

EAGLE AVIATION

QUALITY ASSURANCE MANUAL (QAM)

Eagle Aviation LLC
W635A 20th Avenue
Oshkosh, Wisconsin, 54902

TABLE OF CONTENTS

Introduction	1
Preface	1
Completing the Manual Revisions Record	2
How This Form Works	2
Revision Information	2
QAP Manual Revision Record	3
EA Quality Assurance Program Audit Record	4
QAP Organization and Department Responsibilities	5
Company Quality Assurance Policy	5
Organization	5
Department Responsibilities	5
Eagle Aviation Quality Standard Criteria	6
Manufacturing	6
Engineering	6
Procedures and Forms	6
Diagram – Facility and Inspection Stations	7
Organization Chart	8
Personnel Assignments and Inspection Authority	9
Inspection Authority	9
Plant Layout and Inspection Stations	10
 Quality Assurance Technical Data Manual (QA)	 1
QA-01: Quality Assurance Department and Responsibility	1
QA-02: Purchasing and Receiving	2
QA-03: Storage and Issuance of Materials and Parts	3
QA-04: Production Control-Planning, Materials Control	4
QA-05: Master Vendors List (MVL)	5
QA-06: Master Parts List (MPL)	6
QA-07: Manufacturing Inspection	11
QA-08: Special Processes	12
QA-09: Assembly Inspection	13
QA-10: Drawing and Change Control	14
QA-11: Tool and Gauge Control	15
QA-12: Material Review	16
QA-13: Weight and Balance Control	17
QA-14: Flight Test	18
QA-15: Airworthiness	19
QA-16: Repairs and alterations	20
 Quality Assurance Procedures and Forms Manual (QP)	 1
QP-01: Quality Assurance Stamps	1
QP-02: Application of QA Stamps, Identification, Markings, and Color Coding	3
QP-03: Ordering of Materials Procedure	5
QP-04: Receiving Inspection Procedure	7
QP-05: Material Review Procedures	9
QP-06: Technical Data Control Procedures	11
QP-07: Tooling Inspection Procedures	13
QP-08: Calibration & Control of Dimensional Working Instruments	14
QP-09: Storage and Issuance of Materials and Parts	15

QP-10:	Procedures Related to the Assembly Process.....	17
QP-11:	Weight and Balance Procedure.....	26
QP-12:	Quality Assurance Program Audit	27
QP-13:	Eagle Aviation Forms	28
Standard Practice for Continued Operational Safety Monitoring of an LSA (SP)		1
	Preface	1
	Manufacturer's Responsibilities	2
	Owner/Operator Responsibilities	4

INTRODUCTION

PREFACE

This Quality Assurance Manual (QAM) referenced herein describes the Quality Assurance Program (QAP) requirements for Eagle Aviation LLC, W635A 20th Ave., Oshkosh, Wisconsin, 54902, as required in by ASTM F 2279-6, Standard Practice for Quality Assurance in the Manufacture of Fixed Wing Light Sport Aircraft. Eagle Aviation LLC, herein may be referred to as EA, EA's QAP consists of five Manuals.

1. Quality Assurance Manual (QAM)
2. Quality Assurance Record Manual (QAR)
3. Aircraft Design Manual (ADM)
4. Aircraft Maintenance Manual (AMM)
5. Pilot Operating Handbook (POH)

The QAM consists of four quality assurance sections:

- an Introduction to EA's QAP
- the Quality Assurance Technical Data Manual (QA)
- the Quality Assurance Procedures and Forms Manual (QP)
- and the Standard Practice for Continued Operational Safety Monitoring of a Light Sport Aircraft (SP).

Changes to these manuals and/or changes to EA's Quality Assurance Program are made available for review by the Federal Aviation Administration (FAA) when requested. Eagle Aviation LLC will conduct an annual audit of its QAP.

Mr. Paul Klomhaus, owner of Eagle Aviation, is responsible for implementing the provisions of this manual in conjunction with the Director of Quality Assurance.

APPROVED BY:

Mr. Paul Klomhaus:

Signature/Date

Director of Quality Assurance

Signature/Date

COMPLETING THE MANUAL REVISIONS RECORD

HOW THIS FORM WORKS

This form is used by the Director of Quality Assurance to distribute changes that have been implemented to the QAP. The Director of QA, or his appointee, will post the change, including the QAP Manual Revision Record page, into the applicable QAP Manual.

The Director of QA will then post a QAP Revision Change Notice, via e-mail (or verbally), to the President and all Directors. Once the President and all Directors have read and understand the revision change(s), they will be required to initial off on the Master QAP Revision Change Notice Form, EA-7.

REVISION INFORMATION

Revision Letter: This shows what the revision letter is, such as A, B, C, etc.

Effective Date: The change is effective upon receiving the revision. Verbal approval is also acceptable.

By: The person or department responsible for the revision.

Revision Topic: What prompted the revision.

Section(s) Affected: A list of the section(s) affected by the revision.

Page(s) Affected: A list of the page(s) affected by the revision.

QAP MANUAL REVISION RECORD

Revision #	Effective Date	By	Revision Topic	Section(s) Affected	Page(s) Affected
Original Issue	December 2, 2008	QA	Complete QAP	ALL	ALL

EA QUALITY ASSURANCE PROGRAM AUDIT RECORD

[illegible]

QAP ORGANIZATION AND DEPARTMENT RESPONSIBILITIES

COMPANY QUALITY ASSURANCE POLICY

Eagle Aviation LLC is dedicated to maintaining a quality assurance system that will assure conformity of each airplane at all stages of fabrication and assembly to the FAA approved design data for Fixed Wing Light Sport Aircraft outlined in ASTM F2279.

ORGANIZATION

The organization (excluding administration, accounting, and information technology) consists of three departments, ENGINEERING, MANUFACTURING, and QUALITY ASSURANCE. Each department is managed by a Director and each Director is accountable to the President/Owner. Each department is further subdivided as necessary to achieve the most efficient use of manpower as needed to maintain the established production rate for completed airplanes. The organization chart in Section QA-5 shows the major departments and the functions for which each is responsible. Also, the Owner/President and department Directors make up the quality assurance administration.

DEPARTMENT RESPONSIBILITIES

The Director of Quality Assurance is responsible to the President for assuring that the production of airplanes is in conformity with EA design data and procedures. Quality Assurance findings concerning non-conforming parts or procedures that may be questioned by other organizational components must be resolved through proper materials review actions and, if necessary, with direct communication with the President.

The Director may delegate inspection functions, but not responsibilities, to personnel of other departments with the concurrence of the other department heads and the President.

The Director of QA, or his designee, is responsible for maintaining EA's QAP Manuals and for notifying the FAA of any changes in the quality assurance system that may affect the inspection, conformity, or airworthiness of Eagle Sport airplanes.

The Director of Quality Assurance (in conjunction with the President) is responsible for assuring that all parts and materials used in the manufacturing and assembly process meet EA's Quality Standard. Once the quality standard is determined, only then can this part or material be entered into the Inventory Management System (IMS). Refer below for EA's Quality Standard Criteria. Also, if a part or sub-system is custom designed and/or manufactured for EA, this process is considered a Special Process. Refer to QA-6, Special Processes for further discussion.

EAGLE AVIATION QUALITY STANDARD CRITERIA

All inventory associated with our aircraft manufactured are universally accepted products within the aviation manufacturing community, i.e. Garmin Electronics, Matco Brakes. etc. Those vendors/manufacturing companies have their own QA process that they follow and EA follows up with the receiving inspection procedure outlined in QA-2 and QP-4. Anything that EA purchases that is custom designed goes through the Special Process procedure outlined in QA-6.

MANUFACTURING

The Director of Manufacturing is responsible for all phases of the production process, from procurement of raw material to flight test of each completed airplane, making the most efficient use of manpower to maintain the established production rate.

The Director works in close coordination with the Director of Quality Assurance and President in performing those functions that require inspection duties. Inspection personnel may report administratively to the Director of Manufacturing when such reporting results in more efficient use of company personnel, however, the responsibility for oversight of all inspection functions remains with the Director of Quality Assurance.

ENGINEERING

The Director of Engineering is responsible for the development of all drawings, process specifications, test procedures, and other data that form the basis for EA's aircraft design criteria, including changes to such drawings and data that require approval from the President/Owner.

The Director, in conjunction with the Director of QA, is also responsible for establishing a data change control and issuance system to ensure that only current data are used by production and inspection personnel.

The Director works in close coordination with the Directors of Manufacturing and Quality Assurance, President, in resolving Service Difficulties and, as necessary, generating Service Bulletins or Airworthiness Directives. Included in this function is reporting, processing and resolving failures, malfunctions, and defects that are within the scope of FAR 21.3.

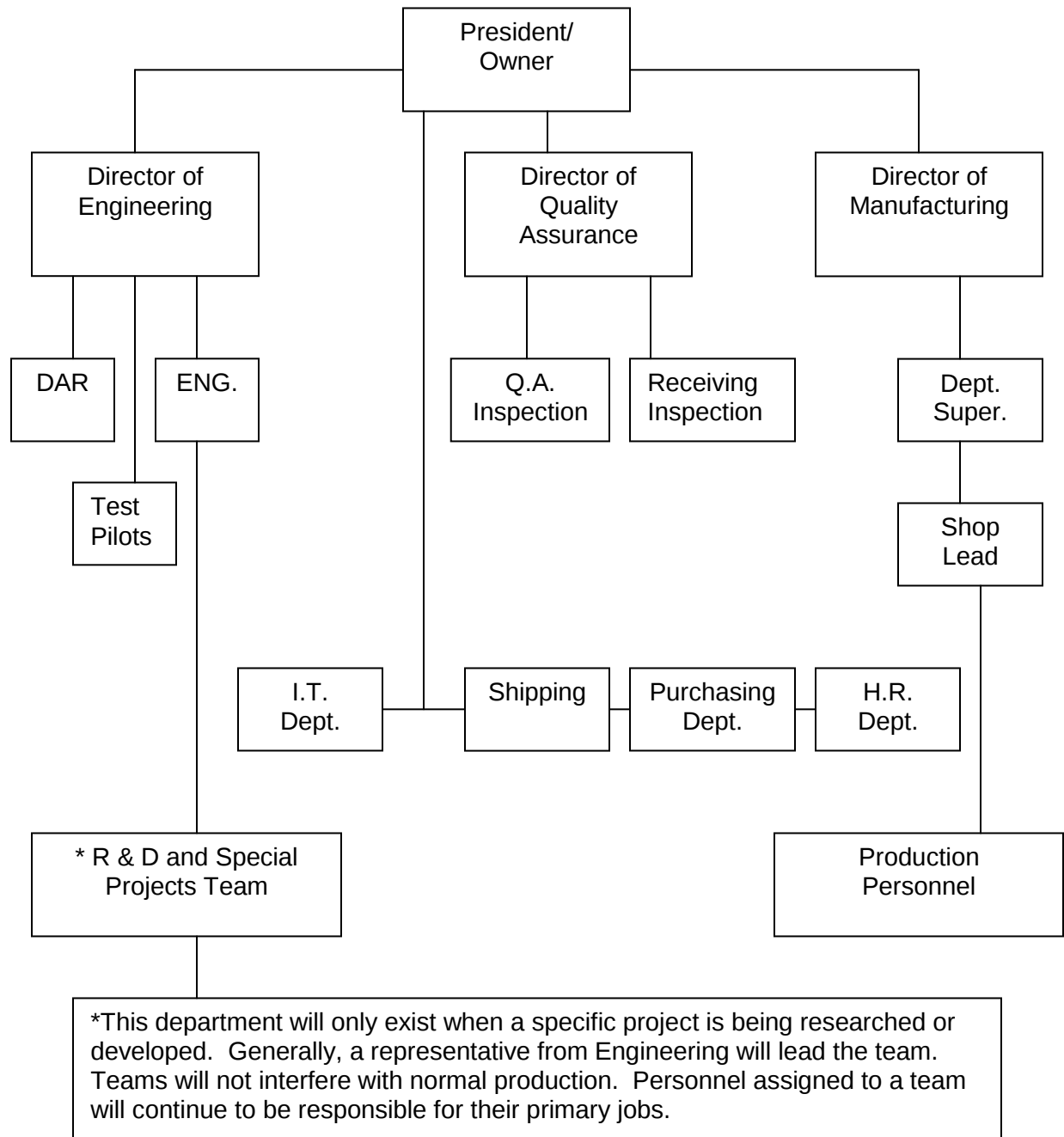
PROCEDURES AND FORMS

Eagle Aviation's operating procedures are contained in both the Quality Assurance Technical Data and Quality Assurance Procedures Manuals, which in turn makes up Eagle's Quality Assurance Program. All forms used are listed in QP-13, EA Forms. All changes to these manuals are subject to review by the FAA in a manner developed by the Director of Quality Assurance and the President.

