

compliance times specified in, and in accordance with, EASA AD 2019–0011R1.

#### (h) Exceptions to EASA AD 2019–0011R1

(1) For purposes of determining compliance with the requirements of this AD: Where EASA AD 2019–0011R1 refers to its effective date, or February 6, 2019 (the effective date of EASA AD 2019–0011, dated January 23, 2019), this AD requires using the effective date of this AD.

(2) The “Remarks” section of EASA AD 2019–0011R1 does not apply to this AD.

(3) Paragraphs (7) and (8) of EASA AD 2018–0011R1 specify to report inspection results to Airbus within a certain compliance time. For this AD, report inspection results at the applicable time specified in paragraph (h)(3)(i) or (h)(3)(ii) of this AD.

(i) If the inspection was done on or after the effective date of this AD: Submit the report within 30 days after the inspection.

(ii) If the inspection was done before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

#### (i) 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 (j) of this AD. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov.

(i) 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.

(ii) AMOCs approved previously for AD 2002–07–05 are approved as AMOCs for the corresponding provisions of EASA AD 2019–0011R1 that are required by paragraph (g) of this AD.

(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 Airbus SAS’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 2019–0011R1 that contains RC procedures and tests: Except as required by paragraph (i)(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.

(4) *Paperwork Reduction Act Burden Statement*: A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120–0056. Public reporting for this collection of information is estimated to be approximately 1 hour per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES–200.

#### (j) Related Information

For more information about this AD, contact Dan Rodina, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206–231–3225.

#### (k) 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.

(i) European Union Aviation Safety Agency (EASA) AD 2019–0011R1, dated February 22, 2019.

(ii) [Reserved]

(3) For EASA AD 2019–0011R1, contact the EASA, at 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>.

(4) 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.

(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, call 202–741–6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Des Moines, Washington, on July 30, 2019.

**Michael Kaszycki,**

*Acting Director, System Oversight Division, Aircraft Certification Service.*

[FR Doc. 2019–17503 Filed 8–14–19; 8:45 am]

**BILLING CODE 4910–13–P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA–2019–0207; Product Identifier 2019–NE–02–AD; Amendment 39–19703; AD 2019–15–10]

**RIN 2120–AA64**

### Airworthiness Directives; Safran Aerosystems Life Jackets

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

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain Safran Aerosystems (formerly Zodiac Aerospace Services) life jackets. This AD was prompted by reports of defective welding on certain life jackets around the inflation system. This AD requires removal and replacement of the affected life jackets. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective September 19, 2019.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of September 19, 2019.

**ADDRESSES:** For service information identified in this final rule, contact Zodiac Aerospace Services, 61 Rue Pierre Curie, CS20001, 78370 Plaisir Cedex, France; phone: + 33 1 61 34 23 23; fax: + 33 1 61 34 21 13; email: [Technical.Retrofit@zodiacaeospace.com](mailto:Technical.Retrofit@zodiacaeospace.com); internet: <http://tpi.services.zodiacaeospace.com>. You may view this service information at the FAA, Engine and Propeller Standards Branch, 1200 District Avenue, Burlington, MA, 01803. For information on the availability of this material at the FAA, call 781–238–7759. It is also available on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA–2019–0207.

#### Examining the AD Docket

You may examine the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA–2019–

0207; 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), 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:** Erin King, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA, 01803; phone 781-238-7655; fax: 781-238-7199; email: [erin.king@faa.gov](mailto:erin.king@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 Safran Aerosystems life jackets. The NPRM published in the **Federal Register** on April 15, 2019 (84 FR 15160). The NPRM was prompted by reports of defective welding on certain life jackets around the inflation system. The NPRM proposed to require removal and replacement of the affected life jackets. The FAA is issuing this AD to address the unsafe condition on these products.

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2019-0010, dated January 23, 2019 (referred to after this as “the MCAI”), to address the unsafe condition on these products. The MCAI states:

Defective welding around the inflation system has been reportedly found on certain life jackets on the production line. Subsequent investigation results identified a batch of life jackets which might be affected by this manufacturing defect.

This condition, if not corrected, could lead to inability of the life jacket to perform its intended function, possible resulting in injury to the user of that life jacket.

To address this potential unsafe condition, Safran Aerosystems issued the SB, providing the list of affected parts, and the repair SB, providing instructions to repair affected parts. For the reason described above, this [EASA] AD requires replacement of affected life jackets, and allows their (re)installation on an aircraft only after having being repaired.

You may obtain further information by examining the MCAI in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2019-0207.

**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.

**Request To Update Service Information**

Alaska Airlines, Inc. (ASA) and Empire Airlines requested that the FAA update all references to Zodiac Aerospace Services Service Bulletin (SB) 25-65-33, Revision 01, dated January 8, 2019, and Zodiac Aerospace Services SB 25-65-34, Original Issue, dated January 8, 2019, to Revision 02 and Revision 01, respectively. ASA indicated that updated service information was published during the NPRM commenting period, and updating this information would avoid the need for operators to submit alternative methods of compliance requests.

