fabricate Elevator Spars				
E18	Assemble Elevator Spars to Elevator				
E19	Fabricate Elevator Ribs or Cores				
E20	Assemble Elevator Ribs or Cores to Elevator				
E21	Assemble Elevator Structure				
E22	Fabricate Elevator Leading and Trailing Edge				
E23	Assemble Elevator Leading and Trailing Edges to Elevator				
E24	Fabricate Elevator Brackets and Fittings				
E25	Assemble Elevator Brackets and fittings to Elevator				
E26	Fabricate Elevator Covering or Skins				
E27	Assemble Elevator Covering or Skins to Elevator				
E28	Fabricate Elevator Trim Tab				
E29	Assemble Elevator Trim Tab to Elevator				
E30	Fabricate Special Tools or Fixtures				

E31	Fabricate Vertical Stabilizer Spars				
E32	Assemble Vertical Stabilizer Spar to the Vertical Stabilizer				
E33	Fabricate Vertical Stabilizer Ribs or Cores				
E34	Assemble Ribs or Cores to Vertical Stabilizer				
E35	Fabricate Vertical Stabilizer Leading/Trailing Edges				
E36	Assemble Leading and Trailing Edges to Vertical Stabilizer				
E37	Fabricate Vertical Stabilizer Brackets and Fittings				
E38	Assemble brackets and Fittings to Vertical Stabilizer				
E39	Fabricate Vertical Stabilizer Cables, Wires, Lines				
E40	Assemble Cables, Wires, Lines to Vertical Stabilizer				
E41	Fabricate Vertical stabilizer Empennage Covering or Skin				
E42	Assemble Vertical stabilizer Empennage Covering or Skin to Vertical Stabilizer				
E43	Assemble Vertical Stabilizer Structure to Fuselage				
E44	Fabricate Rudder Spar				
E45	Assemble Rudder Spar to Rudder				
E46	Fabricate Rudder Ribs or Cores				
E47	Assemble Rudder Ribs or Cores to Rudder				
E48	Assemble Rudder Structure				
E49	Fabricate Rudder Leading and Trailing Edge				
E50	Assemble Rudder Leading and Trailing Edge to Rudder				
E51	Fabricate Rudder Brackets and Fittings				
E52	Assemble Rudder Brackets and Fittings to Rudder				
E53	Fabricate Rudder Covering or Skin				
E54	Assemble Rudder Covering or Skin to Rudder				
E55	Fabricate Rudder Trim Tab				
E56	Assemble Rudder Trim Tab to Rudder				
E57	Assemble Rudder to Vertical Stabilizer				
	Add item:				
	Add item:				
	Add item:				
	Add item:				
Total # of Empennage Tasks	<u>Empennage Subtotal</u>	Mfr Kit/Part/Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
	<u>Empennage Total Points ►</u>				

FABRICATION AND ASSEMBLY TASKS		A	B	C	D
		Mfr Kit/Part/ Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
Task #	Landing Gear — 12 Listed Tasks				
LG1	Fabricate Struts				
LG2	Fabricate Brake System Components				
LG3	Fabricate Landing Gear Actuation System Components				
LG4	Fabricate Landing Gear System Cables, Wires and Lines				
LG5	Assemble Wheels				
LG6	Assemble Brakes, Tires				
LG7	Assemble Landing Gear				
LG8	Assemble Landing Gear System Components Next Level Structure				
LG9	Align Landing Gear				
LG10	Fabricate Landing Gear Fairings/Gear Doors				
LG11	Assemble Landing Gear Fairings/Gear Doors to Next Level Structure				
LG12	Perform Landing Gear Operational Check (Normal, Emergency Systems)				
	Add item:				
	Add item:				
	Add item:				
	Add item:				
Total # of Land Gear Tasks	<u>Landing Gear Subtotal</u>	Mfr Kit/Part/ Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
	<u>Landing Gear Total Points ▶</u>				

FABRICATION AND ASSEMBLY TASKS		A	B	C	D
		Mfr Kit/Part/Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
Task #	Propulsion — 27 Listed Tasks				
P1	Fabricate Engine Mounts(s)				
P2	Assemble Engine Mount(s) to Next Level Structure				
P3	Fabricate Engine Cooling System/Baffles				
P4	Assemble Engine Cooling System Baffles to Engine				
P5	Fabricate Engine Compartment Overheat/Fire Detection System				
P6	Assemble Engine Compartment Overheat/Fire Detection System to Engine Compartment				
P7	Fabricate Induction System				
P8	Assemble Induction System to Engine				
P9	Fabricate Exhaust System				
P10	Assemble Exhaust System to Engine				
P11	Fabricate Engine Control Installation Brackets				
P12	Assemble Engine Controls to Next Level Structure				
P13	Rig and Adjust Engine Controls				
P14	Fabricate Brackets and Fittings				
P15	Assemble Brackets and Fittings to Next Level Structure				
P16	Fabricate Cables, Wires and Lines				
P17	Assemble Cables, Wires and Lines to next Level Structure				
P18	Assemble Engine (Likely N/A)				
P19	Assemble Engine to Engine Mount				
P20	Fabricate Engine Propeller (Likely N/A)				
P21	Fabricate Propeller Spinner Components				
P22	Assemble Propeller to Engine				
P23	Rig and Track Propeller				
P24	Fabricate Engine Cowling				
P25	Assemble Engine Cowling to Airframe				
P26	Fabricate Engine Fuel System Components				
P27	Assemble Engine Fuel System Components to Next Level Structure				
	Add item:				
	Add item:				
	Add item:				
	Add item:				
Total # of Propulsion Tasks	<u>Propulsion Subtotal</u>	Mfr Kit/Part/Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
	<u>Propulsion Total Points ►</u>				

FABRICATION AND ASSEMBLY TASKS		A	B	C	D
		Mfr Kit/Part/ Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
Task #	Cockpit Interior — 11 Listed Tasks				
C1	Fabricate Instrument Panel				
C2	Fabricate Instrument Panel Bracket and Fittings				
C3	Assemble Instrument Panel with Fittings and Brackets				
C4	Assemble Avionics to Instrument Panel				
C5	Fabricate Seats				
C6	Fabricate Seat Brackets and Fittings				
C7	Assemble Seats to Cockpit				
C8	Fabricate Seat Belts Fittings and Shoulder Harness Fittings				
C9	Assemble Seat Belts and Shoulder Harness to Structure				
C10	Fabricate Electrical Wiring, Controls and Switches				
C11	Assemble Electrical Systems Controls and Switches to Next Level Structure				
	Add item:				
	Add item:				
	Add item:				
	Add item:				
Total # of Cockpit Interior Tasks	<u>Cockpit Interior Subtotal</u>	Mfr Kit/Part/ Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
	<u>Cockpit Interior Total Points ►</u>				
Total # of Aircraft Tasks	◀ SUM #1				



TOTAL TASKS AND LINE ITEMS



FABRICATION AND ASSEMBLY SUMMARY	A	B	C	D
	Mfr Kit/Part/ Component	Commercial Assistance	Am-Builder Assembly	Am-Builder Fabrication
1. Total Points for Each Category				
2. Total Points for Complete Aircraft Construction (SUM # 2 should equal SUM # 1 above.)	(SUM #2) ►			
3. Percentage of Each Category as Part of Total Aircraft Construction				
4. Total Percentages for Complete Aircraft Construction – Add all percentages in row 3. (Total should equal 100% (± .5%.))				
5. Total Builder Points – Add together points in row 1, columns C and D only.				
6. Total Builder Percentage – Add together percentages in row 3, columns C and D only.				