
AIRWORTHINESS DIRECTIVE

For the reasons set out in the background section, the CASA delegate whose signature appears below issues the following Airworthiness Directive (AD) under subregulation 39.1 (1) of CASR 1998. The AD requires that the action set out in the requirement section (being action that the delegate considers necessary to correct the unsafe condition) be taken in relation to the aircraft or aeronautical product mentioned in the applicability section: (a) in the circumstances mentioned in the requirement section; and (b) in accordance with the instructions set out in the requirement section; and (c) at the time mentioned in the compliance section.

Radio Communication and Navigation Equipment

AD/RAD/82 Prevent GPS Navigation unit from Providing 9/2004 Erroneous Cross-Deviation

Applicability: Garmin AT, formerly UPS Aviation Technologies, Apollo GX50/55/60/65 TSO-C129a global positioning system (GPS) navigation units as listed below with software versions 3.0 through 3.4 inclusive:

Model	Part Number	Description	Modification Level
GX50	430-6050-400	Approach Certified GPS	With any of the following mods: (H), (N), (P), (T) or (U); prior to (V)
	430-6050-401	Approach Certified GPS	Prior to (V)
	430-5060-402	Approach Certified GPS	Prior to (V)
GX55	430-6050-200	Enroute/Terminal Certified GPS	With any of the following mods: (E), (J), (K), (M) or (N); prior to (R):
	430-6050-201	Enroute/Terminal Certified GPS	With any of the following mods: (E), (J), (K), (M) or (N); prior to (R)
	430-6050-202	Enroute/Terminal Certified GPS	Prior to (R)
	430-6050-203	Enroute/Terminal Certified GPS	Prior to (R)

Radio Communication and Navigation Equipment

AD/RAD/82 (continued)

GX60	430-6050-600	Approach Certified GPS/COM	With any of the following mods: (H), (N), (S), (AB) or (AC);prior to (AE)
	430-6050-601	Approach Certified GPS/COM	With any of the following mods: (H), (N), (S), (AB) or (AC); prior to (AE)
	430-6050-602	Approach Certified GPS/COM	Prior to (AE)
	430-6050-603	Approach Certified GPS/COM	Prior to (AE)
	430-6050-604	Approach Certified GPS/COM	Prior to (AE)
GX65	430-6050-800	Enroute/Terminal Certified GPS/COM	With any of the following mods: (F), (L), (P), (Y) or (AA); prior to (AC)
	430-6050-801	Enroute/Terminal Certified GPS/COM	With any of the following mods: (F), (L), (P), (Y) or (AA); prior to (AC):
	430-6050-802	Enroute/Terminal Certified GPS/COM	Prior to (AC)
	430-6050-803	Enroute/Terminal Certified GPS/COM	Prior to (AC)
	430-6050-804	Enroute/Terminal Certified GPS/COM	Prior to (AC)

Note 1: The above table was sourced from UPS Aviation Technologies Service Bulletin 561-4002-001, dated 19 April 2002, which was referenced in FAA AD 2004-13-20 and the certification in the table refers to the FAA TSO C-129a class of the unit.

Radio Communication and Navigation Equipment

AD/RAD/82 (continued)

- Requirement:
1. Modify and test the software for the Apollo GX50/55/60/65 TSO-C129a GPS navigation unit by accomplishing all of the actions specified in paragraphs 3.B. and 3.C. of Service Bulletin (SB) 561-4002-001, dated 19 April 2002.
 2. Reidentify the modified Apollo GX50/55/60/65 TSO-C129a GPS navigation unit, according to paragraph 3.D. of SB 561-4002-001.

Note 2: FAA AD 2004-13-20 Amdt 39-13702 refers.

Compliance: For Requirement 1 - Within six months after the effective date of this Directive.

For Requirement 2 - Immediately following completion of Requirement 1.

This Airworthiness Directive becomes effective on 2 September 2004.

Background: The United States Federal Aviation Administration (FAA) has advised that, under certain conditions, Garmin AT, Apollo GX series GPS navigation units with software versions 3.0 to 3.4 may provide erroneous cross-deviation information, which could result in the aircraft deviating from its intended course for a brief period of time. This erroneous information may place an excessive workload on the flightcrew while they monitor other available navigation data to avoid deviating off course.

To prevent the GPS unit from providing erroneous information, this Directive requires modification and testing of the software for the GPS navigation units.



Bernard Malcolm Hole
Delegate of the Civil Aviation Safety Authority

20 July 2004