

available to the pilot, it cannot produce hazardous loads on the rotorcraft, or create hazardous deviations in the flight path, under any flight condition appropriate to its use or in the event of a malfunction, assuming that corrective action begins within a reasonable period of time.

(e) If the automatic pilot and flight guidance system integrates signals from auxiliary controls or furnishes signals for operation of other equipment, there must be a means to prevent improper operation.

* * * * *

■ 22. Amend § 29.1333 by revising paragraph (a) to read as follows:

§ 29.1333 Instrument systems.

* * * * *

(a) For pneumatic systems, only the required flight instruments for the first pilot may be connected to that operating system.

* * * * *

§ 29.1335 [Removed]

■ 23. Remove § 29.1335.

■ 24. Amend § 29.1351 by adding paragraphs (e) and (f) to read as follows:

§ 29.1351 General.

* * * * *

(e) Electrical equipment, controls, and wiring must be installed so that operation of any one unit or system of units will not adversely affect the simultaneous operation of any other electrical unit or system essential to safe operation.

(f) Cables must be grouped, routed, and spaced so that damage to essential circuits will be minimized if there are faults in heavy current-carrying cables.

■ 25. Revise § 29.1353 to read as follows:

§ 29.1353 Energy storage systems.

Energy storage systems must be designed and installed as follows:

(a) Energy storage systems must provide automatic protective features for any conditions that could prevent continued safe flight and landing.

(b) Energy storage systems must not emit any flammable, explosive, or toxic gases, smoke, or fluids that could accumulate in hazardous quantities within the rotorcraft.

(c) Corrosive fluids or gases that escape from the system must not damage surrounding structures, adjacent equipment, or systems necessary for continued safe flight and landing.

(d) The maximum amount of heat and pressure that can be generated during any operation or under any failure condition of the energy storage system

or its individual components must not result in any hazardous effect on rotorcraft structure, equipment, or systems necessary for continued safe flight and landing.

(e) Energy storage system installations required for continued safe flight and landing of the rotorcraft must have monitoring features and a means to indicate to the pilot the status of all critical system parameters.

■ 26. Amend § 29.1517 by revising the section heading to read as follows:

§ 29.1517 Limiting height-velocity envelope.

* * * * *

■ 27. Amend § 29.1545 by revising paragraph (b) to read as follows:

§ 29.1545 Airspeed indicator.

* * * * *

(b) The following markings must be made:

(1) A red line:
(i) For rotorcraft other than helicopters, at V_{NE}.

(ii) For helicopters, at V_{NE} (power-on).

(iii) For helicopters, at V_{NE} (power-off). If V_{NE} (power-off) is less than V_{NE} (power-on) and both are simultaneously displayed, the red line at V_{NE} (power-off) must be clearly distinguishable from the red line at V_{NE} (power-on).

(2) [Reserved]

(3) For the caution range, a yellow range.

(4) For the normal operating range, a green or unmarked range.

* * * * *

■ 28. Amend § 29.1549 by revising paragraphs (a) through (d) to read as follows:

§ 29.1549 Powerplant instruments.

* * * * *

(a) Each maximum and, if applicable, minimum safe operating limit must be marked with a red line;

(b) Each normal operating range must be marked as a green or unmarked range;

(c) Each takeoff and precautionary range must be marked with a yellow range or yellow line;

(d) Each engine or rotor range that is restricted because of excessive vibration stresses must be marked with red ranges or red lines; and

* * * * *

■ 29. Amend § 29.1555 by revising paragraph (c)(1) to read as follows:

§ 29.1555 Control markings.

* * * * *

(c) * * *

(1) For fuel systems having no selector controls, the usable fuel capacity of the

system must be indicated at the fuel quantity indicator unless it is:

(i) Provided by another system or equipment readily accessible to the pilot; and

(ii) Contained in the limitations section of the rotorcraft flight manual.

* * * * *

■ 30. Amend § 29.1587 by revising paragraph (b)(6) to read as follows:

§ 29.1587 Performance information.

