

ClearNav Vario

CNv 3.5 Beta Release-General Comments

All new features are available only with an XC license

The 3.5 Beta release incorporates all changes made since the last public release, 3.3.3899.

To use the new features in this release, you **MUST** use a **profile** which has been produced from the **CNvUtility3.5** which is included with this beta release. See the CNvUtility v3.5 Release Notes and Instructions.

Be sure to follow the Instructions for software and Utility installation.

Be sure to review the CNvario Manual Addendum - 3.5.4089 for more details and explanation.

http://clearnav.net/main/cn-vario_manual_addendum.html

The improvements in this release have been focused on supporting the pilot in flying faster – better cruising, better support for the decision of when to stop and climb, improved cruise/climb transition, and better cruise/climb averages.

Our pre-beta testers are enthusiastic about this release. We hope you will be too. Please feel free to give us feedback on the Forum on our website after you have flown with it.

And there is more to come!

David Masson 29/6/2016

CNvario Software Release Notes v3.5.4089 beta

29th June, 2016

Underlying Variometry Improvements

- Cruise averagers redesigned to work in a similar way to climb averagers
- Speed-to-fly driven by improved cruise averagers
- Relative netto is now polar-based
- Speed-to-fly dead band options
- Initial climb average improved

New Variometry features

- Cruising speed-to-fly support
 - block speed option (target speed based on MC, glider polar and wingloading; audio deadband selectable)
 - classic speed-to-fly with selectable audio deadband
- Deadband control screen (none, narrow, medium, wide) for block speed and other audio deadbands.
- TE option for audio, pointer and cruise average

- Pre-empt Climb option – when flying slow enough in good air, TE audio is used and a TE average is displayed
- Circle average (instead of 20 second average) results in a more stable climb average.

Notes Mac Users:

If you download the .zip files using a Mac and then open them you may end up with filenames which looks like this:

- CNv-3.5.4089-Beta-20160629_ADC01.UPD
- CNv-3.5.4089-Beta-20160629\CNv.UPD
- CNv-3.5.4089-Beta-20160629\default-au.cnv
- CNv-3.5.4089-Beta-20160629\default-metric.cnv
- CNv-3.5.4089-Beta-20160629\default-uk.cnv
- CNv-3.5.4089-Beta-20160629\default-us.cnv

These will not be recognized by the CNv when you attempt to update

Just rename to files by deleting all file name information on the left up to and including the "\" character.

Vario Audio improvements

- Audio frequencies aligned so when switching between netto, relative netto, and TE, there is no noticeable transition. Relative Netto is still recommended for cruise audio.
- New speed up/slow down tones
 - Speed-up tone: a distinctive, insistent “bom-bom-bom-bom” when flying too slowly for the airmass
 - Slow-down tone: a “bib-bip.....bib-bip....” every 4 seconds if you are flying too fast for the airmass

Recommended Initial Setup

- Create a profile in the CNvUtility v3.5 and on the Vario page, select the options circled in the illustration shown below in the CNvUtility Release Notes.
- In the CNvario (Vario Settings Ribbon) set the cruise time constant to 10 seconds. This affects the cruise averages, the rate of change of the STF number, and the initial climb average after switching to climb.
- Also in the Vario Settings Ribbon, set the audio and pointer time constants to a value between 0.6 – 1.0 seconds.
- After gaining some experience with this software, the various settings may be adjusted to meet your needs.

Other enhancements

- User setting for low voltage warning which is useful for non-lead acid batteries
- NavDisplay, Analog Display and all gps-driven graphics updated at 5Hz
- Some fast changing numbers are now displayed slower to make them more readable (eg: averages)
- Climb mode may be triggered using the left arrow button on the NavDisplay Flight Screen. (Click for momentary climb, or press and hold for forced climb)
- Thermal Map tool accessible from the Thermal Assistant screen by the up or down arrows. Pressing Go when viewing the map will access setup choices.

Bug fixes

- Waypoint STX file reader fixes - lower case now works in \$fields:
 - "\$ALTITUDE_UNIT feet"
 - "\$LATITUDE" and "\$LONGITUDE" north
- Task declaration from SeeYouMobile/Oudie now works when a turning point name is > 20 characters.
- Task declaration from SeeYouMobile/Oudie sometimes failed when changing command mode, as the new prompt was sent twice. Now the prompt (eg “dow>”) is only sent once. This fix might cause problems if other 3rd party software relies on the incorrect behavior.