DIAGRAM – FACILITY AND INSPECTION STATIONS

The Directors of Manufacturing, Engineering, and Quality Assurance are responsible for establishing and maintaining Inspection Stations at locations easily accessible to inspection personnel. The Quality Assurance Department, in conjunction with the Director of Manufacturing, is responsible for ensuring that each station has all of the documents and data required for the applicable phase(s) of production, and that all such documents and data incorporate the most current EA approved changes.

ORGANIZATION CHART



PERSONNEL ASSIGNMENTS AND INSPECTION AUTHORITY

President/Owner

Paul Klomhaus

Director of Engineering

Marty Rezmer

Director of Quality Assurance (QA)

Paul Klomhaus

Director of Manufacturing and Assembly

Paul Klomhaus

Information Technology (IT) Manager

Chris Franson

Inventory Control Manager

Chris Franson

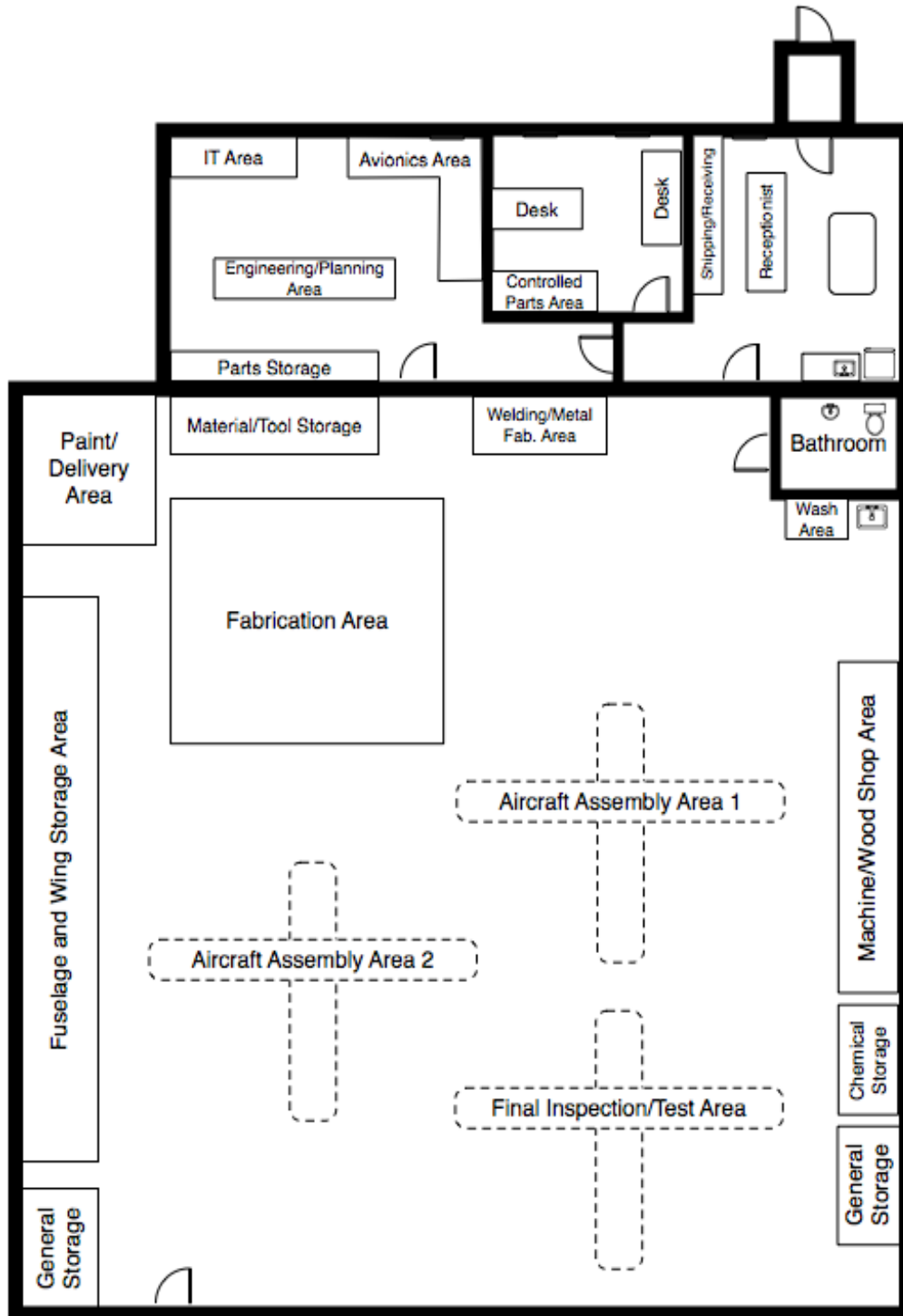
Shop Lead

Tanner Gauger

INSPECTION AUTHORITY

- The President/Owner has inspection authority in all departments and areas of manufacturing. The only exclusion to this is if he actually performs the process.
- The President/Owner and all Directors have inspection authority in all manufacturing and assembly processes. The only exclusion to this is (if required) the one that performs the work cannot be the final inspector.
- The President/Owner, Director of QA (or an appointee) have inspection authority over all incoming parts and materials used in the manufacturing and assembly process.
- The IT Manager has inspection authority for any items that are not used in the manufacturing and assembly process, i.e. office supplies, computer related items, etc.
- The Owner and all Directors are designated QA Inspectors in the manufacturing and assembly process.

PLANT LAYOUT AND INSPECTION STATIONS



QUALITY ASSURANCE TECHNICAL DATA MANUAL (QA)

QA-01: QUALITY ASSURANCE DEPARTMENT AND RESPONSIBILITY

1.1 PURPOSE

To outline the responsibility, procedure and functions of EA QA Department.

1.2 APPLICATION

Applies to the QA Department and its inspection personnel and system under the direction of the Director of QA. The QA department is assigned the responsibility and authority to determine that all products manufactured for use on aircraft are in conformity to ASTM standards. Its inspection systems shall determine that workmanship in all products furnished for use in aircraft are of an acceptable level to meet ASTM standards.

1.3 PROCEDURE

- 1.3.1 Inspectors: Inspectors under the direction of the Director of QA shall provide assurance of conformity, quality and acceptability of the finished product. An adequate number of inspectors shall be employed. They shall be responsible to check all materials, manufacturing processes, assembly, testing, packaging and shipping.

Inspectors will have access to all necessary tools, gauges, inspection procedures and instructions to perform the appropriate inspections at their assigned areas. Inspectors will complete all the necessary forms and records to accurately reflect the in-process status for the parts or assemblies. Inspectors will initiate corrective action, rework or scrap, for all non-conforming material. Upon completion of inspections, the inspectors will identify the parts or assemblies as necessary and route the material to its proper destination. See application of Stamps, Identification, Marking and Color Codes in Quality Assurance Procedures and Forms Manual, Section QP-1 and QP-2.

- 1.3.2 Inspection records: The QA Department shall maintain adequate records of the inspections and tests performed. These records provide objective evidence that the required operations have been performed and show that the parts or assemblies do conform to EA design specifications.

QA Inspection Records are kept on file for as long as the aircraft holds an airworthiness certificate.

QA-02: PURCHASING AND RECEIVING

2.1 PURPOSE

To provide specific procedures for assuring that all aircraft parts, materials, assemblies, and components purchased and received by EA are purchased from reliable sources and conform to ASTM standards.

2.2 APPLICATION

Applies to the procedures and coordination of personnel that are performing the duties of purchasing, receiving, and inspecting EA's parts and supplies.

2.3 PROCEDURE

- 2.3.1 The Inventory Management System (IMS) will be used to order all parts and supplies, and EA Management will make sure that the Master Product List (MPL) is properly inventoried so that appropriate part and supply amounts are maintained.
- 2.3.2 Only certain personnel, determined by the President and the Director of QA, will be authorized to make entries in and edits to the IMS. The control of the IMS will be password-protected.
- 2.3.3 All parts and supplies listed in the IMS come from EA's Master Vendors List (MVL).
- 2.3.4 The Director of QA, or his designee, will oversee the IMS and verify that it is up to date. The database for the IMS will be stored on an in-house server and a remote back-up server for redundant data protection.
- 2.3.5 The President will supply the Director of QA with a list of approved suppliers which make up the MVL. This list shall be furnished to the FAA upon request.
- 2.3.6 EA shall maintain a receiving area and establish proper control to assure that parts will not be routed into designated stock areas unless they have been accepted by an Inspector.
- 2.3.7 All incoming aircraft parts and materials ordered shall be inspected for conformity to design data. Nonconforming materials shall be placed in a controlled area until returned to vendor or disposed of.
- 2.3.8 The President and Director of QA shall establish a minimum preset inventory setting for all parts and materials listed on the MPL. Once a minimum inventory value is reached, the IMS will alert the user to reorder.
- 2.3.9 Detailed procedures for purchasing and receiving inspections are outlined in the Quality Assurance Procedures and Forms Manual, Section QP-3 and QP-4 respectively.

QA-03: STORAGE AND ISSUANCE OF MATERIALS AND PARTS

3.1 PURPOSE

This procedure provides a means of assurance that all materials used in the manufacture of aircraft by EA will be identified by physical, chemical properties, and dimensional characteristics that shall be determined by the Inspection Department prior to being routed to any designated stock area.

3.2 APPLICATION

These procedures apply to all aircraft parts, components, and materials manufactured or purchased by EA for use in building the aircraft.

3.3 PROCEDURE

- 3.3.1 All parts stored in designated stock areas shall be identified as outlined in the Quality Assurance Procedures and Forms Manual, Section QP-2, Application of Stamps, Identification, Marking, and Color Codes. They will be handled in a manner to preclude mixing and inadvertent usage of wrong raw material or parts in production.
- 3.3.2 Materials subject to deterioration as a result of prolonged storage, temperature, or humid conditions shall be protected in a manner as to assure reliability when used in the finished product, such as glues, paints and additives.
- 3.3.3 Materials which are not used in the aircraft may be stocked in designated stock areas with aircraft parts if they are segregated and identifiable.
- 3.3.4 The Inventory Control Manager shall oversee all distribution of materials and parts used in the manufacturing and assembly process.
- 3.3.5 Detailed procedures of storage and issuance of materials and parts are outlined in the Quality Assurance Procedures and Forms Manual, Section QP-9.

QA-04: PRODUCTION CONTROL-PLANNING, MATERIALS CONTROL

4.1 PURPOSE

To establish procedures for the control and planning of all parts and materials ordered, received, stored, and distributed to the distribution points of production, continuing through to final assembly of aircraft and parts.

4.2 APPLICATION

Applies to all personnel that have authority to make entries into the Inventory Management System (IMS).

4.3 PROCEDURE

- 4.3.1 EA's Management Team will be responsible for maintaining a perpetual inventory of parts processed through the receiving and stock areas to the end product. The IMS is the system in place for managing this process.
- 4.3.2 With the President's approval, the Director of QA will grant authorization to specific personnel that need access to the IMS.
- 4.3.3 The Management Team should schedule, handle, and follow up all parts, materials, and components through a specific Bill of Materials (BOM), "Special Process" order, or an Order Sheet. This will be done to assure that all work will be produced as determined, routed to subsequent operation properly, and completed into the end product.
- 4.3.4 All BOM's and/or Special Process Orders (SPO) will be controlled through the QA Department to assure that all parts processed are inspected at points in production where determination for conformity to design data is maintained.
- 4.3.5 Detailed procedures of production control and planning are outlined in the Quality Assurance Procedures and Forms Manual, Section QP-10, Procedures Related to the Assembly Process.