* * * * *

(b) * * *

(6) The height-velocity envelope except for rotorcraft incorporating this as an operating limitation;

* * * * *

■ 31. Amend appendix B to part 29 by revising paragraphs VIII introductory text and VIII(b)(5)(i) to read as follows:

Appendix B to Part 29—Airworthiness Criteria for Helicopter Instrument Flight

* * * * *

VIII. Equipment, systems, and installation. The basic equipment and installation must comply with §§ 29.1303, 29.1431, and 29.1433, with the following exceptions and additions:

* * * * *

(b) * * *

(5) * * *

(i) For pneumatic systems, only the required flight instruments for the first pilot may be connected to that operating system;

* * * * *

Issued in Washington, DC, on or about February 6, 2023.

Billy Nolen,

Acting Administrator.

[FR Doc. 2023-02771 Filed 2-9-23; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-1411; Project Identifier MCAI-2022-00912-T; Amendment 39-22320; AD 2023-02-13]

RIN 2120-AA64

Airworthiness Directives; Dassault Aviation Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2020-21-19, which applied to certain Dassault Aviation Model FALCON 900EX airplanes. AD 2020-21-19 required

revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. This AD continues to require the actions in AD 2020–21–19, and also requires revising the existing maintenance or inspection program, as applicable, to incorporate additional new or more restrictive airworthiness limitations; as specified in a European Union Aviation Safety Agency (EASA) 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 March 17, 2023.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of March 17, 2023.

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of December 7, 2020 (85 FR 69142, November 2, 2020).

ADDRESSES:

AD Docket: You may examine the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA–2022–1411; 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 material incorporated by reference in this AD, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; website easa.europa.eu. You may find this material on the EASA website at ad.easa.europa.eu.
- You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206–231–3195. It is also available in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA–2022–1411.

FOR FURTHER INFORMATION CONTACT: Tom Rodriguez, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198;

telephone 206–231–3226; email tom.rodriguez@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2020–21–19, Amendment 39–21292 (85 FR 69142, November 2, 2020) (AD 2020–21–19). AD 2020–21–19 applied to certain Dassault Aviation Model FALCON 900EX airplanes. AD 2020–21–19 required revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The FAA issued AD 2020–21–19 to address reduced structural integrity of the airplane. AD 2020–21–19 specifies that accomplishing the actions required by paragraph (g) or (i) of that AD terminates the requirements of paragraph (g)(1) of AD 2010–26–05, Amendment 39–16544 (75 FR 79952, December 21, 2010) for Dassault Aviation Model FALCON 900EX airplanes, serial numbers 1 through 96 inclusive, and serial numbers 98 through 119 inclusive. This AD therefore continues to allow that terminating action.

The NPRM published in the **Federal Register** on November 10, 2022 (87 FR 67849). The NPRM was prompted by AD 2022–0144, dated July 11, 2022, issued by EASA, which is the Technical Agent for the Member States of the European Union (EASA AD 2022–0144) (referred to after this as the MCAI). The MCAI states that new or more restrictive airworthiness limitations have been developed.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) under Docket No. FAA–2022–1411.

In the NPRM, the FAA proposed to continue to require the actions in AD 2020–21–19 and to require revising the existing maintenance or inspection program, as applicable, to incorporate additional new or more restrictive airworthiness limitations, as specified in EASA AD 2022–0144.

The FAA is issuing this AD to address reduced structural integrity of the airplane.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

This product has been approved by the aviation authority of another

country and is 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 this product. Except for minor editorial changes, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information Under 1 CFR Part 51

EASA AD 2022–0144 specifies new or more restrictive airworthiness limitations for airplane structures and safe life limits.

This AD also requires EASA AD 2020–0116, dated May 20, 2020, which the Director of the Federal Register approved for incorporation by reference as of December 7, 2020 (85 FR 69142, November 2, 2020).

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 the **ADDRESSES** section.

Costs of Compliance

The FAA estimates that this AD affects 88 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

The FAA estimates the total cost per operator for the retained actions from AD 2020–21–19 to be \$7,650 (90 work-hours × \$85 per work-hour).

The FAA has determined that revising the existing maintenance or inspection program takes an average of 90 work-hours per operator, although the agency recognizes that this number may vary from operator to operator. Since operators incorporate maintenance or inspection program changes for their affected fleet(s), the FAA has determined that a per-operator estimate is more accurate than a per-airplane estimate.

The FAA estimates the total cost per operator for the new actions to be \$7,650 (90 work-hours × \$85 per work-hour).

