

■ 38. In § 785.10, revise paragraphs (a) introductory text, (a)(1), (2), and (5), and (b) to read as follows:

**§ 785.10 Penalty for non-compliance.**

(a) The Administrator is authorized to withdraw the certification of a State's Certified Mediation Program, terminate or suspend the grant to the State's Certified Mediation Program, require a return of unspent grant funds, a reimbursement of grant funds on account of expenditures that are not allowed, and may impose any other penalties or sanctions authorized by law if the Administrator determines that:

(1) The State's Certified Mediation Program, at any time, does not meet the requirements in this part for certification;

(2) The State's Certified Mediation Program is not being operated in a manner consistent with the features of the program as certified by FSA, with the regulations in this part, or the grant agreement;

\* \* \* \* \*

(5) Reports submitted by a State on its Certified Mediation Program as required by § 785.8 are false, contain misrepresentations or material omissions, or are otherwise misleading.

(b) In the event that FSA gives notice to the State of its intent to enforce any withdrawal of certification or other penalty for non-compliance, USDA agencies will cease to participate in any mediation conducted by the State's Certified Mediation Program immediately upon delivery of such notice to the State.

**§ 785.11 [Amended]**

■ 39. In § 785.11, remove the words "State mediation program" and adding "State's Certified Mediation Program" in their place wherever they appear.

**§ 785.12 [Amended]**

■ 40. In § 785.12, remove the cross reference "parts 15, 15b and 1901, subpart E, of" and adding "parts 15 and 15b of" in their place.

**Zach Ducheneaux,**

*Administrator, Farm Service Agency.*

[FR Doc. 2022-04858 Filed 3-8-22; 8:45 am]

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**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 25**

[Docket No. FAA-2017-1141; Special Conditions No. 25-710A-SC]

**Special Conditions: Dassault Aviation Model Falcon 6X Airplanes; Non-Rechargeable Lithium-Ion Battery Installations**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final special conditions, amendment.

**SUMMARY:** These amended special conditions are issued for non-rechargeable lithium-ion battery installations on the Dassault Aviation (Dassault) Model Falcon 6X airplane. Non-rechargeable lithium-ion batteries are a novel or unusual design feature when compared to the state of technology envisioned in the airworthiness standards for transport-category airplanes. The applicable airworthiness regulations do not contain adequate or appropriate safety standards for this design feature. These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to that established by the existing airworthiness standards.

**DATES:** This action is effective on Dassault on March 9, 2022.

**FOR FURTHER INFORMATION CONTACT:** Nazih Khaouly, AIR-623, Aircraft Systems Section, Technical Innovation Policy Branch, Policy and Innovation Division, Federal Aviation Administration, 2200 S 216th Street, Des Moines, Washington, 98198; telephone and fax 206-231-3171, email [nazih.khaouly@faa.gov](mailto:nazih.khaouly@faa.gov).

**SUPPLEMENTARY INFORMATION:**

**Background**

On July 1, 2012, Dassault applied for special conditions for non-rechargeable lithium-ion batteries installed in the Model Falcon 5X airplane. Special conditions were issued for that design on January 16, 2018 (83 FR 2032). However, Dassault has decided not to release an airplane under the model designation Falcon 5X, instead choosing to change that model designation to Falcon 6X.

In February of 2018, due to engine supplier issues, Dassault extended the type certificate application date for its Model Falcon 5X airplane under new Model Falcon 6X. This amendment to the original special conditions reflects

the model-name change. This airplane is a twin-engine business jet with seating for 19 passengers and a maximum takeoff weight of 77,460 pounds. The Dassault Model Falcon 6X airplane design remains unchanged from the Model Falcon 5X in all material respects other than different engines.

The FAA is issuing these special conditions for non-rechargeable lithium-ion battery installations on the Dassault Model Falcon 6X airplane. The FAA's design standards in title 14, Code of Federal Regulations (14 CFR) part 25 are inadequate for addressing an airplane with non-rechargeable lithium-ion batteries.