QA-05: MASTER VENDORS LIST (MVL)

5.1 PURPOSE

To provide a master list of all the approved vendors and suppliers used by Eagle Aviation LLC IMS for the purchasing of materials used for the construction and manufacturing of the EA-100.

5.2 APPLICATION

Applies to the IMS.

5.3 APPROVED VENDORS

- Aircraft Spruce
- Airtronics
- Batteries Plus
- Hi-Line
- Grand Raids Technology
- McMaster-Carr
- UMA
- Radio Shack
- Menards
- Kitz and Phiel
- Sensenich Propeller
- EDMO
- Summit Racing
- Howe Radiators
- RAM Performance
- Kunding Fluid Power
- IBIS
- Team Winnebagoland
- Matco Wheels
- Wicks Aircraft
- LEAF
- Custom Fiberglass
- US Composites
- LP Aero
- AM Safe
- Wal-Mart
- Electronic Industries
- Automotive Supplies
- Specialty Products
- Heater Craft

QA-06: MASTER PARTS LIST (MPL)

6.1 Purpose

To provide a master list of all the approved products purchased by Eagle Aviation LLC IMS for the purchasing of materials used for the construction and manufacturing of the EA-100.

6.2 Application

Applies to the IMS manager

6.3 List

EA No	Item Description	Vendor	Vendor Part Number
1	Altitude Encoder	Airtronics	Transcal SSD-120
2	Antenna-radio Comant CI-121	Aircraft Spruce	11-17921
3	Antenna-transponder	Aircraft Spruce	11-17995
4	AV MAP Geo Pilot II Plus	Aircraft Spruce	11-05814
5	Barb Nylon 1/4" to 1/4"	McMaster-Carr	5372K513
6	Barb Nylon 1/8" NPT x 1/4"	McMaster-Carr	5372K111
7	Barb-Nylon 1/8 NPT x 1/4 90°	McMaster-Carr	5372K311
8	Barb-Nylon T 1/4"	McMaster-Carr	5372K613
9	Battery	Batteries Plus	3-3/8D x 6-7/8W x 6-1/2 H
10	Fuses-10A	Electronics Ind	
11	Fuses-1A	Electronics Ind	
12	Fuses-3A	Electronics Ind	
13	Fuses-5A	Electronics Ind	
14	Fuses-60A	Electronics Ind	
15	Fuses-7A	Electronics Ind	
16	Cable Zip Ties 4"	Hi-Line	CTB43
17	Cable Zip Ties 7"	Hi-Line	CTB73
18	ELT-Artex ME406	Aircraft Spruce	11-03492
19	Engine Monitoring	Grand Rapids	EIS
20	Fast Ons - 22-18ga	Hi-Line	AP5201842
21	Grommets-1/4" EC3 mounting	McMaster-Carr	9600K43
22	Indicator-RAC position	Aircraft Spruce	11-02020
23	Instrument Mounting Nuts	Aircraft Spruce	MS33737-16C
24	Instruments- VSI	UMA	
25	Instruments-AI-Castlebury	Aircraft Spruce	10-02823
26	Instruments-Airspeed Indicator	UMA	
27	Instruments-Alt-Falcon 20K 3-point	Aircraft Spruce	10-02260
28	Instruments-DG-RC Allen	Aircraft Spruce	10-01681
29	Inverter	UMA	

30	Label-elev 1 large	Aircraft Spruce	11-01822
31	Label-elev 1 small	Aircraft Spruce	11-01821
32	Label-elev 2 large	Aircraft Spruce	11-03190
33	Label-elev 2 small	Aircraft Spruce	11-03191
34	Label-flap large	Aircraft Spruce	11-01817
35	Label-flap small	Aircraft Spruce	11-01818
36	Lighting Bezels 3 1/8"	UMA	
37	Lighting Dimmer	UMA	
38	Low Fuel Light-Dash Red	Aircraft Spruce	17-410
39	NAV/Strobe/Position Lights	Aircraft Spruce	156-0049-12V
40	Nuts-EC3 mounting	Aircraft Spruce	AN365-1032A
41	Power Point	Radio Shack	
42	Prop-Spinner Sensenich	Sensenich	
43	Radio	Airtronics	Garmin SL-40
44	Relays		
45	Screws-EC3 mounting	Aircraft Spruce	AN525-10R12
46	Shrink Tubing - 1/8'	Hi-Line	TSP2
47	Shrink Tubing - 3/16"	Hi-Line	TSP3
48	Shrink Tubing - 3/32"	Hi-Line	TSP1.5
49	Shrink Tubing - 3/8"	Hi-Line	TSP6
50	Splices 12-10	Hi-Line	AP320570
51	Splices 16-14	Hi-Line	AP320562
52	Splices 22-18	Hi-Line	AP320559
53	Splices 24-20	Hi-Line	AP323975
54	Splices 26-24	Hi-Line	AP323994
55	Switches-aux fuel pump	Electronic Ind	
56	Switches-PTT-mini switch	Aircraft Spruce	11-03909
57	Switches-spring loaded	Aircraft Spruce	
58	Switch-flap rocker RAC	Aircraft Spruce	11-02035
59	Switch-night light LED	Aircraft Spruce	
60	Switch-rocker style	Aircraft Spruce	
61	Terminal Shields Rt Angle, Lg	Hi-Line	TN714
62	Terminal Shields Rt Angle, Med	Hi-Line	TN711
63	Terminals - 10ga x #8	Hi-Line	AP35108
64	Terminals - 10ga x 1/4"	Hi-Line	AP35110
65	Terminals - 16 - 4 x #6	Hi-Line	AP51864
66	Terminals - 22ga x #6	Hi-Line	AP51863
67	Terminals - 22ga x #8	Hi-Line	AP31890
68	Terminals - 22ga x 1/4"	Hi-Line	AP31894
69	Terminals 6ga x 1/4"	Hi-Line	AP321598
70	Terminals 6ga x 5/16"	Hi-Line	AP33466

71	Transponder	Airtronics	Garmin GTX 327
72	Trim Kit-elevator T3-12A	Aircraft Spruce	11-11615
73	Tubing-instruments	Aircraft Spruce	05-00944
74	Wax Tie Cord	Hi-Line	LCB09
75	Wire - 2 cond. Shielded 22 ga	Edmo	
76	Wire - 10 ga black	Edmo	
77	Wire - 10 ga red	Edmo	
78	Wire - 18 ga black	Edmo	
79	Wire - 18 ga red	Edmo	
80	Wire - 18 ga white	Edmo	
81	Wire - 22 ga white	Edmo	
82	Wire - 22 ga black	Edmo	
83	Wire - 22 ga red	Edmo	
84	Wire - 3 cond. Shielded 22 ga	Edmo	
85	Antifreeze	Local Stores	
86	Clamps-3/4" worm drive	McMaster-Carr	54235K51 (sold in 10 packs)
87	Clamps-Adel size 18	Aircraft Spruce	MS21919-WDG18
88	Clamps-Adel size 9	Aircraft Spruce	MS21919-WDG9
89	Clamps-adell size 14 radiator	Aircraft Spruce	MS21919-WDG14
90	Clamps-Fire Sleeve	Aircraft Spruce	05-02652
91	Clamps-Radiator	McMaster-Carr	54235K56 (sold in 10 packs)
92	Clamps-single crimp 3/4"	McMaster-Carr	52545K73 (sold in 25 packs)
93	Clamps-single crimp heater side	McMaster-Carr	52545K74 (sold in 25 packs)
94	Clamps-single crimp-5/8"	McMaster-Carr	52545K55 (sold in 25 packs)
95	Clamps-single crimp-9/16"	McMaster-Carr	52545K54 (sold in 25 packs)
96	Fire Sleeve Clamps-fuel	Aircraft Spruce	05-02652
97	Fire Sleeve-5/8" ID-AE102-10	Aircraft Spruce	05-01844
98	Fire Sleeve-fuel	Aircraft Spruce	05-01843
99	Fitting-1/2" barb-1/4 npt male	McMaster-Carr	
100	Fitting-1/2" T style	McMaster-Carr	
101	Fitting-5/8" barb-1/4 npt female	McMaster-Carr	
102	Fitting-90° 1/4 NPT- 3/8 barb	McMaster-Carr	53525K17 (sold in 5 packs)
103	Fitting-push loc 90°	Summit Racing	220712
104	Fitting-push loc Straight	Summit Racing	220702
105	Fittings- 3/8" T	McMaster-Carr	91355K48 (sold in 5 packs)
106	Fitting-Straight 1/4 NPT -3/8 barb	McMaster-Carr	5346K35 (sold in 10 packs)
107	Fitting-Straight 1/4 NPT -5/16 barb	McMaster-Carr	5346K16 (sold in 10

			packs)
108	Fitting-Straight 1/4 NPT-3/8 barb	McMaster-Carr	5346K18 (sold in 10 packs)
109	Fuel Filters	Walmart	Fram
110	Fuel Pumps-MSD 2225	Summit Racing	MSD2225
111	Fuel Shut off Valve	Kundinger Fluid	PH-VP500P-4 Ball Valve
112	Gear Oil-Castrol 75W-90	Walmart	
113	Grommets-3/4"	McMaster-Carr	9307K81 (sold in 25 packs)
114	Hose-1/2" id water	Kundinger Fluid	821FR-8 (blue color)
115	Hose-1/4" id fuel line blue style	Aircraft Spruce	05-00500
116	Hose-3/8" Fuel-Parker	Kundinger Fluid	221FR-8
117	Hose-3/8" Fuel-Parker	Kundinger Fluid	5155-6
118	Hose-5/8" id water	Kundinger Fluid	5/8" heater hose
119	Hose-radiator 1 1/4" ID	Automotive Supplies	Flex style
120	Nut-AN3 lock nut-radiator mounting	Aircraft Spruce	
121	Oil-Castrol 20W-50	Walmart	
122	Oil-Castrol 10W-40	Walmart	
123	Overflow bottle	IBIS	
124	Radiator	Howe Racing	
125	Screw-AN3-XXA- radiator mounting	Aircraft Spruce	
126	Screws-AN3-4A engine mount	Aircraft Spruce	
127	Screws-AN3-5A engine mount	Aircraft Spruce	
128	Screws-AN3-6A engine mount	Aircraft Spruce	
129	Screws-AN5-15A engine mount	Aircraft Spruce	
130	Airframe	IBIS	
131	Boots for Wing Roots	Team Winnebagoland	
132	Brake Fluid ATF	Walmart	
133	Brake Line Fittings Straight	Matco	
134	Brake Line Tubing	Matco	
135	Brakes and wheels	Matco	
136	Cowling	Custom Fiberglass	
137	Cowling	Custom Fiberglass	
138	Engine Mount	Specialty Products	
139	Marine Goop-tube	Menards	
140	Master Cylinders	Matco	
141	Master Cylinders	Matco	
142	Nut Plate- two lug K1000-3	Aircraft Spruce	K1000-3
143	Nuts-AN4 seatbelts	Aircraft Spruce	AN365-428A

144	Prop-Sensenich	Sensenich	
145	Rivets-CCC-32	Aircraft Spruce	CCC-32
146	Rivets-MSP-32	Aircraft Spruce	MSP-32
147	Screws-1/4-28 5/8" seatbelts	Wicks Aircraft	AN525-416R10
148	Seatbelts	Am Safe	
149	Silicone Chalk-clear	Menards	
150	Tire Tubes	Matco	
151	Tires	Matco	
152	Windshield & Windows	L.P. Aero	
153	Wing and Tail Tips	Custom Fiberglass	
154	Wing Root Seal	McMaster-Carr	1120A112
155	RAM 115 Engine	RAM Engines	
156	Heater Core	Heater Craft	

QA-07: MANUFACTURING INSPECTION

NOTE: THE PROCEDURES OUTLINED IN QA-5 ARE NOT APPLICABLE AT THIS TIME. EAGLE AVIATION DOES NOT MANUFACTURE ANY PARTS. IF THIS CHANGES, A REVISION WILL BE MADE TO THE QAP AND QA-5 WILL APPLY.