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

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 2020–21–19, Amendment 39–21292 (85 FR 69142, November 2, 2020); and
 - b. Adding the following new airworthiness directive:

2023–02–13 Dassault Aviation:

Amendment 39–22320; Docket No. FAA–2022–1411; Project Identifier MCAI–2022–00912–T.

(a) Effective Date

This airworthiness directive (AD) is effective March 17, 2023.

(b) Affected ADs

(1) This AD replaces AD 2020–21–19, Amendment 39–21292 (85 FR 69142, November 2, 2020) (AD 2020–21–19).

(2) This AD affects AD 2010–26–05, Amendment 39–16544 (75 FR 79952, December 21, 2010) (AD 2010–26–05).

(c) Applicability

This AD applies to Dassault Aviation Model FALCON 900EX airplanes, certificated in any category, as identified in European Union Aviation Safety Agency (EASA) AD 2022–0144, dated July 11, 2022 (EASA AD 2022–0144).

(d) Subject

Air Transport Association (ATA) of America Code 05, Time Limits/Maintenance Checks.

(e) Unsafe Condition

This AD was prompted by a determination that new or more restrictive airworthiness limitations are necessary. The FAA is issuing this AD to address reduced structural integrity of the airplane.

(f) Compliance

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

(g) Retained Revision of the Existing Maintenance or Inspection Program, With a New Terminating Action

This paragraph restates the requirements of paragraph (i) of AD 2020–21–19, with a new terminating action. Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2020–0116, dated May 20, 2020 (EASA AD 2020–0116). Accomplishing the revision of the existing maintenance or inspection program required by paragraph (j) of this AD terminates the requirements of this paragraph.

(h) Retained Exceptions to EASA AD 2020–0116, With No Changes

This paragraph restates the exceptions specified in paragraph (j) of AD 2020–21–10, with no changes.

(1) The requirements specified in paragraphs (1) and (2) of EASA AD 2020–0116 do not apply to this AD.

(2) Paragraph (3) of EASA AD 2020–0116 specifies revising "the approved AMP" within 12 months after its effective date, but this AD requires revising the existing maintenance or inspection program, as applicable, to incorporate the "limitations, tasks and associated thresholds and intervals" specified in paragraph (3) of EASA AD 2020–0116 within 90 days after December 7, 2020 (the effective date of AD 2020–21–19).

(3) The initial compliance time for doing the tasks specified in paragraph (3) of EASA AD 2020–0116 is at the applicable "associated thresholds" specified in paragraph (3) of EASA AD 2020–0116, or

within 90 days after December 7, 2020 (the effective date of AD 2020–21–19), whichever occurs later.

(4) The provisions specified in paragraphs (4) and (5) of EASA AD 2020–0116 do not apply to this AD.

(5) The "Remarks" section of EASA AD 2020–0116 does not apply to this AD.

(i) Retained Restrictions on Alternative Actions and Intervals, With a New Exception

This paragraph restates the requirements of paragraph (k) of AD 2020–21–19, with a new exception. Except as required by paragraph (j) of this AD, after the maintenance or inspection program has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections) and intervals are allowed unless they are approved as specified in the provisions of the "Ref. Publications" section of EASA AD 2020–0116.

(j) New Revision of the Existing Maintenance or Inspection Program

Except as specified in paragraph (k) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, EASA AD 2022–0144. Accomplishing the revision of the existing maintenance or inspection program required by this paragraph terminates the requirements of paragraph (g) of this AD.

(k) Exceptions to EASA AD 2022–0144

(1) The requirements specified in paragraphs (1) and (2) of EASA AD 2022–0144 do not apply to this AD.

(2) Paragraph (3) of EASA AD 2022–0144 specifies revising "the approved AMP" within 12 months after its effective date, but this AD requires revising the existing maintenance or inspection program, as applicable, within 90 days after the effective date of this AD.

(3) The initial compliance time for doing the tasks specified in paragraph (3) of EASA AD 2022–0144 is at the applicable "associated thresholds" as incorporated by the requirements of paragraph (3) of EASA AD 2022–0144, or within 90 days after the effective date of this AD, whichever occurs later.

(4) The provisions specified in paragraphs (4) and (5) of EASA AD 2022–0144 do not apply to this AD.