The FAA agrees to incorporate the latest service information in this AD.

**Request for Previous Credit**

ASA requested the final rule include a “Credit for Previous Actions” paragraph allowing credit for performing the inspection using Zodiac Aerospace Services SB 25-65-33, Revision 01, dated January 8, 2019, or performing the modification using Zodiac Aerospace Services SB 25-65-34, Original Issue, dated January 8, 2019.

The FAA partially agrees. As noted in the previous response, the FAA agrees with incorporating the latest service information in the applicability section and the definition section of this AD. The FAA notes the applicability of this AD and the definition of a part eligible of installation has not changed as the information in Table 1 of Revision 02 and Revision 01 of Zodiac Aerospace Services SB 25-65-33 is identical. Therefore, the FAA is not referencing Revision 01 of Zodiac Aerospace Services SB 25-65-33 in this AD and previous credit is not required.

The FAA has also revised the Installation Prohibition section of this AD to allow the use of either Zodiac Aerospace Services SB 25-65-34, Revision 01, dated March 15, 2019, or Original Issue, dated January 8, 2019, to perform the repair and marking. The FAA, therefore, does not require a previous credit section in this AD.

**Request To Clarify the Eligible for Installation Definition**

ASA requested that the FAA clarify the definition of a life jacket eligible for installation. ASA proposed defining a

life jacket eligible for installation as one that is “not applicable” to Zodiac Aerospace Services SB 25-65-33, Revision 02, dated March 15, 2019, or one that is repaired in accordance with Zodiac Aerospace Services SB 25-65-34, Revision 01, dated March 15, 2019.

The FAA agrees. The FAA clarifies the definition of a life jacket eligible for installation in this AD.

**Support for the NPRM**

Several individual commenters expressed support for the NPRM. One commenter supported the NPRM but noted that cost should be a secondary consideration in determining whether to issue an AD on a potentially life-saving component. Another commenter supported the NPRM but added that all Safran Aerosystems life jackets should be removed from airplanes for safety precautions and passengers on the airplanes should be informed of the issue and know that it is being addressed.

The FAA partially agrees. The FAA agrees with the importance of this AD action because life jackets are potentially life-saving devices and must be in working condition. The FAA also notes that it considers cost when developing rules, but its primary consideration is safety.

The FAA disagrees with expanding the applicability of this AD to all Safran Aerosystems life jackets because the information relied upon by the FAA indicates an unsafe condition exists only with respect to those life jackets identified in the Applicability section of this AD. Passengers who wish to find information on safety issues related to specific model aircraft, engines, propellers, or associated appliances may view airworthiness directives at [www.regulations.gov](http://www.regulations.gov). The FAA did not change this AD.

**Conclusion**

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule with the changes described previously and 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.

The FAA also determined that these changes will not increase the economic burden on any operator or increase the scope of this final rule.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Zodiac Aerospace Services SB 25–65–33, Revision 02, dated March 15, 2019, and Zodiac Aerospace Services SB 25–65–34, Revision 01, dated March 15, 2019. Zodiac Aerospace Services SB 25–65–33 identifies the affected life jackets by part number and serial number. Zodiac Aerospace Services SB 25–65–34

describes procedures for repairing and marking the affected life jackets. 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 the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects an unknown number of life jackets installed on, but not limited to,

ATR–GIE Avions de Transport Regional ATR 42 and ATR 72, Airbus A318/ A319/A320/A321, Airbus A330, Airbus A340, Airbus A350, and Airbus A380 airplanes of U.S. registry. Operators have the option to replace or repair the affected life jackets. The FAA has no way of determining the number of life jackets that might be replaced or repaired.

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

ESTIMATED COSTS

Action	Labor cost	Parts cost	Cost per product
Inspect life jacket .....	0.1 work-hours × \$85 per hour = \$8.50 .....	\$0	\$8.50
Replace life jacket .....	0.5 work-hours × \$85 per hour = \$42.50 .....	96	138.50
Repair life jacket .....	0.5 work-hours × \$85 per hour = \$42.50 .....	0	42.50

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all costs in our cost estimate.

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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager,

Engine and Propeller Standards Branch, Policy and Innovation Division.

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 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 adding the following new airworthiness directive (AD):

2019–15–10 Safran Aerosystems (formerly Zodiac Aerospace Services): Amendment 39–19703; Docket No. FAA–2019–0207; Product Identifier 2019–NE–02–AD.

(a) Effective Date

This AD is effective September 19, 2019.

(b) Affected ADs

None.

(c) Applicability

(1) This AD applies to Safran Aerosystems life jackets with part number (P/N) 210225–2, P/N 216200–0, or P/N 216203–0, and with a serial number listed in Table 1 of Zodiac Aerospace Services Service Bulletin (SB) 25–65–33, Revision 02, dated March 15, 2019, that are not marked with “Mod.per SB 25–65–34” in the identification area.

