

# Rules and Regulations

Federal Register

Vol. 88, No. 63

Monday, April 3, 2023

This section of the FEDERAL REGISTER contains regulatory documents having general applicability and legal effect, most of which are keyed to and codified in the Code of Federal Regulations, which is published under 50 titles pursuant to 44 U.S.C. 1510.

The Code of Federal Regulations is sold by the Superintendent of Documents.

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 25

[Docket No. FAA-2022-1441; Special Conditions No. 25-817-SC]

#### Special Conditions: Blackhawk Aerospace Technologies, Textron Model 500 Series Airplanes; Rechargeable Lithium Batteries and Battery System Installations

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

**ACTION:** Final special conditions; request for comments.

**SUMMARY:** These special conditions are issued for the Textron Model 500/550/S550/560/560XL/560XLS airplanes. These airplanes, as modified by Blackhawk Aerospace Technologies (Blackhawk), will have a novel or unusual design feature when compared to the state of technology envisioned in the airworthiness standards for transport-category airplanes. This design feature is electronic GI 275 Standby Instruments containing rechargeable lithium-ion batteries. 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 Blackhawk on April 3, 2023. Send comments on or before May 18, 2023.

**ADDRESSES:** Send comments identified by Docket No. FAA-2022-1441 using any of the following methods:

- *Federal eRegulations Portal:* Go to <https://www.regulations.gov/> and follow the online instructions for sending your comments electronically.
- *Mail:* Send comments to Docket Operations, M-30, U.S. Department of

Transportation (DOT), 1200 New Jersey Avenue SE, Room W12-140, West Building Ground Floor, Washington, DC 20590-0001.

- *Hand Delivery or Courier:* Take comments to Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

- *Fax:* Fax comments to Docket Operations at 202-493-2251.

*Privacy:* Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in title 14, Code of Federal Regulations (14 CFR) 11.35, the FAA will post all comments received without change to <https://www.regulations.gov/>, including any personal information you provide. The FAA will also post a report summarizing each substantive verbal contact received about these special conditions.

*Confidential Business Information:* Confidential Business Information (CBI) is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to these special conditions contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to these special conditions, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as "PROPIN." The FAA will treat such marked submissions as confidential under the FOIA, and the indicated comments will not be placed in the public docket of these special conditions. Send submissions containing CBI to the individual listed in the **FOR FURTHER INFORMATION CONTACT** section below. Comments the FAA receives, which are not specifically designated as CBI, will be placed in the public docket for these special conditions.

*Docket:* Background documents or comments received may be read at <https://www.regulations.gov/> at any time. Follow the online instructions for accessing the docket or go to Docket Operations in Room W12-140 of the

West Building Ground Floor at 1200 New Jersey Avenue SE, Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Nazih Khaouly, Aircraft Systems Section, AIR-623, Technical Innovation Policy Branch, Policy and Innovation Division, Aircraft Certification Service, Federal Aviation Administration, 2200 South 216th Street, Des Moines, Washington 98198; telephone and fax 206-231-3160; email [nazih.khaouly@faa.gov](mailto:nazih.khaouly@faa.gov).

**SUPPLEMENTARY INFORMATION:** The substance of these special conditions has been published in the **Federal Register** for public comment in several prior instances with no substantive comments received. Therefore, the FAA finds, pursuant to § 11.38(b), that new comments are unlikely, and notice and comment prior to this publication are unnecessary.

#### Comments Invited

The FAA invites interested people to take part in this rulemaking by sending written comments, data, or views. The most helpful comments reference a specific portion of the special conditions, explain the reason for any recommended change, and include supporting data.

The FAA will consider all comments received by the closing date for comments, and will consider comments filed late if it is possible to do so without incurring delay. The FAA may change these special conditions based on the comments received.

#### Background

On February 24, 2020, Blackhawk applied for a supplemental type certificate to install rechargeable lithium batteries and battery systems, in the Textron Model 500 series airplanes, for electronic GI 275 Standby Instruments. The Textron Model 500 series airplane, approved under Type Certificate No. A22CE, is a twin-engine, transport-category airplane with maximum seating capacity for 7 to 12 passengers and a maximum takeoff weight of between 10,850 to 20,330 pounds, depending upon model.

