UNITED STATES OF AMERICA				
DEPARTMENT OF TRANSPORTATION - FEDERAL AVIATION ADMINISTRATION				
SPECIAL AIRWORTHINESS CERTIFICATE				
A	CATEGORY/DESIGNATION EXPERIMENTAL			
	PURPOSE Research and Development			
В	MANU-	NAME N/A		
	FACTURER	ADDRESS N/A		
C	FLIGHT	FROM N/A		
		TO N/A		
D	N- 121LS		SERIAL NO. 680-0076	
	BUILDER CESSNA AIRCRAFT CO.		MODEL 680	
E	DATE OF ISSUANCE 09 Jun 2016		EXPIRY 31 Oct 2016	
	OPERATING LIMITATIONS DATED 09 Jun 2016		ARE PART OF THIS CERTIFICATE	
	SIGNATURE OF FAA REPRESENTATIVE		DESIGNATION OR OFFICE NO.	
	DEAN L. SOF	Juni. Allan	DART-501716-CE	
Any alteration, reproduction or misuse of this certificate may be punishable by a fine not exceeding \$1,000 or				
imprisonment not exceeding 3 years, or both. THIS CERTIFICATE MUST BE DISPLAYED IN THE AIRCRAFT IN ACCORDANCE WITH APPLICABLE TITLE 14, CODE OF FEDERAL REGULATIONS (CFR).				
FAA Form 8130-7 (04/2011) Previous Edition 07/04 May be Used until Depleted SEE REVERSE SIDE NSN: 0052-00-693-4000				

	the authority of Public Law 104-6, 49 United States Code		
A	This airworthiness certificate is issued under the authority of Public Law 104-6, 49 United States Code (USC) 44704 and Title 14 Code of Federal Regulations (CFR).		
В	The airworthiness certificate authorizes the manufacturer named on the reverse side to conduct production fight tests, and only production flight tests, of aircraft registered in his name. No person may production flight tests under this certificate: (1) Carrying persons or property for compensation or conduct production flight tests under this certificate: (1) Carrying persons or property for compensation or hire: and/or (2) Carrying persons not essential to the purpose of the flight.		
C	This airworthiness certificate authorizes the flight specified on the reverse side for the purpose shown in		
D	This airworthiness certificate certifies that as of the date of issuance, the aircraft to which issued has been inspected and found to meet the requirements of the applicable CFR. The aircraft does not meet the requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to requirements of the applicable comprehensive and detailed airworthiness code as provided by Annex 8 to the Convention On International Civil Aviation. No person may operate the aircraft described on the the Convention On International Civil Aviation. No person may operate the aircraft described on the reverse side: (1) except in accordance with the applicable CFR and in accordance with conditions and limitations which may be prescribed by the FAA as part of this certificate; (2) over any foreign country limitations which may be prescribed by the FAA as part of this certificate; (2) over any foreign country.		
E	Unless sooner surrendered, suspended, or revoked, this airworthiness certificate is effective for the duration and under the conditions prescribed in 14 CFR, Part 21, Section 21.181 or 21.217.		



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OPERATING LIMITATIONS RESEARCH AND DEVELOPMENT

These operating limitations form a part of the Experimental Airworthiness Certificate issued for the aircraft described below, and must be displayed in the aircraft.

Make: <u>CESSNA AIRCRAFT CO.</u> Model: <u>680</u> Serial No: <u>680-0076</u> Reg. Number: <u>N121LS</u>

- 1. This aircraft does not meet the airworthiness requirements specified in Annex 8 to the Convention on International Civil Aviation. Operations in civil airspace outside of the United States will require the written permission of the applicable civil aviation authorities (CAA). That written permission must be carried aboard the aircraft together with the U.S. airworthiness certificate and, upon request, be made available to an FAA inspector or the CAA in the country of operation. Operations may be further restricted by the foreign CAA. This may include not allowing use of an airport, requiring specific routing, and restricting flight over specific areas. The operator must comply with any additional limitation prescribed by the CAA when operating in its airspace. (1)
- 2. No person may operate this aircraft for any other purpose specified on the face of FAA Form 8130-7. These operating limitations do not provide any relief from any applicable law or regulation. This aircraft must be operated in accordance with applicable regulations and the additional limitations prescribed herein. Note that a clearance from air traffic control (ATC) is not authorization for a pilot to deviate from any rule, regulation, operating limitation, or minimum altitude, or to conduct unsafe operation of the aircraft. If ATC issues a clearance that would cause a pilot to deviate from a rule, regulation, or operating limitation, or in the pilot's opinion, would place the aircraft in jeopardy, it is the pilot's responsibility to request an amended clearance. These operating limitations are a part of FAA Form 8130-7 and are to be carried in the aircraft at all times and to be available to the pilot in command of the aircraft. (2).
- 3. This special airworthiness certificate and attached operating limitations are not in effect during public aircraft operations (PAO). Concurrent public/civil operations are not permitted; the aircraft cannot be operated as a civil aircraft and as a public aircraft at the same time. This airworthiness certificate is not in effect during flights related to providing military services (that is, air combat maneuvering, air-to-air gunnery, target towing, electronic countermeasures simulation, cruise missile simulation, and air refueling). These activities are inherent military training activities, not civil activities. The FAA makes the distinction between the authorized flights for experimental purposes, as described in the program letter, and PAO. Before operating this aircraft under this special airworthiness certificate following a PAO, the aircraft must be returned via an approved method to the condition and configuration at the time of airworthiness certification. This action must be documented in the aircraft records. The aircraft records and entries must clearly differentiate between a civil experimental flight per this certificate and any other flights. (3).
- Application to amend these operating limitations must be made to the local Flight Standards District Office (FSDO) or Manufacturing Inspection District Office (MIDO). (6)
- 5. The pilot in command of this aircraft must hold <u>Airplane</u> category and <u>appropriate</u> class certificate or privilege. The pilot in command must hold all required ratings or authorizations and endorsements required by part 61. (7)

