This document is created to make public non-proprietary data related to:

Annex 1 - Special Conditions and Equivalent Safety Finding that are part of the applicable Certification Basis not requiring publication on EASA website;

Annex 2 – AMC material used by the TC holder in case that CS-23 amendment 5, or later, is applicable.

Annex 1 – SC and ESF

Content:

SC VFR Night for VLA aeroplane (Project reference CRI O-101)	
APPLICABILITY:	P2008JC model
REQUIREMENTS:	CS -VLA
=+ADVISORY MATERIAL:	-

Special Condition

The applicability of CS-VLA is limited to day-VFR operation only.
The certification basis for VFR night extension should be the CS-VLA with the following Special Condition requirements:

SCVLA.1 :

Replace "This airworthiness code is applicable to aeroplanes with a single engine (spark- or compression-ignition) having not more than two seats, with a Maximum Certificated Take-off Weight of not more than 750 kg and a stalling speed in the landing configuration of not more than 83 km/h (45 knots)(CAS), to be approved for day-VFR only. (See AMC VLA 1)." By

"This airworthiness code is applicable to aeroplanes with a single engine (spark- or compression-ignition) having not more than two seats, with a Maximum Certificated Take-off Weight of not more than 750 kg and a stalling speed in the landing configuration of not more than 83 km/h (45 knots)(CAS), to be approved for day-VFR or for day- and night VFR. (See AMC VLA 1)."

SCVLA 181(c) :

In addition to the CS VLA.181, the following applies:
(c) Any long period oscillation of the flight path (phugoid) must not be so unstable as to cause an unacceptable increase in pilot workload or otherwise endanger the airplane. When in the conditions of CS VLA 175, the longitudinal control force required to maintain speeds differing from the trimmed speed by at least plus or minus 15% is suddenly released, the response of the airplane must not exhibit any dangerous characteristics nor be excessive in relation to the magnitude of the control force released (see SC AMC VLA 181 (c))."

SC AMCVLA 181(c) :

In addition to the CS VLA AMC, this AMC VLA 181(c) applies :

The long period or phugoid oscillation is characteristically lightly damped, sometimes even unstable. Mild levels of instability are acceptable as long as they do not significantly interfere with normal piloting tasks such as trimming to a desired speed or holding altitude. Useful guidelines are that the oscillation should be near neutrally stable if the period is less than 15 sec., or, for motions with longer period, the time to double amplitude should be greater than 55 sec."

SCVLA.773 :

Replace "The pilot compartment must be free from glare and reflections that could interfere with the pilot's vision, and designed so that –" by

"The pilot compartment must be free from glare and reflections that could interfere with the pilot's vision in all operations for which the certification is requested. The pilot compartment must be designed so that –"."

SCVLA.807 :

In addition to the requirements of CS-VLA.807 the following applies :

Markings must be suitable for night VFR."

SC AMC VLA.807 :
In addition to the CS-VLA AMC, this AMC VLA.807 applies :
Self-illuminating placards or signs are acceptable".

SCVLA.903 :

Instead of CS-VLA.903(a), the following applies :

(a) The engine must meet the specifications of CS-E for night-VFR operation."

SC AMC VLA.903:
An engine meeting specification FAR Part 33 is accepted.

SCVLA.905 :

Instead of CS-VLA.905(a), the following applies :

"(a) The propeller must meet the specifications of CS-22 Subpart J for day-VFR operation. For night-VFR operations the Propeller and the Control System must meet the Specification of CS-P except for fixed pitch propellers, for which CS-22 Subpart J is sufficient."

SCVLA.1107 :

In addition to the CS-VLA requirements, the following applies :

If an air filter is used to protect the engine against foreign material particles in the induction air supply--

(a) Each air filter must be capable of withstanding the effects of temperature extremes, rain, fuel, oil, and solvents to which it is expected to be exposed in service and maintenance; and

(b) Each air filter must have a design feature to prevent material separated from the filter media from re-entering the induction system and interfering with proper fuel metering operation."

SCVLA.1121 :

In addition to the requirements of CS-VLA.1121, the following applies :

No exhaust gases may be discharged where they will cause a glare seriously affecting the pilot's vision at night."