**Type Certification Basis**

Under the provisions of 14 CFR 21.17, Dassault must show that the Model Falcon 6X airplane meets the applicable provisions of part 25, as amended by Amendments 25-1 through 25-146.

If the Administrator finds that the applicable airworthiness regulations (*i.e.*, 14 CFR part 25) do not contain adequate or appropriate safety standards for the Dassault Model Falcon 6X airplane because of a novel or unusual design feature, special conditions are prescribed under the provisions of § 21.16.

Special conditions are initially applicable to the airplane model for which they are issued. Should the type certificate for that model be amended later to include any other model that incorporates the same novel or unusual design feature, these special conditions would also apply to the other model under § 21.101.

In addition to the applicable airworthiness regulations and special conditions, the Dassault Model Falcon 6X airplane must comply with the fuel-vent and exhaust-emission requirements of 14 CFR part 34, and the noise-certification requirements of 14 CFR part 36.

The FAA issues special conditions, as defined in 14 CFR 11.19, in accordance with § 11.38, and they become part of the type certification basis under § 21.17.

**Novel or Unusual Design Feature**

The Dassault Model Falcon 6X airplane will incorporate the following novel or unusual design feature: Installation of non-rechargeable lithium-ion batteries.

For the purpose of these special conditions, the FAA refers to a battery and battery system as a battery. A battery system consists of the battery and any protective, monitoring, and alerting circuitry or hardware inside or

outside of the battery. It also includes vents (where necessary) and packaging.

### Discussion

The FAA derived the current regulations governing installation of batteries in transport-category airplanes from Civil Air Regulations (CAR) 4b.625(d) as part of the recodification of CAR 4b that established 14 CFR part 25 in February 1965. This recodification basically reworded the CAR 4b battery requirements, which are currently in § 25.1353(b)(1) through (4). Non-rechargeable lithium-ion batteries are novel and unusual with respect to the state of technology considered when these requirements were codified. Non-rechargeable lithium-ion batteries introduce higher energy levels into airplane systems through new chemical compositions in various battery cell sizes and construction. Interconnection of these cells in battery packs introduce failure modes that require unique design considerations, such as provisions for thermal management.

In January 2013, two independent events involving rechargeable lithium-ion batteries revealed unanticipated failure modes. A National Transportation Safety Board (NTSB) letter to the FAA, dated May 22, 2014, which is available at <https://www.ntsb.gov>, filename A-14-032-036.pdf, describes these events.

On July 12, 2013, an event involving a non-rechargeable lithium-ion battery in an emergency-locator transmitter installation demonstrated unanticipated failure modes. The United Kingdom's Air Accidents Investigation Branch Bulletin S5/2013 describes this event. These events involving rechargeable and non-rechargeable lithium-ion batteries prompted the FAA to initiate a broad evaluation of these energy-storage technologies.

On April 22, 2016, the FAA published special conditions no. 25-612-SC, in the **Federal Register** (81 FR 23573), applicable to Gulfstream Aerospace Corporation for the Model GVI airplane. Those were the first special conditions the FAA issued for non-rechargeable lithium-ion battery installations. In that document, the FAA explained its decision to make those special conditions effective on April 22, 2017, one year after publication in the **Federal Register**. In those special conditions, the FAA stated its intention to apply non-rechargeable lithium-ion battery special conditions to design changes on other airplane makes and models applied for after this same date.

Special condition no. 1 of these special conditions requires that each individual cell within a non-

rechargeable lithium-ion battery be designed to maintain safe temperatures and pressures. Special condition no. 2 addresses these same issues but for the entire battery. Special condition no. 2 requires the battery be designed to prevent propagation of a thermal event, such as self-sustained, uncontrollable increases in temperature or pressure from one cell to adjacent cells.

Special condition nos. 1 and 2 are intended to ensure that the non-rechargeable lithium-ion battery and its cells are designed to eliminate the potential for uncontrollable failures. However, a certain number of failures will occur due to various factors beyond the control of the battery designer. Therefore, other special conditions are intended to protect the airplane and its occupants if failure occurs.

