

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

[Docket No. FAA-2019-0991; Product Identifier 2019-NM-179-AD; Amendment 39-19895; AD 2020-07-16]

RIN 2120-AA64

**Airworthiness Directives; Dassault Aviation Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** The FAA is superseding Airworthiness Directive (AD) 2016-16-09 and AD 2019-03-20, which applied to Dassault Aviation Model FALCON 7X airplanes. Those ADs required revising the existing maintenance or inspection program, as applicable, to incorporate new and more restrictive maintenance requirements and airworthiness limitations for airplane structures and systems. This AD requires revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations; as specified in a European Union Aviation Safety Agency (EASA) AD, which is incorporated by reference. This AD was prompted by the FAA's determination that new or more restrictive airworthiness limitations are necessary. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective May 18, 2020.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 18, 2020.

The Director of the Federal Register approved the incorporation by reference of a certain other publication listed in this AD as of April 2, 2019 (84 FR 6059, February 26, 2019).

**ADDRESSES:** For EASA material incorporated by reference (IBR) in this AD, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 1000; email [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu); internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this IBR material on the EASA website at <https://ad.easa.europa.eu>.

For Dassault Aviation material that was previously incorporated by reference, contact Dassault Falcon Jet Corporation, Teterboro Airport, P.O. Box 2000, South Hackensack, NJ 07606; telephone 201-440-6700; internet <https://www.dassaultfalcon.com>.

You may view this IBR material at the FAA, Transport Standards 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 on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0991.

**Examining the AD Docket**

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0991; 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, 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.

**FOR FURTHER INFORMATION CONTACT:** Tom Rodriguez, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3226; email [tom.rodriguez@faa.gov](mailto:tom.rodriguez@faa.gov).

**SUPPLEMENTARY INFORMATION:****Discussion**

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2019-0257, dated October 17, 2019 ("EASA AD 2019-0257") (also referred to as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Dassault Aviation Model FALCON 7X airplanes. EASA AD 2019-0257 supersedes EASA AD 2018-0277, dated December 17, 2018, which in turn superseded EASA AD 2018-0101, dated May 3, 2018 (which corresponds to FAA AD 2019-03-20, Amendment 39-19572 (84 FR 6059, February 26, 2019) ("AD 2019-03-20")).

Airplanes with an original airworthiness certificate or original export certificate of airworthiness issued after June 1, 2019, must comply with the airworthiness limitations specified as part of the approved type design and referenced on the type certificate data sheet; this AD therefore does not include those airplanes in the applicability.

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2019-03-20 and AD 2016-16-09, Amendment 39-

18607 (81 FR 52752, August 10, 2016) ("AD 2016-16-09"). Those ADs applied to Dassault Aviation Model FALCON 7X airplanes. AD 2019-03-20 specified that accomplishing the revision required by paragraph (g) of that AD terminates all requirements of AD 2016-16-09. The NPRM published in the **Federal Register** on December 31, 2019 (84 FR 72251). The NPRM was prompted by the FAA's determination that new or more restrictive airworthiness limitations are necessary. The NPRM proposed to require revising the existing maintenance or inspection program, as applicable, to incorporate new or more restrictive airworthiness limitations. The FAA is issuing this AD to address reduced structural integrity and reduced control of airplanes due to the failure of system components.

See the MCAI for additional background information.

**Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comment received on the NPRM and the FAA's response to that comment.

**Request To Address Later Revisions of Service Information**

Executive Jet Management, Inc. requested that the FAA address later revisions of the service information. The commenter stated it frequently sees a revision that is called out in an AD being outdated by the time an AD becomes effective. The commenter noted it currently has 3 ADs regarding this issue that have reached their effective date that are still pending an alternative method of compliance (AMOC) and another AD that was effective January 24, 2020. The commenter stated this could be a non-issue for some of the ADs as the deadline is within 12 months after the effective date, which provides substantial time to acquire an AMOC. For other ADs however, the commenter noted there is considerably less time as the deadline is 30 days or 90 days after the effective date. The commenter also noted that Chapter 5-40-00, Airworthiness Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X Maintenance Manual (MM) has been superseded and the current version is Revision 8, dated June 1, 2019, and asked that it be reflected in the proposed rule.