SCVLA.1143 :

In addition to the requirements of CS-VLA.1143, the following applies :

Each power or thrust control must be designed so that if the control separates at the engine fuel metering device, the aeroplane is capable of continuing safe flight and landing."

SC AMC VLA.1143 :
In addition to the CS-VLA AMC, this AMC VLA.1143 applies :
When throttle linkage separation occurs, the fuel control should go to a setting that will allow the pilot to maintain level flight in the cruise configuration."

SCVLA.1147 :

In addition to the requirement of CS-VLA.1147, the following applies :

Each manual engine mixture control must be designed so that, if the control separates at the engine fuel metering device, the aeroplane is capable of continuing safe flight and landing."

SC AMC VLA 1147 :
In addition to the CS-VLA AMC, this AMC VLA.1147 applies :
When mixture linkage separation occurs, the mixture control should go to a full rich setting."

SCVLA.1309 :

In addition to the requirement of CS-VLA.1309, the following applies :

See AMC VLA 1309."

"SC AMC VLA.1309 :

In addition to the CS-VLA AMC, this AMC VLA.1309 applies :

For night VFR operations, the installations of complex systems may require an assessment as required by CS 23.1309 b)."

SCVLA.1321 :

In addition to the requirement of CS-VLA.1321, the following applies :

See AMC VLA 1321."

"SC AMC VLA.1321 :

In addition to the CS-VLA AMC, this AMC VLA.1321 applies :

For night VFR operations, the following arrangement of instruments is acceptable:
(a) For each aeroplane the flight instruments required by CS-VLA 1303 and, as applicable, by the Operating Rules should be grouped on the instrument panel and centred as nearly as practicable about the vertical plane of the pilot's forward vision. In addition –

(1) The instrument that most effectively indicates the attitude should be on the panel in the top centre position;
(2) The instrument that most effectively indicates airspeed should be adjacent to and directly to the left of the instrument in the top centre position;
(3) The instrument that most effectively indicates altitude should be adjacent to and directly to the right of the instrument in the top centre position; and
(4) The instrument that most effectively indicates direction of flight, other than the magnetic direction indicator required by CS-VLA 1303(c), should be adjacent to and directly below the instrument in the top centre position.

(b) If a visual indicator is provided to indicate malfunction of an instrument, it should be effective under all probable cockpit lighting conditions."

SCVLA.1322 :

In addition to the requirements of CS-VLA.1322, the following applies :

If warning, caution, or advisory lights are installed in the cockpit, they must be effective under all probable cockpit lighting conditions."

SCVLA.1325 :

In addition to the requirements of CS-VLA.1325, the following applies :

Each static pressure system must be calibrated in flight to determine the system error. The system error, in indicated pressure altitude, at sea-level, with a standard atmosphere, excluding instrument calibration error, may not exceed ±9 m (± 30 ft) per 185 km/h (100 knot) speed for the appropriate configuration in the speed range between 1·3 V_{SO} with flaps extended and 1·8 V_{S1} with flaps retracted. However, the error need not be less than ±9 m (± 30 ft).”

SCVLA.1331 :

In addition to the requirements of CS-VLA.1331, the following applies:

For night VFR operation there must be at least two independent sources of power and a manual or an automatic means to select each power source for each instrument that uses a power source.”

SCVLA.1351-1 :

Instead of CS-VLA.1351(b)(2), the following applies :

(b)(2) Electric power sources must function properly when connected in combination or independently.”

SCVLA.1351-2 :

Instead of CS-VLA.1351(b)(3), the following applies :

(b)(3) No failure or malfunction of any electric power source may impair the ability of any remaining source to supply load circuits essential for safe operation.”

SCVLA.1351-3 :

In addition to the requirements of CS-VLA.1351(f), the following applies :

The location must allow such provisions to be capable of being operated without hazard to the aeroplane or persons.”

SCVLA.1353 :

In addition to the requirements of CS-VLA.1353, the following applies :

In the event of a complete loss of the primary electrical power generating system, the battery must be capable of providing 30 minutes of electrical power to those loads that are essential to continued safe flight and landing. The 30-minute time period includes the time needed for the pilot(s) to recognise the loss of generated power and to take appropriate load shedding action.”

