Subject: Software update for C-40 Indicator

Helicopters Affected: All aircraft with a C-40 Indicator P/N 210-293-00 or 210-293-01 installed.

Parts Affected: P/Ns listed in Table 1.

Table 1 Affected Part Numbers

210-293-00
210-293-01

Note: This change does not apply to 210-293-01 with "Amdt. A" listed on the serial tag.

Compliance: Recommended

Ownership: Please review this information and determine if the equipment is still in your possession. If the equipment is no longer in your possession, please forward this service bulletin to the current owner, or to your customer, as applicable.

Description: The C-40 indicator has a known issue where in certain circumstances the "Interference Error" message would display erroneously, disrupting the normal load sensing operations of the C-40 Indicator.

A software update has been released which disables this interference error detection, alleviating these nuisance messages occurring during normal operation.

Action: To comply with this bulletin, download and install the updated software per the instructions herein.

Manpower: Approximately 1 man-hour, performed by a technician, will be required for implementation.

Required Materials/Parts: Download software from Onboard Systems web site.

Special Tools: USB flash drive, computer with USB port and internet access

Weight and Balance: N/A

Electrical Load Data: N/A

References: N/A

Publications Affected: The following publications can be downloaded from the company web site by visiting the following link:

C-40 Owner's Manual (120-152-00)
https://www.onboardsystems.com/document/view/120-152-00

Contact Information: Technical support question regarding this bulletin can be addressed through the following contact methods:

    Phone: 360-546-3072
    E-mail: techhelp@onboardsystems.com
    Web: https://www.onboardsystems.com/support/technical

Disposition of Parts Removed: N/A

Material/Part Availability: N/A.

Accomplishment Instructions:

The software to be installed is dependent on the part number of the C-40 Indicator. The applicable software for each configuration is per the table below.

C-40 Indicator P/N and Amdt (if applicable)	Download Software Version:	C-40 Indicator P/N and Amdt after Update
210-293-00	V01-06.00-07	No Change
210-293-01	V01-07.00-08	No Change

Updates are loaded via the C-40 Indicator's USB port on the back of the indicator. It may be necessary to remove the C-40 from its mounted position to view the screen or to access the USB port on the back. Leave the C-40 connected to the wire harness.

USB port

1. Download the applicable software from Onboard Systems web site depending on part number of the C-40 Indicator.
    https://www.onboardsystems.com/product/210-293-00
    or
    https://www.onboardsystems.com/product/210-293-01

    Software version part number compatibility is listed in Table 4.1 of the C-40 Owner's Manual.

2. Unzip the two files (100-06X-00.pdi and 100-06X-00.hex) and place them in the root folder of a USB drive. Remove USB flash drive from the computer.

3. Ensure the C-40 Indicator is powered up. Plug the USB drive into the USB port on the back of the C-40 Indicator. Go to the settings menu and select "Load Firmware".

4. An advisory screen will appear; rotate the knob to change the NO to YES and press to select. Follow the remaining prompts until the indicator displays "Firmware updated". See troubleshooting in section 5.2 of the C-40 owner's manual (manual no. 120-152-00) if needed.

Figure 1 Update Firmware Screen

Updating firmware will retain all user settings such as the cal code, analog output maximum, units and hook hours. Settings should be verified prior to operation.

5. Verify the version at startup (or select the information screen from settings) matches the new version installed. Remove the USB flash drive from the C-40 Indicator after the software version is verified.

Figure 2 Verify Version

6. Perform an "Installation Zero" operation. Installation Zero function is intended to be executed after the initial installation of the load weigh and cargo hook system is completed to remove or zero the weight of equipment installed below the load cell (e.g. - cargo hook) *and* account for the nominal no-load output of the load cell.

   Selecting Installation Zero will bring up an advisory screen (**Figure 3**). To proceed rotate the knob to change the NO to YES and press the knob to continue to the Installation Zero screen. This function should be performed each time the load cell is removed and replaced.

Figure 3 Installation Zero Advisory Screen

Press the knob to set the installation zero and the screen will return to the Settings menu.

Figure 4 Installation Zero Set Screen

7. If the C-40 Indicator was removed, re-install it according to the applicable Owner's Manual for the STC.

Compliance Recording:

Record compliance with this Service Bulletin No. 159-056-00 in the helicopter log book.

Revision	Date	Reason for Revision
0	10/28/24	Original Issue