



Designation: F3198 – 18

Standard Specification for Light Sport Aircraft Manufacturer's Continued Operational Safety (COS) Program¹

This standard is issued under the fixed designation F3198; 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 Continued Operational Safety (COS) program for manufacturer's of light sport aircraft and light sport aircraft kits.

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

1.3 *Units*—The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.4 *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.*

1.5 *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

F2483 [Practice for Maintenance and the Development of Maintenance Manuals for Light Sport Aircraft](#)

3. Terminology

3.1 *Definitions:*

3.1.1 *Notice of Correction Action (Notice)*—a formal communication of mandatory, non-mandatory, or helpful COS information to relevant LSA owners/operators.

¹ This specification 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 March 1, 2018. Published May 2018. DOI: 10.1520/F3198-18.

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.

3.2 *Acronyms:*

3.2.1 CAA—Civil Aviation Authority

3.2.2 COS—continued operational safety

3.2.3 LSA—light-sport aircraft

4. Significance and Use

4.1 The purpose of this specification is to establish a method by which unsafe conditions and service difficulty issues are reported, evaluated, and corrected for the purpose of COS of a light-sport aircraft (LSA).

5. Continued Operational Safety Program

5.1 Manufacturers must develop and implement a COS program in accordance with the requirements established within this specification. The elements of the COS program established herein include the following:

5.1.1 Communication and Owner Information

5.1.2 Determination of Corrective Action

5.1.3 Notice of Corrective Action

5.1.4 Continuation of Airworthiness

5.2 *Assignment of Duties*—Manufacturers may assign COS support duties to other entities.

5.2.1 In the case of assignment, the manufacturer retains COS responsibility for the accomplishment of these activities.

5.2.2 All assignment authorizations must be documented within the manufacturer's COS program.

5.3 *Owner Requests:*

5.3.1 If an owner submits written comments and questions regarding any mandatory Notice, the issuing organization must respond in writing and in a timely manner to any such request. A record of the request and response must be retained with the records of the Notice.

5.3.2 Manufacturers must consider proposals from owners for alternate means of compliance to a mandatory Notice(s) and must, in a timely manner, issue an acceptance or denial in writing to the owner requesting the alternative. If an alternative means of compliance is made available, then this alternative must be communicated to other owners affected by the notice.

6. Communication and Owner Information

6.1 The manufacturer must provide, with the delivery of each LSA, COS instructions that include, at a minimum, the following items:

6.1.1 A listing of owner responsibilities for COS, including:

6.1.1.1 The responsibility of the owner to provide current contact information to the manufacturer that is suitable for delivery of COS Notices.

6.1.1.2 The responsibility of the owner to notify the manufacturer of any unsafe condition or service difficulty (faults, malfunctions, defects, and other occurrences) immediately upon discovery. This notification must be made in a manner acceptable to the manufacturer.

6.1.1.3 The responsibility of the owner to read and comply, as specified within the Notice, with any Notices of Corrective Action provided by the manufacturer as well as all applicable consensus standards and CAA regulations in regard to maintaining the airworthiness of the LSA.

6.1.1.4 The responsibility to understand that the owner may submit written comments and questions regarding any mandatory Notice to the organization who issued the Notice.

6.1.2 A method for the owner to report unsafe conditions and service difficulty issues to the manufacturer.

6.1.3 A method for the owner to obtain and verify that they have the latest COS information developed by the manufacturer.

6.1.4 A method for the owner to update their contact information with the manufacturer.

6.2 The manufacturer must maintain a current owner list that includes all aircraft in service by serial number with contact information for the owner(s) as provided by the method in 6.1.4 or as specified below.

6.2.1 In cases where the presiding CAA records of registered owners is sufficient for tracking aircraft and the manufacturer has access to such records, the manufacturer may elect to utilize such records for complying with this section.

6.2.2 The annual condition inspection checklist for the aircraft must include a check for the accuracy of aircraft identification and registration information (as applicable).

7. Determination of Corrective Action

7.1 Manufacturer must promptly and fully investigate all reported potential unsafe conditions or service difficulties.

7.2 Manufacturers must evaluate all unsafe condition or service difficulty reports as well as any resulting action taken. Permanent records of the reports as well as the evaluation, decisions, and any actions must be retained.

7.3 Manufacturers who utilize components from outside sources must evaluate any formal safety directive, service bulletin, notification, or other product notice from the outside sources to determine the safety effect on the manufacturer's fleet.

7.4 If a manufacturer determines that an unsafe condition exists or could develop that stems from a component supplied by an outside source, then the manufacturer must communicate this concern to the outside source for further investigation.

7.5 A CAA may issue Airworthiness Directives (ADs) against items utilized in an LSA. Manufacturers must evaluate any such directives to determine the safety effect and corrective action on the manufacturer's fleet.

7.6 The procedures in **Appendix X1** to determine the "Safety Risk" and associated actions related to the reported problem provide an acceptable method to show compliance with the requirements of this section.

7.7 Manufacturers must not use Safety Directives or other mandatory notices to promote or make upgrades or equipment changes to the aircraft that are not related to the resolution of unsafe conditions. These situations include, but are not limited to, circumstances in which service publications are issued to improve or enhance the following:

7.7.1 Spare part sales;

7.7.2 Aircraft performance, capability, or efficiency, unless the change is needed for the aircraft to meet the minimum design and performance standards identified in the consensus standard and the manufacturer's statement of compliance;

7.7.3 Aircraft appearance;

7.7.4 Aircraft maintainability not shown to have significance in the prevention of unsafe conditions.

7.7.5 Any other aircraft characteristic when the action called for does not remedy an unsafe condition, including any condition related to reliability which does not have an impact on unsafe conditions.

8. Notice of Corrective Action

8.1 Upon determination that corrective action is warranted (based upon the manufacturer's Determination of Corrective Action as described in Section 7), the manufacturer must issue a Notice to all known owners of affected LSA's.

8.1.1 Notices must contain the following information, when available:

8.1.1.1 The name, postal address, web address, and telephone number of the issuing entity,

8.1.1.2 The date the Notice is released,

8.1.1.3 The date the Notice takes effect,

8.1.1.4 Deadlines (by calendar or flight time) for completion of any required corrective action. If no deadline is required the word "Unspecified" can be used.

8.1.1.5 The make and model of the affected LSA(s),

8.1.1.6 The serial number of the affected LSA(s),

8.1.1.7 A unique identifier for the Notice,

8.1.1.8 The unique identifier of a superseded Notice(s), if applicable,

8.1.1.9 The page number and total number of pages.

8.1.1.10 Instructions for documentation of successful completion of the corrective action in the aircraft records.

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

8.1.2.1 "SAFETY DIRECTIVE" or "SAFETY ALERT" for Notices that require action to correct an unsafe condition that is likely to occur in other aircraft of the same model.

NOTE 1—The terms Safety Directive or Safety Alert have the same meaning. The governing CAA rules may define which term is appropriate. The use of "SAFETY DIRECTIVE/ALERT" for the title is acceptable.