SCVLA.1381 :

In addition to the CS-VLA requirements, the CS23.1381 requirement applies :

The instrument lights must –

(a) Make each instrument and control easily readable and discernible;

(b) Be installed so that their direct rays, and rays reflected from the windshield or other surface, are

shielded from the pilot's eyes; and

(c) Have enough distance or insulating material between current carrying parts and the housing so that vibration in flight will not cause shorting.

A cabin dome light is not an instrument light."

SCVLA.1383 :

In addition to the CS-VLA requirements, the CS23.1383 requirement applies :

Each taxi and landing light must be designed and installed so that –

(a) No dangerous glare is visible to the pilots;

(b) The pilot is not seriously affected by halation;

(c) It provides enough light for night operations; and

(d) It does not cause a fire hazard in any configuration."

SCVLA.1431 :

In addition to the requirements of the CS-VLA.1431, the following applies :

For operations for which electronic equipment is required, compliance must be shown against CS-VLA 1309."

SCVLA.1547 :

In addition to the requirements of the CS-VLA.1547, the following applies :

If a magnetic non-stabilised direction indicator can have a deviation of more than 10° caused by the operation of electrical equipment, the placard must state which electrical loads, or combination of loads, would cause a deviation of more than 10° when turned on."

SCVLA.1559 :

Replace in §(b) "A placard stating 'This aeroplane is classified as a very light aeroplane approved for day VFR only, in non-icing conditions. All aerobatic manoeuvres including intentional spinning are prohibited. See Flight Manual for other limitations'." by "A placard stating 'This aeroplane is classified as a very light aeroplane approved for day VFR only or day and night VFR, whichever is applicable, in non-icing conditions. All aerobatic manoeuvres including intentional spinning are prohibited. See Flight Manual for other limitations'."

SCVLA.1583 :

Replace in §(f) "The kinds of operation (day VFR) in which the aeroplane may be used, must be stated. The minimum equipment required for the operation must be listed." by "The kinds of operation (day VFR or day and night VFR, whichever is applicable) in which the aeroplane may be used, must be stated. The minimum equipment required for the operation must be listed."

SC protection from the effect of HIRF SC-F-VLA.1309-01 (Project reference CRI F-101)	
APPLICABILITY:	P2008JC model
REQUIREMENTS:	CS-VLA.1309 and VLA.1431(a)
ADVISORY MATERIAL:	INT/POL/21/1 issue 1

Special Condition

Protection from the Effects of HIRF

The aeroplane electrical and electronic systems, equipment, and installations considered separately and in relation to other systems must be designed and installed so that:

a. Electrical and electronic systems that perform a function, whose failure would prevent the continued safe flight and landing of the aeroplane must be designed and installed so that:
   i) Each function is not adversely affected during and after the time the aeroplane is exposed to the HIRF environment I defined in Appendix 1.
   ii) Each electrical and electronic system automatically recovers normal operation, in a timely manner, after the aeroplane is exposed to HIRF environment I, as defined in Appendix 1, unless the systems recovery conflicts with other operational or functional requirements of the system; and
   iii) Each electrical and electronic system is not adversely affected during and after the time the aeroplane is exposed to HIRF environment II, as described in Appendix 1.

b. Each electrical and electronic system that performs a function whose failure would significantly reduce the capability of the aeroplane or the ability of the flight crew to cope with adverse operating conditions must be designed and installed so the system is not adversely affected when the equipment providing these functions is exposed to equipment HIRF test levels (b)(i),(ii) or (iii) as described in Appendix 1.

c. Each electrical and electronic system that performs a function whose failure would reduce the capability of the aeroplane or the ability of the flight crew to cope with adverse operating conditions, must be designed and installed so that the system is not adversely affected when the equipment providing these functions is exposed to the equipment HIRF test level (c) as described in Appendix 1.