7.1 PURPOSE

To define the responsibilities and procedures of the QA Department by providing inspections throughout all phases of manufacturing.

7.2 APPLICATION

Applies to the inspection of EA manufactured parts.

7.3 PROCEDURE

- 7.3.1 EA shall maintain inspection stations at points appropriately located, but because of possible area constraints, inspections can take place at individual work areas.
- 7.3.2 All completed parts shall be routed to designated inspection stations for conformity inspection to applicable specifications.
- 7.3.3 Large assemblies such as fuselage and wings shall be inspected in the areas where the fabrication takes place or designated inspection areas.
- 7.3.4 When size permits, all parts will be stamped to indicate acceptance, otherwise the inspector's acceptance verification shall be handled through the specific aircraft QAR Assembly Manual Checklists, tags, BOM, etc.
- 7.3.5 Parts deviating from EA specifications shall be separated and handled in accordance with the Material Review procedure.
- 7.3.6 Detailed procedures of manufacturing inspection are outlined in Sections: QP-1, Quality Assurance Stamps; QP-2, Application of QA Stamps, Identification, Markings, and Color Coding; and QP-10, Procedures Related to the Assembly Process in the Quality Assurance Procedures and Forms Manual.

QA-08: SPECIAL PROCESSES

8.1 PURPOSE

To outline procedures that enable EA to develop specifications that guarantee assurance of conformity to all special fabrication processes involved in the manufacture of aircraft.

8.2 APPLICATION

Applies to manufacturing processes that are performed by other companies that EA contracts with.

8.3 PROCEDURE

- 8.3.1 These process specifications may be Industry, Military, IBIS, Eagle Aviation specification number.
- 8.3.2 Responsibility for developing special processes shall be retained by the Director of Engineering and/or Owner excepting that they shall obtain concurrence from the Director of QA prior to issuance to assure that they are complete and are prepared in such a manner that is enforceable by the QA Department.
- 8.3.3 A Special Process Order (SPO) File shall be generated by the QA or Manufacturing Department for each special process performed. Once completed, this file will become a part of the Aircraft Design Manual (ADM).
- 8.3.4 Specifications primarily involved in prescribing design requirements shall be referenced on engineering drawings, part prototypes, and definitive standards of quality clearly outlined.
- 8.3.5 This outline for design requirements may include, but is not limited to procedures for: welding, brazing, heat treatment, plating, structural composites, adhesive bonding, etc.
- 8.3.6 Enforcement of compliance with process specifications shall be retained by the QA Department.
- 8.3.7 The receiving protocol for SPO's shall follow procedures outlined in QA-2 and QP-4.
- 8.3.8 Detailed procedures of Special Process requirements are outlined in the Quality Assurance Procedures and Forms Manual, Section QP-10, Procedures Related to the Assembly Process.

QA-09: ASSEMBLY INSPECTION

9.1 PURPOSE

To provide procedures to follow during the manufacturing process to maintain conformity to EA's design standards.

9.2 APPLICATION

Applies to the planning and production, and inspection personnel in meeting the conformity requirements during the assembly process.

9.3 PROCEDURE

- 9.3.1 Manufacturing personnel shall obtain all materials and/or parts necessary from the Inventory Control Manager and proceed with the manufacturing process. Parts and materials needed will be outlined on the aircraft BOM and the Assembly Procedure Manual.
- 9.3.2 Inspection of assembled parts shall be conducted at intervals as required for each assembly procedure. Inspections will be driven from the Assembly Manual and the QA Aircraft Inspection Data Sheet Checklists.
- 9.3.3 Each operator in the spaces provided, following the completion of each operation shall sign and date the Assembly Procedure Manual.
- 9.3.4 The inspector shall sign off inspections following the operations that specify required inspections in the spaces provided for that purpose.
- 9.3.5 The QA Aircraft Inspection Data Sheet Checklist shall be initiated at points in production where the fuselage and wing sub-assemblies are jointed to make up the total aircraft frame, and show follow up through all build up operations.
- 9.3.6 The QA Aircraft Inspection Data Sheet Checklist shall provide for the stamping of the inspector's inspection stamp (or initials) at prescribed intervals. A date should also be entered as to when the actual inspection occurred.
- 9.3.7 The aircraft assembly procedures checklists and the QA Aircraft Inspection Data Sheet Checklist shall accompany the aircraft being produced through final assembly, pre-flight inspection and flight test, and maintained as a part of the Aircraft Design Manual (ADM).
- 9.3.8 Detailed procedures of assembly inspections are found in the Assembly Manual.

QA-10: DRAWING AND CHANGE CONTROL

10.1 PURPOSE

To prescribe the method of controlling the distribution of new, latest change and/or engineering orders, obsolete drawings and EA specifications issued by the Engineering Department for production use.

10.2 APPLICATION

Applies to all engineering data and specifications required to manufacture the airplane to design specification.

10.3 PROCEDURE

10.3.1 Drawing changes will be made by the Engineering Department for any of the following reasons:

8.3.1.1 Receipt of drawing change request.

8.3.1.2 New part or design (Prototype)

8.3.1.3 Drawing or drawing system error or revision necessary to bring drawings up to date.

10.3.2 Major changes will be brought to the attention of the DAR during the certification process. Minor changes will be dealt with internally within EA.

NOTE: A minor change is one that would cause no appreciable effect on the weight, balance, structural strength, reliability, operational characteristic, or other characteristics affecting the airworthiness of the product.

NOTE: Any changes that would affect the above are considered major.

10.3.3 New drawings will be signed by the draftsman and approval signature by the Director of Engineering or Owner.

10.3.4 Detailed procedures of drawing and change control are outlined in the Quality Assurance Procedures and Forms Manual, Section QP-6.

QA-11: TOOL AND GAUGE CONTROL

11.1 PURPOSE

To provide the procedures and frequency of inspection for all tools, gauges, and fixtures used by the QA Inspection and Production Control and Planning in maintaining conformity to aircraft design specifications.

11.2 APPLICATION

Applies to all tools and gauges used to produce aircraft and parts such as measuring instruments and devices, holing fixtures that assure duplication of parts and assemblies, weld and drill fixtures, including templates, router boards and press blocks.

11.3 PROCEDURE

- 11.3.1 QA Inspectors will inspect each tool, jig, and fixture at least once during each aircraft manufacturing process.
- 11.3.2 Inspection shall be recorded on the QA Aircraft Inspection Data Sheet Checklist.
- 11.3.3 When findings of the inspector indicate error or defect, immediate steps shall be taken to insure that parts involved conform to design.
- 11.3.4 Detailed tool and gauge control procedures are outlined in the Quality Assurance Procedures and Forms Manual, Section QP-7 and QP-8.

QA-12: MATERIAL REVIEW

12.1 PURPOSE

To outline a procedure for the control of identifying, segregating, and disposition of all damaged or nonconforming materials deviating from the approved design and specifications in a manner that will preclude inadvertent usage in the finished product.

12.2 APPLICATION

Applies to all aircraft parts, assemblies, components, materials, and services that do not meet the design specifications and cannot be feasibly reworked to meet them.

12.3 PROCEDURE

12.3.1 There shall be an MRB consisting of one member from QA and one member from Engineering for disposition of non-conformities.

12.3.2 Definition of a “minor” nonconformity is to be submitted to MRB. “Minor” implies that it would not cause appreciable effect on the weight, balance, structural strength, reliability, operational characteristic, or other characteristics affecting the airworthiness of the product. Nonconformities that would affect the above are considered “major” and must be submitted to the Director of Engineering and/or Owner for disposition, rework and drawing change per Technical Data Control Procedure QP-7, unless outright scrapped.

12.3.3 The Director of QA or the Owner shall be considered the Senior Member of the MRB. His decision shall be the determining factor in the approval on MRB functions, except in the case of a major nonconformity, in which the Director of Engineering will submit any resulting drawing changes to the Director of QA and Owner prior to release. Any aircraft part, or assemblies that requires review process shall not be released for production until all the approvals are in order.

12.3.4 The Director of QA will be responsible for reviewing MRB records periodically to initiate corrective actions that could prevent recurring nonconformities.

12.3.5 Detailed material review procedures are outlined in the Quality Assurance Procedures and Forms Manual, Section QP-5.

QA-13: WEIGHT AND BALANCE CONTROL

13.1 PURPOSE

To provide procedures for assurance that all aircraft meet conformance standards in establishing an actual empty weight, compared to and acceptable to the design data empty weight and center of gravity (CG).

13.2 APPLICATION

Applies to all airplanes manufactured by EA.

13.3 PROCEDURE

- 13.3.1 A weight and balance report containing the actual weight and balance versus the weight and balance and center of gravity design data specifications with an equipment list itemizing optional equipment installed shall be prepared and supplied with each aircraft.
- 13.3.2 A copy of the weight and balance report and equipment list will be retained by EA with the aircraft records.
- 13.3.3 Each aircraft will be weighed prior to aircraft flight test procedures.
- 13.3.4 Detailed procedures for establishing weight and balance will be compiled and used for guidance.
- 13.3.5 Procedures will provide requirements for controlling accuracy of scales used and conditions under which the aircraft is weight to prevent inaccuracies.
- 13.3.6 Controls used shall include provisions for evaluation of empty weight variation in order to preclude gradual weight increase of the aircraft.
- 13.3.7 Detailed weight and balance control procedures are outlined in the Quality Assurance Procedures and Forms Manual, Section QP-11.

QA-14: FLIGHT TEST

14.1 PURPOSE

To set forth procedures of preparation for, and actual flight testing of aircraft for conformance to design specifications prior to issuance of an airworthiness certificate.

14.2 APPLICATION

Applies to flight test personnel and their methods of testing each new airplane or others that are used for testing of prototype articles prior to the issuance of an airworthiness certification.

14.3 PROCEDURE

14.3.1 EA flight test pilots shall be proficient with the aircraft's flight characteristics and flight test procedures.

14.3.2 Flight test pilots shall have necessary knowledge required to determine that satisfactory performance requirements per aircraft design data are being met.

14.3.3 Results of all flight tests are to be recorded as per the approved procedural requirements.

14.3.4 Flight testing procedures shall not be permitted until the QA Inspection for flight test has released the aircraft.

14.3.5 It will be the responsibility of the flight test pilot to examine the flight test records to verify that the aircraft has been accepted and released by the QA Inspector for flight test.

14.3.6 The flight test procedure will provide for the recording of all unsatisfactory conditions encountered during the ground and flight test, and this record will provide for entries indicating when the conditions have been corrected and that they have been re-inspected by the flight test pilot.

14.3.7 Unsatisfactory conditions noted by the test pilot that adversely affected the flight characteristics shall necessitate a flight check after repair or adjustment to insure that the corrective measures taken provided satisfactory conditions.

14.3.8 Production test pilots shall be qualified and approved by the Owner.

14.3.9 The Production Acceptance Procedure Checklist will be used to perform flight test.

QA-15: AIRWORTHINESS

15.1 PURPOSE

To set forth procedures for the airworthiness certification of EA aircraft.

15.2 APPLICATION

Applies to the FAA Designated Airworthiness Representative (DAR) and his method of inspecting EA aircraft and the issuing of airworthiness documentation.

15.3 PROCEDURE

- 15.3.1 The DAR shall have proficient knowledge of the aircraft being inspected for certification.
- 15.3.2 The DAR shall have proficient knowledge of the applicable FARs required for the certification process.
- 15.3.3 It shall be the responsibility of the DAR to examine all pertinent paperwork to verify that the item(s) has been inspected and/or flight tested, and accepted by the proper personnel prior to the issuance of the Airworthiness Certificate.
- 15.3.4 The DAR shall be qualified per FAA Order 8100.8.
- 15.3.5 The DAR shall only perform airworthiness functions that are listed on their limitations.

