



# Standard Specification for Continued Airworthiness System for Powered Parachute Aircraft<sup>1</sup>

This standard is issued under the fixed designation F2241; 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 The following continued airworthiness requirements apply for the manufacture of powered parachute aircraft and their qualification for possible certification.

1.2 This specification applies to powered parachute 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 requirements prior to use.*

## 2. Referenced Documents

### 2.1 ASTM Standards:<sup>2</sup>

F2240 Specification for Manufacturer Quality Assurance Program for Powered Parachute Aircraft

F2241 Specification for Continued Airworthiness System for Powered Parachute Aircraft

F2242 Specification for Production Acceptance Testing System for Powered Parachute Aircraft

F2243 Specification for Required Product Information to be Provided with Powered Parachute Aircraft

F2244 Specification for Design and Performance Requirements for Powered Parachute Aircraft

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

F2563 Practice for Kit Assembly Instructions of Aircraft Intended Primarily for Recreation

## 3. Terminology

### 3.1 Definitions:

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee F37 on Light Sport Aircraft and is the direct responsibility of Subcommittee F37.30 on Power Parachute.

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<sup>2</sup> For referenced ASTM standards, visit the ASTM website, [www.astm.org](http://www.astm.org), or contact ASTM Customer Service at [service@astm.org](mailto:service@astm.org). For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

3.1.1 *powered parachute, n*—aircraft comprised of a flexible or semi-rigid wing connected to a fuselage in such a way that the wing is not in position for flight until the aircraft is in motion. That aircraft has a fuselage with seats, engine, and wheels (or floats), such that the wing and engine cannot be flown without the wheels (or floats) and seat(s). Unique to the powered parachute is the large displacement between the center of lift (high) and the center of gravity (low), which is pendulum effect. Pendulum effect limits angle of attack changes, provides stall resistance and maintains flight stability.

## 4. Current Operators List Documentation

4.1 The manufacturer shall maintain a list of registered aircraft owners that includes all aircraft in service by serial number, registration number, together with the name and address of the owner.

4.2 In cases where the appropriate Civil Aviation Authority maintains records of registered owners 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.

## 5. Monitoring, Investigation and Remedial Action

5.1 The manufacturer shall maintain contact with dealers and owners who report incidents or other situations that might relate to safety, operations, or maintenance of aircraft produced and placed in service. The manufacturer will promptly investigate all reported failures, malfunctions, or defects and develop the appropriate corrective action. The magnitude of the service problem will define the subsequent publication to the operators.

## 6. Safety Directives

6.1 A safety directive will be distributed to all operators when a condition is found to exist that may also exist in other aircraft in the fleet and which would cause a deviation from original design or unsafe condition for flight, rendering the aircraft unairworthy. This change, maintenance procedure, inspection procedure, or other procedures deemed appropriate by the manufacturer is mandatory and must be performed and documented in the individual aircraft logs in order for that aircraft to maintain compliance with ASTM standards. When a

safety directive is issued, immediately provide a copy to the appropriate airworthiness authority.

## 7. Service Bulletin Documents

7.1 Service bulletins will be distributed to all operators by the manufacturer when no unsafe condition exists that could lead to an unairworthy condition, but a service problem has become repetitive for which the manufacturer has developed a design change, or service procedure change that will contribute to the improvement or convenience of operation or maintenance of the aircraft. Service bulletin changes are not mandatory to maintain the aircraft's compliance with ASTM Standards.

## 8. Service Letter Documents

8.1 The manufacturer will issue service letters on any subject that is considered helpful to the operators. Such letters are intended to maintain a good rapport with the operators, encourage feedback on service and other problems, or to circulate items of interest that an operator may feel would be of value to other operators. A service letter does not include any mandatory operator actions.

## 9. Continuation of Airworthiness

9.1 *Copies Maintained*—In order to help insure that the fleet of aircraft remains airworthy even after the original manufacturer has ceased to exist as a viable business entity, the original manufacturer shall maintain documentation on file showing

compliance with Specifications **F2240**, **F2241**, **F2242**, **F2243**, **F2244**, **F2483**, and **F2563**. This documentation showing compliance with the specifications and any safety directives shall be copied and maintained at a physically safe location. For purposes of this specification, a physically safe location is one which is at least 33 m (100 ft) from the main production facility, such that a fire could not destroy both sets of records.

9.2 *Access Assurance*—This documentation should be available in such a manner that it can be obtained for commercial use in the event that existing avenues of recovering the information is destroyed. This documentation shall be retained even after the original manufacturer ceases business activity such that in the event that a future entity wishes to continue supporting the airworthiness of the make and model involved, they may do so by making use of the original manufacturer's documentation. The original manufacturer may either keep these documents on file such that they will be available at any future date or shall turn them over to a responsible agency such as the FAA, or other industry entity, for safe keeping. The location and contact for accessing these documents shall be presented in the Aircraft Operating Instructions, and any revision to this information shall be disseminated through service bulletins to the aircraft owners.

## 10. Keywords

10.1 light sport aircraft; powered parachute aircraft; special airworthiness certificates

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