DEPARTMENT OF TRANSPORTATION
Federal Aviation Administration
14 CFR Part 39

[Docket No. FAA-2019-0425; Project Identifier 2016-NE-13-AD; Amendment 39-21346; AD 2020-25-04]

RIN 2120-AA64

Airworthiness Directives; Rolls-Royce Deutschland Ltd & Co KG (Type Certificate previously held by Rolls-Royce plc) Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2016-24-08 for all Rolls-Royce Deutschland Ltd. & Co KG (RRD) RB211-Trent 875-17, RB211-Trent 877-17, RB211-Trent 884-17, RB211-Trent 884B-17, RB211-Trent 892-17, RB211-Trent 892B-17, and RB211-Trent 895-17 model turbofan engines. AD 2016-24-08 required repetitive inspections of the engine upper bifurcation nose fairing assembly and repair or replacement of any fairing assembly that fails inspection. This AD retains the requirements to perform repetitive inspections of the engine upper bifurcation nose fairing assembly and repair or replacement of any fairing assembly that fails inspection. As a terminating action to these inspections, this AD also requires the modification of the engine upper bifurcation nose fairing assembly. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE24 8BJ; phone: (+44) 1332 242424; fax: (+44)1332 249936; email: http://www.rolls-
Examining the AD Docket

You may examine the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2019-0425; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), any comments received, and other information. The address for Docket Operations is 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: Scott Stevenson, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7132; fax: (781) 238-7199; email: Scott.M.Stevenson@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2016-24-08, Amendment 39-18725 (81 FR 86567, December 1, 2016) (AD 2016-24-08). AD 2016-24-08 applied to all RR RB211-Trent 875-17, RB211-Trent 877-17, RB211-Trent 884-17, RB211-Trent 884B-17, RB211-Trent 892-17, RB211-Trent 892B-17, and RB211-Trent 895-17 model turbofan engines. The NPRM published in the Federal Register on June 24, 2019 (84 FR 29423). The NPRM was prompted by RRD developing a modification of the engine upper bifurcation nose fairing assembly that terminates the need for repetitive inspections of this part. In the NPRM, the FAA proposed to retain the requirements to perform repetitive inspections of the engine upper bifurcation nose fairing assembly and repair or replacement of any fairing assembly that fails inspection. As a terminating action, in the NPRM the FAA also
proposed to require modification of the engine upper bifurcation nose fairing assembly. The FAA is issuing this AD to address the unsafe condition of these products.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2018-0088, dated April 18, 2018 (referred to after this as “the MCAI”), to address the unsafe condition on these products. The MCAI states:

Inspection of in-service Trent 800 engines identified cracking and/or material release from the upper bifurcation fairing, which mates to the aeroplane thrust reverser upper bifurcation forward fire seal. Both sets of hardware create the engine firewall to isolate the engine compartment fire zone, which is a firewall feature of the aeroplane type design. Damage (missing materials and holes/openings) to the upper bifurcation fairing creates a breach of the engine fire wall, which may decrease the effectiveness of the engine fire detection and suppression systems due to excess fan air entering the engine compartment fire zone. This could delay or prevent the fire detection and suppression system from functioning properly, and can result in an increased risk of prolonged burning, potentially allowing a fire to reach unprotected areas of the engine, strut and wing.

This condition, if not detected and corrected, could lead to an uncontrolled fire, possibly resulting in damage to, or loss of, the aeroplane.

To address this potential unsafe condition, RR published the NMSB to provide inspection instructions. Consequently, EASA issued AD 2016-0084 to require repetitive inspections of the upper bifurcation fairing and, depending on findings, accomplishment of applicable corrective action(s).

Since that [EASA] AD was issued, RR developed modification (mod) 72-J803, which introduces a revised upper bifurcation nose
fairing assembly, featuring an additional support bracket assembly at the right hand seal land. RR also published the modification SB to provide instructions for in-service engines. This modification removes the need for repetitive inspections.

