



Garmin USA, Inc. 1200 East 151st Street Olathe, Kansas 66062 PH: 913/397.8200 Fax: 913/397.8282

GNS 480/CNX80 User Newsletter

Ninth Edition

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Paul Damschen, GNS480/CNX80 Certification Manager

STC Amendment for the GNS 480/CNX80 is complete

The good news is that the STC Amendment that approves application software version 2.3 and GPS WAAS engine software version 3.2 is now complete. In the prior newsletter we had discussed the major new features of this amendment, and some things have changed along the way. We'll discuss some of those changes here, which included minor changes from v2.2 to 2.3 and GPS engine software v3.1 to 3.2.

More LPV Approaches than ILS Approaches

GPS navigation passed a real benchmark that I would not have predicted would happen this quickly when we first certified the GNS 480/CNX80 as the world's first LPV approach capable GPS navigation system. There are now more LPV approaches all over the United States than ILS approaches, totaling 1333 LPV approaches at over 833 airports.

The FAA has stated they will create 500 more per year until all LPV capable runways are served by LPV approaches. Here at Garmin we've seen the effects as the navigation database has grown exponentially with the additional published GPS approaches. In fact, it's becoming hard to remember when I last flew to an IFR capable airport that didn't have a GPS approach with vertical guidance of some kind. WAAS has truly changed the way we fly today.

Larger WAAS envelope in place

As mentioned, this STC amendment is for the inclusion of application v2.3 and GPS WAAS engine software v3.2. These software upgrades and antenna upgrade (if applicable) offer numerous feature enhancements and removal of previously imposed AFMS limitations and brings the GNS 480/CNX80 into full TSO C146a compliance.

This Service Bulletin (#0850) package will also include a new Pilot's Guide and Flight Manual Supplement (Rev G) which will allow the installer to check the configuration of your installation and determine full TSO compliance. This modification is warranty reimbursable with a deadline of December 31, 2009, after which this upgrade will no longer be warranty reimbursable.

It is highly recommended that you take advantage of this upgrade; earlier software versions contain internal memory size limitations that will eventually cause your GNS 480 to stop functioning if this upgrade is not installed. (This limitation will likely be exceeded within the next calendar year.)

GPS WAAS software version 3.2 was also included in this STC Amendment. The WAAS envelope has been substantially increased in size over the last two years, and now covers Alaska, Canada, and extends well south into Mexico and Caribbean. To see the current WAAS envelope go to:
http://www.nstb.tc.faa.gov/Full_VerticalProtectionLevel.htm

This revision to the GPS WAAS engine software allows the GPS engine to process the upper latitude atmospheric corrections properly.

Other Common Questions

AC90-100 compliance has also been a common question, and we mentioned this in the last newsletter. The GNS 480 (CNX80) has been added to the AC once again and is fully compliant with a Type 2 LOA.

This software version also has an improved MapMX interface which supports the new G600 system. The G600 is a retrofit Primary and Multi-Function Display which includes the air data computer and Attitude Heading Reference System (AHRS) from our award winning G1000 integrated system. For more information on the G600 you can visit our minisite at: <http://www8.garmin.com/buzz/g600/>.

The latest GNS 480 units were shipped with 64MB cards, however older units were shipped with 32MB cards. It is highly recommended you upgrade to a 64MB card. As mentioned, the number of WAAS approaches has greatly increased the size of the database and your 32MB card will no longer be sufficient in size. For a limited time, these cards will be made available, tested and certified, for \$65.

We have had a few questions regarding external interfaces. When configuring devices with the 480, only approved sources may be used. The Shadin FADC is a non-certified altitude source. Refer to the GNS 480 (CNX80) Installation Manual, Garmin P/N 560-0982-01, Appendix C, for approved altitude sources.

We hope this system upgrade meets your needs and leads to an even greater satisfaction with Garmin products.

We appreciate your loyalty!

Please let us know if you have any questions or comments. We do appreciate your feedback allowing us to directly address your questions, concerns, and provide you with the best customer service we can.

We would like to extend our appreciation for your support of Garmin products.

Please feel free to contact us by visiting www.garmin.com and send your comments to the technical support group (support.salem@garmin.com): Attention Paul Damschen, Flight Test.

This Newsletter along with the first eight editions can be found on the web at:
www.garmin.com/products/gns480/