Service Notification



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Date of Initial Publication: **02-May-2017** Publication Date of this Revision: **02-May-2017**

SN-ASTM-CTLS-06

Revision 00

Service Notification

CTLE-LSA Compliance as a Light-Sport Aircraft

SN-ASTM-CTLS-06

Repeating Symbols

Please pay attention to the following symbols throughout this document emphasizing particular information.

- ▲ Warning: Identifies an instruction, which if not followed may cause serious injury or even death.
- **Caution:** Denotes an instruction which if not followed, may severely damage the aircraft or could lead to suspension of warranty.
- Note: Information useful for better handling.

1 Planning Information

1.1 Affected Aircraft

Туре:	СТ
Model:	CTLS-LSA
Aircraft Series:	CTLE-LSA
Serial Number:	Not limited.
Applicable Countries:	Countries with aircraft delivered in compliance with ASTM industry standards and operated as Light-Sport Aircraft.

1.2 Concurrent Documents

Not applicable.

1.3 <u>Reason</u>

FAA recommendation after NTSB final report on the crash of a CTLE-LSA.

1.4 <u>Subject</u>

Information for aircraft owners that maximum operational permissible gross weight of the aircraft is not more than 1320 lbs (600 kg).

1.5 <u>Compliance</u>

This SN is intended to provide viable information for the safe operation of the aircraft. Compliance on this subject is required by the applicable national regulations for continued airworthiness of the aircraft.



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1.6 <u>Approval</u>

Not applicable.

1.7 <u>Type of Maintenance</u>

Not applicable.

1.8 Personnel Qualifications

Aircraft owner, case dependent supported by an aircraft inspector as per national regulations.

1.9 <u>Release to Service</u>

Not applicable.

1.10 Weight and Balance

Not applicable.

1.11 <u>References</u>

Not applicable.

1.12 <u>Superseded Documents</u>

Not applicable.

1.13 Contact Details

For further information on conduct of this SN, or to report any Safety of Flight or Service Difficulty issues contact Flight Design GmbH directly: <u>airworthiness@flightdesign.com</u> or <u>info@flightdesign.com</u>.

1.14 <u>Disclaimer</u>

This Service Notification has been generated with utmost care. Nevertheless errors and misunderstandings can never be fully excluded. In case of any doubts the applicant of this Service Notification is requested to contact Flight Design immediately to clarify the issue.

2 Resources

Not applicable.

3 Instructions

3.1 General

The NTSB recently released the Final Report for a fatal accident involving a Flight Design CTLE-LSA aircraft that occurred 10-Feb-2016.

The probable cause(s) of this accident are reported to be:

The pilot's failure to maintain adequate airspeed while maneuvering at low altitude in hilly terrain, which resulted in the airplane's wing exceeding its critical angle-of-attack and a subsequent aerodynamic stall.

Contributing to the accident were the pilot's inability to recognize the rising terrain due to the sun glare and the pilot's operation of the <u>airplane in excess of its (specified) gross weight.</u>

3.2 <u>Procedure</u>

Flight Design is issuing this notification to owners/operators of Flight Design CTLE-LSA aircraft regarding operation above a MTOW of 1320 pounds with respect to the definition of LSA as stated in 14 CFR 1.1, and duration of a special airworthiness certificate in the light-sport category in 14 CFR 21.181(a)(3).

A copy of that part of the regulation is attached to this SN (Service Notification) for review. It states that:

A special airworthiness certificate in the light sport category is effective as long as-

- (i) The aircraft meets the definition of a light-sport aircraft;
- (ii) The conforms to its original configuration, except for those alterations performed in accordance with applicable consensus standard and authorized by the aircraft's manufacturer or a person acceptable to the FAA.
- (iii) The aircraft has no unsafe condition and is not likely to develop an unsafe condition; and the aircraft is registered in the United States.