For the reasons described above, this [EASA] AD retains the requirements of EASA AD 2016-0084, which is superseded, and requires a modification, which constitutes terminating action for the repetitive inspections required by this [EASA] AD.

You may obtain further information by examining the MCAI in the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2019-0425.

Discussion of Final Airworthiness Directive

Comments

The FAA received comments from six commenters. The commenters were Rolls-Royce plc (RR); American Airlines (AAL); The Boeing Company (Boeing); Delta Air Lines, Inc. (DAL); and two individual commenters. Five commenters requested changes to this AD, which included adding or updating the unsafe condition, terminating action, installation prohibition, and credit for previous actions. One commenter requested clarification regarding on-wing rework. One commenter expressed support for the AD. The following presents the comments received on the NPRM and the FAA’s response to each comment.

Request to Remove Statement Indicating the Unsafe Condition Could Cause a Fire

Boeing requested that paragraph (e), Unsafe Condition, of this AD be revised to replace “…could result in engine fire and damage to the airplane” with “…could result in reduced ability to detect and/or control an engine fire which could lead to damage to the airplane.” Boeing reasoned that unsafe condition is not expected to cause an engine fire. Instead, when material is liberated from the engine upper bifurcation nose fairing assembly, the core zone fire detection and extinguishing may be less effective in the event of a fire. This is due to airflow that may be allowed to pass into the fire zone through an alternate path and at an unknown rate compared to the intended design.
The FAA partially agrees. The FAA agrees that a cracked engine upper bifurcation nose fairing assembly and material release would not lead to an engine fire. The unsafe condition of this AD, however, is not the cracking of the engine upper bifurcation nose fairing assembly and material release, but the resulting failure of the engine fire control system. Since the engine fire control system would be inadequate to detect and control an engine fire, regardless of cause, the resulting hazard is the engine fire and consequent damage to the airplane. The FAA did not change this AD.

**Request to Clarify Engine Upper Bifurcation Nose Fairing Assembly with FRSJ739 Repair**

DAL requested that Note 1 to paragraph (g)(3) of this AD be updated to clarify inspection if on-wing repair FRSJ739 was applied. DAL reasoned that RRD added a second sheet to Figure 1 when it published Revision 2 of RR Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AJ165, on August 21, 2018. This second sheet includes the entire length of the bracket in Zone A if on-wing repair FRSJ739 was applied. The proposed AD did not provide any distinctions for on-wing repair FRSJ739.

The FAA disagrees. As stated in Note 1 to paragraph (g)(3) of this AD, Figure 1 of RR Alert NMSB RB.211-72-AJ165, Revision 2, dated August 21, 2018, provides guidance on the engine upper bifurcation nose fairing assembly inspection locations. Operators are not required to use Figure 1 to comply with this AD. Therefore, this AD is not required to reference on-wing repair FRSJ739.

**Request to Add Credit for Previous Actions Paragraph**

DAL requested that the FAA add a Credit for Previous Actions paragraph to this AD for previous initial and repetitive inspections completed using RR Alert NMSB RB.211-72-AJ165, Initial Issue, dated March 31, 2016, required by AD 2016-24-08.

The FAA disagrees. AD 2016-24-08 and this AD do not require use of RR Alert NMSB RB.211-72-AJ165 to perform the initial and repetitive inspections. RR Alert NMSB RB.211-72-AJ165 is provided as guidance on engine upper bifurcation nose fairing assembly inspection locations. Therefore, this AD does not need to provide credit for inspections performed using RR Alert NMSB RB.211-72-AJ165. The FAA did not change this AD.
Request to Update Terminating Action with the latest Service Information

AAL, Boeing, DAL, and an individual commenter requested that paragraph (h), Mandatory Terminating Action, of this AD be updated to include RR Service Bulletin (SB) RB.211-72-J803, Revision 2, dated April 1, 2019. The commenters reasoned that RR SB RB.211-72-J803, Revision 1, dated July 13, 2018, has been superseded by Revision 2, dated April 1, 2019. Boeing also suggested adding language that allows any later revisions of the service information to be equivalent action as RRD may publish further revisions.