APPENDIX 1 to SC-F-VLA.1309-01

a) HIRF environments:

Table I lists the HIRF Environment I required by SC-F-VLA.1309-01sub-paragraph (a)(i) & (a)(ii)
Table II lists the HIRF Environment II required by SC-F-VLA.1309-01 sub-paragraph (a) (iii).

b) Test levels for complying with SC-F23.1309-02 sub-paragraph (b):

As a minimum, one of the following sets of equipment test levels shall be used:

1. From 10 kHz to 400 MHz, use conducted susceptibility tests with CW and 1 kHz square wave modulation of depth greater than 90 percent. The conducted susceptibility current shall start at 0.6 mA at 10 kHz, increasing 20 dB per frequency decade to 30 mA at 500 kHz. From 500 kHz to 400 MHz, the conducted susceptibility current shall be 30 mA. From 100 MHz to 400 MHz, use radiated susceptibility tests at 20 V/m peak, with CW and 1 kHz square wave modulation of depth greater than 90 percent. From 400 MHz to 8 GHz, use radiated susceptibility tests at 150 V/m peak with pulse modulation of 0.1 percent duty cycle with 1 kHz pulse repetition frequency. This signal should be switched on and off at a rate of 1 Hz with a duty cycle of 50 percent. Also, from 400 MHz to 8 GHz, use radiated susceptibility tests at 28 V/m peak with 1 kHz square wave modulation of depth greater than 90 percent. This signal should be switched on and off at a rate of 1 Hz with a duty cycle of 50 percent.
2. Or, from 10 kHz to 400 MHz, use conducted susceptibility tests with CW and 1 kHz square wave modulation of depth greater than 90 percent. The conducted susceptibility current shall start at 0.6 mA at 10 kHz, increasing 20 dB per frequency decade to 30 mA at 500 kHz. From 500 kHz to 400 MHz, the conducted susceptibility current shall be 30 mA. From 100 MHz to 400 MHz, use radiated susceptibility tests at 20 V/m peak, with CW and 1 kHz square wave modulation of depth greater than 90 percent. From 400 MHz to 8 GHz, use radiated susceptibility tests at 150 V/m peak with pulse modulation of 4 percent duty cycle with a 1 kHz pulse repetition frequency. This signal should be switched on and off at a rate of 1 Hz with a duty cycle of 50 percent with a duty cycle of 50 percent.
3. Or, the test level to be used during equipment testing may be based on the HIRF Environment II in with allowance made for aircraft attenuation using aircraft transfer function/attenuation curves. Testing must cover the frequency band of 10 kHz to 8 GHz.

c) Test levels for complying with SC-F-VLA.1309-01 sub-paragraph (c)

As a minimum, the following equipment test level shall be used:
From 10 kHz to 400 MHz, use conducted susceptibility tests, starting at 0.15 mA at 10 kHz, increasing 20 dB per frequency decade to 7.5 mA at 500 kHz. From 500 kHz to 400 MHz, use conducted susceptibility tests at 7.5 mA. From 100 MHz to 8 GHz, use radiated susceptibility tests at 5 V/m

d) Test procedures:

AC/AMJ 20.1317 Final Draft Issue (EEHWG Document WG-327 dated November 1998) and EUROCAE ED-14D/RTCA Document DO-160D, Section 20 should be referred to for the applicability of tests and test details.

TABLE I

HIRF ENVIRONMENT I

FREQUENCY FIELD STRENGTH (V/m)

FREQUENCY	FIELD STRENGTH (V/m)	
	PEAK	AVERAGE
10 kHz - 100 kHz	50	50
100 kHz - 500 kHz	50	50
500 kHz - 2 MHz	50	50
2 MHz - 30 MHz	100	100
30 MHz - 70 MHz	50	50
70 MHz - 100 MHz	50	50
100 MHz - 200 MHz	100	100
200 MHz - 400 MHz	100	100
400 MHz - 700 MHz	700	50
700 MHz - 1 GHz	700	100
1 GHz - 2 GHz	2000	200
2 GHz - 4 GHz	3000	200
4 GHz - 6 GHz	3000	200
6 GHz - 8 GHz	1000	200
8 GHz - 12 GHz	3000	300
12 GHz - 18 GHz	2000	200
18 GHz - 40 GHz	600	200

TABLE II

HIRF ENVIRONMENT II

FREQUENCY FIELD STRENGTH (V/m)

FREQUENCY	FIELD STRENGTH (V/m)	
	PEAK	AVERAGE
10 kHz - 100 kHz	20	20
100 kHz - 500 kHz	20	20
500 kHz - 2 MHz	30	30
2 MHz - 30 MHz	100	100
30 MHz - 70 MHz	10	10
70 MHz - 100 MHz	10	10
100 MHz - 200 MHz	30	10
200 MHz - 400 MHz	10	10
400 MHz - 700 MHz	700	40
700 MHz - 1 GHz	700	40
1 GHz - 2 GHz	1300	160
2 GHz - 4 GHz	3000	120
4 GHz - 6 GHz	3000	160
6 GHz - 8 GHz	400	170
8 GHz - 12 GHz	1230	230
12 GHz - 18 GHz	730	190
18 GHz - 40 GHz	600	150

Disclaimer – This document is not exhaustive and it will be updated gradually.

