Designation: F2930 – 16 (Reapproved 2025)

Standard Guide for Compliance with Light Sport Aircraft Standards[1]

This standard is issued under the fixed designation F2930; 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 document provides guidance to assist manufacturers in understanding and meeting ASTM standards for light sport aircraft. This guidance material presents philosophies, practices and considerations recommended by industry consensus, but does not present technical or business requirements that must be met.

1.2 It is the intent of this guide to provide processes to be considered by organizations looking to develop or improve objective evidence of compliance for light sport aircraft. It does not attempt to identify all of the standards, regulations or other requirements that may be applicable to a given aircraft, production or testing process.

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, health, and environmental practices and determine the applicability of regulatory limitations prior to use.*

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

2. Referenced Documents

2.1 *ASTM Standards:*[2]

F2245 Specification for Design and Performance of a Light Sport Airplane

F2295 Practice for Continued Operational Safety Monitoring of a Light Sport Aircraft (Withdrawn 2019)[3]

F2483 Practice for Maintenance and the Development of Maintenance Manuals for Light Sport Aircraft

F2746 Specification for Pilot's Operating Handbook (POH) for Light Sport Airplane

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

F2972 Specification for Light Sport Aircraft Manufacturer's Quality Assurance System

F3035 Practice for Production Acceptance in the Manufacture of a Fixed Wing Light Sport Aircraft

F3060 Terminology for Aircraft

2.2 *FAA Standards:*[4]

FAA Advisory Circular No. 23.629-1B Means of Compliance with Title 14 CFR, Part 23, Section 23.629, Flutter

FAA JASC (Joint Aircraft System/Component) Codes

2.3 *Other References:*

ATA (Air Transport Association) Spec 100, or the newer iSpec 2200—Information Standards for Aviation Maintenance[5]

Metallic Materials Properties Development and Standardization (MMPDS, formerly MIL-HDBK-5)[6]

CMH-17 (formerly MIL-HDBK-17) for composite material properties[6]

CICTT (Commercial Aviation Safety Team/International Civil Aviation Organization Common Taxonomy Team) International Standard for Aircraft Make, Model, and Series Groupings – Business Rules, October 2012 (1.3)[7]

3. Terminology

3.1 The following are a selection of relevant terms. See Terminology F3060 for more definitions and abbreviations.

3.2 *Definitions:*

3.2.1 *compliance package*—a set of documents which provides objective, verifiable evidence for compliance to applicable ASTM standards.

3.2.2 *compliance program*—a set of activities planned for, executed, and for which results are reviewed against ASTM standards for the purpose of declaring compliance to a particular standard.

[1] This guide is under the jurisdiction of ASTM Committee F37 on Light Sport Aircraft and is the direct responsibility of Subcommittee F37.70 on Cross Cutting.

Current edition approved Jan. 1, 2025. Published January 2025. Originally approved in 2012. Last previous edition approved in 2016 as F2930 – 16ε1. DOI: 10.1520/F2930-16R25.

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

[3] The last approved version of this historical standard is referenced on www.astm.org.

[4] Available from Federal Aviation Administration (FAA), 800 Independence Ave., SW, Washington, DC 20591, http://www.faa.gov.

[5] Available from http://www.airlines.org.

[6] Available from http://www.everyspec.com.

[7] Available from http://intlaviationstandards.org.

3.2.2.1 *Discussion*—The program may be short and simple or extensive and comprehensive, depending on the standard or purpose of the program (for example, initial design versus modification).

3.2.3 *continued compliance activity*—work that is conducted as part of the ongoing support and production of an aircraft following the initial design definition and statement of compliance.

3.2.4 *control drawing*—discloses engineering form, fit, function, and performance requirements for the acquisition of purchased items of existing designs, or of items specially developed by vendors.

3.2.4.1 *Discussion*—A control drawing facilitates accurate procurement of vendor-developed items without disclosing details of designs or divulging proprietary vendor data.

