GNS 480 SW Version 2.4 Upgrade Supplement

This supplement provides information regarding new features of software version 2.4 for GNS 480.

There was no change to the GNS 480 Cockpit Reference Guide.

The following document was revised to Revision G to include information for new features of the software upgrade v2.4 for the GNS 480 (refer to Service Bulletin 1519 and STC Service Bulletin 1521):

- GNS 480 Pilot's Guide & Reference,
  Garmin AT Part Number 560-0984-01 Rev. G (Garmin P/N 190-00502-00 Rev D)

The combination of the documents listed below at revision F and this supplement, P/N 190-01917-00 are equivalent to Revision G of the document listed above.

- GNS 480 Pilot's Guide & Reference
  Garmin AT Part Number 560-0984-01 Rev. F (Garmin P/N 190-00502-00 Rev C)

and

- GNS 480 SW Version 2.4 Upgrade Supplement
  Garmin AT Part Number 560-01917-00 Rev. A

Current documents are available at www.garmin.com/manuals for free download.

Printed copies may be purchased by contacting Garmin Customer Support.

GNS 480 (CNX 80) Pilot's Guide

Annunciations - Page 11-12

The LP +V procedure type was added.

Annunciation	Description
GPS	Indicates GPS is being used as the navigation source. Appears in lower left corner of the display.
VOR/ILS/LOC	Indicates VOR/ILS/LOC is being used as the navigation source. Appears in lower left corner of the display.
ENR	Appears to the right of the "GPS" annunciator when in En Route mode. When > 30 nm from departure or destination and not on departure or arrival procedure. CDI resolution is ± 2 nm.
TERM	Appears to the right of the "GPS" annunciator when performing approach navigation within 30 nm of departure or arrival airport. CDI resolution is ± 1 nm.
APPR	Appears to the right of the "GPS" annunciator when GPS approach is active, and on Final Approach course (i.e. VTF or FAF, MAP, or the first Missed Approach waypoint is active. CDI resolution is variable for all approaches and becomes more sensitive as you near the runway.
LOI	"LOI" (Loss of Integrity) appears on the left side of the map display when WAAS/GPS is unable to calculate the integrity of the position or calculated integrity is insufficient to support the current phase of flight.
BC	The Back Course annunciation appears to the right of "LOC" when the Back Course Localizer mode is enabled.
DR	The Dead Reckoning annunciator appears on the left side of the map display when GPS position is unavailable and the GNS 480 is in Dead Reckoning mode. Dead Reckoning mode will continue until GPS position is restored or the first Pilot Nav leg is reached.
PTK	The Parallel Track annunciator appears in the lower left corner of the display when parallel track is active.
SUSP	Suspend annunciation appears in the lower left corner of the display when automatic sequencing of waypoints in the active flight plan is suspended.
M	Message annunciation appears in the lower left corner of the display when a message is available for viewing. A blinking "M" indicates a new message.
VTF	Vector To Final annunciation appears in the lower left corner of the display when "Vector To Final" approach mode is active, which may be activated manually or automatically.
ALT	Appears for Lnav/Vnav, Lnav+V, or LPV approaches when the aircraft's estimated height is lower than the Final Approach waypoint height by more than the current VPL plus 50 meters.

CDI Window	Shows course deviation, heading, or PILOT NAV.
CDI Window: Rwy Dist/Brg	Shows distance To runway and a bearing direction indicator for LPV, LNAV, Lnav+V, and Lnav/Vnav approaches.
CDI Window: FLAGGED	No active guidance is available for the selected Nav source (VHF Nav radio or GPS receiver). For GPS, the usual causes are Loss of GPS position, Loss Of Integrity, or inadequate GPS HPL or VPL on the Final Approach leg.
CDI Window: HDG xx°	Displayed when a PILOT NAV Heading Leg is the active flight plan leg. The current heading is shown. If heading information is not available, the field is dashed.
CDI Window: PILOT NAV	Guidance is not provided on this leg by the GNS 480. Use other flight instruments to fly this leg.
TFC, TFC Fail, TFC STBY, TFC Test, TFC N/A	Status of the external traffic source.
LPV, LP, Lnav/Vnav, Lnav	LPV is for GPS precision approaches. Amber indicates the current vertical (VPL) or horizontal protection level (HPL) exceeds the alarm limit. Green indicates the VPL and HPL are acceptable for LPV or Lnav/Vnav approaches (WAAS environment). LP indicates Localizer Performance with no vertical guidance. LPV indicates Localizer Performance with vertical guidance. Lnav/Vnav indicates an Lnav approach with vertical guidance. Lnav indicates an Lnav-only approach with no vertical guidance.
LP +V	LP +V indicates Localizer Performance with advisory vertical guidance. Fly LP minimums down to the MDA and missed approach location. This annunciation is available in SW Ver 2.4, or later.
Lnav+V	GPS approach using published LNAV minima. Advisory vertical guidance is provided.

Nav/HSI Display (NAV) - Page 32

In the Nav/HSI Display section, LP +V was added to the annunciation description.

LPV, LP, Lnav/Vnav, Lnav+V, or Lnav annunciations are centered and appear below the compass rose when these approaches are active. The approach type is displayed in green if HPL and VPL alarm limits are met and yellow if they do not.

Search for All Nearest Airports/Helipads - Page 41

This section was updated to include PINS.

Some airports/helipads, such as water landings or Point in Space (PINS) approaches, will only be displayed when the following settings are used.

1. Press the **More** key and then **Limits**.

2. Select Runway Type: Hard/Soft/Water.

3. Select Runway Length: All Length.

4. Select Night Lighting: Not required.

5. Press Enter.

Enable SBAS Providers - Page 118

This section was updated to describe the selection of multiple SBAS providers.

Normally the best selection of satellites for SBAS coverage is automatically selected. You may manually enable or disable specific SBAS providers. Normally all SBAS providers should be enabled, but there may be some situations where it may be useful to disable an SBAS provider or when required by local regulatory agencies.

1. Press the **CRSR** knob to start editing.

2. Turn the **Large** knob to highlight the Enable WAAS selection (WAAS, EGNOS, MSAS, etc.).

3. Turn the **Small** knob to change the value.

4. Press the **Menu/Enter** key to save the value.