The commenter stated it understands the FAA's restriction of not being able to use the words "or later approved revisions" when writing ADs. The commenter proposed adding wording to an AD that requires operators to be at

“no less than” a certain airworthiness limitation (AWL), which would allow for full compliance with regulations while streamlining the process for the owner/operator. The commenter stated that this approach would still meet the intent of the proposed AD, without using “or later approved revisions” wording.

The FAA acknowledges the commenters’ concerns regarding needing AMOCs for later approved revisions of mandated service information. In the FAA’s ongoing efforts to improve efficiency of the AD process, the FAA worked with EASA and manufacturers to develop a process to use certain EASA ADs as the primary source of information for compliance with the requirements of corresponding FAA ADs. EASA ADs include the approval of the use of later approved service information for compliance with the applicable requirements. This AD was developed using this process and it refers to EASA AD 2019–0257 as the primary source of information.

Therefore, operators are allowed to use the referenced Airworthiness Limitations document (Chapter 5–40–00, Airworthiness Limitations, DGT 107838, Revision 8, dated June 1, 2019, of the Dassault Falcon 7X Maintenance Manual (MM)), or later approved revisions as stated in the EASA AD, to show compliance with this AD, without the use of the AMOC process specified in paragraph (m)(1) of this AD.

Regarding the commenter’s request to reference the current revision of the airworthiness limitations, we note that Chapter 5–40–00, Airworthiness Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X Maintenance Manual (MM), is only referenced in paragraph (g) of this AD, which is a retained requirement. It is not necessary to reference the current revision in paragraph (g) of this AD because once operators have accomplished paragraph (i) of this AD, then paragraph (g) of this AD is terminated. Paragraph (i) of this AD refers to the MCAI, which refers to Dassault Falcon 7X Aircraft Maintenance Manual, Chapter 5–40, DGT 107838, Revision 8, dated June 1, 2019.

The FAA has not changed this AD regarding this issue.

#### **Clarification of Paragraph (k) of This AD**

Once a maintenance or inspection program is revised as required by paragraph (i) of this AD, paragraph (k) of this AD does not allow for the later use of alternative actions or intervals unless these alternative actions or

intervals are approved as specified in “Ref. Publications” section of EASA AD 2019–0288. In paragraph (k) of the proposed AD, the FAA proposed language using the word “except.” To make the language consistent with the language in the “Ref. Publications” section of EASA AD 2019–0288, the FAA has changed the wording to “unless they are approved.”

#### **Clarification of Paragraph (l) of This AD**

The FAA has revised paragraph (l) of this AD to reference paragraph (g) of this AD as a terminating action for the requirements of paragraph (q) of AD 2014–16–23, Amendment 39–17947 (79 FR 52545, September 4, 2014) (“AD 2014–16–23”). As specified in AD 2019–03–20, paragraph (g) of that AD is a terminating action for the requirements of paragraph (q) of AD 2014–16–23. Paragraph (g) of this AD is a restatement of paragraph (g) of AD 2019–03–20.

#### **Conclusion**

The FAA reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes. The FAA has determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

#### **Related IBR Material Under 1 CFR Part 51**

EASA AD 2019–0257 describes new or more restrictive maintenance airworthiness limitations for airplane structures and systems.

This AD also requires Chapter 5–40–00, Airworthiness Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X Maintenance Manual (MM), which the Director of the Federal Register approved for incorporation by reference as of April 2, 2019 (84 FR 6059, February 26, 2019).

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 67 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 2019–03–20 to be \$7,650 (90 work-hours × \$85 per work-hour).

The FAA has determined that revising the 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. In the past, the agency has estimated that this action takes 1 work-hour per airplane. 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.

**Adoption of 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 removing Airworthiness Directive (AD) 2016–16–09, Amendment 39–18607 (81 FR 52752, August 10, 2016), and AD 2019–03–20, Amendment 39–19572 (84 FR 6059, February 26, 2019), and adding the following new AD:

**2020–07–16 Dassault Aviation:** Amendment 39–19895; Docket No. FAA–2019–0991; Product Identifier 2019–NM–179–AD.

**(a) Effective Date**

This AD is effective May 18, 2020.

