

收文者：華捷商務航空股份有限公司、飛特立航空股份有限公司、前進航空股份有限公司、中華航空公司、德安航空公司、凌天航空股份有限公司、長榮航空公司、遠東航空公司、群鷹翔國土資源航空公司、漢翔航空工業股份有限公司、華信航空公司、大鵬航空公司、復興航空運輸股份有限公司、台灣虎航股份有限公司、立榮航空公司

 適航指令發布單 Airworthiness Directive Issuance Form			
民航局 AD 編號 AD number	CAA-2018-02-010	發布日期 Date issued	2018/2/21
適用之航空產品 Applied to (models, serial numbers or part numbers, as applicable)	Rosemount Aerospace, Inc. Model 851AK pitot probes that were repaired by CSI Aerospace Inc.		
主旨摘要	To prevent incorrect airspeed indications during flight, which could lead to loss of control.		
民航局 CAA <input type="checkbox"/> 本國產品 Native products <input type="checkbox"/> 其他個案 Other	設計國民航主管機構 Original Authorities <input checked="" type="checkbox"/> FAA <input type="checkbox"/> EASA <input type="checkbox"/> Brazil <input type="checkbox"/> Transport Canada Civil Aviation <input type="checkbox"/> DGAC <input type="checkbox"/> Germany LBA <input type="checkbox"/> CAA-NL <input type="checkbox"/> UK CAA <input type="checkbox"/> Japan CAB <input type="checkbox"/> CAA of Israel <input type="checkbox"/> Other _____		
	設計國 AD 編號 Original AD number	2018-03-04	
	1. 直接採用原 AD 之內容?(Is the original AD directly adopted?) <input checked="" type="checkbox"/> 是(Yes) <input type="checkbox"/> 否(No) _ a. 生效日期另訂為(Re-specify the effective date as) : _____ b. 執行時限另訂為(Re-specify the compliance time or period as) : _____ 2. 使用人是否需要將 AD 執行結果向民航局提出報告?(Do Users need to report the status of compliance to the CAA?) <input type="checkbox"/> 是(Yes) <input checked="" type="checkbox"/> 否(No)		
備註 Note	None.		
註： 1. AD 內容後附。 2. 航空器產品使用人得向民航局提出豁免、替代符合方法、執行時限之展延之申請。 3. 如有任何問題，請聯絡交通部民用航空局初始適航科。Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw Note： 1. The AD text is enclosed. 2. Exemption, an alternative method of compliance or adjustment of the compliance time may be proposed to the CAA for approval. 3. For further information, please contact Civil Aeronautics Administration on Tel：(02)2349-6331~3, Fax：(02)2545-8464, e-mail： adcaa@mail.caa.gov.tw			

收文者: 華捷商務航空股份有限公司、飛特立航空股份有限公司、前進航空股份有限公司、中華航空公司、德安航空公司、凌天航空股份有限公司、長榮航空公司、遠東航空公司、群鷹翔國土資源航空公司、漢翔航空工業股份有限公司、華信航空公司、大鵬航空公司、復興航空運輸股份有限公司、台灣虎航股份有限公司、立榮航空公司

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[FR Doc No: 2018-02550]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-6616; Product Identifier 2016-CE-004-AD; Amendment 39-19177; AD 2018-03-04]

RIN 2120-AA64

Airworthiness Directives; Rosemount Aerospace, Inc. Pitot Probes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for Rosemount Aerospace Model 851AK pitot probes that were repaired by CSI Aerospace, Inc. between January 2013 and July 2014 that are installed on airplanes. This AD was prompted by a report that certain pitot probes are indicating the wrong airspeed during flight. This AD requires inspecting the airplane to determine the number of affected pitot probes installed and replacing the affected pitot probes. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective March 16, 2018.

