DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0548; Project Identifier MCAI-2021-00046-T]

RIN 2120-AA64

Airworthiness Directives; ATR-GIE Avions de Transport Régional Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for all ATR-GIE Avions de Transport Régional Model ATR42-500 and ATR72-212A airplanes. This proposed AD was prompted by reports indicating that certain Thales global positioning system (GPS) satellite based augmentation system (SBAS) receivers provided, under certain conditions, erroneous outputs on aircraft positions. This proposed AD would require replacing affected GPS SBAS receivers with new, improved receivers, as specified in a European Union Aviation Safety Agency (EASA) AD, which is proposed for incorporation by reference. The FAA is proposing this AD to address the unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

• Federal eRulemaking Portal: Go to https://www.regulations.gov. Follow the instructions for submitting comments.

• Fax: 202-493-2251.

• Mail: U.S. Department of Transportation, Docket Operations, M-30, West
• Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m.,
Monday through Friday, except Federal holidays.

For material that will be incorporated by reference (IBR) in this AD, contact
EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999
000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this IBR
material on the EASA website at https://ad.easa.europa.eu. You may view this IBR
material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200
South 216th St., Des Moines, WA. For information on the availability of this material at
the FAA, call 206-231-3195. It is also available in the AD docket on the Internet at

Examining the AD Docket

You may examine the AD docket on the Internet at https://www.regulations.gov
by searching for and locating Docket No. FAA-2021-0548; 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 NPRM, any comments received, and other information. The
street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Shahram Daneshmandi, Aerospace
Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South
216th St., Des Moines, WA 98198; phone and fax: 206-231-3220; email:
shahram.daneshmandi@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about
this proposal. Send your comments to an address listed under ADDRESSES. Include
“Docket No. FAA-2021-0548; Project Identifier MCAI-2021-00046-T” at the beginning of your comments. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend the proposal because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to https://www.regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this proposed AD.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this NPRM contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this NPRM, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this NPRM. Submissions containing CBI should be sent to Shahram Daneshmandi, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3220; email: shahram.daneshmandi@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.
**Background**

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0013, dated January 13, 2021 (EASA AD 2021-0013) (also referred to as the Mandatory Continuing Airworthiness Information, or the MCAI), to correct an unsafe condition for all ATR-GIE Avions de Transport Régional Model ATR42-500 and ATR72-212A airplanes.

This proposed AD was prompted by reports indicating that Thales GPS SBAS receivers provided, under certain conditions, erroneous outputs on aircraft positions. The manufacturer developed a new, improved receiver which incorporates improved software and ensures correct navigational performance. The FAA is proposing this AD to address erroneous aircraft position outputs from the GPS SBAS receivers, which could result in controlled flight into terrain, and consequent loss of control of the airplane.

Although paragraphs (2) and (3) of EASA AD 2021-0013 require amending the applicable AFM, the FAA has determined that this requirement is not necessary. The FAA received verification from the manufacturer that the unsafe condition in this proposed AD will be addressed by replacing the GPS SBAS receivers with new, improved receivers. However, the GPS procedures added to the AFM as required by AD 2020-08-02, Amendment 39-21108 (85 FR 20586, April 14, 2020) (AD 2020-08-02), must be removed, as specified in paragraph (h)(2) of this proposed AD.

See the MCAI for additional background information.

**Related AD**

AD 2020-08-02 applies to certain Thales GPS SBAS receivers installed on airplanes (including Model ATR42-500 and ATR72-212A) and helicopters. AD 2020-08-02 requires the installation of a software update to the aircraft navigation database and insertion of a change to the applicable airplane flight manual (AFM). The FAA issued AD 2020-08-02 to address erroneous aircraft position outputs from the
affected Thales GPS SBAS receivers, which could result in controlled flight into terrain and loss of the aircraft. AD 2020-08-02 corresponds to EASA AD 2019-0004, dated January 11, 2019. Upon completion of EASA AD 2021-0013 by Model ATR42-500 and ATR72-212A airplanes, all requirements of EASA 2019-0004 are effectively terminated for those airplanes.

**Related Service Information under 1 CFR Part 51**

EASA AD 2021-0013 describes procedures for replacing certain GPS SBAS receivers with new, improved receivers. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

**FAA’s Determination and Requirements of this Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA’s bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI referenced above. The FAA is proposing this AD because the FAA evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

**Proposed AD Requirements**

This proposed AD would require accomplishing the actions specified in EASA AD 2021-0013 described previously, as incorporated by reference, except for any differences identified as exceptions in the regulatory text of this AD, and except as discussed under “Difference Between this Proposed AD and the MCAI.” Accomplishment of the requirements of this AD would terminate all requirements of AD 2020-08-02 for Model ATR42-500 and ATR72-212A airplanes.
**Difference Between this Proposed AD and the MCAI**

Although certain service information specified in EASA AD 2021-0013 specifies the inclusion of MOD 10046 in the AFM List of Modifications (LOM), this proposed AD does not include this requirement. Instead, after accomplishment of the actions in this proposed AD, operators would be required to remove the AFM revisions for the GPS reset procedures that are required by FAA AD 2020-08-02, because the unsafe condition in this proposed AD will be addressed by the GPS SBAS receiver replacement. This difference has been coordinated with ATR and EASA.