**(b) Affected ADs**

(1) This AD replaces AD 2016–16–09, Amendment 39–18607 (81 FR 52752, August 10, 2016) and AD 2019–03–20, Amendment 39–19572 (84 FR 6059, February 26, 2019) (“AD 2019–03–20”).

(2) This AD affects AD 2014–16–23, Amendment 39–17947 (79 FR 52545, September 4, 2014) (“AD 2014–16–23”).

**(c) Applicability**

This AD applies to Dassault Aviation Model FALCON 7X airplanes, certificated in any category, with an original airworthiness certificate or original export certificate of airworthiness issued on or before June 1, 2019.

**Note 1 to paragraph (c):** Model FALCON 7X airplanes with modifications M1000 and M1254 incorporated are commonly referred to as “Model FALCON 8X” airplanes as a marketing designation.

**(d) Subject**

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

**(e) Reason**

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 and reduced control of airplanes due to the failure of system components.

**(f) Compliance**

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

**(g) Retained Maintenance or Inspection Program Revision, With No Changes**

This paragraph restates the requirements of paragraph (g) of AD 2019–03–20, with no changes. Within 90 days after April 2, 2019 (the effective date of AD 2019–03–20), revise the existing maintenance or inspection program, as applicable, by incorporating the information specified in Chapter 5–40–00, Airworthiness Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X Maintenance Manual (MM). The initial compliance times for the tasks specified in Chapter 5–40–00, Airworthiness Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X MM are at the applicable compliance times specified in Chapter 5–40–00, Airworthiness Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X MM, or within 90 days after April 2, 2019, whichever occurs later. Accomplishing the maintenance or inspection program revision required by paragraph (i) of this AD terminates the requirements of this paragraph.

**(h) Retained No Alternative Actions, Intervals, or Critical Design Configuration Control Limitations (CDCCLs), With a New Exception**

This paragraph restates the requirements of paragraph (i) of AD 2019–03–20, with a new exception. Except as required by paragraph (i) of this AD, after the maintenance or inspection program, as applicable, has been revised as required by paragraph (g) of this AD, no alternative actions (e.g., inspections), intervals, or CDCCLs may be used unless the actions, intervals, and CDCCLs are approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (m)(1) of this AD.

**(i) New Maintenance or Inspection Program Revision**

Except as specified in paragraph (j) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2019–0257, dated October 17, 2019 (“EASA AD 2019–0257”). Accomplishing the maintenance or inspection program revision required by this paragraph terminates the requirements of paragraph (g) of this AD.

**(j) Exceptions to EASA AD 2019–0257**

(1) The requirements specified in paragraphs (1) and (2) of EASA AD 2019–0257 do not apply to this AD.

(2) Where paragraph (3) of EASA AD 2019–0257 specifies a compliance time of “Within 12 months” after its effective date to “revise the approved AMP [Aircraft Maintenance Program],” 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 2019–0257 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 2019–0257 is at the applicable “associated thresholds” specified in

paragraph (3) of EASA AD 2019–0257, 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 2019–0257 do not apply to this AD.

(5) The “Remarks” section of EASA AD 2019–0257 does not apply to this AD.

**(k) New Provisions for Alternative Actions, Intervals, and CDCCLs**

After the maintenance or inspection program has been revised as required by paragraph (i) of this AD, no alternative actions (e.g., inspections), intervals, and CDCCLs are allowed unless they are approved as specified in the provisions of the “Ref. Publications” section of EASA AD 2019–0257.

**(l) Terminating Action for Certain Requirements in AD 2014–16–23**

Accomplishing the actions required by paragraphs (g) or (i) of this AD terminates the requirements of paragraph (q) of AD 2014–16–23.

**(m) Other FAA AD Provisions**

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs):* The Manager, International Section, Transport Standards 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 International Section, send it to the attention of the person identified in paragraph (n) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. 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.

(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 Section, Transport Standards 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.

