SERVICE BULLETIN
SB-120722-A

ID NUMBER & REVISION:	SB-120722-A
SUBJECT:	Auto Pilot Runaway Trim Condition (Garmin G3X Software Update)
RELEASE DATE:	12/14/2022
EFFECTIVE DATE:	12/14/2022
SUPERSEDES NOTICE:	N/A

AIRCRAFT AFFECTED: **MAKE & MODEL:**   ICON A5

SERIAL NUMBERS: ASN: 00152, 00154, 00155, 00158, 00159, 00161 – 00163

REQUIRED ACTION: Disable the autopilot until Garmin software 9.13 and ICON configuration file are installed. The autopilot can be re-enabled and operated once the software is installed.

TIME OF COMPLIANCE: Before next flight

REVISION HISTORY: **A**   Initial Release

LEVEL OF CERTIFICATION REQUIRED (any level checked can perform task):

- ☒ Pilot/Owner
- ☐ LSA Repairman – Inspection
- ☒ LSA Repairman – Maintenance
- ☒ A & P
- ☒ Certified Repair Station
- ☒ Manufacturer

PURPOSE:

Garmin recently released a Service Bulletin (SB) number 22112 Rev B indicating that there is a potential for a runaway trim condition when the autopilot is engaged. The runaway trim condition is an automatic and un-commanded movement of the trim. This condition is typically recognized upon the first engagement of the autopilot. An un-commanded pitch moment will occur as well as trim indicator movement.

ASSEMBLIES AND PARTS:

PART NUMBER	DESCRIPTION	QUANTITY	ALTERNATE	
			PART NUMBER	DESCRIPTION
N/A	Garmin G3X Software 9.13	1		
N/A	ICON 1.0 Configuration File	1		

IF APPLICABLE, SERVICE KITS:

KIT NUMBER	CONTENT PARTS	DESCRIPTION	QUANTITY
None			

INSTRUCTIONS:

NOTE: Disable the autopilot until the Garmin software version 9.13 is uploaded, and the ICON 1.0 configuration file is installed.

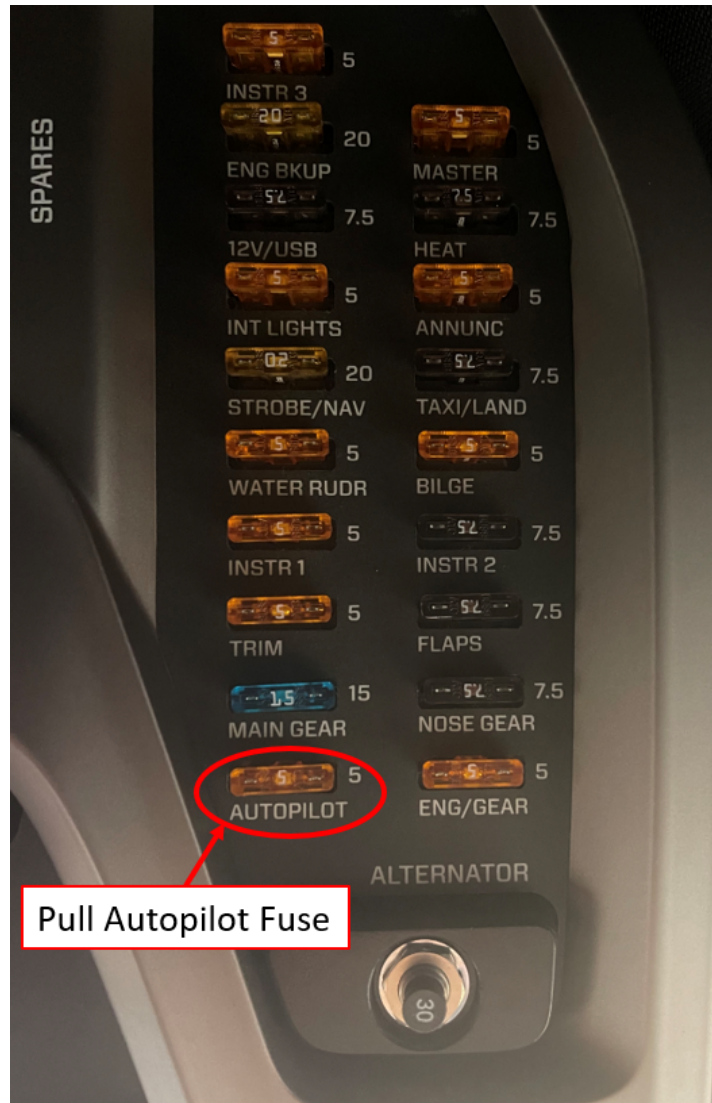1. Remove the autopilot fuse (see Figure 1) from the overhead fuse panel

