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Standard Guide for Wing Interface Documentation for Weight Shift Control Aircraft¹

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1. Scope

1.1 This guide covers the manufacture of Weight Shift aircraft and their qualification for certification.

1.2 This guide applies to Weight Shift Control 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

[F2317/F2317M Specification for Design of Weight-Shift-Control Aircraft](#)

[F2425 Specification for Continued Airworthiness System for Weight-Shift-Control Aircraft](#)

[F2447 Practice for Production Acceptance Test Procedures for Weight-Shift-Control Aircraft](#)

[F2457 Specification for Required Product Information to be Provided with Weight-Shift-Control Aircraft](#)

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

[F2972 Specification for Light Sport Aircraft Manufacturer's Quality Assurance System](#)

3. Terminology

3.1 *Definitions:*

3.1.1 *weight-shift-control aircraft, n*—a powered aircraft with a framed pivoting wing and a fuselage controllable only in pitch and roll by the pilot's ability to change the aircraft's center of gravity with respect to the wing. Flight control of the

aircraft depends on the wing's ability to flexibly deform rather than the use of control surfaces.

4. Interface Documentation

4.1 Interface documentation is the data necessary for the aircraft manufacturer to complete overall certification to ASTM Weight Shift Control standards. The following data represents a guide to recommended type, detail, and general format for data transfer from a major subcontractor to the aircraft manufacturer.

4.2 *Manufacturer's Reference Documents*—The following are reference documents that should be supplied to the manufacturer by the subcontractor. These are intended to be maintained at a current status and referenced by documents provided with each delivered product.

4.2.1 *Quality Assurance Manual*—In order to meet the requirements of Specification [F2972](#), it will be necessary for the manufacturer to have a current copy of the subcontractor's quality assurance manual on file. This manual needs to show that written procedures are in effect for:

4.2.1.1 Drawing control,

4.2.1.2 Component control,

4.2.1.3 Receiving inspection,

4.2.1.4 Material identification,

4.2.1.5 Inspection,

4.2.1.6 Non-conforming material handling, and

4.2.1.7 QA audits.

4.2.2 *Continued Airworthiness*—In order to meet the requirements of Specification [F2425](#), it will be necessary for the manufacturer to have a current copy of the subcontractor's continued airworthiness manual on file.

4.2.3 *Production Acceptance Testing*—In order to meet the requirements of Practice [F2447](#), it will be necessary for the manufacturer to have a current copy of the subcontractor's production acceptance testing written procedure on file.

4.2.4 *Maintenance Manual Coordination*—In order to meet the requirements of Practice [F2483](#), it will be necessary for the manufacturer to have a current copy of the subcontractor's maintenance manual on file.

4.2.5 *Statement of Conformance Coordination*—In order to meet the requirements for Specification [F2317/F2317M](#), it will be necessary for the manufacturer to have on file a current copy

¹ This guide is under the jurisdiction of ASTM Committee [F37](#) on Light Sport Aircraft and is the direct responsibility of Subcommittee [F37.40](#) on Weight Shift.

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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.