QA-16: REPAIRS AND ALTERATIONS

16.1 PURPOSE

To set forth procedures for a major repair or alteration to the aircraft.

16.2 APPLICATION

This procedure applies any time there is a major alteration or repair that could cause the aircraft to not meet ASTM conformity.

16.3 PROCEDURE

Engineering will review the repair or alteration. They will share this information with the QA department. QA and Engineering will review the ASTM standards to ensure that the repair or alteration is in compliance.

Upon completion and review, the Engineering department will write a statement providing details and a statement of compliance to ASTM rules. This affidavit and related engineering data will be filed in the ADM.

QUALITY ASSURANCE PROCEDURES AND FORMS MANUAL (QP)

QP-01: QUALITY ASSURANCE STAMPS

NOTE: The processes outlined in QP-1 and 2 in regards to QA Stamps will not apply until further notice. Until this process is implemented, individual initials from inspector authority personnel will be used.

1.1 PURPOSE

This procedure is for the identification, distribution and control of Quality Assurance (QA) used by EA.

1.2 APPLICATION

This procedure applies to inspectors and personnel associated with the issuance and control of QA Inspection Stamps.

1.3 PROCEDURE

1.3.1 QA Inspection Stamps will be made of rubber and identifications will be made with permanent ink.

1.3.2 Each stamp will be identified with a unique number assigned to a specific individual.

1.3.3 QA Inspector authorizations are characterized by the following identification system and distributed accordingly.

1.3.3.1 One and two digit numbered stamps are issued to QA inspectors that are authorized to inspect in all areas.

1.3.3.2 Three digit numbered stamps are issued to production personnel competent to perform limited inspections in specific areas and subject to QA audit.

1.3.3.3 Material Review Board (MRB) stamps: Issued to one and two digit inspectors to be applied by inspectors on all parts requiring MRB action.

1.3.3.4 Planning Stamps: Issued to QA personnel to be applied to planning documents to indicate approval and responsibility for revisions to planning documents.

1.3.4 One or more stamps, all with the same identifying number will be issued to a qualified person using the Receipt: QA Stamps, Form EA-13.

1.3.5 A separate record of stamps, by stamp number is to be maintained using the QA Control Log: QA Stamps, Form EA-14.

- 1.3.6 The stamp recipient is the only person permitted to use the assigned stamps and is responsible for keeping them clean and their impressions legible. Worn stamps are returned to QA and replaced.
- 1.3.7 The stamp recipient is responsible for immediate reporting, in writing, the loss of a stamp to the Director of QA.
- 1.3.8 Stamps returned because of a transfer or termination shall not be reissued for six months. The number of stamps that have been lost shall not be reused for twelve months after their reported loss.

QP-02: APPLICATION OF QA STAMPS, IDENTIFICATION, MARKINGS, AND COLOR CODING

2.1 PURPOSE

To describe the use and application of Quality Inspection Stamps, identification, markings, and color coding.

2.2 APPLICATION

Applies to methods used by personnel to identify and show approval of material, parts and assemblies pertaining to specific areas and types of inspections required.

2.3 PROCEDURE

2.3.1 ID Markings: Material, parts, and assemblies stored in designated stock areas will be identified by part number using permanent ink. Materials and parts that cannot be marked because of size or for other reasons will be identified with a tag attached to a box, bundle, etc.

2.3.2 Color Coding: Raw material consisting of tubing, sheet, plate, bar, rod, etc. shall be color coded as follows except when material received is stenciled with code specs. All other markings shall be over-sprayed with EA color coding.

2.3.2.1 Aluminum

#3003-0	Yellow
#3003-H14	Blue
#5052-0	Brown
#5052-H34	Pink
#2024-0	Green
#2024-T3	Red
#2024-T4	Black
#2024-T351	Copper (metallic)
#6061-0	White
#6061-T4	Purple
#6061-T6	Gold (metallic)
#6061-T651	Turquoise
#5052-H32	Orange

2.3.2.2 Steel

#1010	Red
#1018	Green
#1020	Gold (metallic)
#1025	Purple
#4130 (annealed)	Green
#4130 (normalized)	Copper (metallic)
#1008	Yellow
Stainless Steel	Black

2.4 QA General Acceptance Stamp

- 2.4.1 One, two, or three digit General Acceptance Stamps are to be applied by QA inspectors or authorized personnel on material, parts, assemblies, order forms, and inspection records. This signifies that the individual applying said stamp certifies that the material, parts, and assemblies have been manufactured and/or processed in accordance with applicable approved drawings and/or specifications and conforms to design specifications.
- 2.4.2 Material, parts, and assemblies that cannot be stamped because of size or any other reason shall be stamped on a tag attached to the parts or box, bundle, etc.
- 2.4.3 The General Acceptance Stamp shall be placed on inspection records beside the operation to be inspected.
- 2.4.4 The General Acceptance Stamp shall be placed on each aircraft's Bill of Materials document upon receiving each part and inspecting it (See QP-4).
- 2.4.5 MRB Stamp: Applied by authorized personnel on all material, parts, assemblies, inspection records, and Bill of Material (BOM) that do not conform to applicable approved drawings and/or specifications. This requires presentation to the Material Review Board after material, parts, or assemblies have been evaluated and determined to be either acceptable "as is" or to be repaired and re-inspected to an acceptable condition. The QA General Acceptance stamp as shown shall interlock the MRB stamp.

QP-03: ORDERING OF MATERIALS PROCEDURE

3.1 PURPOSE

To prescribe the system to use to purchase all inventory with the use of the Inventory Management System (IMS) and the Master Products List (MPL). The MPL only contains products that have been selected from the EA's Master Vendor List (MVL).

3.2 APPLICATION

Applies to the purchasing of all aircraft material, parts, assemblies, appliances, and services.

3.3 PROCEDURE

3.3.1 For each order made, the authorized person placing the order will use the Inventory Management System (IMS) to generate an electronic Order Sheet (OS). All or individual parts will be ordered by means of telephone call-in, fax or via Internet ordering. Specific ordering procedures are also noted in the Quality Assurance Record specific to each aircraft.

3.3.2 Ordering of raw materials shall include a request that the suppliers provide certification of compliance to specifications pertaining to the physical and/or chemical characteristics and properties. Raw materials are defined as all types of steel and aluminum, tubing, sheet, plate, bar, rod, castings, forging, rubber, plastic, wood, fabric, and control cables.

3.3.3 From a minimum preset inventory setting for all parts and materials listed on the MPL, the IMS will flag the user when a specific quantity is at a minimum. The Inventory Control Manager, or his designee, will restock the MPL by placing an order using the procedure below.

3.3.3.1 Enter password and navigate to the Inventory Manager page

3.3.3.2 Click on "Place an Order"

3.3.3.3 Fill in the "Order Description" with a short identifying description

3.3.3.4 Fill in quantities to the right of each desired item on the MPL

3.3.3.5 Click "Generate Order Sheet"

3.3.3.6 Order each item using the method indicated on the Order Sheet. Once an item is ordered, check the "Ordered" checkbox. The date and time of the order will be filled in automatically.

3.3.3.7 Click "Save Order"

- 3.3.4 If an order being placed needs special attention, the “Special Order” box should be checked and specific instructions outlined in the “Remarks” Section for the Inventory Control Manager (or designee) when it is inventoried.
- 3.3.5 Once the ordering process is complete the OS automatically updates to include the Orderer’s Initials.

QP-04: RECEIVING INSPECTION PROCEDURE

4.1 PURPOSE

To prescribe the means of assuring that only quality parts and materials that meet design data are purchased and received for the manufacture of aircraft and parts.

4.2 APPLICATION

Applies to the inspection of all aircraft material and parts ordered from the Master Products List (MPL).

4.3 PROCEDURE

- 4.3.1 Delivery of all parts and materials will be routed directly to the Controlled Inspection Area and under no circumstances shall they be released into the manufacturing flow until they have been inspected.
- 4.3.2 All aircraft material and parts received will be inspected for compliance to the approved EA and/or manufacture technical data. Only persons listed in the Introduction section of the QAP, under Personnel Assignments and Inspection Authority, can perform Receiving Inspection.
- 4.3.3 Parts that have been sent out for special processing are to be inspected when returned for the processing performed, for presence of certification, visual for damage, and identification.
- 4.3.4 Measuring devices, measurement standards, and test equipment that have been sent out for calibration and repair, when returned, are to be inspected visually for damage in transit, presence of test reports, and certification to the National Institute of Standards & Technology.
- 4.3.5 The IMS will be used to receive and record inspections on all incoming parts and materials. Only authorized personnel will be allowed to perform this procedure. Refer to the Introduction Section of the QAP, Personnel Assignments and Inspection Authority, for authorized personnel. The steps to this process are listed below.
 - 4.3.5.1 Enter password and navigate to the Inventory Manager page
 - 4.3.5.2 Click on "Receive an Order"
 - 4.3.5.3 Select the appropriate order (identified by date and "Order Description")
 - 4.3.5.4 Fill in initials for Received/Inspected/Approved/Accepted field(s) for each product. Date and time of receipt/inspection/approval is filled in automatically.
 - 4.3.5.5 Click "Save Order"
 - 4.3.5.6 At this point the Order Sheet may be printed (if it is necessary to have a hard copy on file). The completed Order Sheet will be saved in the EA orders database. Upon saving the order, the Inventory database is updated, adding the accepted products to the list.

- 4.3.6 If applicable, for each material or part ordered that contains a serial or ID number, this number will be placed in the box provided for traceability. This ID number will follow the specific part to supply, onto the aircraft and into the aircraft specific QAR.
- 4.3.7 If there is question as to if the part and/or material meets EA standards and can be used in the manufacturing/assembly process, they should be sent to the Material Review Board (MRB) for review or returned to the vendor or supplier.
- 4.3.8 Materials or parts that are in question or have been rejected outright shall be tagged with the Rejection and Disposition Tag, Form EA-4 and sent to the MRB, or returned directly to the vendor, supplier, or subcontractor.
- 4.3.9 For materials or parts to be returned, the Material Return Notice, Form EA-6 shall be prepared and returned with the material or part.
- 4.3.10 Once the receiving process is complete on the specific material and/or parts and passed inspection, it will be routed to the Parts Distribution Area.

QP-05: MATERIAL REVIEW PROCEDURES

5.1 PURPOSE

This procedure describes the process for reviewing materials, parts, and assemblies that may not be nonconforming to EA standards, and to order appropriate dispositions for those materials, parts, and assemblies.

5.2 APPLICATION

The materials review procedure is to be applied to any parts, materials and assemblies that have been identified as substandard or nonconforming to EA design specifications.

5.3 PROCEDURE

- 5.3.1 Nonconforming material shall be placed in the Material Review Area located in the main office.
- 5.3.2 The MRB shall determine whether nonconforming materials may be used “Use As Is,” that is if they are minor nonconformity’s and are acceptable within design limits or whether they are major nonconformity’s, but can be made acceptable through rework. Materials that cannot shall be considered “Scrap.”
- 5.3.3 Scrap materials that need MRB action are to be processed through the QA Department, where the Director of QA will verify that the scrap materials are mutilated and properly disposed of.
- 5.3.4 Once a decision has been made, the MRB Lead will fill out the Material Review Report, Form EA-5, for appropriate processing.

5.4 DEFINITIONS

- 5.4.1 “Use As Is”: Conditions and characteristics of a part, material or component presented to the MRB, in respect to dimensions, finishes, material hardness, assembly, etc.
- 5.4.2 “Repairable Material”: Nonconforming material that can be repaired to conform to specifications determined by the MRB.
- 5.4.3 “Scrap Material”: Nonconforming material which cannot be used “As Is” or “Repaired” to conform to specifications determined by the MRB.
- 5.4.4 “Nonconforming Material”: Materials, parts, or components which do not meet design specifications.
- 5.4.5 “Minor Nonconformity”: As defined in Section QA-10.
“Major Nonconformity”: As defined in Section QA-10.