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Figure 1 Overhead Fuse Panel

2. Affix an "INOP" label onto the face of the autopilot controller, as shown in Figure 2.

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Figure 2 INOP Label

NOTE: At this point the aircraft is safe to fly without the autopilot.

3. To fly the aircraft with an operable autopilot, proceed to "Software 9.13 Plus ICON 1.0 configuration file" instructions below

Software 9.13 Plus ICON 1.0 configuration file
1. Download the Garmin software version 9.13 onto a SD card
    a. The software can be downloaded here.
    b. Select: **GDU 4xx Cockpit Display** for your desired operating system
    c. Select your inserted Software SD card as the download location for the software
    d. Once downloaded, open folder titled "Garmin"
    e. Inside "Garmin" folder, create new folder titled "config"
    f. Download ICON 1.0 configuration file and transfer into "config" file on the software SD card.

NOTE: The ICON 1.0 configuration file shall be obtained from an authorized ISP or ICON headquarters in Vacaville California.
2. Ensure that aircraft master power is off
3. Insert the SD card into the SD slot at the bottom of the Garmin G3X Touch display
    a. See Figure 2

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Figure 3 SD Card Slot and Menu Button

4. When "Update Software" windows populates, select "Yes"
    a. See Figure 3

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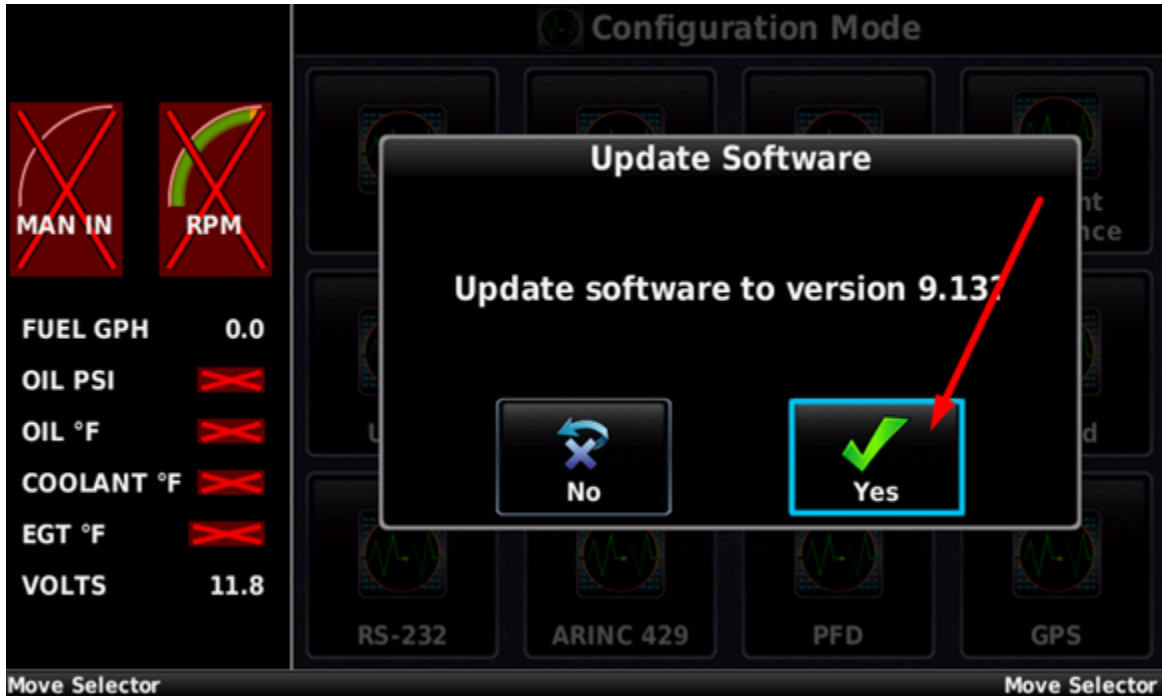
Figure 4 Update Software Screen

