



Designation: F2427 – 05a (Reapproved 2018)

# Standard Specification for Required Product Information to be Provided with Lighter- Than-Air Light Sport Aircraft<sup>1</sup>

This standard is issued under the fixed designation F2427; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

## 1. Scope

1.1 This specification covers the manufacture of lighter-than-air light sport aircraft.

1.1.1 This specification covers the minimum requirements for information that shall be provided by the manufacturer or seller of new lighter-than-air aircraft as a part of the initial sale or transfer to the first end user.

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

1.3 *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. Terminology

2.1 *Definitions:*

2.1.1 *airship*—engine-driven lighter-than-air aircraft that can be steered.

2.1.2 *AOI*—Aircraft Operating Instructions.

2.1.3 *balloon*—lighter-than-air aircraft that is not engine-driven, and that sustains flight through the use of either gas buoyancy or an airborne heater.

2.1.4 *lighter-than-air aircraft*—aircraft that can rise and remain suspended by using contained gas weighing less than the air that is displaced by the gas.

2.1.4.1 *Discussion*—Aircraft may include dynamic lift that derive as much as 30 % lift from other than buoyancy.

2.1.5 *thermal airship*—airship using heated air for a portion of its lift, incorporating design features to prevent nose

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee F37 on Light Sport Aircraft and is the direct responsibility of Subcommittee F37.60 on Lighter than Air.

Current edition approved Nov. 1, 2018. Published November 2018. Originally approved in 2004. Last previous edition approved in 2013 as F2427–05a (2013). DOI: 10.1520/F2427–05AR18.

collapse due to dynamic pressure and exempt from specific pressurized envelope requirements.

2.1.6 *vectored thrust balloon*—thermal balloon with thrust capability that does not have design features to prevent forward envelope collapse due to dynamic pressure and is therefore limited in its lateral speed capability.

## 3. Information Requirements

3.1 The manufacturer shall provide critical information for each aircraft. This information shall include, but not be limited to, the information plate attached to the aircraft, the placard notice, Aircraft Operating Instructions, the maintenance manual, and the manufacturers statement of compliance, as defined in the following paragraphs. Additional aircraft type specific requirements are provided in the annexes.

3.2 *Information Plate*—A manufacturer-issued stainless steel information plate, printed in English, shall be permanently affixed to the aircraft in a visible location and shall be designed to remain legible for the expected life of the aircraft. The information plate shall have the required information either stamped or engraved into the plate.

3.2.1 *Serial Number*—A manufacturer-issued unique identifying number or code.

3.2.2 *Name and Manufacturer*, shall include the aircraft name, the manufacturer's name, and the manufacturer's main location including, city, state, and country.

3.2.3 *Model Number*—A manufacturer-issued unique identifying number or code assigned to each manufactured type of aircraft having the same structural design or components.

3.2.4 *Date of Manufacture*—The date (month and year) determined by the manufacturer that the aircraft met his required design and manufacturing specifications.

## 4. Placard Notice

4.1 The following placard notice shall be posted in the aircraft passenger area so that it is visible to both the pilot and passenger upon entry or while seated in the aircraft. The lettering shall be a minimum of 3.1 mm ( $\frac{1}{8}$  in.) high.

4.1.1 PASSENGER NOTICE: This aircraft conforms to ASTM Consensus Standards of airworthiness developed and maintained by the aviation community under ASTM Technical Committee F37.