(5) The "Remarks" section of EASA AD 2022–0144 does not apply to this AD.

(l) New Provisions for Alternative Actions and Intervals

After the existing maintenance or inspection program has been revised as required by paragraph (j) of this AD, no alternative actions (e.g., inspections) and intervals are allowed unless they are approved as specified in the provisions of the "Ref. Publications" section of EASA AD 2022–0144.

(m) Terminating Action for Certain Actions in AD 2010–26–05

Accomplishing the actions required by paragraph (g) or (j) of this AD terminates the requirements of paragraph (g)(1) of AD 2010–26–05, for Dassault Aviation Model FALCON 900EX airplanes, serial numbers 1 through 96

inclusive, and serial numbers 98 through 119 inclusive only.

(n) Additional AD Provisions

The following provisions also apply to this AD:

(1) *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 responsible Flight Standards Office, as appropriate. If sending information directly to the International Validation Branch, send it to the attention of the person identified in paragraph (o) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, International Validation Branch, FAA; or EASA; or Dassault Aviation's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(o) Additional Information

For more information about this AD, contact Tom Rodriguez, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone 206-231-3226; email tom.rodriguez@faa.gov.

(p) Material Incorporated by Reference

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

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

(3) The following service information was approved for IBR on March 17, 2023.

(i) European Union Aviation Safety Agency (EASA) AD 2022-0144, dated July 11, 2022.

(ii) [Reserved]

(4) The following service information was approved for IBR on December 7, 2020 (85 FR 69142, November 2, 2020).

(i) European Union Aviation Safety Agency (EASA) AD 2020-0116, dated May 20, 2020.

(ii) [Reserved]

(5) For EASA ADs 2022-0144 and 2020-0116, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADS@easa.europa.eu; website easa.europa.eu. You may find these EASA ADs on the EASA website at ad.easa.europa.eu.

(6) You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(7) You may view this material that is incorporated by reference at the National

Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on January 25, 2023.

Christina Underwood,

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

[FR Doc. 2023-02782 Filed 2-9-23; 8:45 am]

BILLING CODE 4910-13-P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0684; Project Identifier MCAI-2021-01204-T; Amendment 39-22287; AD 2022-27-02]

RIN 2120-AA64

Airworthiness Directives; Bombardier, Inc., Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Bombardier, Inc., Model BD-700-2A12 airplanes. This AD was prompted by a report of a lateral offset observed on the head-up display (HUD) of several airplanes between the synthetic vision system (SVS) and actual runway due to mechanical misalignment of the HUD during manufacturing and assembly. This AD requires revising the existing airplane flight manual (AFM) to prohibit steep approach landing (SAL) and enhanced flight vision system (EFVS) operations. This AD also requires calibrating the HUD. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective March 17, 2023.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of March 17, 2023.

ADDRESSES:

AD Docket: You may examine the AD docket at regulations.gov under Docket No. FAA-2022-0684; 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 service information identified in this final rule, contact Bombardier Business Aircraft Customer Response Center, 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 1-514-855-2999; email ac.yul@aero.bombardier.com; website bombardier.com.

- You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at regulations.gov under Docket No. FAA-2022-0684.

FOR FURTHER INFORMATION CONTACT:

Thomas Niczky, Aerospace Engineer, Avionics and Electrical Systems Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7347; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Bombardier, Inc., Model BD-700-2A12 airplanes. The NPRM published in the **Federal Register** on June 21, 2022 (87 FR 36783). The NPRM was prompted by AD CF-2021-36, dated November 1, 2021, issued by Transport Canada, which is the aviation authority for Canada (referred to after this as the MCAI). The MCAI states that during production activities, a lateral offset was observed on the HUD of several airplanes between the SVS and actual runway. An investigation determined the cause of the offset to be mechanical misalignment of the HUD during manufacturing and assembly. This offset, if not corrected, will create an incorrect airplane reference display on the HUD, which could lead to excessive deviation during landing. This could particularly affect SAL or EFVS operations.

In the NPRM, the FAA proposed to require revising the existing AFM to prohibit SAL and EFVS operations, and calibrating the HUD. The FAA is issuing this AD to address the unsafe condition on these products.

You may examine the MCAI in the AD docket at regulations.gov under Docket No. FAA-2022-0684.