5. The Garmin G3X will automatically update the software, DO NOT turn off the aircraft power until the software is fully updated. This can be confirmed when message "Software update in progress-Do not remove power" is no longer shown. This can be found by selecting "Messages" at bottom of screen
   a. See Figures 4 and 5
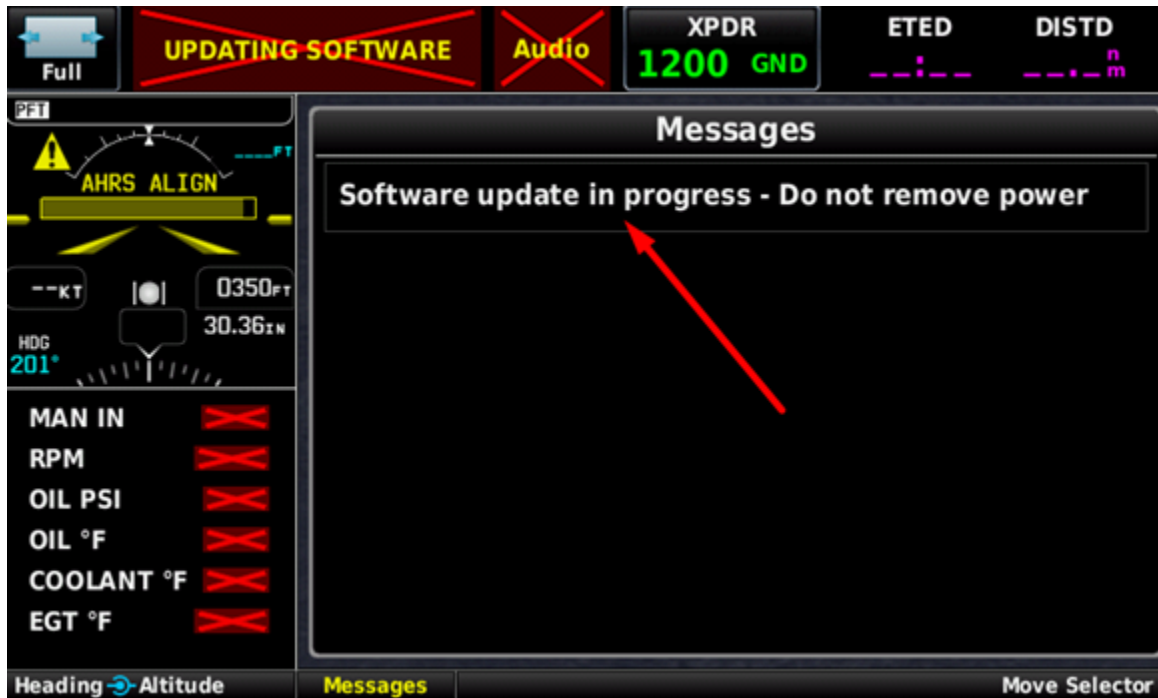
Figure 5 Messages

