RELEASE NOTES

RELEASE NOTICE

This is the February 2024 release notice for **Oceaneering® C-NavX1** GNSS receiver firmware version 1.0.6.5

REVISION HISTORY

Revision	Release Date	Change Details	Author
D	6 - Feb - 2024	v1.0.6.5 firmware operational release	Ben Dean
C	02 - Nov - 2023	v1.0.5.1 firmware operational release	Ben Dean
B	22 - Sep – 2023	v1.0.5.1 firmware release in new global format	Ben Dean
A	10 - Aug - 2023	v1.0.5.1 firmware release	Ben Dean

RELEASE AUTHORIZATION

Title	Signature	Date
Russel Morton	*Russell Morton*	06 - Feb - 2024

PRECEDING DOCUMENT DETAILS

Revision	Release Date	Change Details	Author
2	18 - Jan - 2023	v1.0.4.1 firmware release	Ben Dean
1	28 - Jul - 2022	v1.0.2.3 firmware release	Ben Dean
0	14 – Jul - 2023	Initial Release	Ben Dean

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1   OVERVIEW

This is the release notice for C-NavX1® GNSS receiver firmware version 1.0.6.5

This document describes the changes, improvements and the new features added since the previous formal release of version 1.0.5.1

2   REFERENCES

Document Number	Document Title
CNAV-MAN-061	C-NavX1 GNSS Receiver User Guide.
CNAV-MAN-062	C-NavX1 Firmware Update Installation Procedure.
CNAV-MAN-063	C-NavX1 RINEX Procedure.
CNAV-BUL-0002	C-NavX1 Age of Correction Data Bulletin.

3   IMPORTANT NOTES

- This firmware will only function in C-NavX1® GNSS receivers.

- Update the receiver with a consistent ensemble of firmware.

- Extract the ZIP file contents to a new folder to ensure that all the correct firmware and documentation are in one location and there is no mixing of old and new firmware.

- Always install the new firmware with the antenna connected and in an area, where the receiver can track satellites.

- **Always wait for 1 minute prior to power cycling the receiver after installing the firmware.**

4   FIRMWARE CHANGES / IMPROVEMENTS

- Fixed baud rate/NMEA output setting preservation after power cycle of the C-NavX1®.

- C-NavX1® will no longer behave as a DHCP server.

- C-NavX1® remote UDP port no longer fixed to a local value.

- Fixed LTE Pending status loop when service not internal SIM not activated on the network.

- Internal logging reverted to binary format to enable improved QC analysis capability (users requiring RINEX files will need to send the binary files to C-Nav for conversion)

- Velocity North/East/Up fields populated in PVT1B message for display in the extended navigation menu in C-Controller.

- NMEA VTG / RMC Course over ground fields populated.

- Filter changes to resolve NMEA VTG CoG values.

5 FIRMWARE ZIP FILE CONTENTS

This C-NavX1® GNSS receiver firmware is distributed in a compressed ZIP file. The ZIP file includes the following contents:

Filename	Version	Comments
1.0.6.5.img.gz	1.0.6.5	Zipped firmware image
CNAV-MAN-062 (C-NavX1 Firmware Update Installation Procedure)	1	Firmware loading instructions
CNAV-RN-0006, Rev D (C-NavX1 Firmware Release Notice)	D	This document
CNAV-MAN-063 (C-NavX1 RINEX Procedure)	1	RINEX instructions
C-NavX1 Firmware Updater	1.0.1	Windows application for firmware loading
TPS2RIN RINEX Application	1.0.28.3459	Zipped executable

6 SOFTWARE UPDATE APPLICATION

This firmware has been tested and is intended to be used with the following versions of controller:

Software	Version	Tick off
C-Setup	9.3.0 and newer	☑
C-Monitor QA/QC Software	9.3.0 and newer	☑
C-NaviGator	9.3.0 and newer	☑
C-Scape	9.3.0 and newer	☑

Updates located on SharePoint C-Nav Software / Released Versions, in the corresponding software folders. At time of release on the public facing website.

7 KNOWN ISSUES

- Only one controller can be connected on COM ports and one on ETH ports simultaneously.

- Data output rate is fixed at 1Hz.

- Web-UI restricted for future use.

- Unable to connect to the C-NavX1® upon initial power up until first position fix.

- TXRXINFOA not correctly populated for USB port resulting in display of cumulative port usage rather than current.

- For C-NavX1 S/N 0229 or lower, there is a known error when restarting the C-NavX1 with the USB connected to a host whereby the C-NavX1 will not boot up. (USB needs to be disconnected prior to restart).

- VTG output copies the CMG (true) value to the CMG Magnetic value. The CMG magnetic should be a null field.