Special conditions 3, 7, and 8 are self-explanatory.

Special condition no. 4 makes it clear that the flammable-fluid fire-protection requirements of § 25.863 apply to non-rechargeable lithium-ion battery installations. Section 25.863 is applicable to areas of the airplane that could be exposed to flammable-fluid leakage from airplane systems. Non-rechargeable lithium-ion batteries contain an electrolyte that is a flammable fluid.

Special condition no. 5 requires that each non-rechargeable lithium-ion battery installation not damage surrounding structure or adjacent systems, equipment, or electrical wiring from corrosive fluids or gases that may escape in such a way as to cause a major or more severe failure condition.

While special condition no. 5 addresses corrosive fluids and gases, special condition no. 6 addresses heat. Special condition no. 6 requires that each non-rechargeable lithium-ion battery installation have provisions to prevent any hazardous effect on airplane structure or systems caused by the maximum amount of heat the battery installation can generate due to any failure of it or its individual cells. The means of meeting special conditions nos. 5 and 6 may be the same, but the requirements are independent and address different hazards.

These special conditions apply to all non-rechargeable lithium-ion battery installations in lieu of § 25.1353(b)(1) through (4) at Amendment 25-123. Sections 25.1353(b)(1) through (4) at Amendment 25-123 remain in effect for other battery installations.

These special conditions contain the additional safety standards that the Administrator considers necessary to establish a level of safety equivalent to

that established by the existing airworthiness standards.

### Discussion of Comments

The FAA issued Final Special Conditions, Request for Comment Special Conditions No. 25-710-SC for the Dassault Model Falcon 5X airplane, which was published in the **Federal Register** on January 16, 2018 (83 FR 2032). No comments were received, and the special conditions are adopted as proposed, with amendments.

### Applicability

These special conditions are applicable to the Dassault Model Falcon 6X airplane. Should Dassault apply at a later date for a change to the type certificate to include another model incorporating the same novel or unusual design feature, these special conditions would apply to that model as well.

These special conditions are only applicable to design changes applied for after the effective date.

These special conditions are not applicable to changes to previously certified non-rechargeable lithium-ion battery installations where the only change is either cosmetic or to relocate the installation to improve the safety of the airplane and occupants. Previously certified non-rechargeable lithium-ion battery installations, as used in this paragraph, are those installations approved for certification projects applied for on or before the effective date of these special conditions. A cosmetic change is a change in appearance only, and does not change any function or safety characteristic of the battery installation. These special conditions also are not applicable to unchanged, previously certified non-rechargeable lithium-ion battery installations that are affected by a change in a manner that improves the safety of its installation. The FAA determined that these exclusions are in the public interest because the need to meet all of the special conditions might otherwise deter these design changes that improve safety.

### Conclusion

This action affects only a certain novel or unusual design feature on one model of airplane. It is not a rule of general applicability.

### List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and record keeping requirements.

The authority citation for these special conditions is as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701, 44702, 44704.

## The Special Conditions

Accordingly, pursuant to the authority delegated to me by the Administrator, the following special conditions are issued as part of the type certification basis for the Dassault Aviation Model Falcon 6X airplane.

### Non-Rechargeable Lithium-Ion Battery Installations

In lieu of § 25.1353(b)(1) through (4) at Amendment 25–123, each non-rechargeable lithium-ion battery installation must:

1. Be designed to maintain safe cell temperatures and pressures under all foreseeable operating conditions to prevent fire and explosion.
2. Be designed to prevent the occurrence of self-sustaining, uncontrollable increases in temperature or pressure.
3. Not emit explosive or toxic gases, either in normal operation or as a result of its failure, that may accumulate in hazardous quantities within the airplane.
4. Meet the requirements of § 25.863.
5. Not damage surrounding structure or adjacent systems, equipment, or electrical wiring from corrosive fluids or gases that may escape in such a way as to cause a major or more severe failure condition.
6. Have provisions to prevent any hazardous effect on airplane structure or systems caused by the maximum amount of heat it can generate due to any failure of it or its individual cells.
7. Have a failure-sensing-and-warning system to alert the flightcrew if its failure affects safe operation of the airplane.
8. Have a means for the flightcrew or maintenance personnel to determine the battery charge state if the battery's function is required for safe operation of the airplane.