#### Type Certification Basis

Under the provisions of title 14, Code of Federal Regulations (14 CFR) 21.101, Blackhawk must show that the Textron

Model 500 series airplanes, as changed, continue to meet the applicable provisions of the regulations listed in Type Certificate No. A22CE or the applicable regulations in effect on the date of application for the change, except for earlier amendments as agreed upon by the FAA.

If the Administrator finds that the applicable airworthiness regulations (e.g., 14 CFR part 25) do not contain adequate or appropriate safety standards for the Textron Model 500 series airplanes 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 model for which they are issued. Should the applicant apply for a supplemental type certificate to modify any other model included on the same type certificate to incorporate 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 Textron Model 500 series airplanes 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 § 11.19, in accordance with § 11.38, and they become part of the type certification basis under § 21.101.

#### Novel or Unusual Design Features

The Textron Model 500 series airplanes will incorporate the following novel or unusual design feature:

Electronic GI 275 Standby Instruments containing rechargeable lithium-ion batteries.

#### Discussion

Rechargeable lithium batteries and battery systems are considered to be a novel or unusual design feature in transport category airplanes, with respect to the requirements in § 25.1353. This type of battery has certain failure, operational, and maintenance characteristics that differ significantly from those of the nickel-cadmium and lead-acid rechargeable batteries currently approved for installation on transport category airplanes. These batteries and battery systems 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 introduces failure modes that require unique design considerations, such as provisions for thermal management.

Special Condition 1 requires that each individual cell within a battery and battery system be designed to maintain safe temperatures and pressures. Special Condition 2 addresses these same issues but for the entire battery system.

Special Condition 2 requires that the batteries and battery system be designed to prevent propagation of a thermal event, such as self-sustained, uncontrolled increases in temperature or pressure from one cell to adjacent cells.

Special Conditions 1 and 2 are intended to ensure that the cells and battery system 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 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 4 clarifies that the flammable-fluid fire-protection requirements of § 25.863 apply to rechargeable lithium battery installations. Section 25.863 is applicable to areas of the airplane that could be exposed to flammable fluid leakage from airplane systems. Rechargeable lithium batteries contain electrolyte that is a flammable fluid.

Special Condition 5 requires each rechargeable lithium battery and battery system installation to 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.

Special Condition 6 requires each rechargeable lithium battery and battery system installation to 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. The means of meeting special conditions 5 and 6 may be the same, but they are independent requirements addressing different hazards. Special Condition 5 addresses corrosive fluids and gases, whereas special condition 6 addresses heat.

Special Condition 9 requires rechargeable lithium batteries and battery systems to have “automatic” means, for charge rate and disconnect, due to the fast acting nature of lithium battery chemical reactions. Manual intervention would not be timely or effective in mitigating the hazards associated with these batteries.

These special conditions apply to all rechargeable lithium batteries and battery system installations in lieu of

§ 25.1353(b)(1) through (4) at amendment 25–123, or § 25.1353(c)(1) through (4) at earlier amendments. Those regulations will remain in effect for other battery installations on these airplanes.

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.

#### Applicability

As discussed above, these special conditions are applicable to the Textron Model 500 series airplanes. Should Blackhawk apply at a later date for a supplemental type certificate to modify any other model included on Type Certificate No. A22CE to incorporate the same novel or unusual design feature, these special conditions would apply to that model as well.

#### Conclusion

This action affects only a certain novel or unusual design feature on one model series of airplanes. It is not a rule of general applicability and affects only the applicant who applied to the FAA for approval of these features on the airplane.

#### List of Subjects in 14 CFR Part 25

Aircraft, Aviation safety, Reporting and recordkeeping requirements.

#### Authority Citation

The authority citation for these special conditions is as follows:

**Authority:** 49 U.S.C. 106(f), 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 Textron Model 500 series airplanes, as modified by Blackhawk.

#### Rechargeable Lithium Battery and Battery System Installations

In lieu of § 25.1353(b)(1) through (4) at amendment 25–123, or § 25.1353(c)(1) through (4) at earlier amendments, each rechargeable lithium battery and battery system 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, and automatically control the charge rate of each cell to protect

against adverse operating conditions, such as cell imbalance, back charging, overcharging and overheating.

(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 flight crew if its failure affects safe operation of the airplane.

(8) If its function is required for safe operation of the airplane, have a monitoring and warning feature that alerts the flight crew when its charge state falls below acceptable levels.