SC Lithium Battery Installation for ELA1 aeroplanes SC-ELA.2015-01 (Project reference CRI F-103)	
APPLICABILITY:	P2008JC model
REQUIREMENTS:	VLA.1353, VLA.601, LSA and ASTM F2245-12d
ADVISORY MATERIAL:	RTCA DO 311, DO 347 UN T 38.3, UL 1642, UL 2054

Special Condition
Lithium battery installations

This special condition covers the installation of new technology type battery as storage battery in sailplanes, powered sailplanes, light sport aeroplanes or very light aeroplanes, except batteries used for electrical or hybrid propulsion.

The special condition does not cover or replace applicable regulations for handling, storage, transport and disposal of batteries.

Definitions and Terminology

- The following terms and definitions are used in the context of this special condition:
- Battery cell - electrochemical cells used to store electrical energy
- Battery – assembly of (rechargeable or non-rechargeable) battery cells and associated components e.g. control unit, sensors, connectors, circuit breaker, containment.
- Storage Battery – rechargeable battery to provide energy for engine and/or avionic or other equipment.
- Li batteries – rechargeable Lithium battery of various types
- GM - guidance material

In addition to the requirements established in the applicable Certification Specifications, these additional requirements shall be met:

SC-ELA.2015-01.02 Storage battery design and installation

(a) No explosive or toxic gases emitted by any battery in normal operation, or as the result of any probable malfunction in the charging system or battery installation, may accumulate in hazardous quantities within the aircraft. If it has not been proved that neither vapours nor fluids may separate out from the storage battery, its compartment must be ventilated and drained.

(b) A protection against overcharge and critical discharge of the batteries shall be provided including deep or unbalanced discharge if necessary for the type of battery.

GM: Control Units and Battery Management Systems should be designed and manufactured following good engineering practice with consideration of electric magnetic interference, environmental and software aspects.

(c) The suitability and reliability of batteries shall be proved due to experience or tests.

GM: Tests performed by the manufacturer of battery or battery cells according applicable standards (e.g. RTCA DO 311, DO 347, UN T 38.3, UL 1642) can be accepted upon agreement with the Agency.

(d) Characteristics of the storage batteries, including failure modes (e.g. thermal runaway, expansion, explosion, toxic emission) should be identified. Batteries cells and other subcomponents of the system should be assembled and installed minimizing the effects of failures.

GM: Possible design precautions depending on the identified risks might include:

- Providing the crew with the relevant information allowing to take proper actions (e.g. temperature or pressure monitoring),
- Mitigating the effect of thermal runaway or fire, and ensuring the surrounding structure is able to withstand the thermal loads,
- Designing the containment or compartment for the battery in order to cope with overpressure or expansion.

(e) No corrosive fluids or gases that may escape from the battery may damage adjacent essential structures or equipment.

Annex 2 - AMC used in case of CS-23 amendment 6, or later.
Following lists are provided only for awareness of the specific AMC materials used by the TC holder, which could have driven specific design features to comply with the objective requirements (design-independent) introduced from the CS 23 amendment 5.

<Model P2008JC NG>:

