



Document Number:	601-00006-075
Title:	PFD Mandatory Service Bulletin
Revision:	00
Date:	4 May 2007

1. Planning Information

1.1 Distribution/Eligibility

This Service Bulletin may be distributed only to those groups indicated below with a check mark:

<i>Group</i>	<i>Distribution?</i>
Avidyne internal	√
Avidyne-authorized Service Facility	√
Avidyne Web Post	√
Avidyne-authorized Installer	√
Avidyne OEM customers	√
End-use customers, owners and operators	√

1.2 Description

This Service Bulletin provides information on known incompatibilities between Garmin 400W/500W-series navigators and Avidyne Primary Flight Displays. It includes mandatory operational limitations for aircraft with certain combinations of equipment and recommends against new or updated installations in affected configurations.

1.3 Reason

This **MANDATORY SERVICE BULLETIN** communicates important safety information concerning aircraft equipped with Avidyne EXP5000 Primary Flight Displays (“Avidyne PFDs”) and Garmin 400W/500W-series navigators with WAAS (“Garmin WAAS navigators”).

BACKGROUND INFORMATION

Garmin International recently introduced upgrades to its 400/500-series GPS navigators to incorporate support for the Wide Area Augmentation System (WAAS). The new models are designated the



400W/500W-series. This equipment is available both as new production and as upgrades to previously purchased 400/500-series navigators.

Many Garmin 400/500-series navigators are installed in airplanes equipped with Avidyne PFDs. Operators may wish to take advantage of the improved accuracy and added features of the Garmin WAAS navigators.

Avidyne has discovered a serious incompatibility between the Garmin WAAS navigators and all Avidyne PFDs installed as of the date of this publication. The Garmin WAAS navigators make use of extended precision in transmitting course deviation data while on GPS approaches. The use of this extended precision was not anticipated in the development of the Avidyne PFD. As a result, the PFD may erroneously display a centered HDI/CDI needle on final approach when an off-center indication is appropriate.

As of this date, there is no information in either Garmin's installation data or Avidyne's installation data to indicate compatibility of this equipment, nor is there any approval basis in an STC held by Garmin or Avidyne or any TC held by any airplane manufacturer. Nevertheless, it has come to Avidyne's attention that upgrades of existing installations from 400/500-series navigators to 400W/500W-series navigators in airplanes equipped with Avidyne PFDs may have been performed via some form of field approval.

Avidyne is preparing a modification to the PFD that will correct this incompatibility. Until this modification is available and performed, compliance with the instructions of Section 3 of this Service Bulletin is mandatory.

1.4 Effectivity/Compatibility

This service bulletin applies to all airplanes equipped with Avidyne EXP5000 Primary Flight Displays (P/N 700-00006-(-) with software P/N 530-00183-(-) Rev 01 or earlier P/N or revision), and Garmin 400W/500W-series navigator(s).

1.5 Compliance

This Service Bulletin is mandatory. The operational limitations listed below must be observed until a compatible configuration of the Avidyne PFD and Garmin WAAS navigator(s) is installed.

1.6 Approval

The engineering data underlying the accomplishment instructions contained in Section 3 are FAA approved. No other portion of this service bulletin is FAA approved.

1.7 Reference

None

1.8 Publications Affected

None

2. Material – Cost and Availability

Not Applicable.



3. Accomplishment Instructions

3.1 Operational Limitation

Until a compatible configuration of Avidyne PFD and Garmin WAAS navigators is installed on an affected airplane, the following operational limitation is to be observed:

No GPS approaches of any type may be flown. Only LOC, ILS and VOR approaches (by means of VOR, not by means of GPS) may be flown.

3.2 Additional Instructions

Avidyne strongly recommends against upgrades of Garmin 400/500-series navigators to 400W/500W-series in affected airplanes until a compatible Avidyne PFD software version is available and installed.

Owners of airplanes on which such an upgrade has already been performed should contact Avidyne immediately at 888-723-7592.