Figure 6 Update Message

6. The software is fully updated when the message "Software update in progress- Do not remove power" disappears
7. The update will take several minutes
8. Once the software is fully updated, reboot the G3X by
   a. Simultaneously holding the NRST, MENU, and BACK buttons
   b. Once the boot screen appears, hold only the MENU button until the configuration load screen appears
      i. See Figure 3
9. Once in configuration mode, click "Config Files"
   a. See Figure 6
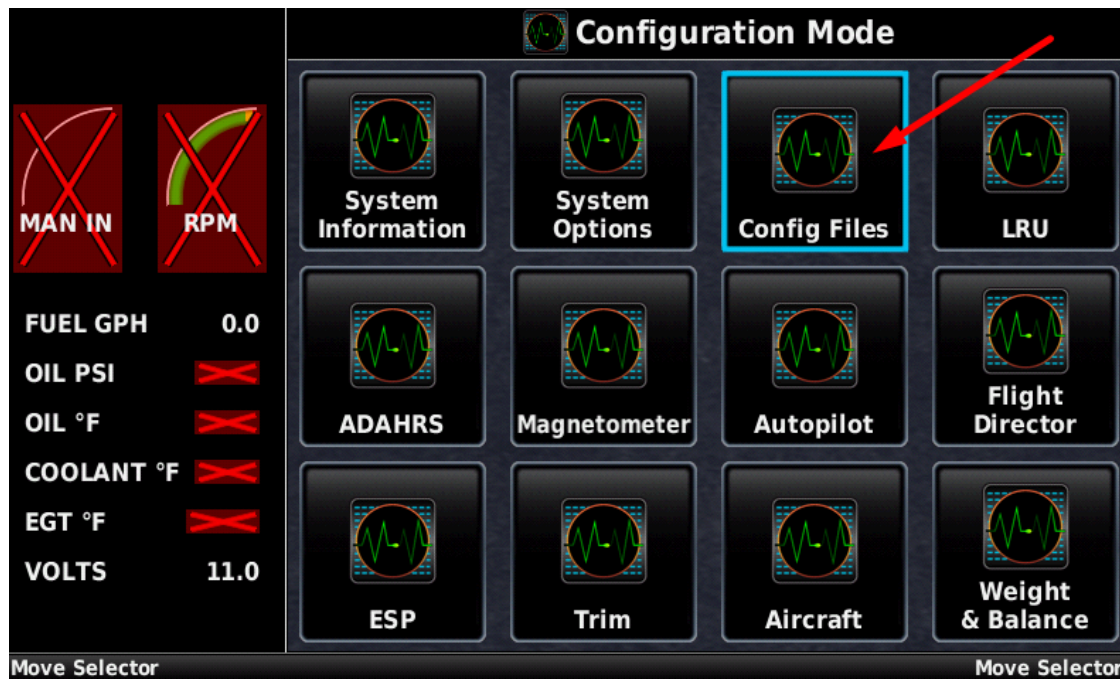
Figure 7 Configuration Mode Screen

