# GA Antenna Series Instructions for Continued Airworthiness

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Aircraft tail number	
Antenna location on aircraft	

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#### **Record of Revision**

Rev.	Date	Description of Change	
D	08-21-06	Initial STC Issuance	
Е	11-29-06	Added GA 35 Antenna	
F	08-27-07	Added GA 36 & GA 37 Antennas	

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#### 1. INTRODUCTION

#### 1.1 Purpose

This document is designed for use by the installing agency of the antenna models listed in Table 1 below as Instructions for Continued Airworthiness in response to Federal Aviation regulation (FAR) Part 23.1529, and Part 23 Appendix G. They include information required by the operator to adequately maintain the antenna models listed in Table 1.

## 1.2 Scope

This document identifies the Instruction for Continued Airworthiness for the modification of the aircraft for installation of the antenna models listed in Table 1.

**Table 1 - List of Antenna Models** 

Manufacturer	Antenna Model	Description
Garmin	GA 35	GPS/WAAS Antenna
Garmin	GA 36	GPS/WAAS Antenna
Garmin	GA 37	GPS/WAAS with XM Antenna
Garmin	GA 55	XM Antenna
Garmin	GA 55A	XM Antenna
Garmin	GA 56W	GPS/WAAS Antenna
Garmin	GA 56A	GPS/WAAS Antenna
Garmin	GA 57	GPS/WAAS with XM Antenna
Garmin AT	A-34	GPS/WAAS Antenna

#### 1.3 Document Control

This document shall be released, archived, and controlled in accordance with Garmin document control system. When this document is revised, refer to Section 2.15 for information on how to gain FAA acceptance or approval and how to notify customers of changes.

#### 1.4 Airworthiness Limitations Section

There are no additional Airworthiness Limitations as defined in 14 CFR § 23, Appendix G. G23.4 that result from this modification. The Airworthiness Limitations section is FAA approved and specifies maintenance required under §§43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

#### 1.5 Permission to Use Certain Documents

Permission is granted to any corporation or person applying for approval of the antenna models listed in Table 1 to use and reference appropriate STC documents to accomplish the Instructions for Continued Airworthiness and show compliance with STC engineering data. This permission does not construe suitability of the documents. It is the responsibility of the applicant to determine the suitability of the documents for the ICA.

#### 1.6 Definitions

The following terminology is used within this document:

- 1) AC: Advisory Circular
- 2) ACO: Aircraft Certification Office
- 3) AEG: Aircraft Evaluation Group
- 4) CFR: Code of Federal Regulations
- 5) **DER:** Designated Engineering Representative
- 6) FAA: Federal Aviation Administration
- 7) IAW: In Accordance With
- 8) ICA: Instructions for Continued Airworthiness
- 9) MFD: Multi-Function Display unit
- 10) PMI: Primary Manufacturing Inspector
- 11) POI: Primary Operations Inspector
- 12) STC: Supplemental Type Certificate
- 13) **TC:** Type Certification or Type Certificate
- 14) TSO: Technical Standard Order

#### 2. INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

#### 2.1 Introduction

Distribution:

Content, Scope, Purpose and Arrangement: This document identifies the Instruction for Continued Airworthiness for the modification of the aircraft by installation of the antenna models listed in Table 1. Applicability: Applies to aircraft altered by installation of the antenna models listed in Table 1. Definition of Abbreviations: See Section 1.6 Precautions: None Units of measurement: None 190-00569-00 Rev. F STC Antenna Installation Referenced publications: Manual (or later FAA approved revisions) 005-C0373-00 Rev. F Garmin GA Antenna Series Master Data List

This document should be included in the

permanent aircraft records.

### 2.2 Description of Alteration

Physical installation of the antenna models listed in Table 1.

# 2.3 Control, Operating Information

There are no pilot controls or operating information. All pilot controls and operating information is through the interfaced receiver unit.

# 2.4 Servicing Information

The antenna models listed in Table 1 are non-repairable. The antenna must be replaced in event of failure.

#### 2.5 Periodic Maintenance Instructions

This STC is for physical installation and mounting of the antenna models listed in Table 1 and does not include functional operation. The antenna models listed in Table 1, when interfaced to other receiving equipment, are functionally tested by the interfaced receiver.

Within 12 calendar months, conduct a visual inspection on the antenna and its mounting.

## 2.6 Troubleshooting Information

Troubleshooting is performed with the interfaced receiving unit.

# 2.7 Removal and Replacement Information

If the antenna is removed and replaced, verify proper operation by successfully completion of the self test of the interfaced receiving equipment.

Penetration of the pressure vessel of a pressurized aircraft is not approved under this STC installation.

Note: There are no special handling requirements for the antennas.

#### 2.8 Diagrams

Refer to the STC Antenna Installation Manual (listed under reference documentation in section 2.1 of this document) for drawings applicable to this installation. There are no wiring diagrams since this STC does not provide wiring interconnections. Location of the antenna varies with aircraft and installation, but must mounted with RF transparent view of the sky. Refer to the cover page of this document for the mounting location of the antenna specific to the aircraft tail number.

#### 2.9 Special Inspection Requirements

Verify there are no cracks on the antenna. Verify there are no cracks or deformation in the mounting structure around the antenna. Verify all sealing fillets around the antenna are good condition.

#### 2.10 Application of Protective Treatments

None, N/A.

#### 2.11 Data Relative to Structural Fasteners

For fastener torque information, refer to the STC Antenna Installation Manual listed in the reference documentation in section 2.1 of this document.

# 2.12 Special Tools

No special tools are required. Refer to the STC Antenna Installation Manual listed in reference documentation in section 2.1 of this document.

# 2.13 Additional Instructions for Aircraft Operating under FAR 121/135

- 1. Aircraft Electrical Loads: There is no power connection to the antenna. The only interface to the antenna is from the receiving equipment. Power loads are addressed with the interfaced receiving equipment.
- 2. Methods of balancing flight controls: N/A.
- 3. Special Repair Methods applicable to the airplane: See certificate holder's General Maintenance Manual for instructions.

#### 2.14 Overhaul Period

This STC is for physical installation and mounting of the antenna(s) and does not include functional operation. The antenna(s) do not require overhaul at a specific time period. Antenna health is monitored and self-test conducted by the interfaced GPS/WAAS and XM receivers.

#### 2.15 ICA Revision and Distribution

To revise this ICA, a letter must be submitted to the ACO for approval along with the revised ICA. The ACO will obtain AEG acceptance, and approve any revision to the Airworthiness Limitations Section 1.4. After FAA acceptance/approval, Garmin will release the revised ICA for customer use, and provide any required notification of the revision.

The latest revision of this document will be available on the Garmin website (www.garmin.com). A Garmin Service Bulletin, describing ICA revision, will be sent to dealers if revision is determined to be significant.

#### 2.16 Assistance

Flight Standards Inspectors or the certificate holder's PMI have the required resources to respond to questions regarding this ICA. In addition, the customer may refer questions regarding this equipment and its installation to the manufacturer, Garmin. Garmin customer assistance may be contacted during normal business hours via telephone 913-397-8200 or email from the Garmin web site at garmin.com.

# 2.17 Implementation and Record Keeping

Modification of an aircraft by this Supplemental Type Certificate obligates the aircraft operator to include the maintenance information provided by this document in the operator's aircraft maintenance manual and/or operator's aircraft scheduled maintenance program.