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-2016-6616; or in person at the 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 street address for Docket Operations (phone: 800-647-5527) 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: Jonathan Kim, Aerospace Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Parkway, Fort Worth, Texas 76177-1524; telephone: (817) 222-5131; fax: (817) 222-5245; email: jonathan.kim@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to Rosemount Aerospace Model 851AK pitot probes that were repaired by CSI Aerospace, Inc. between January 2013 and July 2014 that are installed on airplanes. The NPRM was published in the Federal Register on May 11, 2016 (81 FR 29193). The NPRM was prompted by a report that certain pitot probes are indicating the wrong airspeed during flight. The NPRM proposed to require inspecting the airplane to determine the number of affected pitot probes installed and replacing the affected pitot probes. We are issuing this AD to prevent incorrect airspeed indications during flight, which could lead to loss of control. Due to design redundancy, this is only applicable if more than one deficient probe is installed.

Comments

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

Support for the AD

Air Line Pilots Association, International (ALPA) supported the proposed AD as written. We have not changed this AD action based on this comment.

Request To Revise the Description of the Unsafe Condition

Andy Feely of CSI Aerospace, Inc. (CSI) stated that they do not have any data which confirms that the inaccurate airspeed occurred during flight “in icing conditions.”

The commenter also stated that in the proposed AD, in the Summary, Discussion, and paragraph (e) Unsafe Condition sections, several references are made to the reported problem occurring “in icing conditions.” CSI does not have any data to support this statement. This statement is inconsistent with the field data that CSI has been able to collect. CSI has communicated with affected operators and has been unable to confirm experiences of inaccurate airspeed reporting during flight “in icing conditions.” CSI has a service difficulty report (SDR) where the airplane had varying airspeed indications from the airspeed indication systems (pitot probes), however, it does not contain a report of icing conditions.

The commenter requested removing all references to “icing conditions” throughout the final rule AD action.

We partially agree with the commenter. We agree to remove the language “icing conditions” from the Summary, Discussion, and paragraph (e) of the AD because the SDR report that prompted the AD action does not provide meteorological conditions. However, we disagree that icing conditions do not contribute to the unsafe condition. There is evidence that the migrated braze material may present a non-conforming, forward facing surface inside the pitot throat on which ice crystals may accumulate when they make contact and could lead to the incorrect airspeed indications.

We have changed the AD as indicated above.

Request To Clarify Summary

Andy Feely of CSI stated that there is a specific time period that the affected pitot probes were repaired by CSI.

The commenter requested that the specific time period of between January 2013 and July 2014 be added in the Summary section of the final rule AD action to clarify the applicability of the affected pitot probes and to be consistent with the dates in the Discussion section of the proposed AD.

We agree with the commenter. We have changed this AD action based on this comment.

Request To Revise the FAA's Determination Section

Andy Feely of CSI stated that the FAA's Determination section in the proposed AD does not accurately reflect the scope of the unsafe condition. It implies a more widespread problem. Through CSI's immediate actions taken, once notified of the initial report (March 2014), all suspect serial numbers of the affected pitot probes were identified and located. All affected customers were notified and were provided instructions to inspect, scrap, return and/or replace the suspect probes. The commenter also stated that it is his opinion that this condition is not "likely to exist or develop in other products of the same type design" because the probes were located, contained, and monitored.

The commenter requested a revision to this section to more accurately indicate the scope of the unsafe condition.

We do not agree with the commenter. In 14 CFR, section 39.5, the FAA is required to issue an AD when we find that an unsafe condition exists in a product and the condition is likely to exist or develop in other products of the same type design. We have determined that this AD meets these requirements.

We have not changed this AD action based on this comment.

Request To Revise the Applicability Section

Andy Feely of CSI stated that the Applicability section should include a statement to clarify the time period to narrow the actual scope of the problem and to be consistent with the dates stated in the Discussion section of the proposed AD. The commenter also stated that pitot probes re-repaired after August 1, 2014, are no longer part of the affected probes.

The commenter requested that paragraph (c) of the final rule AD be revised to add the specific time period the affected probes were repaired by CSI and to specify the serial numbers of pitot probes repaired after August 1, 2014, which are no longer part of the affected probes.

We partially agree with the commenter. We agree with including a statement in the Applicability section that suspect probes that were re-repaired by CSI Aerospace, Inc. after August 1, 2014, are not at risk because corrective actions have been taken to address the unsafe condition. We have changed the final rule AD action to add the serial numbers of the re-repaired probes to the Applicability section. Because we are relaxing the requirement to allow probes to be re-repaired after August 2014 and CSI is confident that these probes were re-repaired after August 2014, this does not add any additional burden to operators.

We disagree with removing the serial numbers of re-repaired pitot probes from the Applicability section because we do not want to omit serial numbers from the final rule AD action based on claims that affected parts are already in compliance with the actions of the proposed AD. The original list of serial numbers provided in the proposed AD did not include serial numbers of re-repaired probes, but we have added them to the final rule AD action. Again, adding these serial numbers does not impose a burden on the public and this AD only documents those serial numbers that originally had the unsafe condition. All airplanes that had probes previously repaired would not be subject to any actions of this AD other than the requirement to assure that no suspect probe is installed in the future.

We have not changed this AD action based on this part of the comment.

Request To Correct Serial Number of Affect Pitot Probe

Andy Feely of CSI stated that the serial number of pitot probe 88912 in the proposed AD is incorrect.

The commenter requested the serial number be corrected to 88192 in the final rule AD action.

We agree with the commenter and have changed this AD action based on this comment.

Request To Allow Maintenance Records Review

Andy Feely of CSI and Ryan Hall of Delta Air Lines stated that operators who have serial number traceability of the affected pitot probes fully documented in their maintenance records should be permitted to do a records review in order to determine location and number of affected probes installed on their airplane(s).

The commenters requested that paragraph (g) of the final rule AD action be changed to include a review of the maintenance records in lieu of a physical inspection of the airplane if the serial number and repair date of the pitot probe can be positively identified.

We agree with the commenter. Many operators keep thorough maintenance records that make it possible to positively identify the serial number of the affected probe and the repair date from a review their maintenance records.

We have changed this AD action based on this comment.

Request To Clarify Compliance

Andy Feely of CSI stated it is not initially clear to owners/operators who have determined, either through inspection of the airplane, through maintenance records review, or that action was already taken before the effective date of this AD to assure that no more than one affected probe remains on the airplane and that two out of the three pitot probes installed on their airplane are not affected are in compliance with certain portions of the proposed AD.

The commenter requested an additional statement be added to paragraph (g) of the final rule AD action to clarify that no further action is required except for the ongoing requirement in paragraph (h)(2) of this final rule AD action if airplane inspection or maintenance records review reveals that no more than one affected probe remains on the airplane.

We agree with the commenter and have changed this AD action based on this comment.

Request To Clarify Replacement Requirement

Andy Feely of CSI stated that in the proposed AD it is unclear when the replacement of the affected pitot probes is required.

The commenter requested to have the words “after the effective date of this AD” removed from paragraph (h)(1) of the final rule AD action.

We do not agree with the commenter. If it is determined that the pitot probes are required to be replaced, as specified in paragraph (h)(1) of the proposed AD, the operator will have two months after the effective date of the final rule AD action to do so.

We have not changed this AD action based on this comment.

Request To Remove Certain Pitot Probes From the Applicability

Andy Feely of CSI stated that as a result of the aggressive voluntary corrective action plan by CSI and the airlines, the serial number listing of the affected pitot probes has been greatly reduced.

The commenter stated that robust traceability by serial number, delivery date, and customer, have allowed CSI and its customers the ability to proactively remove the affected probes for re-repair or scrap. CSI maintains very tight coordination with the affected customers and is aware of the status of all affected pitot probes.

The commenter has requested that many of the pitot probes listed in the Applicability section be removed from the final rule AD action.

We do not agree with the commenter. We disagree with removing the serial numbers of re-repaired or scrapped pitot probes from the Applicability section of the final rule AD action because we do not want to omit serial numbers based on claims that affected parts are already in compliance. We acknowledge that CSI has made significant efforts to remove all affected pitot probes from the

fleet and to communicate their efforts to the FAA; however, after their effort was complete, approximately 100 pitot probes could not be accounted for.

We have not changed this AD action based on this comment.

Request To Extend Compliance Time for Replacement

Robert Holcomb of American Airlines stated that the final rule AD should take into account the burden of costs associated with acquiring additional spares to meet the two-month replacement compliance time.

The commenter stated that American Airlines owns 197 of the affected pitot probes. Of the 197 affected pitot probes, 83 are on active airplanes and 21 of those have been re-repaired. The commenter also stated that American Airlines has not had any failures of the affected pitot probes and currently has 87 active airplanes with potential to have an affected pitot probe installed.

The commenter requested increasing the replacement compliance time to 6 months based on lack of failures on the MD80 fleet, current spare constraints, and turnaround time of re-repaired pitot probes.

We do not agree with the commenter. We received a report about erroneous airspeed data being transmitted from multiple Rosemount Aerospace Model 851AK pitot probes repaired by CSI when installed on a Boeing Aircraft Company Model B717 airplane. Because we cannot say with certainty when or where this unsafe condition will manifest in the pitot probe, we are unable to increase the replacement compliance time to six months without additional justification. If operators have substantiating data to demonstrate that an acceptable level of safety has been met with a change in compliance time or other changes to this AD, we will consider an alternative method of compliance (AMOC) to the final rule AD action on a case by case basis. We do not provide costs beyond initial work hours and parts costs. Therefore, accounting for costs associated with acquiring spares is beyond the scope of our policy.

We have not changed this AD action based on this comment.

Request To Clarify Exclusion of Certain Pitot Probes From the Applicability

Ryan Hall of Delta Air Lines stated that it is not clear in the Applicability section of the proposed AD that pitot probes repaired by CSI on or after August 1, 2014, are not part of the applicability.

The commenter stated that paragraph (c) of proposed rule AD applies to pitot probes that were repaired by CSI and have a serial number listed in paragraph (c)(1) of this AD that are known to be installed on aircraft. However, paragraph (h)(3) of the proposed AD contains the phrase, 'unless it has been repaired by CSI and has a date of August 1, 2014, or later.

The commenter requested that the Applicability section of the final rule AD action be revised to include the statement excluding pitot probes repaired by CSI Aerospace, Inc. after August 1, 2014, from the applicability.

We agree with the commenter and have changed this AD action based on this comment.

Request To Add Removal Requirement

Ralph Isaacson stated that the laser etching, which identifies the manufacturer and serial number, is eventually worn off by environmental conditions, usage, and age.

The commenter stated that in some instances the pitot probes will require removal from the fuselage to clearly identify the mechanically stamped serial number at the inner base of the probe.

The commenter requested that a requirement for removing the pitot probes in order to identify the overhauled pitot probes serial numbers should be added to the final rule AD action.

We partially agree with the commenter. We agree with the possibility that the serial number may not be legible on the outside of the pitot probe because of environmental conditions, usage, age, etc. However, we disagree with adding a requirement to remove the pitot probe during every inspection.

If the serial number is legible from the outside of the pitot probe, this may add an unnecessary burden to the operators. Also, some operators are capable of positively identifying the serial number of the affected pitot probe and the repair date from a review of maintenance records. We have not changed this AD action based on this comment.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have 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.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Costs of Compliance

We estimate that this AD affects 679 products installed on airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated Costs				
Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Inspect to determine the number of defective pitot probes installed on the airplane	1 work-hour × \$85 per hour = \$85	N/A	N/A	\$57,715

We estimate the following costs to do any necessary replacements that will be required based on the results of the inspection. We have no way of determining the number of airplanes that might need these replacements:

On-Condition Costs			
Action	Labor cost	Parts cost	Cost per product
Replace defective pitot probe	1 work-hour × \$85 per hour = \$85	\$6,750	\$6,835

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.

We are 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 small airplanes, gliders, balloons, airships, domestic business jet transport airplanes, and associated appliances to the Director of the 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 that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) 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):



2018-03-04 Rosemount Aerospace, Inc.: Amendment 39-19177; Docket No. FAA-2016-6616; Product Identifier 2016-CE-004-AD.

(a) Effective Date

This AD is effective March 16, 2018.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Rosemount Aerospace, Inc. Model 851AK pitot probes that were repaired by CSI Aerospace Inc. and have a serial number listed in paragraph (c)(1) of this AD that are known to be installed on but not limited to the airplanes listed in paragraph (c)(2) of this AD. Pitot probes that were repaired by CSI Aerospace Inc. that have a repair date of August 1, 2014, or later, are excluded from the applicability.

- (1) 24352, 53257, 61568, 68168, 69913, 69953, 71007, 71802, 71820, 73010, 73406, 75549, 75555, 80489, 80491, 83809, 84200, 84495, 84911, 84922, 85317, 85731, 87225, 87234, 87235, 87241, 87272, 87512, 87551, 87909, 88192, 88622, 90538, 91606, 93291, 93292, 93293, 93305, 93941, 93948, 93960, 94258, 94304, 94559, 94814, 94819, 95150, 95849, 97405, 98194, 99498, 99509, 100105, 100111, 100127, 100313, 100741, 101374, 101500, 102037, 102054, 102309, 102502, 104604, 106134, 106139, 106381, 106905, 107251, 107405, 107406, 107450, 107887, 108174, 108302, 108858, 108859, 108967, 108970, 109119, 109122, 109124, 109128, 109383, 109393, 109394, 109467, 109474, 109488, 109521, 109524, 109537, 109577, 109795, 109798, 109799, 109808, 109810, 109946, 109954, 109958, 109962, 109996, 110323, 110324, 110327, 110338, 110611, 110626, 110880, 110895, 110956, 111061, 111066, 111315, 111320, 111432, 111561, 111571, 111578, 111802, 111807, 112229, 112280, 112343, 112497, 112646, 112657, 112677, 112779, 112781, 112783, 112979, 112993, 113025, 113026, 113129, 113151, 113382, 113721, 113758, 113837, 113838, 113843, 113845, 113920, 113934, 114130, 114147, 114152, 114157, 114223, 114239, 114376, 114572, 114813, 114869, 114872, 114959, 114962A, 114966, 115428, 115713, 116046, 116249, 116253, 116255, 116271, 116424, 116557, 116734, 116792, 116994, 117022, 117144, 117164, 117310, 117412, 117414, 117426, 117427, 117428, 117587, 117961, 118111, 118119, 118234, 118331, 118637, 118639, 118770, 118938, 119115, 119281, 119290, 119414, 119441, 119496, 119587, 119593, 119694, 119695, 119737, 119852, 120456, 120461, 120728, 120823, 120825, 120826, 120829, 121040, 121041, 121110, 121116, 121145, 121172, 121320, 121322, 121524, 121661, 121834, 121852, 122286, 122662, 122843, 122934, 122935, 123286, 123289, 123330, 123745, 123746, 123753, 123767, 124144, 124385, 124390, 124396, 124890, 125016, 125021, 125077, 125163, 125174, 126785, 127449, 127894, 127899, 128302, 128307, 129503, 130371, 130377, 130688, 131422, 131423, 131752, 132065, 132067, 132297, 132825, 133103, 133161, 133220, 133291, 133310, 133313, 133394, 133396, 133512, 133521, 134100, 134102, 134403, 134535, 134537, 134639, 134675, 134681, 135136, 135234, 135246, 135250, 135554, 135561, 135568, 135735, 135743, 136075, 136208, 137049, 137398,