Affected CS req.	Amendment	AMC
CS 23.2100	6	ASTM F3082/F3082M-17 Standard Specification for Weights and Centers of Gravity of Aircraft ASTM F3114-21 Standard Specification for Structures
CS 23.2105	6	ASTM F3179/F3179M-20 Standard Specification for Performance of Aircraft
CS 23.2110	6	ASTM F3179/F3179M-20 Standard Specification for Performance of Aircraft
CS 23.2115	6	ASTM F3179/F3179M-20 Standard Specification for Performance of Aircraft
CS 23.2120	6	ASTM F3179/F3179M-20 Standard Specification for Performance of Aircraft
CS 23.2125	6	ASTM F3179/F3179M-20 Standard Specification for Performance of Aircraft
CS 23.2130	6	ASTM F3179/F3179M-20 Standard Specification for Performance of Aircraft
CS 23.2135	6	ASTM F3173/F3173M-21 Standard Specification for Aircraft Handling Characteristics
CS 23.2140	6	ASTM F3173/F3173M-21 Standard Specification for Aircraft Handling Characteristics
CS 23.2145	6	ASTM F3173/F3173M-21 Standard Specification for Aircraft Handling Characteristics
CS 23.2150	6	ASTM F3180/F3180M-21 Standard Specification for Low-Speed Flight Characteristics of Aircraft M-TS-0000573 Stall characteristics, stall warning, and spins
CS 23.2155	6	ASTM F3173/F3173M-21 Standard Specification for Aircraft Handling Characteristics
CS 23.2160	6	ASTM F3173/F3173M-21 Standard Specification for Aircraft Handling Characteristics
CS 23.2165	6	ASTM F3120/F3120M-20 Standard Specification for Ice Protection for General Aviation Aircraft
CS 23.2170	6	ASTM F3174/F3174M-19 Standard Specification for Establishing Operating Limitations and Information for Aeroplanes
CS 23.2200	6	ASTM F3116/F3116M-18e2 Standard Specification for Design Loads and Conditions
CS 23.2210	6	ASTM F3116/F3116M-18e2 Standard Specification for Design Loads and Conditions
CS 23.2215	6	ASTM F3116/F3116M-18e2 Standard Specification for Design Loads and Conditions

Disclaimer – This document is not exhaustive and it will be updated gradually.

CS 23.2220	6	ASTM F3116/F3116M-18e2 Standard Specification for Design Loads and Conditions
CS 23.2225	6	ASTM F3116/F3116M-18e2 Standard Specification for Design Loads and Conditions
CS 23.2230	6	ASTM F3114-21 Standard Specification for Structures
CS 23.2235	6	ASTM F3114-21 Standard Specification for Structures ASTM F3232/F3232M-20 Standard Specification for Flight Controls in Small Aircraft ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft
CS 23.2240	6	ASTM F3115/F3115M-20 Standard Specification for Structural Durability for Small Aeroplanes ASTM F3380 – 19 Standard Practice for Structural Compliance of Very Light Aeroplanes
CS 23.2245	6	ASTM F3232/F3232M-20 Standard Specification for Flight Controls in Small Aircraft
CS 23.2250	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3232/F3232M-20 Standard Specification for Flight Controls in Small Aircraft ASTM F3114-21 Standard Specification for Structures ASTM F3233/F3233M-21 Standard Specification for Flight and Navigation Instrumentation in Aircraft
CS 23.2255	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3232/F3232M-20 Standard Specification for Flight Controls in Small Aircraft ASTM F3114-21 Standard Specification for Structures
CS 23.2260	6	ASTM F3114-21 Standard Specification for Structures ASTM F3380 – 19 Standard Practice for Structural Compliance of Very Light Aeroplanes
CS 23.2265	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3114-21 Standard Specification for Structures ASTM F3380 – 19 Standard Practice for Structural Compliance of Very Light Aeroplanes ASTM F3232/F3232M-20 Standard Specification for Flight Controls in Small Aircraft ASTM F3083/F3083M-20a Standard Specification for Emergency Conditions, Occupant Safety and Accommodations
CS 23.2270	6	ASTM F3083/F3083M-20a Standard Specification for Emergency Conditions, Occupant Safety and Accommodations
CS 23.2300	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3232/F3232M-20 Standard Specification for Flight Controls in Small Aircraft

Disclaimer – This document is not exhaustive and it will be updated gradually.