The FAA agrees to revise the reference to RR SB RB.211-72-J803 in paragraph (h) of this AD from Revision 1, dated July 13, 2018, to Revision 2, dated April 1, 2019. The FAA disagrees with adding language that allows any later revisions of the service information. Since later revisions of the service information have not been published or reviewed by the agency, the FAA will not require their use.

With the update to RR SB RB.211-72-J803 in this AD from Revision 1, dated July 13, 2018, to Revision 2, dated April 1, 2019, the FAA determined the need to update the estimated costs to reflect the increase in labor hours from 2 work-hours to 8 work-hours for both on-wing and in-shop visits.

Request to Add On-Wing Mandatory Terminating Action

DAL requested that the on-wing rework instructions introduced in the Accomplishment Instructions, paragraph 3.D., of RR SB RB.211-72-J803, Revision 2, dated April 1, 2019, be included as an option for the mandatory terminating action to the AD. DAL added that paragraph (i), Installation Prohibition, will ensure that de-modification of the engine upper bifurcation nose fairing assembly will not be possible once the reworked engine upper bifurcation nose fairing assembly is installed.

The FAA agrees that the on-wing rework instructions should be added as an option to the mandatory terminating action in addition to the in-shop rework procedure. RR SB RB.211-72-J803, Revision 2, dated April 1, 2019, provides an option to perform the on-wing rework instructions. As a result, operators can perform the rework in-shop or on-wing. The FAA added the on-wing rework instructions to the mandatory terminating action section of this AD.
The FAA also agrees that de-modification of the engine upper bifurcation nose fairing assembly will not be possible once the reworked engine upper bifurcation nose fairing assembly is installed. As noted in the following comment response, the FAA removed the installation prohibition proposed in the NPRM as the mandatory terminating actions requiring the modification of the engine upper bifurcation nose fairing assembly makes this installation prohibition unnecessary.

**Request to Revise Installation Prohibition**

RR and AAL requested that paragraph (i), Installation Prohibition, of the proposed AD be revised. Rolls-Royce was concerned if an upper bifurcation panel (upper bifurcation nose fairing assembly) is required to complete an on-wing repair, it will prevent the installation of the original panel without the part being modified to the later standard. AAL reasoned that a serviceable engine upper bifurcation nose fairing assembly that needs to be repaired or replaced per AD 2016-24-08, but has not been, may be removed during non-related maintenance. The FAA infers that RR’s concern aligns with AAL reasoning that removal of a panel for on-wing activity, such as maintenance or repair unrelated to the rework, will make the part ineligible for installation. Therefore, AAL proposed that paragraph (i) of the proposed AD be revised to “After the effective date of this AD, do not install an engine upper bifurcation nose fairing assembly, P/N FK25470, onto any engine that has or had an engine upper bifurcation nose fairing assembly, P/N KH75280, installed.”

The FAA agrees that the installation prohibition would prevent the installation of the engine upper bifurcation nose fairing assembly, P/N FK25470, onto any engine after the effective date of this AD, even for work unrelated to this AD. The mandatory terminating action requires the modification of engine upper bifurcation nose fairing assembly, P/N FK25470 and, as such, the installation prohibition is not necessary. The FAA removed the installation prohibition from this AD.

**Support for the AD**

An individual commenter expressed support for the AD as written.
Conclusion

The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting the AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. Except for minor editorial changes, and any other changes described previously, 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

The FAA reviewed RR SB RB.211-72-J803, Revision 2, dated April 1, 2019; Revision 1, dated July 13, 2018; and Initial Issue, dated December 7, 2017. The service information describes procedures for modification of the engine upper bifurcation nose fairing assembly. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Other Related Service Information

The FAA reviewed RR Alert NMSB RB.211-72-AJ165, Revision 2, dated August 21, 2018. The NMSB provides guidance on engine upper bifurcation nose fairing assembly inspection locations. The FAA also reviewed AMM TASK 70-20-02, Water Washable Fluorescent Penetrant Inspection (Maintenance Process 213), and OMat 632, high sensitivity fluorescent penetrant inspection. This service information provides guidance on performing a fluorescent penetrant inspection.