(2) These appliances are installed on, but not limited to, ATR–GIE Avions de Transport Regional ATR 42 and ATR 72, Airbus A318/ A319/A320/A321, Airbus A330, Airbus A340, Airbus A350, and Airbus A380 airplanes.

(d) Subject

Joint Aircraft System Component (JASC) Code 2561, Life Jacket.

(e) Unsafe Condition

This AD was prompted by reports of defective welding on certain life jackets around the inflation system. The FAA is issuing this AD to prevent failure of the life jacket. The unsafe condition, if not addressed, could result in injury to the wearer of the life jacket.

(f) Compliance

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

(g) Required Actions

Within six months after the effective date of this AD, remove each affected life jacket from the airplane and, before further flight, replace the life jacket with a life jacket eligible for installation.

**(h) Installation Prohibition**

After the effective date of this AD, do not install on any airplane an affected life jacket unless it has been repaired and marked to indicate compliance with such repair in accordance with Zodiac Aerospace Services SB 25–65–34, Revision 01, dated March 15, 2019, or Original Issue, dated January 8, 2019; or a method approved by the FAA.

**(i) Definition**

A life jacket eligible for installation is a new life jacket not listed in Table 1 of Zodiac Aerospace Services SB 25–65–33, Revision 02, dated March 15, 2019, or a life jacket repaired in accordance with Zodiac Aerospace Services SB 25–65–34, Revision 01, dated March 15, 2019, or Original Issue, dated January 8, 2019; or by a method approved by the FAA.

**(j) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Boston ACO 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 ACO Branch, send it to the attention of the person identified in paragraph (k)(1) of this AD.

(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 Erin King, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone 781–238–7655; fax: 781–238–7199; email: [erin.king@faa.gov](mailto:erin.king@faa.gov).

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2019–0010, dated January 23, 2019, for more information. You may examine the EASA AD in the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA–2019–0207.

**(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) Zodiac Aerospace Services Service Bulletin (SB) 25–65–33, Revision 02, dated March 15, 2019.

(ii) Zodiac Aerospace Services SB 25–65–34, Revision 01, dated March 15, 2019.

(3) For Safran Aerosystems service information identified in this AD, contact Zodiac Aerospace Services, 61 Rue Pierre Curie, CS20001, 78370 Plaisir Cedex, France; phone: + 33 1 61 34 23 23; fax: + 33 1 61 34 21 13; email: [Technical.Retrofit@zodiacaerospace.com](mailto:Technical.Retrofit@zodiacaerospace.com); internet: <http://tpi.services.zodiacaerospace.com>.

(4) You may view this service information at the FAA, Engine & Propeller Standards 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, call 202–741–6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on August 2, 2019.

**Karen M. Grant,**

*Acting Manager, Engine and Propeller Standards Branch, Aircraft Certification Service.*

[FR Doc. 2019–17402 Filed 8–14–19; 8:45 am]

**BILLING CODE 4910–13–P**

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

**[Docket No. FAA–2019–0120; Product Identifier 2018–NM–167–AD; Amendment 39–19702; AD 2019–15–09]**

**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 DHC–8–400 series airplanes. This AD was prompted by a report of a cracked outboard spoiler actuator mounting bracket. This AD requires repetitive inspections of the outboard spoiler actuator mounting brackets, replacement of any cracked bracket, and eventual replacement of all brackets with a re-designed part that would terminate the repetitive inspections. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective September 19, 2019.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of September 19, 2019.

**ADDRESSES:** For service information identified in this final rule, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416–375–4000; fax 416–375–

4539; email [thd.qseries@aero.bombardier.com](mailto:thd.qseries@aero.bombardier.com); internet <http://www.bombardier.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 <http://www.regulations.gov> by searching for and locating Docket No. FAA–2019–0120.

**Examining the AD Docket**

You may examine the AD docket on the internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA–2019–0120; 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:** Aziz Ahmed, Aerospace Engineer, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone: 516–287–7329; fax: 516–794–5531; email: [Aziz.Ahmed@faa.gov](mailto:Aziz.Ahmed@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 Bombardier, Inc., Model DHC–8–400 series airplanes. The NPRM published in the **Federal Register** on March 21, 2019 (84 FR 10449). The NPRM was prompted by a report of a cracked outboard spoiler actuator mounting bracket. The NPRM proposed to require repetitive inspections of the outboard spoiler actuator mounting brackets, replacement of any cracked bracket, and eventual replacement of all brackets with a re-designed part that would terminate the repetitive inspections.

The FAA is issuing this AD to address cracking of the outboard spoiler actuator mounting brackets, which could cause inoperability or jam of a single spoiler panel and possible jam of the aileron circuit. This condition, if not corrected, could adversely affect the continued safe operation and landing of the airplane.

Transport Canada Civil Aviation (TCCA), which is the aviation authority