CS 23.2305	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft
CS 23.2315	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3083/F3083M-20a Standard Specification for Emergency Conditions, Occupant Safety and Accommodations
CS 23.2320	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3227/F3227M-21 Standard Specification for Environmental Systems in Aircraft ASTM F3114-21 Standard Specification for Structures
CS 23.2325	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3231/F3231M-21 Standard Specification for Electrical Systems for Aircraft with Combustion Engine Electrical Power Generation ASTM F3066/F3066M-18 Standard Specification for Aircraft Powerplant Installation Hazard Mitigation ASTM F3083/F3083M-20a Standard Specification for Emergency Conditions, Occupant Safety and Accommodations ASTM F3233/F3233M-21 Standard Specification for Flight and Navigation Instrumentation in Aircraft ASTM F3234/F3234M-17 Standard Specification for Exterior Lighting in Small Aircraft
CS 23.2330	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3066/F3066M-18 Standard Specification for Aircraft Powerplant Installation Hazard Mitigation ASTM F3114-21 Standard Specification for Structures ASTM F3231/F3231M-21 Standard Specification for Electrical Systems for Aircraft with Combustion Engine Electrical Power Generation
CS 23.2335	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3231/F3231M-21 Standard Specification for Electrical Systems Aircraft with Combustion Engine Electrical Power Generation
CS 23.2340	6	ASTM F3117/F3117M-20 Standard Specification for Crew Interface in Aircraft
CS 23.2400	6	ASTM F3062/F3062M-20 Standard Specification for Aircraft Powerplant Installation ASTM F3063/F3063M-20 Standard Specification for Aircraft Fuel Storage and Delivery ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication ASTM F3065/F3065M-21a Standard Specification for Aircraft Propeller System Installation ASTM F3066/F3066M-18 Standard Specification for Aircraft Powerplant Installation Hazard Mitigation

Disclaimer – This document is not exhaustive and it will be updated gradually.

CS 23.2410	6	ASTM F3117/F3117M-20 Standard Specification for Crew Interface in Aircraft ASTM F3062/F3062M-20 Standard Specification for Aircraft Powerplant Installation ASTM F3063/F3063M-20 Standard Specification for Aircraft Fuel Storage and Delivery ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication ASTM F3066/F3066M-18 Standard Specification for Aircraft Powerplant Installation Hazard Mitigation
CS 23.2415	6	ASTM F3063/F3063M-20 Standard Specification for Aircraft Fuel Storage and Delivery ASTM F3066/F3066M-18 Standard Specification for Aircraft Powerplant Installation Hazard Mitigation
CS 23.2425	6	ASTM F3062/F3062M-20 Standard Specification for Aircraft Powerplant Installation ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication ASTM F3065/F3065M-21a Standard Specification for Aircraft Propeller System Installation ASTM F3117-20 Standard Specification for Crew Interface in Aircraft
CS 23.2430	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3062/F3062M-20 Standard Specification for Aircraft Powerplant Installation ASTM F3063/F3063M-20 Standard Specification for Aircraft Fuel Storage and Delivery ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication M-TS-0000506 Piston engine electric fuel pump
CS 23.2435	6	ASTM F3062/F3062M-20 Standard Specification for Aircraft Powerplant Installation
CS 23.2440	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3062/F3062M-20 Standard Specification for Aircraft Powerplant Installation ASTM F3063/F3063M-20 Standard Specification for Aircraft Fuel Storage and Delivery ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication ASTM F3066/F3066M-18 Standard Specification for Aircraft Powerplant Installation Hazard Mitigation
CS 23.2445	6	ASTM F3117/F3117M-20 Standard Specification for Crew Interface in Aircraft ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication
CS 23.2500	6	ASTM F3117-20 Standard Specification for Crew Interface in Aircraft

Disclaimer – This document is not exhaustive and it will be updated gradually.