5.5 Material Review Board (MRB) Members

The following personnel at EA have been selected for the Material Review Board:

- President/Owner
- Director of QA or his designee
- Director of Engineering or his designee

QP-06: TECHNICAL DATA CONTROL PROCEDURES

6.1 PURPOSE

To prescribe the procedures necessary in obtaining assurance of control and distribution of EA design technical data. Technical data includes part drawings, drawing change notices, engineering and flight data, specifications and QA Data. These procedures shall provide assurances that this technical data is available to Production and Inspection personnel and that any obsolete technical data is promptly removed from use.

6.2 APPLICATION

Applies to all engineering and quality technical data necessary to produce aircraft and parts to EA design data standards.

6.3 PROCEDURE

6.3.1 Technical data changes may be made by the Engineering Department for any of the following reasons:

6.3.1.1 Receipt of a Manufacturing/Design Change Request, Form EA-11.

6.3.1.2 New part or design (Prototype)

6.3.1.3 Design technical data error

6.3.2 Technical Data Change Requirements

6.3.2.1 Revised drawings and/or technical data must always be given the next consecutive letter change. All new drawings are to be given a new number. All changes on drawings and/or technical data are to be recorded in the revisions block.

6.3.2.2 All updating and/or revisions to technical data must include current approved specifications and appropriate QC requirements.

6.3.2.3 Engineering technical data must indicate those aircraft serial numbers affected by major and minor changes as applicable.

6.3.2.4 All drawing changes shall be submitted to the Director of Engineering for final evaluation.

6.3.3 Approval: Minor and Major Changes and/or Other Related Approvals

6.3.3.1 Minor and Major changes must be approved by both the Director of Engineering and the President/Owner.

6.3.3.2 Research, new model, or development drawings and technical data may be released for pre-production purposes, but all drawings and data must

be stamped or clearly written “Prototype” so as to preclude final acceptance, shipment or submittal of the article or product for airworthiness certification or approval.

- 6.3.3.3 Upon receiving notice of approval of drawings and/or other technical data from either the Director of Engineering or President/Owner, the new drawings and/or technical data will be submitted to and be filed by the Director of QA in the Aircraft Design Manual (ADM).
- 6.3.3.4 Superseded drawings and/or technical data will be removed by the Director of QA from the Master copy of the Aircraft Design Manual (ADM) to preclude their use into production aircraft.
- 6.3.3.4 The Director of QA will submit a Revision Record change of the QAM, specific to the Aircraft Design Manual (ADM).

QP-07: TOOLING INSPECTION PROCEDURES

7.1 PURPOSE

To establish the method for inspecting production tools including jigs, fixtures and templates.

7.2 APPLICATION

Applies to all tools used to produce and hold parts and assemblies during the aircraft manufacturing process.

7.3 PROCEDURE

- 7.3.1 New tooling shall be inspected by a QA Inspector prior to initial use and documented on the Production Tooling Inspection Report, Form EA-10.
- 7.3.2 All production tooling in use shall be inscribed (either by punch or permanent ink) with a number that can be tracked back to the Production Tooling Inspection Report, Form EA-10.
- 7.3.3 Production Tooling Inspection Report will be kept in EA's Production Tooling Design Binder.
- 7.3.4 All production personnel shall verify that each production tool is marked with a number showing proof of initial inspection. If this mark is not found, the jig, fixture, and/or template will not be used and will immediately be removed from the production floor and taken to the Director of QA. The Director of QA will be responsible for following the appropriate procedures outlined above.
- 7.3.5 The Director of QA is responsible for recurring production tooling inspections, if required.
- 7.3.6 If a specific production tool is found to be defective for whatever reason, or during recurring inspections found to not meet EA production standards, the Director of QA will be responsible for a course of action. The Director of QA shall also make an entry on the Production Tooling Inspection Report as to what course of action will be taken.
- 7.3.7 A defective production tool will either be refurbished to its original production standard or destroyed. If destroyed, the Director of QA is responsible for verifying that this has been accomplished.

QP-08: CALIBRATION & CONTROL OF DIMENSIONAL WORKING INSTRUMENTS

8.1 PURPOSE

To describe the system for periodic calibration and checking of dimensional working instruments.

8.2 APPLICATION

Applies to the calibration of dimensional working instruments such as limit gauges, measurement hand tools, gauge blocks, weight measuring devices, and electronic measuring tools.

8.3 PROCEDURE

- 8.3.1 The Director of Engineering or designee is responsible for initial and recurrent testing of dimensional working instruments and for filling out the Measuring and Test Equipment Inspection Record, Form EA-12.
- 8.3.2 Each dimensional working instrument is to be labeled showing the date when the next calibration is due.
- 8.3.3 Dimensional Measuring Equipment and Inspection Instruments that EA has no means of accomplishing shall be completed by an outside source that can show methods traceable to the National Institute of Standards and Technology (NIST).
- 8.3.4 EA personnel that cannot identify that a specific measuring device has been inspected, or identifies that an inspection is overdue, shall not use it and immediately notify the Director of Engineering.
- 8.3.5 Equipment not meeting inspection requirements at calibration cycles and deemed unfixable shall be sent to QA for disposal. The specific piece shall be clearly marked "Do Not Use" by QA and either destroyed or stored away from other accurate, usable measuring equipment.

QP-09: STORAGE AND ISSUANCE OF MATERIALS AND PARTS

9.1 PURPOSE

To provide procedures for controlling the storage and issuance of materials and parts assuring that quality is preserved. To Assure that only materials and parts that conform to EA's design standards are issued and used in the manufacturing/assembly process.

9.2 APPLICATION

Applies to all incoming material, parts, assemblies, or components received from the controlled inspection area and routed to the Parts Distribution Area.

9.3 INVENTORY RECEIVING PROCESS

9.3.1 All incoming materials, parts, assemblies, or components received from vendors (and EA constructed parts) must be verified that they have been routed through the Receiving/Inspection Process outlined in QP-4 before they are sent to the Parts Distribution Area for inventory control.

9.3.2 With the use of the Inventory Management System (IMS), the Inventory Control Manager, or his designee, will verify that all incoming parts and/or materials have been inspected by verifying that the procedure outlined in QP-4, 4.3.5.4 has been followed and all initials are present.

9.3.2.1 (4.3.5.4) Fill in initials for Received/Inspected/Approved/Accepted field(s) for each product. Date and time of receipt/inspection/approval is filled in automatically.

9.3.3 If this cannot be verified, the Inventory Control Manager (or designee) will not continue and will redirect the inventory in question to the QA Department.

9.3.4 If all procedures have been verified complete, for quality assurance the Inventory Control Manager (or designee) will perform a visual inspection and crosscheck serial numbers against what was entered in the IMS prior to placing the part or material into usable inventory service. The Inventory Control Manager will then initial the appropriate box(s). When this is completed, the IMS Inventory database will automatically update, adding the accepted products to the Master Products List (MPL). The part/material will then be placed into the appropriate Parts Distribution Area(s).

9.3.5 If the "Special Order" box is checked, the Inventory Control Manager will refer to the "Remarks" Section for further instructions.

9.3.6 For whatever reason, if the Inventory Control Manager (or designee) does not accept a specific part or material, he will identify the person who performed the Inspection (by initials in box) and work with him on a course of action. If the problem cannot be resolved, the procedures outlined in QP-5, Material Review Procedures, shall be followed. The part or material in question will be removed

from the Parts Distribution Area and routed back to the Controlled Inspection Area so inadvertent placement into service is avoided.

9.4 ISSUANCE OF MATERIALS AND PARTS: BILL OF MATERIAL (BOM)

- 9.4.1 Issuance of materials and parts will be done by the Inventory Control Manager (or designee). The IMS, in conjunction with the aircraft specific Bill of Material (BOM), will be use to issue and track each outgoing item ordered by production and assembly personnel.
- 9.4.2 Once an EA Bill of Sale has been received, an electronic Bill of Material (BOM) will be generated by QA for a specific aircraft configuration and forwarded to the Inventory Control Manager.
- 9.4.3 The Inventory Control Manager will verify that the aircraft parts and supplies needed for assembly are present and no discrepancies are found between stock parts and supplies compared to the Master Products List (MPL) in the IMS. If discrepancies are found, the Inventory Control Manager will work with the QA Department on resolving the discrepancies.
- 9.4.4 When parts and materials are required for production and assembly, the aircraft specific BOM will be used to manually track each outgoing part used. As parts and/or supplies are issued, the Inventory Control Manager (or designee) will electronically fill in the BOM for each part or supply issued and also document this on the paper BOM. He will also verify that the parts that have associated ID numbers match what he is issuing.

9.5 ISSUANCE OF MATERIALS AND PARTS: COMMON USE MATERIALS

- 9.5.1 Common use materials such as, nuts, bolts, washers, etc. will not be issued via an aircraft specific BOM. These materials will be stored in bins located in the assembly area. The Inventory Control Manager (or designee) will be responsible for monitoring, ordering and restocking as appropriate.
- 9.5.2 The Inventory Control Manager (or designee) will label all bins and/or containers with the appropriate item part number.
- 9.5.3 When sheet metal, bar, and tube stock is received, The Inventory Control Manager (or designee) will follow the procedures outlined in QP-2, Application of QA Stamps, Identification, Markings, and Color Coding and responsible for monitoring, ordering and restocking as appropriate.

QP-10: PROCEDURES RELATED TO THE ASSEMBLY PROCESS

10.1 PURPOSE

To provide procedures to follow that will outline the system(s) used in the production of the EA-100 Airplane, from conception to final inspection.

10.2 APPLICATION

Applies to Manufacturing and Inspection personnel by providing methods of controlling production sequences within process inspections and inventory controls.

10.3 GENERATION OF THE BILL OF MATERIALS (BOM)

10.3.1 When an aircraft order is received, a Bill of Sale is developed and from this the Bill of Material (BOM) is generated. The BOM is the document used by all departments that controls the production sequence from start to finish. It contains all required parts needed to build a plane that is specific in nature to the Bill of Sale, and all part ID numbers for traceability.

10.3.2 With the use of the Inventory Management System (IMS), the QA Department will generate a specific BOM based off of a Bill of Sale. The steps are listed below.

10.3.2.1 Navigate to the Inventory Manager page

10.3.2.2 Click on “Create a BOM”

10.3.2.3 Fill in the identifying fields, i.e. Aircraft ID, N Number, etc

10.3.2.4 Fill in the appropriate quantities to the right of each item on the Master Product List (MPL).

10.3.2.5 Click on “Save BOM”. The inventory database is automatically updated such that the appropriate items are marked “Allocated”.

10.3.3 While developing the BOM, if the IMS flags the user that a specific item quantity is getting low, the user will use the procedures in QP-3 for reordering.

10.3.4 When the BOM is completed, the QA Department will send an electronic copy to the Director of Manufacturing, Director of QA, and to the Inventory Control Manager.

10.3.5 The QA Department will print out a copy of the BOM, develop a Quality Assurance Record Manual (QAR) for the aircraft that will be built, and place the BOM hard copy into the QAR.

10.3.6 The QA Department will then forward the QAR to the Director of Manufacturing to initiate the start of the manufacturing process.

10.3.7 The Director of Manufacturing will develop an Assembly Manual that is specific in nature to the Bill of Sale and BOM, and assign an assembly crew to the job. The

Assembly Manual will become a part of the aircraft specific QAR and will be the road map that will be used from start to finish.

- 10.3.8 The Director of Manufacturing, in conjunction with the Director of QA, will be responsible for monitoring the overall assembly and inspection process so all tasks are completed to EA standard.

