

Apollo GX55 GPS STC Master Drawing List

II Morrow Inc.
2345 Turner Rd SE
Salem, OR 97302

June 17, 1997
Part #: 560-1000-00 Rev --

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STC Master Drawing List**

Part Number: 560-1000-00
Document Revision: --
Date: June 17, 1997

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Revision Log

Rev	Date	Description	EN	By	Auth	Chk
--	6/17/97	Initial release.		RAS		

II Morrow Inc. A United Parcel Service Company		P. O. Box 13549 Salem, Oregon USA	
Title:	Apollo GX55 GPS STC Master Drawing List	Number:	560-1000-00 Rev -
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1. INTRODUCTION

1.1 PURPOSE

The purpose of this document is to provide the data required to support the installation of the II Morrow Apollo GX55 GPS in a Partenavia P68 series aircraft in accordance with STC Requirements. The GX55 is a TSO-C129 Class A2 supplemental navigation system installed for use under VFR (Visual Flight Rules) or IFR (Instrument Flight Rules) conditions for oceanic, enroute and terminal operations.

1.2 SCOPE

This document applies to the II Morrow Apollo GX55 GPS. This document includes general installation information as well as, included by reference, other data required for the installation and STC.

2. STC DOCUMENTS

The documents listed in this section and used with this STC must be of the revision listed or other FAA approved revisions.

2.1 REQUIRED FOR INSTALLATION

The following documents are required for the installation:

- II Morrow P/N 560-0960-00, Apollo GX55 GPS Installation Manual
- II Morrow P/N 560-1001-00, Apollo GX55 GPS System Configuration Index

One of the following is required, depending on antenna used.

- II Morrow P/N 560-0949-01, A33 GPS Antenna Installation Guide
- II Morrow P/N 560-5047-00, A34 GPS Antenna Installation Guide

2.2 RELATED DOCUMENTS

The following documents contain information related to the initial STC but are not required for follow-on installations:

- II Morrow P/N 560-1008-00, Apollo GX55 GPS Partenavia P68C Installation Description
- II Morrow document PD1063, Rev -, Apollo GX Series VHF Comm / GPS Safety Analysis
- II Morrow document PD1069, Rev -, Apollo GX55 GPS Flight Test Plan (Initial Airworthiness - P68C)
- II Morrow document PD1086, Rev B, N3832P, Partenavia P68C Electrical Load Analysis

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2.2.1 Reference Documents

The following documents are used as reference for the installation:

- FAA AC 43.13-1A, Acceptable Methods, Techniques, and Practices - Aircraft Inspection and Repair
- FAA AC 43.13-2A, Acceptable Methods, Techniques, and Practices - Aircraft Alterations
- FAA AC 20-138, Airworthiness Approval of Global Positioning System Navigation Equipment for Use as a VFR and IFR Supplemental Navigation System

3. EQUIPMENT CONFIGURATION

The configuration of the equipment must be verified using the Apollo GX55 GPS System Configuration Index, II Morrow P/N 560-1001-[00 Rev-] or later approved document. This document also lists proper revisions of the user and installation manuals and appropriate antennas.

4. GENERAL INSTALLATION REQUIREMENTS

4.1 GENERAL

The installation must be done in accordance with all applicable FARs.

Mechanical installation, wiring, cable bundling and routing, and connections to existing aircraft systems must conform to those specific instructions or requirements found in the STC data. In any area where specific installation instructions or requirements are not provided in the STC data, the installer shall conform to the recommended practices and procedures found in AC 43.13-2A, Chapter 2, *Radio Installations*, and Chapter 3, *Antenna Installations*; AC 43.13-1A, Chapter 11, *Electrical Systems*, sections 2-4 and 7.

4.2 HARDWARE

Hardware not supplied with the equipment, or otherwise specified in the appropriate installation manuals or other STC data (e.g., screws, nuts, ...) should be selected from standard aircraft hardware as described by AC 43.13-1A, Chapter 5, *Aircraft Hardware*.

4.3 WIRING

All wire used in the installation should be of appropriate standard aircraft quality grade and size as described in AC 43.13 1A, Chapter 11, section 3, *Electric Wire*.

4.4 CIRCUIT PROTECTION

All circuits must be protected in accordance with AC 43.13-1A, Chapter 11, section 2, paragraph 429, *Circuit Protection Devices*.

4.5 ELECTRICAL LOAD ANALYSIS

An electrical load analysis should be performed on each aircraft, as described in AC 43.13-1A, Chapter 11, section 2.

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4.6 FLIGHT MANUAL SUPPLEMENT

4.6.1 VFR Installation

The equipment may be installed limited to VFR use only as long as the airworthiness considerations described in AC 20-138, section 7, Airworthiness Criteria for GPS Installations Used as a Supplemental Navigation System Limited to Visual Flight Rules (VFR) Only, have been met.

An AFM supplement or supplemental flight manual is not required for installations limited to VFR use only provided:

- a) the complexity of the installation does not require an AFM or supplemental flight manual to describe limitations, and
- b) VFR limitation placard, stating "GPS Limited to VFR Use Only," or an FAA approved equivalent statement is installed in clear view of, and readable by, the pilot

4.6.2 IFR Installation

An FAA approved AFM supplement is required for the Apollo GX55 GPS when installed for IFR operation. The FAA approved AFM supplement, II Morrow P/N 560-1009-00 Rev - (or later FAA approved), can be used to prepare the AFM supplement for follow-on installations.

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V I S I O N A R Y T H I N K I N G T O D A Y