		ASTM F3231/F3231M-21 Standard Specification for Electrical Systems for Aircraft with Combustion Engine Electrical Power Generation ASTM F3233/F3233M-21 Standard Specification for Flight and Navigation Instrumentation in Aircraft ASTM F3229/F3229M-17 Standard Practice for Static Pressure System Tests in Small Aircraft ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3432-20a Standard Practice for Powerplant Instruments ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication F3230-20a Standard Practice for Safety Assessment of Systems and Equipment in Small Aircraft ASTM F3309/F3309M-21 Standard Practice for Simplified Safety Assessment of Systems and Equipment in Small Aircraft
CS 23.2505	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft
CS 23.2510	6	ASTM F3233/F3233M-21 Standard Specification for Flight and Navigation Instrumentation in Aircraft ASTM F3232/F3232M-20 Standard Specification for Flight Controls in Small Aircraft ASTM F3229/F3229M-17 Standard Practice for Static Pressure System Tests in Small Aircraft ASTM F3231/F3231M-21 Standard Specification for Electrical Systems for Aircraft with Combustion Engine Electrical Power Generation ASTM F3117-20 Standard Specification for Crew Interface in Aircraft ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft F3230-20a Standard Practice for Safety Assessment of Systems and Equipment in Small Aircraft ASTM F3309/F3309M-21 Standard Practice for Simplified Safety Assessment of Systems and Equipment in Small Aircraft ASTM F3114-21 Standard Specification for Structures F3061/F3061M-24a Standard Specification for Systems and Equipment in Small Aircraft
CS 23.2520	6	F3061/F3061M-24a Standard Specification for Systems and Equipment in Small Aircraft ASTM F3367-23
CS 23.2525	6	ASTM F3231/F3231M-21 Standard Specification for Electrical Systems for Aircraft with Combustion Engine Electrical Power Generation ASTM F3233/F3233M-21 Standard Specification for Flight and Navigation Instrumentation in Aircraft ASTM F3117-20 Standard Specification for Crew Interface in Aircraft SC CS-F23. 1353-02 Li-Batteries

Disclaimer – This document is not exhaustive and it will be updated gradually.

		ASTM F2490 Aircraft Electrical Load and Power Source Capacity Analysis
CS 23.2530	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3234/F3234M-17 Standard Specification for Exterior Lighting in Small Aircraft ASTM F3117-20 Standard Specification for Crew Interface in Aircraft
CS 23.2535	6	ASTM F3083/F3083M-20a Standard Specification for Emergency Conditions, Occupant Safety and Accommodations ASTM F3117-20 Standard Specification for Crew Interface in Aircraft
CS 23.2600	6	F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft F3232/F3232M-20 Standard Specification for Flight Controls in Small Aircraft F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication F3117-20 Standard Specification for Crew Interface in Aircraft ASTM F3174/F3174M-19 Standard Specification for Establishing Operating Limitations and Information for Aeroplanes ASTM F3114-21 Standard Specification for Structures ASTM F3227/F3227M-21 Standard Specification for Environmental Systems in Aircraft CS-23 773(b) SC CS 23.div-01 - Human Factor- Integrated Avionics Systems
CS 23.2605	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3232/F3232M-20 Standard Specification for Flight Controls in Small Aircraft ASTM F3233/F3233M-21 Standard Specification for Flight and Navigation Instrumentation in Aircraft ASTM F3231/F3231M-21 Standard Specification for Electrical Systems for Aircraft with Combustion Engine Electrical Power Generation ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication ASTM F3117-20 Standard Specification for Crew Interface in Aircraft ASTM F3432-20a Standard Practice for Powerplant Instruments
CS 23.2610	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft F3117-20 Standard Specification for Crew Interface in Aircraft ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication ASTM F3174/F3174M-19 Standard Specification for Establishing Operating Limitations and Information for

		Aeroplanes
CS 23.2615	6	ASTM F3061/F3061M-20 Standard Specification for Systems and Equipment in Small Aircraft ASTM F3064/F3064M-21 Standard Specification for Aircraft Powerplant Control, Operation, and Indication ASTM F3432-20a Standard Practice for Powerplant Instruments ASTM F3117/F3117M-20 Standard Specification for Crew Interface in Aircraft ASTM F3233/F3233M-21 Standard Specification for Flight and Navigation Instrumentation in Aircraft ASTM F3229/F3229M-17 Standard Practice for Static Pressure System Tests in Small Aircraft
CS 23.2620	6	ASTM F3117/F3117M-20 Standard Specification for Crew Interface in Aircraft ASTM F3174/F3174M-19 Standard Specification for Establishing Operating Limitations and Information for Aeroplanes
CS 23.2625	6	ASTM F3117/F3117M-20 Standard Specification for Crew Interface in Aircraft

Acronyms and Abbreviations

TC	Type Certificate
TCDS	Type Certificate Data Sheet
SC	Special Condition
ESF	Equivalent Safety Findings
AMC	Acceptable Means of Compliance
GM	Guidance Material
MOC	Means of Compliance
CS	Certification Specifications

– END –