Costs of Compliance

The FAA estimates that this AD affects 70 engines installed on airplanes of U.S. registry. Based on updated information since publication of the NPRM, the FAA revised the estimated number of engines installed on airplanes of U.S. registry from 125 in the NPRM to 70 in this final rule.

The FAA estimates the following costs to comply with this AD:
**Estimated costs**

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor Cost</th>
<th>Parts Cost</th>
<th>Cost per product</th>
<th>Cost on U.S. operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspect engine upper bifurcation nose fairing assembly</td>
<td>3.25 work-hours x $85 per hour = $276.25</td>
<td>$0</td>
<td>$276.25</td>
<td>$19,337.50</td>
</tr>
<tr>
<td>Modify engine upper bifurcation nose fairing assembly</td>
<td>8 work-hours x $85 per hour = $680</td>
<td>$50</td>
<td>$730</td>
<td>$51,100</td>
</tr>
</tbody>
</table>

The FAA estimates the following costs to do any necessary repairs or replacements that would be required based on the results of the mandated inspections. The agency has no way of determining the number of engines that might need these repairs or replacements:

**On-condition costs**

<table>
<thead>
<tr>
<th>Action</th>
<th>Labor Cost</th>
<th>Parts Cost</th>
<th>Cost per product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repair engine upper bifurcation nose fairing assembly</td>
<td>8 work-hours x $85 per hour = $680</td>
<td>$500</td>
<td>$1,180</td>
</tr>
<tr>
<td>Replace engine upper bifurcation nose fairing assembly</td>
<td>30 work hours x $85 per hour = $2,550</td>
<td>$500</td>
<td>$3,050</td>
</tr>
</tbody>
</table>

**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 AD 2016-24-08, Amendment 39-18725 (81 FR 86567, December 1, 2016); and

   b. Adding the following new airworthiness directive:

   **2020-25-04 Rolls-Royce Deutschland Ltd & Co KG (Type Certificate previously held by Rolls-Royce plc):** Amendment 39-21346; Docket No. FAA-2019-0425; Project Identifier 2016-NE-13-AD.
(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2016-24-08, Amendment 39-18725 (81 FR 86567, December 1, 2016).

(c) Applicability

This AD applies to all Rolls-Royce Deutschland Ltd. & Co KG (RRD) (Type Certificate previously held by Rolls-Royce plc) RB211-Trent 875-17, RB211-Trent 877-17, RB211-Trent 884-17, RB211-Trent 884B-17, RB211-Trent 892-17, RB211-Trent 892B-17, and RB211-Trent 895-17 model turbofan engines.

(d) Subject


(e) Unsafe Condition

This AD was prompted by RRD developing a modification of the engine upper bifurcation nose fairing assembly as a result of reports of cracking and material release from an engine upper bifurcation fairing. The FAA is issuing this AD to prevent failure of the engine fire control system. The unsafe condition, if not addressed could result in engine fire and damage to the airplane.

(f) Compliance

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

(g) Required Actions

(1) Within 7,500 engine flight hours (FHs) since new or since the last inspection or within 150 flight cycles (FCs) after January 5, 2017 (the effective date of AD 2016-24-08), whichever occurs later, inspect the engine upper bifurcation nose fairing assembly for cracks or missing material. Use paragraph (g)(3) of this AD to perform the inspection.

(2) Repeat the inspection required by paragraph (g)(1) of this AD within every 7,500 engine FHs since the last inspection.

(3) Inspect the engine upper bifurcation nose fairing assembly as follows.
Note 1 to Paragraph (g)(3): Figure 1 of Rolls-Royce plc (RR) Alert Non-Modification Service Bulletin (NMSB) RB.211-72-AJ165, Revision 2, dated August 21, 2018, provides guidance on the engine upper bifurcation nose fairing assembly inspection locations.