10.4 AIRPLANE ASSEMBLY MANUAL AND ASSEMBLY INSPECTIONS

- 10.4.1 As noted in 10.3.7, the Director of Manufacturing will be responsible for preparing the Assembly Manual that will be used to assemble a specific aircraft. The manual will be used by assembly personnel and will guide them through each assembly procedure and/or process. It will also be used to document all work done and all inspections.
- 10.4.2 All assemblers must refer to the Assembly Manual, follow each procedure process as outlined, and document their work where noted. All assemblers must initial their own work and will not initial off on work they did not perform.
- 10.4.3 The Assembly Manual will always stay with the associated QAR and aircraft being assembled.
- 10.4.4 When inspections are identified and required, they must be performed by only qualified and authorized persons, and appropriately documented as required. An inspector cannot sign off on his own work.
- 10.4.5 Each assembly process must be done in sequence and inspected prior to advancing to the next process.
- 10.4.6 All parts and materials used in the assembly process must be obtained from the Inventory Control Manager. Parts cannot be shared between aircraft unless authorized by the Director of QA and appropriately documented on the BOM.
- 10.4.7 Assembly personnel and Inspectors will verify that parts and materials that have associated ID numbers concur with what is documented on the BOM.
- 10.4.8 Assemblers will only use parts, materials and hardware provided by EA.
- 10.4.9 Assemblers will verify that all tools used are in good condition and if required, inspections are current. They will also verify that all tools are returned and put away after each shift. All tools will be accounted for prior to each shift change.
- 10.4.10 If a tool cannot be accounted for, it shall be documented in the Assembly Manual and the Director of QA notified.
- 10.4.11 Besides the mandatory inspections, the Director of QA (or designee) will periodically perform a no-notice inspection of the assembly process to verify that all procedures and policies are being performed correctly and EA design standards are being followed. This will be documented in the Assembly Manual.

10.5 SPECIAL PROCESSES OUTLINE

- 10.5.1 For each company that EA contracts with to manufacture a “custom” part or assembly, EA will develop Special Processes that must be followed in the manufacturing of the part or assembly. Each Special Process will be custom tailored to the specific task at hand. The outline that follows is an example, but is not limited to what is noted.
- 10.5.2 The Special Process will become a part of the Master Quality Assurance Record (QAR).
- 10.5.3 Design criteria and specifications outlined in the Special Process documentation will be referred to each time during the Receiving, Inspection, and Acceptance Process for each part or assembly.
- 10.5.4 The inspector performing the acceptance inspection will follow the procedures outlined in QP-4 and document his inspection appropriately.
- 10.5.5 The inspector shall also verify that the Vendor Special Process Statement, Form EA-9, accompanied the part or assembly and that it is filed in the associated aircraft QAR.
- 10.5.6 The Special Process Outline shall include (if applicable), but not limited to:
- 10.5.6.1 Name of Vendor providing service.
 - 10.5.6.2 Special Process performed.
 - 10.5.6.3 Completion date requirement.
 - 10.5.6.4 Person/personnel to perform the task and/or licensure requirements
 - 10.5.6.5 Tool/jig requirements
 - 10.5.6.6 Drawings with technical specifications
 - 10.5.6.7 Prototype examples
 - 10.5.6.8 Material requirements
 - 10.5.6.9 Procedural requirements
 - 10.5.6.10 Facility requirements
 - 10.5.6.11 OSHA/safety requirements

10.6 MANUFACTURING INSPECTIONS

NOTE: THIS SECTION IS NOT APPLICABLE AT THIS TIME. EAGLE AVIATION DOES NOT MANUFACTURE ANY PARTS. IF THIS CHANGES, THIS SECTION WILL BE DEVELOPED AND A REVISION WILL BE MADE TO THE QAP TO REFLECT THE CHANGES.

10.7 SPECIAL PROCESSES RECEIVING CHECKLISTS

Eagle Aviation LLC has developed receiving checklists for those items that require a special process for manufacturing. Upon receiving the inventory item the inventory control manager will ensure that the receiving checklist has been filled out properly.

AIRFRAME CHECKLIST FOR IBIS

FECHA Date			INFORMACION GENERAL General Information		
DÍA Day	MES Month	AÑO Year	ACTIVIDAD Activity	AERONAVE / KIT: Aircraft/Kit:	MAGIC/KIT 51 (Despacho Kit 2) Magic/Kit 51 (2nd Kit Dispatched)
				MATRICULA / SERIAL: Registration / Serial:	S/N GS-04-08-700-67
				CLIENTE: Client:	PAUL KLOMHAUS (USA)

		CANTIDAD		DESCRIPCIÓN Description	ESTADO Status	OBSERVACIONES Observations
ÍTEM Item	INICIAL Intended	REAL Actual				
1				FUSELAJE Fuselage		
2				PLANO Wing		
3				ESTABILIZADOR Stabilizer		
4				ELEVADOR Elevator		
5				TIMÓN Rudder		
6				ALETA TRIM EN ELEVADOR Elevator Trim Tab		
7				ALETA TRIM EN TIMON Rudder Trim Tab		
8				DERIVA Drift/Steering		
9				FLAP Flap		
10				ALERÓN Aileron		
11				STROOT Strut		
12				FEARING STROOT Faring Strut		
13				YURY STROOT Jury Strut		
14				TREN DE NARIZ (COMPLETO) Nose Gear (Complete)		
15				PIERNA TREN PRINCIPAL Main Gear Leg		

16			AMARRA STROOT Tie-down Strut		
17			RIN Wheel/Tire/Rim		
18			LLANTA Wheel/Tire/Rim		
19			KIT SIST DE CABRILLAS DOBLE COMANDO (2 CABRILLAS) Dual Yoke Control System Kit (2 Yokes)		
20			KIT SIST DE CONTROLES (FLAPS, ALERONES, TIMÓN, ELEVADOR) Control System Kit (Flaps, Ailerons, Rudder, Elevator)		
21			KIT SIST FLAP ALERÓN Aileron Flap System Kit		
22			KIT PEDALES DOBLE COMANDO Dual Control Pedals		
23			PISADERAS PEDALES Pedal		
24			RESORTES RETORNO TIMON Rudder Return Springs		
25			VARILLA PEDALES Pedal Rods		
26			OREJA PLANO EXTERIOR External Wing Covering?		
27			OREJA PLANO INTERIOR Internal Wing Covering		
28			TUBO PITOT (CONEXIÓN) Pitot Tube (Connection)		
29			TANQUES DE COMBUSTIBLE EN PLANOS Wing Fuel Tanks		
30			TAPA TANQUE DE COMBUSTIBLE PLANO Wing Tank Caps		
31			TANQUE RESERVORIO FUSELAJE Fuselage Reservoir Tank		
32			KIT SISTEMA DE COMBUSTIBLE Fuel System Kit		
33			MEDIDOR DE COMBUSTIBLE VISUAL Visual Fuel Meter		
34			SISTEMA DE SILLAS CORREDIZAS Sliding Seat System		
35			MALLA BODEGA Cargo Compartment Mesh		
36			CONSOLA CENTRAL CABINA Cabin Center Console		
37			KIT TAPICERÍA Upholstery Kit		
38			MUÑECO ACELERADOR Throttle Control Handle		
39			VARILLA ACELERADOR Throttle Control Rod		

40			PUERTA Door		
41			GATO PUERTA Door Handle		
42			CHAPA SEGURO PUERTA Door Securing Handle		
43			CHAPA INTERIOR Interior Handle		
44			KIT LAMINAS PLEXIGLASS FRONTAL Forward Plexiglass Sheet Kit		
45			PLEXI-GLASS FRONTAL Forward Plexiglass		
46			PLEXI-GLASS VENTANA LATERALES BODEGA Cargo Compartment Plexiglass Side Windows		
47			PLEXI-GLASS VENTANA TRASERAS BODEGA Cargo Compartment Plexiglass Rear Windows		
48			PLEXI-GLASS VENTANA TECHO Plexiglass Roof Window		
49			PLEXI-GLASS PUERTA Door Plexiglass		
50			COWLING (CAPO COMPLETO) Cowling (Complete Hood)		
51			CARENAS Fairings		
52			FEARING DORSAL Dorsal Fairing		
53			FIBRA TIMÓN Rudder Fiber		
54			FIBRA DERIVA Drift Fiber		
55			TABLERO EN FIBRA DE TRES SECCIONES 3-Section Fiber Panel		
56			TIPS PUNTAS ESTABILIZADOR Stabilizer Tips		
57			TIPS PUNTAS PLANOS Wing Tips		
58			LUCES DE ATERRIZAJE (CONEXIÓN) Landing Lights (Connection)		
59			MOTOR DE FLAPS Y MICROSWICHES (CONEXIÓN) Flaps Motor and Micro-switches (Connection)		
60			FEARING ALERONES Aileron Fairings		
61			FEARING FLAPS Flaps		
62			FEARING GUAYA TIMÓN Rudder		
63			TAPA DE INSPECCIÓN PLANOS Wing Inspection Cover		
64			TAPA DE INSPECCIÓN FUSELAJE PISO BODEGA Cargo Compartment Fuselage Floor Inspection Cover		

65			TAPA DE INSPECCIÓN COLA FUSELAJE Fuselage Tail Inspection Cover		
66			TAPA DE INSPECCIÓN TECHO BODEGA Cargo Compartment Inspection Cover		
67			RESORTE ELEVADOR Elevator Spring		
68			TAPA DE INSPECCIÓN LATERAL DERIVA Side Inspection Cover		
69			LATAS FUSELAJE / ESTABILIZADOR Fuselage / Stabilizer Tins		
70			LATAS TUBOS CABINA Tin Cabin Tubes		
71			KIT PINTURA BLANCO White Paint Kit		
72			KIT QUINCALLERÍA Hardware Kit		

ENGINE MOUNT CHECKLIST FOR SPECIALTY WELDING

Step #	Step Description	Completed (Initials)
1	Verify that the engine mount parts are manufactured from 4130 alloy steel as follows: round tubing-seamless, MIL-T 6736 normalized/annealed. Sheet stock is also 4130 alloy steel, MIL-S-18729C, normalized.	
2	The parts are rough cut and the filed smooth in preparation for assembly according to the parts list.	
3	The tubes are rough cut to length then ground and filed for proper fit according to the parts list.	
4	The parts are assembled in the production jig and TIG welded using OXWELD #1 1/16" welding rod to aircraft standards (AC-43-13).	
5	After the welding is complete and the structure has cooled, all welded joints and surrounding areas are heated evenly with and oxy-acetylene torch with a small rose bud tip to 1200°F and allowed to cool in still air. This relieves any stress cracking.	
6	When cool the mount is checked for welding quality and burs. Corrections are made if required.	
7	The mount is cleaned using acetone. Then it is primed with self etching zinc-chromate primer.	
8	The mount is painted with gloss black spray enamel.	

Welder's Name _____

Welder's Certification Number _____

Date _____

EXHAUST SYSTEM CHECKLIST FOR SPECIALTY WELDING

Step #	Step Description	Completed (Initials)
1	All exhaust system components are made of 321 stainless steel tubing and sheet material.	
2	The muffler used is manufactured by Super Trapp. It is a free flowing and is made with stainless steel.	
3	Using the jig, all tubes are cut and mandrel bent.	
4	The components are assembled in the jig and TIG welded using 347 filler rod.	
5	Weld the heat shield onto the muffler using the same welding process.	
6	Weld the muffler to the exhaust pipe.	

Welder's Name _____

Welder's Certification Number _____

Date _____

QP-11: WEIGHT AND BALANCE PROCEDURE

11.1 PURPOSE

To establish a method of control meeting the weight, balance, and center of gravity requirements as established in the design specifications.

11.2 APPLICATION

Applies to personnel involved and methods used in establishing the weight and balance criteria.

11.3 ASSOCIATED MATERIALS

11.3.1 Weight and Balance Work Sheet, Form EA-8

11.3.2 Equipment List

11.4 PROCEDURE

11.4.1 Check the aircraft and equipment to assure that all items of equipment are installed as indicated on the equipment list.

11.4.2 Scales used in the weighing of aircraft must be calibrated periodically. Scale zero readings must be checked before each aircraft is weighed.

11.4.3 The aircraft will be weighed inside a closed building to prevent error in scale reading due to wind.

11.4.4 The aircraft shall be weighed in a level flight attitude with the scale being placed under the wheels.

11.4.5 The aircraft must be weighed without fuel and with oil. The oil quantity must be indicated on the weight and balance report.

