

DEPARTMENT OF TRANSPORTATION**Federal Aviation Administration****14 CFR Part 39**

[Docket No. FAA-2024-2020; Project Identifier MCAI-2024-00303-A; Amendment 39-22877; AD 2024-22-06]

RIN 2120-AA64

Airworthiness Directives; Embraer S.A. Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2023-21-06 for certain Embraer S.A. (Embraer) Model EMB-505 airplanes. AD 2023-21-06 required installing structural reinforcements on certain monuments and replacing certain floor support rivets. Since the FAA issued AD 2023-21-06, the FAA determined that certain airplanes need to be re-assigned to a different group and certain re-identified floor support part numbers need to be corrected. This AD requires installing structural reinforcements on monuments and replacing fasteners on the floor support, as specified in an Agência Nacional de Aviação Civil (ANAC) AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective January 2, 2025.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of January 2, 2025.

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2020; 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 final rule, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For ANAC material identified in this AD, contact ANAC, Continuing Airworthiness Technical Branch (GTAC), Rua Doutor Orlando Feirabend Filho, 230—Centro Empresarial Aquarius—Torre B—Andares 14 a 18, Parque Residencial Aquarius, CEP

12.246-190—São José dos Campos—SP, Brazil; phone: 55 (12) 3203-6600; email: pac@anac.gov.br; website: anac.gov.br/en/. You may find this material on the ANAC website at sistemas.anac.gov.br/certificacao/DA/DAE.asp.

- You may view this material 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 [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2020.

FOR FURTHER INFORMATION CONTACT: Jim Rutherford, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (816) 329-4165; email: 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 2023-21-06, Amendment 39-22578 (88 FR 76114, November 6, 2023; corrected December 7, 2023 (88 FR 85093)) (AD 2023-21-06). AD 2023-21-06 applied to certain serial-numbered Embraer Model EMB-505 airplanes. AD 2023-21-06 was prompted by an MCAI originated by ANAC, which is the aviation authority for Brazil. ANAC issued ANAC AD 2023-05-03, effective June 2, 2023 (ANAC AD 2023-05-03) to correct an unsafe condition.

AD 2023-21-06 required installing structural reinforcements on certain monuments and replacing certain floor support rivets. The FAA issued AD 2023-21-06 to address certain monuments (the right-hand refreshment center and left-hand forward cabinet) that might not withstand the loads expected for specific emergency landing conditions, which may cause the detachment of mass items and result in injuries to the airplane occupants.

Since the FAA issued AD 2023-21-06, ANAC superseded ANAC AD 2023-05-03 and issued ANAC AD 2023-05-03R01, effective March 8, 2024 (ANAC AD 2023-05-03R01) for certain serial-numbered Embraer Model EMB-505 airplanes. ANAC AD 2023-05-03R01 stated it was issued to incorporate Embraer Service Bulletin SB505-25-0046, Revision 02, dated February 19, 2024, which updates effectivity information, compliance information, and part number information.

ANAC superseded ANAC AD 2023-05-03R01 and issued ANAC AD 2023-05-03R02, effective May 17, 2024 (ANAC AD 2023-05-03R02) (also referred to as the MCAI) for certain serial-numbered Embraer Model EMB-

505 airplanes. The MCAI states it was issued to incorporate Embraer Service Bulletin SB505-25-0046, Revision 03, dated May 6, 2024 (actual date May 7, 2024), which includes additional actions for certain airplane groups that had complied with the requirements of ANAC AD 2023-05-03R01 but had not yet installed part number 506-66837-001 and updates the effectivity information, compliance information, and part number information.

The NPRM published in the **Federal Register** on August 16, 2024 (89 FR 66642). The NPRM was prompted by ANAC AD 2023-05-03R02. In the NPRM, the FAA proposed to require installing structural reinforcements on monuments and replacing fasteners on the floor support, as specified in ANAC AD 2023-05-03R02.

The FAA is issuing this AD to address certain monuments that might not withstand the loads expected for specific emergency landing conditions, which may cause the detachment of mass items and result in injuries to the airplane occupants.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA-2024-2020.