- 6. The pilot in command must hold—
 - (a) An appropriate type rating; or
 - (b) An experimental aircraft authorization, by make and model, on their pilot certificate; or
 - (c) A temporary letter of authorization (LOA) issued by an FAA Flight Standards Operations Inspector.
- 7. Additional required flightcrew members must hold the appropriate airman certificate, that is, pilot or flight engineer. They must meet the qualification, training, and recency experience requirements of part 61 or part 63 as appropriate. Pilots must hold Airplane category and appropriate class certificate. (9)
- 8. When filing a flight plan, the experimental nature of this aircraft must be listed in the remarks section. (10)
- 9. This aircraft must not be used for towing, including, but not limited to glider towing, banner towing, target towing, or towing electronic receivers or emitters. This aircraft must not be used for intentional parachute
- 10. If aircraft, engine, or propeller operating limitations are exceeded outside of planned test conditions, an
- 11. No person may operate this aircraft unless it is maintained in accordance with an inspection program meeting the scope and content described in § 91.409(f). The operator must select and identify in the aircraft maintenance records one of the following programs for the inspection of the aircraft:
 - (a) For type-certificated aircraft, a current inspection program recommended by the manufacturer; or All large airplanes,
 - (b) For former military aircraft, an inspection program recommended turbine engine by the manufacturer or North Atlantic Treaty Organization (NATO) airplanes, and turbine military service; or rotorcraft.
 - (c) An FAA-approved inspection program. AFS-300

Note: To extend an inspection interval, the owner/operator must submit a request for that extension with supporting documentation and data to the local FSDO and obtain concurrence from that FSDO. Inspections must be recorded in the aircraft maintenance records showing the following, or a similarly worded, statement: "I certify that this aircraft has been inspected on [insert date] per [identify applicable inspection program] and found to be in a condition for safe operation." (14)

- 12. Only FAA-certificated repair stations, FAA-certificated mechanics with appropriate ratings, or a manufacturer as authorized by § 43.3 may perform inspections required by these operating limitations. (18)
- 13. The aircraft may not be operated unless the replacement for life-limited articles specified in the applicable technical publications pertaining to the aircraft and its articles are complied with in one of the following
 - (a) Type-Certificated Products: Replacement of life-limited parts required by § 91.409(e) applies to experimental aircraft when the required replacement times are specified in the U.S. aircraft specifications or type certificate data sheets.
 - (b) Non-Type-Certificated Products: All articles installed in non-type-certificated products operated under an airworthiness certificate issued for an experimental purpose, in which the manufacturer has specified limits, must include in their program an equivalent level of safety for those articles. These limits must be evaluated for their current operating environment and addressed in the approved inspection program. All articles installed in non-type-certificated products in which the manufacturer has specified limits, must include in their program an equivalent level of safety for those articles. The article must be inspected to ensure the equivalent level of safety still renders the product in a serviceable condition for safe operation. (19)
- 14. For aircraft originally incorporating fatigue life recording systems, the owner/operator must maintain and use the system as prescribed by the aircraft manufacturer and comply with the manufacturer's fatigue life

15. Day VFR operations are authorized

Night flight operations are authorized if the instruments specified in § 91.205(c) are installed, operational and maintained in accordance with the applicable requirements of part 91.

Instrument flight operations are authorized if the instruments specified in § 91.205(d) are installed, operational, and maintained in accordance with the applicable requirements of part 91. The pilot in command must have a method to comply with the § 91.319(c) prohibition from operating over densely in the aircraft maintenance records and include the following items: date, work performed, and name and certificate number of person returning aircraft to service. (41)

- 16. All flights must be conducted within the geographical area described as follows: Within the geographic boundaries of the contiguous 48 states of the United States of America including coastal waters. (44)
- 17. Flight over a densely populated area or in a congested airway is authorized in accordance with § 91.319(c) only for the purpose of takeoff and landing.

The area on the surface described by the term "only for the purpose of takeoff and landing" is the traffic pattern.

For the purpose of this limitation, the term "only for the purpose of takeoff and landing" does not allow multiple traffic patterns for operations such as training or maintenance checks. This does not restrict a go-around/rejected landing for safety reasons.

When avoiding populated areas, aircraft speed and weight must be considered. The information in FAA Order 8900.1, Flight Standards Information Management System (FSIMS), regarding set-back distances from spectator areas for aviation events such as air shows or air races may assist in determining a suitable space to fly the aircraft. (46)

18. No person may be carried in this aircraft during flight unless that person is essential to the purpose of the flight. (54).

Dean L. Sorenson

Designated Airworthiness Representative

Date: 09 Jun 2016

DART-501716-CE

Designation Number