(3) *Required for Compliance (RC):* For any service information referenced in EASA AD 2019–0257 that contains RC procedures and tests: Except as required by paragraph (m)(2) of this AD, RC procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator’s maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

**(n) Related Information**

For more information about this AD, contact Tom Rodriguez, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3226; email [tom.rodriguez@faa.gov](mailto:tom.rodriguez@faa.gov).

**(o) 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 May 18, 2020.

(i) European Union Aviation Safety Agency (EASA) AD 2019-0257, dated October 17, 2019.

(ii) [Reserved]

(4) The following service information was approved for IBR on April 2, 2019 (84 FR 6059, February 26, 2019).

(i) Chapter 5-40-00, Airworthiness Limitations, DGT 107838, Revision 7, dated August 24, 2018, of the Dassault Falcon 7X Maintenance Manual (MM).

(ii) [Reserved]

(5) For information about EASA AD 2019-0257, contact the EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 89990 6017; email [ADS@easa.europa.eu](mailto:ADS@easa.europa.eu); internet [www.easa.europa.eu](http://www.easa.europa.eu). You may find this EASA AD on the EASA website at <https://ad.easa.europa.eu>.

(6) For Dassault Aviation service information identified in this AD, contact Dassault Falcon Jet Corporation, Teterboro Airport, P.O. Box 2000, South Hackensack, NJ 07606; telephone 201-440-6700; internet <https://www.dassaultfalcon.com>.

(7) You may view this material at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. This material may be found in the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0991.

(8) 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 [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on April 3, 2020.

**Lance T. Gant,**

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

[FR Doc. 2020-07646 Filed 4-10-20; 8:45 am]

**BILLING CODE 4910-13-P**

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

**[Docket No. FAA-2019-0859; Product Identifier 2019-NM-114-AD; Amendment 39-19893; AD 2020-07-14]**

**RIN 2120-AA64**

**Airworthiness Directives; The Boeing Company Airplanes**

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

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes. This AD was prompted by fuel system reviews conducted by the manufacturer indicating that the existing bond path design provides insufficient bond resistance margin between the fuel pump motor/impeller and structure. This AD requires replacement of the bonding jumpers on the auxiliary power unit (APU) fuel pump. This AD also requires, for certain airplanes, installation of a second bonding jumper; an inspection of the override/jettison fuel pumps and transfer/jettison fuel pumps to determine if the bonding jumper has a one-piece braid or two-piece braid and replacement of the bonding jumper if necessary; and replacement of the bonding jumper on the electrical scavenge fuel pump. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective May 18, 2020.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of May 18, 2020.

**ADDRESSES:** For service information identified in this final rule, contact Boeing Commercial Airplanes, Attention: Contractual & Data Services (C&DS), 2600 Westminister Blvd., MC 110-SK57, Seal Beach, CA 90740-5600; telephone 562-797-1717; internet <https://www.myboeingfleet.com>. You may view this service information at the FAA, Transport Standards 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 on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0859.

**Examining the AD Docket**

You may examine the AD docket on the internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0859; 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 regulatory evaluation, 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.

**FOR FURTHER INFORMATION CONTACT:**

Jeffrey Rothman, Aerospace Engineer, Propulsion Section, FAA, Seattle ACO Branch, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3558; email: [jeffrey.rothman@faa.gov](mailto:jeffrey.rothman@faa.gov).

**SUPPLEMENTARY INFORMATION:****Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain The Boeing Company Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes. The NPRM published in the **Federal Register** on November 8, 2019 (84 FR 60351). The NPRM was prompted by fuel system reviews conducted by the manufacturer indicating that the existing bond path design provides insufficient bond resistance margin between the fuel pump motor/impeller and structure. The NPRM proposed to require replacement of the bonding jumpers on the APU fuel pump. The NPRM also proposed to require, for certain airplanes, installation of a second bonding jumper; an inspection of the override/jettison fuel pumps and transfer/jettison fuel pumps to determine if the bonding jumper has a one-piece braid or two-piece braid and replacement of the bonding jumper if necessary; and replacement of the bonding jumper on the electrical scavenge fuel pump.

**Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The following presents the comments received on the NPRM and the FAA's response to each comment.