3.2.5 *date of manufacture*—possible dates include, but are not limited to, the date of initial registration in the relevant country of first registry of the individual aircraft, the date of initial airworthiness certification, the date of the signature of a statement of compliance, or other date as defined by the applicable CAA.

3.2.5.1 *Discussion*—It is important for the manufacturer to correctly identify this date as it determines which standards and which revisions thereof are applicable to each individual aircraft.

3.2.6 *declaration of compliance*—the official statement by a manufacturer that an aircraft meets the applicable light sport aircraft standards as specified by the relevant CAA.

3.2.7 *manufacturer*—any entity engaged in the production of a light sport aircraft which is responsible for completing all compliance-related paperwork and assertions of compliance.

3.2.7.1 *Discussion*—The manufacturer is also responsible for identifying each aircraft produced; for stating that each aircraft complies with the applicable requirements, conforms to its own design definition and has performed acceptably on all necessary ground and flight testing; and for continued monitoring and correction of safety-of-flight issues.

3.3 *Acronyms:*

3.3.1 *AMM*—Aircraft Maintenance Manual

3.3.2 *BOM*—Bill of Materials

3.3.3 *CAA*—Civil Aviation Authority

3.3.4 *CAD/CAM*—Computer Aided Design/Computer Aided Manufacturing

3.3.5 *COS/COSM*—Continued Operational Safety/ Monitoring

3.3.6 *COTS*—Commercial Off-The-Shelf

3.3.7 *FTS*—Flight Training Supplement

3.3.8 *IPB*—Illustrated Parts Breakdown (aka IPC, Integrated Parts Catalogue, Illustrated Parts Catalog)

3.3.9 *LSA*—Light Sport Aircraft

3.3.10 *MCCL*—Master Compliance Check List

3.3.11 *MOC*—Means of Compliance

3.3.12 *MTS*—Made to Spec

3.3.13 *NHA*—Next Higher Assembly

3.3.14 *OEM*—Original Equipment Manufacturer

3.3.15 *POH*—Pilot Operating Handbook (aka AFM, Aircraft Flight Manual; aka AOI, Aircraft Operating Instructions)

3.3.16 *QA*—Quality Assurance

3.3.17 *QAM*—Quality Assurance Manual

3.3.18 *QAP*—Quality Assurance Program

3.3.19 *QAR*—Quality Assurance Record

3.3.20 *QC*—Quality Control

3.3.21 *UM*—Unit of Measure

4. Significance and Use

4.1 This guide provides some major themes and examples for consideration related to compliance which are not necessarily captured in any single standard pertinent to light sport aircraft. The outline of this document is intended to loosely reflect the process that an organization would go through in order to reach and maintain production of a light sport aircraft that is demonstrably compliant with the applicable ASTM standards.

4.2 These considerations are applicable to manufacturers which are responsible for conformity to processes and procedures required in ASTM standards for light sport aircraft. Manufacturers are encouraged to think through the contents of this guide, reference the ASTM light sport aircraft standards, establish, document and follow their own procedures.

4.3 Manufacturers are responsible for determining which standards and revisions thereof are part of the regulatory package of any given CAA, along with any other requirements applicable within the agency's jurisdiction.

4.4 Following this guide does not ensure compliance of a particular light sport aircraft; however, following the explanations provided herein should assist manufacturers in avoiding common pitfalls of declaring compliance prematurely, determining shortcomings in current declarations of compliance, and maintaining a body of documentation sufficient to support a declaration of compliance.

5. Key Themes

5.1 The following key concepts are essential to the compliance process and can be seen throughout this guide. Manufacturers are encouraged to keep these themes in mind.

5.2 *Configuration Control*—Over the course of the development or compliance program, or both, the configuration should be captured such that the specifics of the compliant design are characterized, traceable, and documented. This includes elements such as definition, source, specifications, and a system for managing configuration.

5.3 *Change Management*—Changes come about from a variety of sources: changes for improvements to a design, as a result of safety of flight issues, or in response to a change in the standards themselves. All changes must be managed in order to maintain compliance to the applicable standards throughout the product's lifecycle. Failure to manage and track changes will result in non-compliance.