To summarize, for a CTLE-LSA to be allowed to operate as a Light Sport Aircraft <u>it must always</u> <u>stay within the gross operating weight 1320lbs (600 kg)</u> as required and meet all the other requirements of a Special Light Sport Aircraft. In addition, all changes made to the aircraft must be in accordance with the applicable consensus standard (in this case the ASTM SLSA standards) and be authorized by the aircraft's manufacturer (in this case Flight Design). The Major Repair of Alteration (MRA) process requires documentation and approval by Flight Design to remain a Special Light Sport Aircraft.

▲Warning: It is the sole obligation of the aircraft owner to ensure that the aircraft maintenance is done in line with applicable instructions and national regulations. When deviating from these requirements, the safe operation of the aircraft may be severely endangered.

3.3 Documentation

Confirm consideration of this SN as part of the documentation of the next annual inspection following issuance of this SN.

4 Appendix

4.1 <u>Changes to Previous Revision</u>

Original Issue – no changes.



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4.2 Feedback Form

No feedback required.

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5 Annexes

<u>Annex 1</u>

14 CFR 21.181 - Duration

(a) Unless sooner surrendered, suspended, revoked, or a termination date is otherwise established by the FAA, airworthiness certificates are effective as follows:

(1) Standard airworthiness certificates, special airworthiness certificates - primary category, and airworthiness certificates issued for restricted or limited category aircraft are effective as long as the maintenance, preventive maintenance, and alterations are performed in accordance with Parts 43 and 91 of this chapter and the aircraft are registered in the United States.

(2) A special flight permit is effective for the period of time specified in the permit.

(3) A special airworthiness certificate in the light-sport category is effective as long as -

(i) The aircraft meets the definition of a light-sport aircraft;

(ii) The aircraft conforms to its original configuration, except for those alterations performed in accordance with an applicable consensus standard and authorized by the aircraft's manufacturer or a person acceptable to the FAA;

(iii) The aircraft has no unsafe condition and is not likely to develop an unsafe condition; and

(iv) The aircraft is registered in the United States.

(4) An experimental certificate for research and development, showing compliance with regulations, crew training, or market surveys is effective for 1 year after the date of issue or renewal unless the FAA prescribes a shorter period. The duration of an experimental certificate issued for operating amateur-built aircraft, exhibition, air-racing, operating primary kit-built aircraft, or operating light-sport aircraft is unlimited, unless the FAA establishes a specific period for good cause.

(b) The owner, operator, or bailee of the aircraft must, upon request, make it available for inspection by the FAA.

(c) Upon suspension, revocation, or termination by order of the FAA of an airworthiness certificate, the owner, operator, or bailee of an aircraft must, upon request, surrender the certificate to the FAA.

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Annex 2

Light-Sport Aircraft

Light-sport aircraft means an aircraft, other than a helicopter or powered-lift that, since its original certification, has continued to meet the following:

(1) A maximum takeoff weight of not more than -

- (i) 1,320 pounds (600 kilograms) for aircraft not intended for operation on water; or
- (ii) 1,430 pounds (650 kilograms) for an aircraft intended for operation on water.

(2) A maximum airspeed in level flight with maximum continuous power (VH) of not more than 120 knots CAS under standard atmospheric conditions at sea level.

(3) A maximum never-exceed speed (VNE) of not more than 120 knots CAS for a glider.(4) A maximum stalling speed or minimum steady flight speed without the use of lift-

enhancing devices (VS1) of not more than 45 knots CAS at the aircraft's maximum certificated takeoff weight and most critical center of gravity.

(5) A maximum seating capacity of no more than two persons, including the pilot.

(6) A single, reciprocating engine, if powered.

(7) A fixed or ground-adjustable propeller if a powered aircraft other than a powered glider.

(8) A fixed or feathering propeller system if a powered glider.

(9) A fixed-pitch, semi-rigid, teetering, two-blade rotor system, if a gyroplane.

(10) A non-pressurized cabin, if equipped with a cabin.

(11) Fixed landing gear, except for an aircraft intended for operation on water or a glider.

(12) Fixed or retractable landing gear, or a hull, for an aircraft intended for operation on water.

(13) Fixed or retractable landing gear for a glider.

Source - 14 CFR § 1.1