



Designation: F2295 – 06

Standard Practice for Continued Operational Safety Monitoring of a Light Sport Aircraft¹

This standard is issued under the fixed designation F2295; 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 practice establishes the standard practice for the continued operational safety monitoring of a light sport aircraft.

1.2 *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

F2245 Specification for Design and Performance of a Light Sport Airplane

F2564 Specification for Design and Performance of a Light Sport Glider

3. Terminology

3.1 *Definitions:*

3.1.1 *LSA (light sport aircraft)*—used herein to refer to both LSA airplanes and LSA gliders.

3.1.2 *LSA airplane (light sport aircraft airplane)*—powered aircraft designed in accordance with Specification **F2245** that is manufactured and delivered ready to fly.

3.1.3 *LSA glider (light sport aircraft glider)*—aircraft designed in accordance with Specification **F2564** that is manufactured and delivered ready to fly.

3.1.4 *manufacturer*—any entity engaged in the production of a LSA.

4. Significance and Use

4.1 The purpose of this practice is to establish a method by which safety of flight issues are discovered, evaluated, and corrected for the purpose of maintaining operational safety of a LSA.

¹ This practice is under the jurisdiction of ASTM Committee **F37** on Light Sport Aircraft and is the direct responsibility of Subcommittee **F37.20** on Airplane.

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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.

5. Continued Airworthiness Support

5.1 The manufacturer of a LSA shall maintain an Operational Safety Monitoring System as a normal business conduct.

5.2 *Assignment Of Duties*—Manufacturers may assign operational safety monitoring and continued airworthiness support duties to other entities.

5.3 *Manufacturer's Responsibilities*—LSA manufacturers shall develop and implement a system of receiving, evaluating, and correcting safety of flight and service difficulty issues.

5.3.1 Manufacturer shall evaluate all safety of flight and service difficulty reports and shall initiate corrective action as needed to correct any safety of flight related issues.

5.3.2 Manufacturer shall not use notices of corrective action to promote or make mandatory non-safety of flight related equipment upgrades or additions.

5.3.3 The manufacturer shall provide with the delivery of each LSA documented continued airworthiness instructions in the English language. These instructions shall include at least the following:

5.3.3.1 A method for the owner/operator to report maintenance, service, and safety difficulties to the manufacturer, in accordance with **5.4**.

5.3.3.2 A method for the owner/operator to obtain and verify that they have the latest safety of flight information developed by the manufacturer, in accordance with **5.4**.

5.3.3.3 Instructions pertaining to annual and 100-h inspection items as needed.

5.4 *Owner/Operator Responsibilities:*

5.4.1 Each owner/operator of a LSA shall read and comply with the maintenance and continued airworthiness information and instructions provided by the manufacturer.

5.4.2 Each owner/operator of a LSA shall be responsible for providing the manufacturer with current contact information where the manufacturer may send the owner/operator supplemental notification bulletins.

5.4.3 The owner/operator of a LSA shall be responsible for notifying the manufacturer of any safety of flight issue or significant service difficulty upon discovery.

5.4.4 The owner/operator of a LSA shall be responsible for complying with all manufacturer issued notices of corrective action and for complying with all applicable aviation authority regulations in regard to maintaining the airworthiness of the LSA.

5.4.5 An owner of a LSA shall ensure that any needed corrective action be completed as specified in a notice, or by the next scheduled annual inspection.

5.4.6 Should an owner/operator not comply with any mandatory service requirement, the LSA shall be considered not in compliance with applicable ASTM standards and may be subject to regulatory action by the presiding aviation authority.

6. Determination Of Corrective Action

6.1 The manufacturer of a LSA shall evaluate and determine appropriate corrective action for a safety of flight issue in accordance with **Annex A1**.

6.2 Manufacturer shall maintain a record of all safety of flight related risk assessments and the resolution thereof.

7. Notice Of Corrective Action

7.1 When corrective action is determined to be warranted (based upon the manufacturer's Operational Safety Risk Assessment Procedure as described in Section 6), the manufacturer shall issue a notice to the known owner/operators of the effected LSA's.

7.2 Notices:

7.2.1 Notices shall have a page header that contains the following information, when available:

7.2.1.1 The name, postal address, Web address, and telephone number of the issuing entity,

7.2.1.2 The date the notice is released,

7.2.1.3 The date the notice takes effect,

7.2.1.4 Limitations for completion of any required corrective action,

7.2.1.5 The make and model of the affected LSA,

7.2.1.6 The serial number of the affected LSA,

7.2.1.7 A number that uniquely identifies the notice,

7.2.1.8 The number of the superseded notice, if applicable, and

7.2.1.9 The page number and number of total pages.

7.2.2 The first page shall contain, in large bold uppercase letters, one of the following titles:

7.2.2.1 "SAFETY ALERT" for notifications that require immediate action.

7.2.2.2 "SERVICE BULLETIN" for notifications that do not require immediate action but do recommend future action.

7.2.2.3 "NOTIFICATION" for notifications that do not necessarily recommend future action but are primarily for promulgation of continued airworthiness information.

8. Discontinued Airworthiness Support

8.1 Should a manufacturer no longer be able to support the LSA produced, manufacturer should make a timely and diligent effort to contractually transfer any design data needed for continued airworthiness support to a viable entity, such as another manufacturer, type club, user group, or other interested party.

NOTE 1—This section shall not be construed as a requirement for a manufacturer to forfeit for any reason, any patents, copyrights, design ownership, commercial rights, proprietary information, intellectual property, monetary rights, or financial interests in the sale or transfer, or both, of any design data. Should a significant airworthiness issue arise that cannot be satisfactorily resolved, affected LSA's may be subject to regulatory action by the presiding aviation authority.

9. Keywords

9.1 airworthiness; light sport aircraft; sport pilot

ASTM F2295-06 ANNEX

<https://standards.iteh.ai/catalog/standards/sist/7d1b1318-caaa-49e9-914d-604c79158cb4/astm-f2295-06>

(Mandatory Information)

A1. OPERATIONAL SAFETY RISK ASSESSMENT PROCEDURE

A1.1 Introduction

A1.1.1 This process of performing a risk assessment is for LSA manufacturers to use in order to determine appropriate corrective action on aircraft service difficulty or flight safety reports. Note that all operational situations are unique and that manufacturer experience or judgment may result in a different action taken than that prescribed by this procedure.

A1.1.2 Safety Alert notifications are required to address unsafe conditions, but the determination of which types of service problems should be considered as unsafe conditions is generally dependent upon the type and use of aircraft, and the effect a particular condition may have on the continued safe operation of the aircraft.

A1.2 Definitions

A1.2.1 *Safety Effect*—The actual service report or potential consequences of the service issue. The more adverse the

consequences, the higher the risk weighting. The weighting for each safety effect is shown below:

A1.2.2 *Catastrophic Effect (4)*—High potential for loss of aircraft and fatalities.

A1.2.3 *Hazardous Effect (3)*—Large reduction in functional capabilities or safety margins that may cause serious or fatal injuries.

A1.2.4 *Major Effect (2)*—Significant reduction in functional capabilities or safety margins that may cause physical discomfort or a significant increase in workload, possible injuries, or fatalities.

A1.2.5 *Minor Effect (1)*—Slight reduction in functional capabilities or safety margins that may cause an increase in workload or require use of emergency procedures.

A1.2.6 *Operational Use*—Operational use may play a role in determining appropriate corrective action by impacting the priority in which the corrective action is accomplished.