**Explanation of Required Compliance Information**

In the FAA’s ongoing efforts to improve the efficiency of the AD process, the FAA initially worked with Airbus and EASA to develop a process to use certain EASA ADs as the primary source of information for compliance with requirements for corresponding FAA ADs. The FAA has since coordinated with other manufacturers and civil aviation authorities (CAAs) to use this process. As a result, EASA AD 2021-0013 will be incorporated by reference in the FAA final rule. This proposed AD would, therefore, require compliance with EASA AD 2021-0013 in its entirety, through that incorporation, except for any differences identified as exceptions in the regulatory text of this proposed AD. Using common terms that are the same as the heading of a particular section in the EASA AD does not mean that operators need comply only with that section. For example, where the AD requirement refers to “all required actions and compliance times,” compliance with this AD requirement is not limited to the section titled “Required Action(s) and Compliance Time(s)” in the EASA AD. Service information specified in EASA AD 2021-0013 that is required for compliance with EASA AD 2021-0013 will be available on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0548 after the FAA final rule is published.
Costs of Compliance

The FAA estimates that this proposed AD affects 15 airplanes of U.S. registry.

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

<table>
<thead>
<tr>
<th>Estimated costs for required actions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Labor cost</strong></td>
</tr>
<tr>
<td>2 work-hours X $85 per hour = $170</td>
</tr>
</tbody>
</table>

*The manufacturer will provide replacement receivers at no cost to the operators. The FAA has received no definitive data on which to base the cost estimates for these parts.

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 determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would 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 proposed regulation:

(1) Is not a “significant regulatory action” under Executive Order 12866,
(2) Would not affect intrastate aviation in Alaska, and
(3) Would 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 Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 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):

   ATR-GIE Avions de Transport Régional: Docket No. FAA-2021-0548; Project Identifier MCAI-2021-00046-T.

(a) Comments Due Date

   The FAA must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected Airworthiness Directives (ADs)

   This AD affects AD 2020-08-02, Amendment 39-21108 (85 FR 20586, April 14, 2020) (AD 2020-08-02).
(c) Applicability

This AD applies to all ATR-GIE Avions de Transport Régional Model ATR42-500 and ATR72-212A airplanes, certificated in any category.

(d) Subject

Air Transport Association (ATA) of America Code 34, Navigation.

(e) Reason

This AD was prompted by reports that Thales global positioning system (GPS) satellite based augmentation system (SBAS) receivers provided, under certain conditions, erroneous outputs on aircraft positions. The FAA is issuing this AD to address the potential for these erroneous outputs, which could result in controlled flight into terrain, and consequent loss of control of the airplane.

(f) Compliance

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

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, European Union Aviation Safety Agency (EASA) AD 2021-0013, dated January 13, 2021 (EASA AD 2021-0013).

(h) Exceptions to EASA AD 2021-0013

(1) Where EASA AD 2021-0013 refers to its effective date, this AD requires using the effective date of this AD.

(2) The requirements specified in paragraphs (2) and (3) of EASA AD 2021-0013 do not apply to this AD. Instead, the AFM changes required by AD 2020-08-02 must be removed from the existing AFM before further flight after compliance with all other actions required by this AD.

(3) The “Remarks” section of EASA AD 2021-0013 does not apply to this AD.

(i) Terminating Action for AD 2020-08-02
Accomplishment of this AD terminates all requirements of AD 2020-08-02 for Model ATR42-500 and ATR72-212A airplanes.

(j) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, Large Aircraft Section, International Validation 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 responsible Flight Standards Office, as appropriate. If sending information directly to the Large Aircraft Section, International Validation Branch, send it to the attention of the person identified in paragraph (k)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA; or EASA; or ATR-GIE Avions de Transport Régional’s EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(k) Related Information

(1) For information about EASA AD 2021-0013, contact EASA, Konrad-Adenauer-Ufer 3, 50668 Cologne, Germany; telephone +49 221 8999 000; email ADs@easa.europa.eu; Internet www.easa.europa.eu. You may find this EASA AD on the EASA website at https://ad.easa.europa.eu. You may view this material at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des
Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. This material may be found in the AD docket on the Internet at https://www.regulations.gov by searching for and locating Docket No. FAA-2021-0548.

(2) For more information about this AD, contact Shahram Daneshmandi, Aerospace Engineer, Large Aircraft Section, International Validation Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; phone and fax: 206-231-3220; email: shahram.daneshmandi@faa.gov.

Issued on June 30, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives, Compliance & Airworthiness Division, Aircraft Certification Service.

[FR Doc. 2021-14360 Filed: 7/6/2021 8:45 am; Publication Date: 7/7/2021]