11.4.6 A weight and balance report must be supplied with each aircraft. The report should be marked either "Computed Weight and Balance" (when acceptable) or "Actual Weight and Balance", whichever is applicable. The initial weight and balance will be actual.

QP-12: QUALITY ASSURANCE PROGRAM AUDIT

12.1 PURPOSE

This procedure sets forth the method for (at a minimum) annually examining EA's products and systems to determine the effectiveness of the overall QA Program.

12.2 APPLICATION

This procedure applies to the following internal functions: Receiving and Receiving Inspections, Assembly Procedures and Assembly Manual, QA Inspections, EA Design Standards, Technical Data Control, Shipping, Purchasing, Inventory Management System (IMS), Flight Test, and Airworthiness.

12.3 PROCEDURE

- 12.3.1 The Director of QA, in conjunction with the President, is responsible for planning and conducting the QAP audit.
- 12.3.2 The QAP audit shall evaluate the overall program with primary emphasis on how departments work together in reference to safety, efficiency, quality, and customer satisfaction.
- 12.3.3 Prior to the audit, the Director of QA and the President shall establish a list of objectives that will be the basis of the audit. This will be used as a guide to evaluate from. After the audit, if it is determined that an objective has not been met, a plan of action as to how it will be corrected shall be identified.
- 12.3.4 The annual audit will be documented on the EA Quality Assurance Audit Record.
- 12.3.5 In addition to 12.3.3, from a random selection, a specific aircraft Quality Assurance Record (QAR) shall be compared to the Master QAR.
- 12.3.6 The annual audit should also revisit ASTM requirements and if any changes have been implemented that may have an impact on EA's policies, procedures and standards.

QP-13: EAGLE AVIATION FORMS

13.1 PURPOSE

To identify all forms that EA uses and the most current revision that applies.

13.2 APPLICATION

Applies to all employees of EA.

13.3 PROCEDURE

13.3.1 The list of forms that EA currently uses and the associated revision are listed below.

<u>FORM</u>	<u>TITLE</u>	<u>REVISION</u>
EA-1	Change of Customer Information Form	Original
EA-2	Customer “Received” Information Form	Original
EA-3	Customer Feedback Form	Original
EA-4	Rejection and Disposition Tag	Original
EA-5	Material Review Report Form	Original
EA-6	Material Return Notice Form	Original
EA-7	Master QAP Revision Change Notice Form	Original
EA-8	Weight and Balance Work Sheet Form	Original
EA-9	Vendor Special Process Statement Form	Original
EA-10	Production Tooling Inspection Report	Original
EA-11	Manufacturing/Design Change Request Form	Original
EA-12	Measuring and Test Equipment Inspection Record	Original
EA-13	Receipt: QA Stamps	Original
EA-14	QA Control Log: QA Stamps	Original
EA-15	Record of Telephone Correspondence Form	Original
EA-16	Safety of Flight/Service Difficulty Report	Original
EA-17	Customer Acceptance Checklist	Original

STANDARD PRACTICE FOR CONTINUED OPERATIONAL SAFETY MONITORING OF AN LSA (SP)

PREFACE

The following document contains Eagle Aviation's Operational Safety Monitoring System which establishes the method by which safety of flight issues are discovered, evaluated, and corrected for the purpose of maintaining operational safety of the EA-100. It outlines the system of receiving, evaluating, and correcting safety of flight and service difficulty issues.

Eagle Aviation's Operational Safety Monitoring System has been structured around standards outlined in ASTM 2295-06, Standard Practice for Continued Operational Safety Monitoring of a Light Sport Aircraft, and has been divided into two sections: Manufacturer's Responsibilities and Owner/Operator Responsibilities. The final section of this program contains the forms that will be used to communicate between Eagle Aviation and the Owner/Operators.

With the structuring of Eagle Aviation's Operational Safety Monitoring System, Eagle fully understands the importance of a quality line of communication with the end user and safety issues related to keeping this line of communication open. For this reason, Eagle Aviation has established three lines of communication that will be used with Owner/Operators: (1) electronic communication via e-mail (primary), (2) U.S. Mail (secondary), and (3) by telephone (alternate). The primary way that Eagle will communicate with the Owner/Operators will be via the Internet. Eagle will highly recommend this to its customers, but if for whatever reason the Owner/Operator does not prefer this method, the secondary communication option will be U.S. Mail. The alternate communication method of placing a phone call will only be used when the situation dictates immediate response or if all other methods have failed. In any situation, all communication methods will be verified "received" by either electronic or paper (Customer "Received" Information Form, EA-2), or if by telephone, QA will complete a "Record of Telephone Correspondence, Form EA-15" which will state who placed the call, date and time, nature of the call, and action required (if applicable). This documentation will be filed in the Owner/Operator tracking file or if applicable, filed electronically.

When the Owner/Operator takes delivery of an airplane, he or she will be asked what method of communication is preferred, and this will be documented on the Customer Acceptance Checklist, Form EA-17. This method noted will be used unless, in e-mail or written script, the customer changes the communication method. Also, written script to all Owner/ Operators in regards to airworthiness instructions will be performed in the English language.

A copy of this document will be supplied to each Owner/Operator during the aircraft delivery process.

MANUFACTURER'S RESPONSIBILITIES

NOTE: The following information is based directly on specific paragraphs from ASTM 2295-06, Standard Practice for Continued Operational Safety Monitoring of a Light Sport Aircraft. All procedures and related forms that are referenced can be found on Eagle Aviation's Website (eaglesportplane.com) under the "Customer Service" tab. They can either be filled out and submitted directly online or printed off, filled out manually, and submitted via U.S. Mail. If requested, all forms can be issued the day of aircraft acceptance/delivery or by mail anytime.

ASTM 2295-6, Paragraph 5.3: Manufacturer's Responsibilities

ASTM 2295-6, Paragraph 5.3.1

All Safety of Flight/Service Difficulty Reports (Form EA-16) from an Owner/Operator (or received internally) will be routed (electronically or via U.S. Mail) directly to the Owner/President and Director of Quality Assurance (QA) for evaluation. If it is clear that the report will not generate a safety of flight situation, the Owner/President, Director of QA, or their appointee, will address the issue and respond to the Owner/Operator by e-mail or U.S. Mail (receipt requested).

If the Report does trigger a possible safety of flight concern, the Owner/President will immediately convene a board that will be responsible for evaluating the issue, and if required, initiating corrective action as needed. This board will consist of the Owner/President and all Department Directors. The board will use Annex A1 from ASTM 2295-06, Operational Safety Risk Assessment Procedure, to determine the appropriate corrective action(s). If the outcome is determined to be weighted either (2), (3), or (4), as outlined in A1.2, an immediate response to the outcome will be initiated by direct phone calls to all Owners/Operators for corrective action and/or grounding of the aircraft fleet. If the outcome is determined to be weighted (1), the board's corrective action will be relayed to the Owners/Operators by either e-mail or U.S. Mail. In any case, the required outline of information relayed to all Owners/Operators (either by e-mail, U.S. Mail, or phone) will follow the format outlined in F2295 7.0, Notice of Corrective Action and notification that the Owner/Operator has read the information will be required. This Notice of Corrective Action will be contained in a Safety of Flight Information Document.

Safety of Flight Information Document: All Safety of Flight and/or Service Difficulty Reports, if applicable, will be filed in an electronic folder (or 3-ring binder), sequentially numbered (i.e. revision number), and kept permanently

ASTM 2295-6, Paragraph 5.3.3.1

The method for the Owner/Operator to report maintenance, service, and safety difficulties to Eagle Aviation will follow suit with the procedures outlined above in 5.3.1.

The procedure that Eagle will follow to address the specific situation is also contained above in 5.3.1.

ASTM 2295-6, Paragraph 5.3.3.2

The methods that the Owner/Operator can use to determine whether s/he has the latest revision to the Safety of Flight Information Document include logging on to the Eagle Aviation Website and verifying under the “Customer Service” tab or by calling Eagle Aviation. This information will also be reviewed when the Owner/Operator takes delivery of an airplane, and it will be documented on the specific Customer Acceptance Checklist and in the Customer Database.

Each time a revision to the Safety of Flight Information Document is completed, this document is distributed to each Owner/Operator according to their preferred means of communication. For the Owner/Operators that opted for electronic communication, the document will be posted to the website and all Owner/Operators will be automatically notified by e-mail, which includes a link to the latest revision. When the customer clicks this link, the Customer Database will be automatically updated. For all customers that opted for U.S. Mail, the Safety of Flight Information Document will be sent by U.S. Mail and confirmed received with a “receipt requested” card from the USPS. Once Eagle Aviation receives the receipt, QA will manually update the Customer Database. The Director of QA, or his representative, will then verify that all Owner/Operators have the most current revision noted in the Customer Database. After an appropriate time period determined by the severity of the issue, QA will contact by phone any Owner/Operators that have not confirmed receipt of the latest revision. If contact still cannot be made, the secondary POC will be contacted. If this does not work, the FAA will be contacted as a last resort.

ASTM 2295-6, Paragraph 5.3.3.3

Instructions pertaining to the annual and 100 hour inspections will be covered when the Owner/Operator takes delivery of an airplane and documented on the specific Customer Acceptance Checklist. Any change to these inspections will require a new revision to the Safety of Flight Document. Procedures that Eagle Aviation will follow to pass on the new revision to all Owner/Operators are contained in 5.3.1 and 5.3.3.2 above.

OWNER/OPERATOR RESPONSIBILITIES

ASTM 2295-6, Paragraph 5.4: Owner/Operator Responsibilities

ASTM 2295-6, Paragraph 5.4.1/5.4.4/5.4.5/5.4.6

Eagle Aviation has established multiple ways for Owner/Operators to stay up-to-date with airworthiness information and instructions. E-mail and the use of Eagle's website will be the primary means of communication between Eagle Aviation and all Owner/Operators, but if this not opted for, the U.S. Mail will be used. Eagle Aviation will verify that Owner/Operators have received all pertinent airworthiness information as a part of the aircraft delivery process and by the procedures outlined in the "Manufacturer's Responsibilities" section above. In any case, it is the Owner/Operator's responsibility to keep a line of communication open with Eagle Aviation and regularly check e-mail and/or postal mail.

The Owner/Operator will be responsible for complying with all applicable maintenance and/or corrective actions that have been received from Eagle Aviation as specified in the notice. They will also be responsible for complying with all applicable aviation authority regulations in regard to maintaining aircraft airworthiness. If there is confusion with any airworthiness information and instructions received, it is the responsibility of the Owner/Operator to clarify the question at hand prior to considering the aircraft airworthy. Should an Owner/Operator not comply with any mandatory service requirement, the aircraft in question shall be considered not in compliance with applicable ASTM standards and may be subject to regulatory action by the presiding aviation authority.

ASTM 2295-6, Paragraph 5.4.2

During the aircraft delivery process, as a part of the Customer Acceptance Checklist, each Owner/Operator will supply Eagle Aviation with current contact information, which will include (if applicable): permanent address, phone number, and e-mail address. Eagle will also request a secondary POC as a backup. This information will be entered into the Customer Database.

It will be the responsibility of the Owner/Operator to promptly notify Eagle Aviation when there is a change to any contact information. To do so, the Owner/Operator will use the "Update Contact Information" section of the "Customer Service" page on Eagle Aviation's web site, or fill out and mail Form EA-1, Change of Customer Information Form, provided during the aircraft delivery process.

ASTM 2295-6, Paragraph 5.4.3

It is the responsibility of each Owner/Operator to contact Eagle Aviation in the most expeditious manner if a safety of flight or significant service difficulty is noted and then follow up with a Safety of Flight and/or Service Difficulty Report, Form EA-16. Eagle Aviation will then follow procedures outlined in 5.3.1 above. If an Owner/Operator would like to provide general feedback information, the Customer Feedback Form, EA-3, shall be filled out and mailed to Eagle Aviation, LLC.

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