

S1 interrogating pulses below the MTL. We are issuing this proposed AD to prevent interrogating aircraft from possibly receiving inaccurate replies due to suppression from aircraft equipped with the GTX 330/330D Mode S Transponders when the pulses are below the MTL. The inaccurate replies could result in reduced vertical separation or unsafe TCAS resolution advisories.

DATES: We must receive any comments on this proposed AD by February 3, 2004.

ADDRESSES: Use one of the following to submit comments on this proposed AD:

- *By mail:* FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-CE-39-AD, 901 Locust, Room 506, Kansas City, Missouri 64106.

- *By fax:* (816) 329-3771.

- *By e-mail:* 9-ACE-7-Docket@faa.gov.

Comments sent electronically must contain "Docket No. 2003-CE-39-AD" in the subject line. If you send comments electronically as attached electronic files, the files must be formatted in Microsoft Word 97 for Windows or ASCII.

You may get the service information identified in this proposed AD from GARMIN International Inc., 1200 East 151st Street, Olathe, KS 66062, 913-397-8200.

You may view the AD docket at FAA, Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-CE-39-AD, 901 Locust, Room 506, Kansas City, Missouri 64106. Office hours are 8 a.m. to 4 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Roger A. Souter, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: 316-946-4134; facsimile: 316-946-4107; email address: roger.souter@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

How Do I Comment on This Proposed AD?

We invite you to submit any written relevant data, views, or arguments regarding this proposal. Send your comments to an address listed under

ADDRESSES. Include "AD Docket No. 2003-CE-39-AD" in the subject line of your comments. If you want us to acknowledge receipt of your mailed comments, send us a self-addressed, stamped postcard with the docket number written on it. We will date-stamp your postcard and mail it back to you.

Are There Any Specific Portions of This Proposed AD I Should Pay Attention To?

We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. If you contact us through a nonwritten communication and that contact relates to a substantive part of this proposed AD, we will summarize the contact and place the summary in the docket. We will consider all comments received by the closing date and may amend this proposed AD in light of those comments and contacts.

Discussion

What Events Have Caused This Proposed AD?

The GTX 330/GTX 330D may detect from other aircraft the S1 (suppression) interrogating pulse below the MTL and, in some circumstances, does not reply. The GTX 330/330D should still reply even if it detects S1 interrogating pulses below the MTL. GARMIN International Inc. suspected the suppression problem after observation between GARMIN company aircraft that were equipped with the GTX 330 and Ryan Traffic and Collision Alert Device (TCAD). Engineering bench tests and test flights confirmed that this suppression problem existed.

What Are The Consequences If the Condition Is Not Corrected?

Interrogating aircraft could possibly receive inaccurate replies due to suppression from aircraft equipped with the GTX 330/330D Mode S Transponders when the pulses are below the MTL. The inaccurate replies could result in reduced vertical separation or unsafe TCAS resolution advisories.

Is There Service Information That Applies To This Subject?

GARMIN International Inc. has issued the Software Service Bulletin No.: 0304, Rev B, dated June 12, 2003.

What Are the Provisions of This Service Information?

The service bulletin includes:

- Modification instructions for upgrading to software version 3.03 and
- A listing of parts required to perform the modification.

FAA's Determination and Requirements of This Proposed AD

What Has FAA Decided?

We have evaluated all pertinent information and identified an unsafe

condition that is likely to exist or develop on other products of this same type design. Therefore, we are proposing AD action.

What Would This Proposed AD Require?

This proposed AD would require you to incorporate the actions in the previously-referenced service bulletin.

How Does the Revision to 14 CFR Part 39 Affect This Proposed AD?

On July 10, 2002, we published a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs FAA's AD system. This regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. This material previously was included in each individual AD. Since this material is included in 14 CFR part 39, we will not include it in future AD actions.

Costs of Compliance

How Many Airplanes Would This Proposed AD Impact?

We estimate that this proposed AD affects 1300 airplanes in the U.S. registry.

What Would Be the Cost Impact of This Proposed AD on Owners/Operators of the Affected Airplanes?

GARMIN International Inc. will cover all workhours and parts cost associated with this modification under warranty. The proposed AD would not impose any cost upon the owners/operators of any airplane that has the GTX 330/330D Software Upgrade to Version 3.03 installed.

Compliance Time of This Proposed AD

What Would Be the Compliance Time of This Proposed AD?

The compliance time of this proposed AD is within 30 days after the effective date of the AD.

Why Is the Compliance Time Presented in Calendar Time Instead of Hours Time-In-Service (TIS)?

The unsafe condition exists or could develop on airplanes equipped with the affected equipment regardless of airplane operation. For example, the unsafe condition has the same chance of occurring on an airplane with 50 hours TIS as it does on one with 5,000 hours TIS. Therefore, we are presenting the compliance time of the proposed AD in calendar time instead of hours TIS.