Discussion of Final Airworthiness Directive**Comments**

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

These products have been approved by the aviation authority of another country and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Material Incorporated by Reference Under 1 CFR Part 51

The FAA reviewed ANAC AD 2023-05-03R02, which specifies procedures for installing structural reinforcements on certain monuments and replacing certain fasteners on the floor support.

This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in **ADDRESSES**.

Differences Between This AD and the MCAI

The material specified in ANAC AD 2023-05-03R02 allows the use of alternative or similar parts in place of the ones specified in the kits, provided these alternative or similar parts are

approved by Embraer, but this AD requires approval from either the Manager, International Validation Branch, FAA; ANAC; or ANAC's authorized Designee. If approved by the ANAC Designee, the approval must include the Designee's authorized signature.

Costs of Compliance

The FAA estimates that this AD affects 208 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Airplane groups 1 and 2—install structural reinforcements.	22 work-hours × \$85 per hour = \$1,870.	\$1,600	\$3,470	\$242,900 (70 airplanes).
Airplane groups 3, 4, and 5—install structural reinforcements and replace floor fasteners.	14 work-hours × \$85 per hour = \$1,190.	600	1,790	\$200,480 (112 airplanes).
Airplane groups 6 and 8—install structural reinforcements and replace floor fasteners.	26 work-hours × \$85 per hour = \$2,210.	2,000	4,210	\$84,200 (20 airplanes).
Airplane group 7—install structural reinforcements	20 work-hours × \$85 per hour = \$1,700.	1,600	3,300	\$16,500 (5 airplanes).
Airplane group 9—install structural reinforcements	14 work-hours × \$85 per hour = \$1,190.	1,600	2,790	\$2,790 (1 airplane).

The FAA estimates the following costs for the additional work that operators would be required to do for compliance with this AD if they completed the actions in the original

version of Embraer Service Bulletin SB505-25-0046, dated March 31, 2021; Service Bulletin SB505-25-0046, Revision 01, dated May 8, 2023; or Service Bulletin SB505-25-0046,

Revision 02, dated February 19, 2024. The agency has no way of determining the number of airplanes that might need these actions:

ON-CONDITION COSTS

Action	Labor cost	Parts cost	Cost per product
Inspect floor fasteners	9 work-hours × \$85 per hour = \$765	\$50	\$815
Replace floor fasteners	1 work-hour × \$85 per hour = \$85	50	135
Airplane groups 1 and 2 install reinforcement support on left-hand forward cabinet.	2 work-hours × \$85 per hour = \$170	200	370

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of

that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA has determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39—AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

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

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by:
 - a. Removing Airworthiness Directive 2023-21-06, Amendment 39-22578 (88 FR 76114, November 6, 2023; corrected December 7, 2023 (88 FR 85093)); and
 - b. Adding the following new airworthiness directive:

2024–22–06 Embraer S.A.: Amendment 39–22877; Docket No. FAA–2024–2020; Project Identifier MCAI–2024–00303–A.

(a) Effective Date

This airworthiness directive (AD) is effective January 2, 2025.

(b) Affected ADs

This AD replaces AD 2023–21–06, Amendment 39–22578 (88 FR 76114, November 6, 2023; corrected December 7, 2023 (88 FR 85093)).

(c) Applicability

This AD applies to Embraer S.A. Model EMB–505 airplanes, certificated in any category, as identified in Agência Nacional de Aviação Civil (ANAC) AD 2023–05–03R02, effective May 17, 2024 (ANAC AD 2023–05–03R02).

(d) Subject

Joint Aircraft System Component (JASC) Code 2500, Cabin Equipment/Furnishings.

(e) Unsafe Condition

This AD was prompted by the analysis of certain monuments (the right-hand refreshment center and left-hand forward cabinet) that identified the need for installing structural reinforcements and replacing applicable floor support rivets. The FAA is issuing this AD to address the unsafe condition. The unsafe condition, if not addressed, could result in a monument not withstanding the loads expected for specific emergency landing conditions, which may cause the detachment of mass items and result in injuries to the airplane occupants.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

Except as specified in paragraphs (h) and (i) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, ANAC AD 2023–05–03R02.

(h) Exceptions to ANAC AD 2023–05–03R02

(1) Where ANAC AD 2023–05–03R02 refers to its effective date, this AD requires using the effective date of this AD.