**Note:** A battery system consists of the battery and any protective, monitoring, and alerting circuitry or hardware inside or outside of the battery. It also includes vents (where necessary) and packaging. For the purpose of these special conditions, a "battery" and "battery system" are referred to as a battery.

Issued in Kansas City, Missouri, on March 3, 2022.

**Patrick R. Mullen,**

*Manager, Technical Innovation Policy Branch, Policy and Innovation Division, Aircraft Certification Service.*

[FR Doc. 2022–04935 Filed 3–8–22; 8:45 am]

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA–2020–1073; Project Identifier MCAI–2020–01303–A; Amendment 39–21964; AD 2022–05–12]

RIN 2120–AA64

### Airworthiness Directives; Embraer S.A. (Type Certificate Previously Held by Empresa Brasileira de Aeronáutica S.A.) Airplanes

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2020–12–08 for all Embraer S.A. Model EMB–505 airplanes. AD 2020–12–08 required inspections of the mass-balance weights of the elevators, ailerons, and rudder (flight control surfaces) and their attachment parts, and corrective actions if necessary, and revising the airworthiness limitation section (ALS) of the maintenance manual or instructions for continued airworthiness to incorporate new airworthiness limitations. This AD retains the actions required by AD 2020–12–08 and requires, for certain airplanes, cleaning and weighing certain mass-balances and installation or replacement, as applicable; and for certain other mass-balances for certain airplanes, replacement of those mass-balances. This AD was prompted by a determination that new applicable airplane serial numbers and new criteria for the replacement of affected parts are necessary. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective April 13, 2022.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of April 13, 2022.

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of July 1, 2020 (85 FR 36312, June 16, 2020).

**ADDRESSES:** For service information identified in this final rule, contact Phenom Maintenance Support, Avenida Brigadeiro Faria Lima, 2170, P.O. Box 36/2, São José dos Campos, 12227–901, Brazil; phone: +55 12 3927 1000; email: [phenom.reliability@embraer.com.br](mailto:phenom.reliability@embraer.com.br); website: <https://www.embraer.com.br/en-US/Pages/home.aspx>. You may view this service information at the FAA,

Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (817) 222–5110. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA–2020–1073.

### Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA–2020–1073; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is Document Operations, U.S. Department of Transportation, Docket Operations, M–30, West Building Ground Floor, Room W12–140, 1200 New Jersey Avenue SE, Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Jim Rutherford, Aerospace Engineer, General Aviation & Rotorcraft Section, International Validation Branch, FAA, 901 Locust, Room 301, Kansas City, MO 64106; phone: (816) 329–4165; email: [jim.rutherford@faa.gov](mailto:jim.rutherford@faa.gov).

### SUPPLEMENTARY INFORMATION:

#### Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2020–12–08, Amendment 39–21143 (85 FR 36312, June 16, 2020), (AD 2020–12–08). AD 2020–12–08 applied to all Embraer S.A. (type certificate previously held by Empresa Brasileira de Aeronáutica S.A.) Model EMB–505 airplanes and required for certain serial-numbered airplanes, inspecting the mass-balance weights of the flight control surfaces and their attachment parts for corrosion and fragmentation, and taking corrective actions if necessary, including sending inspection results to Embraer. For all airplanes, AD 2020–12–08 required revising the airworthiness limitation section of the maintenance manual or instructions for continued airworthiness to incorporate new airworthiness limitations.

The NPRM published in the **Federal Register** on September 9, 2021 (86 FR 50487). The NPRM was prompted by Brazilian AD 2020–09–01, dated September 8, 2020 (referred to after this as "the MCAI"), issued by the Agência Nacional de Aviação Civil (ANAC), which is the aviation authority for Brazil. The MCAI states: