DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2016-9345; Directorate Identifier 2016-CE-028-AD; Amendment 39-18801; AD 2017-04-06]

RIN 2120-AA64

Airworthiness Directives; United Instruments, Inc. Series Altimeters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain United Instruments, Inc. 5934 series altimeters that were manufactured between January 2015 and February 2016 and installed in airplanes and helicopters. This AD was prompted by reports of certain altimeters displaying higher than actual altitude due to a slow diaphragm leak, which would affect the accuracy of the altimeters. This AD requires replacing the affected altimeters. We are issuing this AD to correct the unsafe condition on these products.

DATES: This AD is effective April 7, 2017.

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of April 7, 2017.

ADDRESSES: For service information identified in this final rule, contact United Instruments, Inc., 3625 Comotara Avenue, Wichita, KS 67226; telephone (316) 636-9203; fax: (316) 636-9243; email: customerservice@unitedinst.com; Internet: www.unitedinst.com or http://www.unitedinst.com/Products/SpecificationsSheets/d132811.aspx. You may view this referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-9345.

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-2016-9345; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD,
the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: (800) 647-5527) is Document Management Facility, 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: Les Lyne, Aerospace Engineer, FAA, Wichita Aircraft Certification Office, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4190; fax: (316) 946-4107; email: leslie.lyne@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 certain United Instruments, Inc. 5934 series altimeters that were manufactured between January 2015 and February 2016 and installed in airplanes and helicopters. The NPRM published in the Federal Register on November 7, 2016 (81 FR 78083). The NPRM was prompted by a report that certain 5934 series altimeters that were manufactured between January 2015 and February 2016 may display higher than actual altitude. These altimeters are susceptible to developing a slow diaphragm leak, which would affect the accuracy of the altimeters. It has been determined that insufficient removal of chemical substance on the diaphragm assembly during the production process of the altimeter caused the misleading display of altitude data. The NPRM proposed to require replacing the affected altimeters. We are issuing this AD to prevent display of misleading altitude data, which could result in inadvertent flight into terrain.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM or on the determination of the cost to the public.

Conclusion

We reviewed the relevant data and determined that air safety and the public interest require adopting this AD as proposed except for minor editorial changes. We have determined that these minor changes:

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

Related Service Information Under 1 CFR Part 51

We reviewed United Instruments, Inc. Service Bulletin No. 13, dated March 25, 2016. The service bulletin describes procedures for replacing the nonconforming altimeters. 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

We estimate that this AD affects 1,351 altimeters as installed in airplanes and helicopters of U.S. registry.

We estimate 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>Replace altimeter</td>
<td>1 work-hour × $85 per hour = $85</td>
<td>$1,600</td>
<td>$1,685</td>
<td>$2,276,435</td>
</tr>
</tbody>
</table>

According to the manufacturer, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have 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.

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.

### 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):
2017-04-06 United Instruments, Inc.: Amendment 39-18801; Docket No. FAA-2016-9345; Directorate Identifier 2016-CE-028-AD.

(a) Effective Date

This AD is effective April 7, 2017.

(b) Affected ADs

None.

(c) Applicability

This AD applies to United Instruments, Inc. 5934 series altimeters that were manufactured between January 2015 and February 2016 and installed in airplanes and helicopters.

   (1) The specific affected serial number altimeters can be found in United Instruments, Inc. Service Bulletin No. 13, dated March 25, 2016. Paragraph (j)(3) of this AD contains addresses for obtaining the service bulletin.

   (2) Altimeters that have been corrected by United Instruments, Inc. following Service Bulletin No. 13, dated March 25, 2016, are not affected by this AD and no further action is necessary.

   (3) Altimeters that have been corrected by United Instruments, Inc. can be identified by a yellow dot, approximately 1/4 inch (6 mm) in diameter, located approximately 1 inch (25 mm) to the left side of the nameplate. The corrected altimeters will also have a letter “M,” approximately 1/8 inch (3mm) high, metal stamped on the nameplate after the name “ALTIMETER.”

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 44, Cabin Systems.

(e) Unsafe Condition

This AD was prompted by reports of certain altimeters displaying higher than actual altitude due to a slow diaphragm leak. We are issuing this AD to prevent display of misleading altitude data, which could result in inadvertent flight into terrain.

(f) Compliance

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

(g) Replacement

Within the next 12 months after April 7, 2017 (the effective date of this AD), replace any affected altimeter with a serviceable part following United Instruments, Inc. Service Bulletin No. 13, dated March 25, 2016.
(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Wichita Aircraft Certification Office (ACO), 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, send it to the attention of the person identified in paragraph (i) 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 Les Lyne, Aerospace Engineer, FAA, Wichita ACO, 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4190; fax: (316) 946-4107; email: leslie.lyne@faa.gov.

(j) 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.

(ii) Reserved.

(3) For United Instruments, Inc. service information identified in this AD, contact United Instruments, Inc., 3625 Comotara Avenue, Wichita, KS 67226; telephone (316) 636-9203; fax: (316) 636-9243; email: customerservice@unitedinst.com; Internet: www.unitedinst.com or http://www.unitedinst.com/Products/SpecificationsSheets/d132811.aspx.

(4) You may view this service information at FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available on the internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2016-9345.

(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 Kansas City, Missouri, on February 6, 2017.
Kelly A. Broadway,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.