137543, 137544, 137642, 139076, 139081, 139433, 139444, 139691, 139694, 139759, 139763, 139971, 139976, 140188, 140563, 140565, 140643, 140649, 140650, 141161, 141356, 141362, 141497, 141501, 141605, 141607, 142426, 142765, 142774, 142775, 143070, 143405, 143409, 143411, 143418, 143816, 143818, 143988, 143992, 143999, 144591, 144814, 144816, 144976, 144977, 146116, 146835, 147421, 148524, 148765, 148777, 149460, 149464, 149510, 149941, 150196, 150206, 150211, 150212, 150214, 150542, 150725, 151077, 151086, 151095, 151493, 152097, 152819, 152922, 152969, 152974, 152981, 153232, 153233, 153453, 153454, 153625, 153628, 153635, 153641, 153956, 153962, 153966, 153984, 154007, 154156, 154704, 154721, 154738, 154741, 155003, 155042, 155045, 155238, 155278, 155517, 156022, 156025, 156222, 156526, 156529, 156672, 157023, 157137, 157143, 158393, 158790, 158797, 159033, 159036, 159413, 159440, 159891, 160000, 160002, 160006, 160456, 160459, 160463, 160466, 160468, 161137, 161139, 161159, 161177, 161184, 161185, 161363, 161364, 161366, 162376, 162384, 162674, 162682, 162685, 162688, 163176, 163178, 163181, 163557, 163559, 163602, 164217, 164279, 164746, 164750, 164907, 164908, 165135, 165259, 165459, 165805, 166235, 166324, 166325, 166326, 166331, 166477, 166481, 166608, 166671, 166673, 166892, 167029, 167030, 167035, 167037, 167182, 167341, 167556, 167559, 167705, 167707, 167709, 167763, 167764, 167765, 167766, 167811, 195627, 195628, 195706, 195707, 195710, 195796, 195833, 195876, 196041, 196042, 196045, 196137, 196234, 196397, 196400, 196401, 196403, 196498, 196500, 196761, 197097, 197137, 197140, 197143, 197238, 197657, 197874, 198528, 198687, 198775, 198780, 198788, 198872, 198878, 199034, 199042, 199187, 199441, 199613, 199616, 199669, 200293, 200324, 200534, 200535, 200538, 200556, 200737, 200738, 200739, 200793, 200830, 200834, 200872, 201576, 201685, 201733, 201892, 201893, 201964, 202053, 202305, 202306, 202469, 202471, 202472, 202596, 202625, 202633, 202760, 202381, 202879, 202901, 203010, 203016, 203147, 204629, 204665, 204714, 204820, 204821, 204822, 205249, 205253, 205329, 205335, 205526, 205527, 205529, 205700, 205882, 205967, 206273, 206406, 206436, 206441, 206646, 207019, 207020, 207021, 207364, 207369, 207683, 207684, 207837, 207849, 207850, 208206, 208381, 208394, 208396, 208543, 209148, 209698, 209704, 209707, 212176, 212525, 212697, 212700, 213952, 213953, 214085, 214089, 214144, 214795, 214803, 215392, 215476, 216214, 216509, 216515, 216951, 216955, 216957, 217368, 217369, 217382, 217441, 217708, 217805, 218112, 218610, 218613, 218757, 218761, 218958, 218965, 218967, 218970, 218976, 219226, 219228, 219233, 219236, 219411, 219418, 219832, 219840, 219842, 219915, 220990, 220991, 221197, 221286, 221635, 224540, 224700, 224701, 224704, 224707, 224876, 225257, 225262, 225586, 225907, 225910, 225974, 226133, 226136, 226465, 226466, 226467, 227159, 227174, 227836, 227837, 229277, 230190, 230191, 230192, 230193, 231082, 232015, 232681, 232684, 234534, 235621, 235628, 238097, 238179, 239755, 239760, 239956, 239964, 242109, 242998, 243347, 243350, 243351, 245230, 246442, 246792, 246851, 247007, 247302, 250747, 253132, 256326, 256327, 258614, 258861, 258865, 260508, 262743, 262744, 263643, 263644, 263645, 263651, 263700, 264117, 264119, 264122, 264123, 264125, 264193, 264738, 265208, 265210, 265655, 265656, 265657, 265658, 268055, 268562, 268564, 268565, 268566, 272372, 272592, 273833, 273835, 275276, 275658, 275663, 277554, 280433, 280435, 296902, 298059, and 298843.