(i) Visually inspect upper bifurcation fairing seal face 22, seal support 23, and Zone A for any cracks or material loss on the right side.

(A) If fairing seal face 22 is found to have released material, repair or replace the fairing before further flight.

(B) If there is a single crack found on fairing seal face 22, shorter than 6 mm, repair or replace the fairing within 100 engine FCs, or at the next engine shop visit, whichever occurs first.

(C) If there is a single crack, longer than 6 mm, found on fairing seal face 22, repair or replace the fairing within 15 engine FCs or at the next engine shop visit, whichever occurs first.

(D) If there are two or more cracks found on fairing seal face 22, replace the fairing within 15 engine FCs or at the next engine shop visit, whichever occurs first.

(E) If there is any cracking or material loss found on seal support 23, replace the fairing within 15 engine FCs or at the next engine shop visit, whichever occurs first.

(ii) If the visual inspection required by paragraph (g)(3)(i) of this AD does not detect any cracks, fluorescent penetrant inspect Zone A.

(A) If a crack shorter than 6 mm is detected, repair or replace the fairing within 100 engine FCs, or at the next engine shop visit, whichever occurs first.

(B) If a crack longer than 6 mm is detected, repair or replace the fairing within 15 engine FCs or at the next engine shop visit, whichever occurs first.

Note 2 to Paragraph (g)(3)(ii): AMM TASK 70-20-02, Water Washable Fluorescent Penetrant Inspection (Maintenance Process 213), and OMat 632, high sensitivity fluorescent penetrant inspection, provides guidance on performing a fluorescent penetrant inspection.
(h) Mandatory Terminating Action

As a mandatory terminating action to the inspections of the engine upper bifurcation nose fairing assembly required by paragraph (g) of this AD, perform one of the following:

1. At the next engine shop visit after the effective date of this AD, modify the engine upper bifurcation nose fairing assembly in accordance with the Accomplishment Instructions, paragraph 3.C., of RR Service Bulletin (SB) RB.211-72-J803, Revision 2, dated April 1, 2019; paragraph 3.B., Revision 1, dated July 13, 2018; or paragraph 3.B., Original Issue, dated December 7, 2017; or

2. Before the next engine shop visit after the effective date of this AD, modify the engine upper bifurcation nose fairing assembly in accordance with the Accomplishment Instructions, paragraph 3.D., of RR SB RB.211-72-J803, Revision 2, dated April 1, 2019.

(i) Definition

For the purpose of this AD, an “engine shop visit” is defined as the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges, except that the separation of engine flanges solely for the purposes of transportation without subsequent engine maintenance does not constitute an engine shop visit.

(j) Alternative Methods of Compliance (AMOCs)

1. The Manager, ECO 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 certification office, send it to the attention of the person identified in Related Information. You may email your request to: ANE-AD-AMOC@faa.gov.

2. 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) Related Information

(1) For more information about this AD, contact Scott Stevenson, Aviation Safety Engineer, ECO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7132; fax: (781) 238-7199; email: Scott.M.Stevenson@faa.gov.

(2) Refer to European Aviation Safety Agency (EASA) AD 2018-0088, dated April 18, 2018, for more information. You may examine the EASA AD in the AD docket at https://www.regulations.gov by searching for and locating Docket No. FAA-2019-0425.

(l) 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 the AD specifies otherwise.

(i) Rolls-Royce plc (RR) Service Bulletin (SB) RB.211-72-J803, Revision 2, dated April 1, 2019.

(ii) RR SB RB.211-72-J803, Revision 1, dated July 13, 2018.


(3) For RR service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE24 8BJ; phone: (+44) 1332 242424; fax: (+44) 1332 249936; email: http://www.rolls-royce.com/contact/civil_team.jsp; internet: https://customers.rolls-royce.com/public/rollsroycecare.

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (781) 238-7759.

(5) You may view this service information 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, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.
Issued on November 30, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.
[FR Doc. 2020-26730 Filed: 12/3/2020 8:45 am; Publication Date: 12/4/2020]