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StandardSpecification for Light Sport Aircraft Manufacturer's Quality Assurance System[1]

This standard is issued under the fixed designation F2972; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This specification establishes the minimum requirements for a quality assurance system for manufacturers of Light Sport Aircraft or Light Sport Aircraft kits, or both.

1.2 This standard applies to aircraft seeking civil aviation authority approval in the form of flight certificates, flight permits, or other like documentation.

1.3 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

F2839 Practice for Compliance Audits to ASTM Standards on Light Sport Aircraft

3. Terminology

3.1 *Definitions:*

3.1.1 *permanent record, n*—where specified herein, the applicable record shall be kept and shall be accessible as long as airworthiness certificates remain in effect for aircraft produced that relate to the record.

3.1.2 *quality assurance manual (QAM), n*—the documentation of the quality assurance system.

3.1.3 *quality assurance record (QAR), n*—the permanent record of quality assurance associated with each LSA produced.

3.1.4 *quality assurance system (QAS), n*—a system of processes and controls used by a manufacturer to verify and validate that the LSA meets its specified requirement.

3.1.5 *reserved holding area, n*—physical area for isolating items away from normal production processes while awaiting proper disposition.

3.2 *Abbreviations:*

3.2.1 *MRB*—Material Review Board

4. Quality Assurance System

4.1 Manufacturers shall develop and implement a Quality Assurance System (QAS) in accordance with the requirements established within this practice. The elements of the QAS established herein include the following:

4.1.1 Quality Assurance Manual (QAM).

4.1.2 Quality Assurance Record (QAR).

4.1.3 Record of Compliance.

4.1.4 Product Configuration Control, Document Control, and Change Management.

4.1.5 Control of Critical Special Processes and Equipment.

4.1.6 Material Control.

4.1.7 Inspections.

4.1.8 Identification and Handling of Nonconforming Material.

4.1.9 Assignment of QA Duties and Supplier Control.

4.1.10 Audits.

4.2 *Quality Assurance Manual (QAM)*—Each manufacturer shall document their QAS in the form of a Quality Assurance Manual (QAM). The QAM itself and each of the QAS elements included or referenced shall be controlled as production documentation in accordance with 6.0.

4.3 *Quality Assurance Administration (QAA)*—The manufacturer's administration that is charged with the implementation of the QAS may consist of one or more: company employees, company officials, or manufacturer's agents, consultants, or assigns. The individual(s) that make up the QAA shall be identified within the QAM.

5. Quality Assurance Record (QAR)

5.1 A QAR shall be retained for each LSA produced. Each QAR shall consist of the following, which shall include the LSA serial number and date of manufacture.

5.1.1 Completed final records and checks from the manufacturing and assembly operations. This should include items such as major subassembly sign-offs, critical part sign-offs,

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.