(9) Have a means to automatically disconnect from its charging source in the event of an over-temperature condition, cell failure or battery failure.

**Note:** The battery system consists of the batteries, battery charger, 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 28, 2023.

**Patrick R. Mullen,**

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

[FR Doc. 2023-06729 Filed 3-31-23; 8:45 am]

**BILLING CODE 4910-13-P**

**FEDERAL COMMUNICATIONS COMMISSION**

**47 CFR Part 73**

[DA 23-262; MB Docket No. 22-373; RM-11933; FR ID 134378]

**Radio Broadcasting Services; South Padre Island, Texas**

**AGENCY:** Federal Communications Commission.

**ACTION:** Final rule.

**SUMMARY:** This document amends the FM Table of Allotments, of the Commission's rules, by adding Channel

288A at South Padre Island, Texas. A staff engineering analysis indicates that Channel 288A can be allotted to South Padre Island, Texas, consistent with the minimum distance separation requirements of the Commission's rules (Rules), with a site restriction of 11 km (7 miles) south of the community. The reference coordinates are 26-01-30 NL and 97-09-15 WL.

**DATES:** Effective May 12, 2023.

**FOR FURTHER INFORMATION CONTACT:** Rolanda F. Smith, Media Bureau, (202) 418-2700.

**SUPPLEMENTARY INFORMATION:** This is a synopsis of the Federal Communications Commission's (Commission) Report and Order, adopted March 28, 2023 and released March 28, 2023. The full text of this Commission decision is available online at <https://apps.fcc.gov/ecfs/>. This document does not contain information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104-13.

The Report and Order in this proceeding substituted Channel 288A for vacant Channel 237A at South Padre Island, Texas to accommodate the hybrid modification application for Station KRIX(FM), Port Isabel, Texas resulting in the public interest because it would enhanced service for Station KRIX(FM), Port Isabel, Texas. Channel 237A at South Padre Island, Texas is not currently listed in the FM Table of Allotments but is considered a vacant allotment resulting from the license cancellation of FM station DKZSP, Fac. ID No. 56473, South Padre Island, Texas. The Commission will send a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see U.S.C. 801(a)(1)(A).

**List of Subjects in 47 CFR Part 73**

Radio, Radio broadcasting.  
Federal Communications Commission.  
**Nazifa Sawez,**  
*Assistant Chief, Audio Division, Media Bureau.*

**Final Rules**

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR part 73 as follows:

**PART 73—RADIO BROADCAST SERVICES**

■ 1. The authority citation for part 73 continues to read as follows:

**Authority:** 47 U.S.C. 154, 155, 301, 303, 307, 309, 310, 334, 336, 339.

■ 2. In § 73.202, amend table 1 to paragraph (b), under Texas, by adding in alphabetical order an entry for "South Padre Island" to read as follows:

**§ 73.202 Table of Allotments.**

\* \* \* \* \*  
(b) \* \* \*

TABLE 1 TO PARAGRAPH (b)

U.S. States	Channel No.
<b>Texas</b>	
* * * * *	
South Padre Island .....	288A
* * * * *	

[FR Doc. 2023-06780 Filed 3-31-23; 8:45 am]

**BILLING CODE 6712-01-P**

**DEPARTMENT OF THE INTERIOR**

**Fish and Wildlife Service**

**50 CFR Part 17**

[Docket No. FWS-HQ-ES-2022-0134; FF09E21000 FXES1111090FEDR 234]

**RIN 1018-BG93**

**Endangered and Threatened Wildlife and Plants; Significant Portion of Its Range Analysis for the Northern Distinct Population Segment of the Southern Subspecies of Scarlet Macaw**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final determination; notification of additional analysis.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), determine threatened status under the Endangered Species Act of 1973 (Act), as amended, for the northern distinct population segment (DPS), of the southern subspecies of scarlet macaw (*Ara macao macao*). Scarlet macaws are brilliantly colored parrots native to Mexico and Central and South America. This action affirms the 2019 listing of the scarlet macaw under the Act.

**DATES:** This determination is effective March 30, 2023.

**ADDRESSES:** Supporting materials for this action, including comments we received on our November 2, 2022, **Federal Register** document (87 FR 66093) are available in Docket No. FWS-HQ-ES-2022-0134 on <https://www.regulations.gov>.