(2) Where ANAC AD 2023–05–03R02 refers to Embraer Service Bulletin SB505–25–0046, Revision 03, as dated “May 6, 2024,” replace that text with “May 7, 2024.”

(3) Where paragraph (b) of ANAC AD 2023–05–03R02 refers to “June 2, 2023, the effective date of AD 2023–05–03, original revision,” replace that text with “December 11, 2023, the effective date of AD 2023–21–06.”

(4) Although the material referenced in ANAC AD 2023–05–03R02 allows the use of alternative or similar parts in place of the ones specified in the kits provided, this AD requires that alternative or similar parts be approved by the Manager, International Validation Branch, FAA; ANAC; or ANAC’s authorized Designee. If approved by the ANAC Designee, the approval must include the Designee’s authorized signature.

(5) Where the material referenced in ANAC AD 2023–05–03R02 specifies to “discard” certain parts, replace that text with “remove from service.”

(6) This AD does not adopt paragraph (d)(1) of ANAC AD 2023–05–03R02.

(i) No Reporting Requirement

Although the material referenced in ANAC AD 2023–05–03R02 specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(j) Alternative Methods of Compliance (AMOCs)

The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the International Validation Branch, mail it to the address identified in paragraph (k) of this AD or email to: AMOC@faa.gov. If mailing information, also submit information by email. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Additional Information

For more information about this AD, contact Jim Rutherford, Aviation Safety Engineer, FAA, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; phone: (816) 329–4165; email: jim.rutherford@faa.gov.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the material listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this material as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Agência Nacional de Aviação Civil (ANAC) AD 2023–05–03R02, effective May 17, 2024.

(ii) [Reserved]

(3) For ANAC material identified in this AD, contact ANAC, Continuing Airworthiness Technical Branch (GTAC), Rua Doutor Orlando Feirabend Filho, 230—Centro Empresarial Aquarius—Torre B—Andares 14 a 18, Parque Residencial Aquarius, CEP 12.246–190—São José dos Campos—SP, Brazil; phone: 55 (12) 3203–6600; email: pac@anac.gov.br; website: anac.gov.br/en/. You may find this material on the ANAC website at sistemas.anac.gov.br/certificacao/DA/DAE.asp.

(4) You may view this material 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.

(5) You may view this material at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, visit www.archives.gov/federal-register/cfr/ibr-locations or email fr.inspection@nara.gov.

Issued on October 24, 2024.

Victor Wicklund,

Deputy Director, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2024–27709 Filed 11–26–24; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

33 CFR Part 165

[Docket Number USCG–2024–1009]

RIN 1625–AA00

Safety Zone; Corpus Christi Bay, Corpus Christi, TX

AGENCY: Coast Guard, DHS.

ACTION: Temporary final rule.

SUMMARY: The Coast Guard is establishing a temporary safety zone for certain navigable waters in the Laguna Madre, South Padre Island, Texas. The safety zone is needed to protect personnel, vessels, and the marine environment from potential hazards created by fireworks display launched from a barge in Laguna Madre, South Padre Island, Texas. Entry of vessels or persons into this zone is prohibited unless specifically authorized by the Captain of the Port, Sector Corpus Christi or a designated representative.

DATES: This rule is effective from 9:30 p.m. through 11:59 p.m. on December 7, 2024.

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to <https://www.regulations.gov>, type USCG–2024–1009 in the “SEARCH” box and click “SEARCH.” Click on Open Docket Folder on the line associated with this rule.

FOR FURTHER INFORMATION CONTACT: If you have questions about this rule, call or email Lieutenant Timothy Cardenas, Sector Corpus Christi Waterways Management Division, U.S. Coast Guard; telephone 361–939–5130, email Timothy.J.Cardenas@uscg.mil.

SUPPLEMENTARY INFORMATION:

I. Table of Abbreviations

CFR Code of Federal Regulations
DHS Department of Homeland Security
FR Federal Register
NPRM Notice of proposed rulemaking
§ Section
U.S.C. United States Code

II. Background Information and Regulatory History

The Coast Guard is issuing this temporary rule under authority in 5