(2) DC-9-11, DC-9-12, DC-9-13, DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-32F (C-9A, C-9B), DC-9-33F, DC-9-34, DC-9-34F, DC-9-41, DC-9-51, DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), MD-88, MD-90-30, and 717-200.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 3414, Airspeed/Mach Indicator.

(e) Unsafe Condition

This AD was prompted by a report that the pitot probes are indicating the wrong airspeed during flight. We are issuing this AD to prevent incorrect airspeed indications during flight, which could lead to loss of control. Due to design redundancy, this is only applicable if more than one deficient probe is installed.

(f) Compliance

Comply with this AD within the compliance times specified. If the actions required in paragraphs (g) and (h)(1) of this AD have already been done before March 16, 2018 (the effective date of this AD), then only paragraph (h)(2) of this AD applies.

(g) Determine Number of Affected Pitot Probes Installed

Within 30 days after March 16, 2018 (the effective date of this AD), inspect the airplane to determine the number of pitot probes identified in paragraph (c)(1) of this AD that are installed on the airplane. This inspection can be performed through a review of maintenance records in lieu of a physical inspection of the product if the serial number and repair date can be positively identified from the review. If the serial number cannot be positively identified from a review of the aircraft's maintenance records or from the outside of the airplane, this may require the pitot probe to be removed from the fuselage to view the serial number at the inner base of the probe. If it is determined that no more than one pitot probe identified in paragraph (c)(1) of this AD is installed on the airplane, no further action is required except for the ongoing requirement in paragraph (h)(2) of this AD.

(h) Replace Affected Pitot Probes

(1) If it is determined that more than one pitot probe identified in paragraph (c)(1) of this AD is installed on the airplane during the inspection required in paragraph (g) of this AD, within the next 2 months after March 16, 2018 (the effective date of this AD), do one of the following so that no more than one pitot probe identified in paragraph (c)(1) of this AD is installed on any aircraft simultaneously.

(i) Replace the pitot probes that are listed with pitot probes that do not have a serial number listed in paragraph (c)(1) of this AD; or

(ii) Replace the pitot probes that are listed with one that has been properly repaired, and if repaired by CSI, has a repair date of August 1, 2014, or later. This can be done by having the existing pitot probe repaired by CSI Aerospace, Inc.

(2) As of March 16, 2018 (the effective date of this AD), do not install on any airplane a pitot probe having a serial number listed in paragraph (c)(1) of this AD, unless it has been properly repaired, and if repaired by CSI Aerospace, Inc., has a repair date of August 1, 2014, or later.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Fort Worth 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 (j) 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.

(i) Related Information

For more information about this AD, contact Jonathan Kim, Aerospace Engineer, Fort Worth ACO Branch, FAA, 10101 Hillwood Parkway, Fort Worth, Texas 76177-1524; telephone: (817) 222-5131; fax: (817) 222-5245; email: jonathan.kim@faa.gov.

Issued in Kansas City, Missouri, on February 2, 2018.
Melvin J. Johnson,
Deputy Director, Policy & Innovation Division,
Aircraft Certification Service.