10. The configuration file on the SD card will be shown
    a. See Figure 7
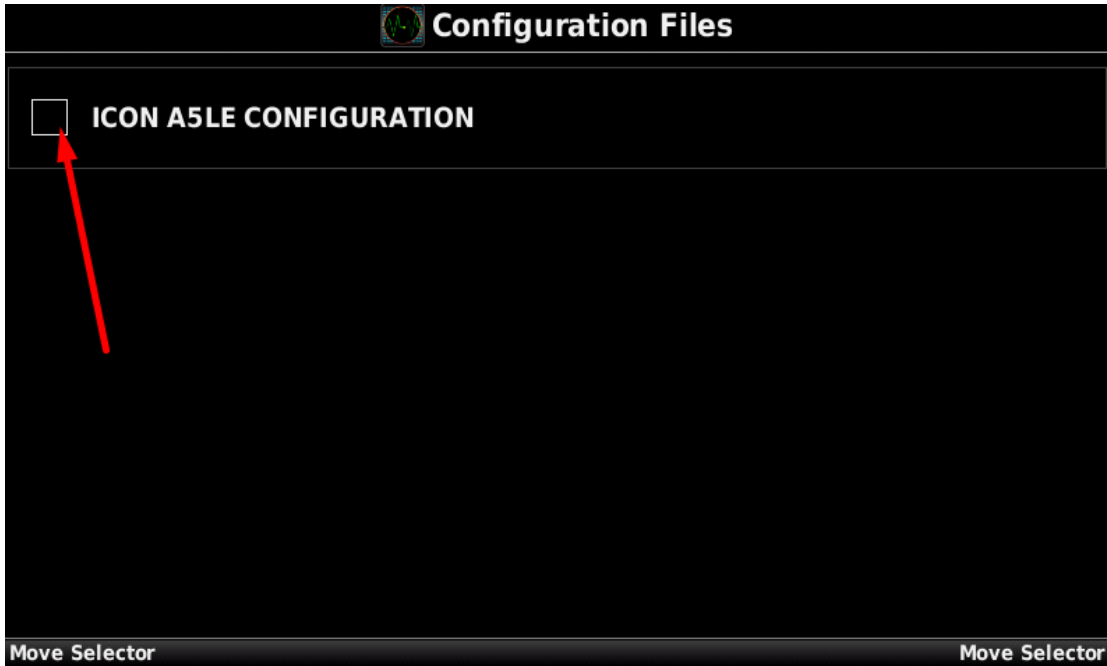
Figure 8 ICON Configuration File

11. Select "ICON A5LE CONFIGURATION"
    a.   A prompt will appear; Select "Yes"
    b.   See Figure 8
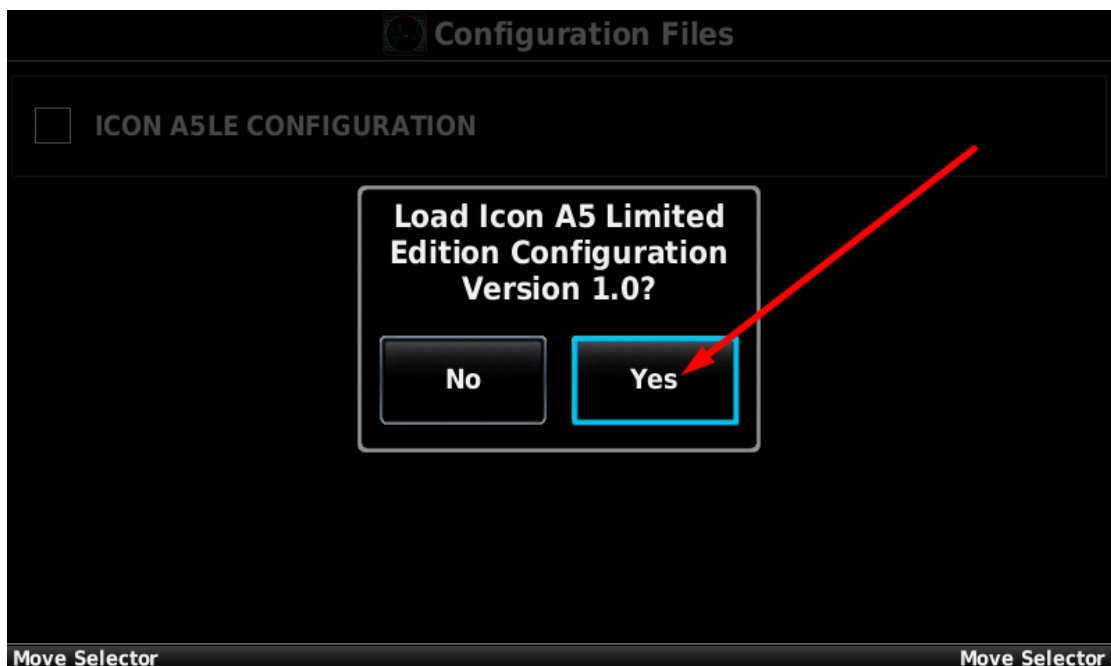
Figure 9 Load Configuration File Prompt

12. A green check mark will appear showing that the file has been loaded
    a. See Figure 9
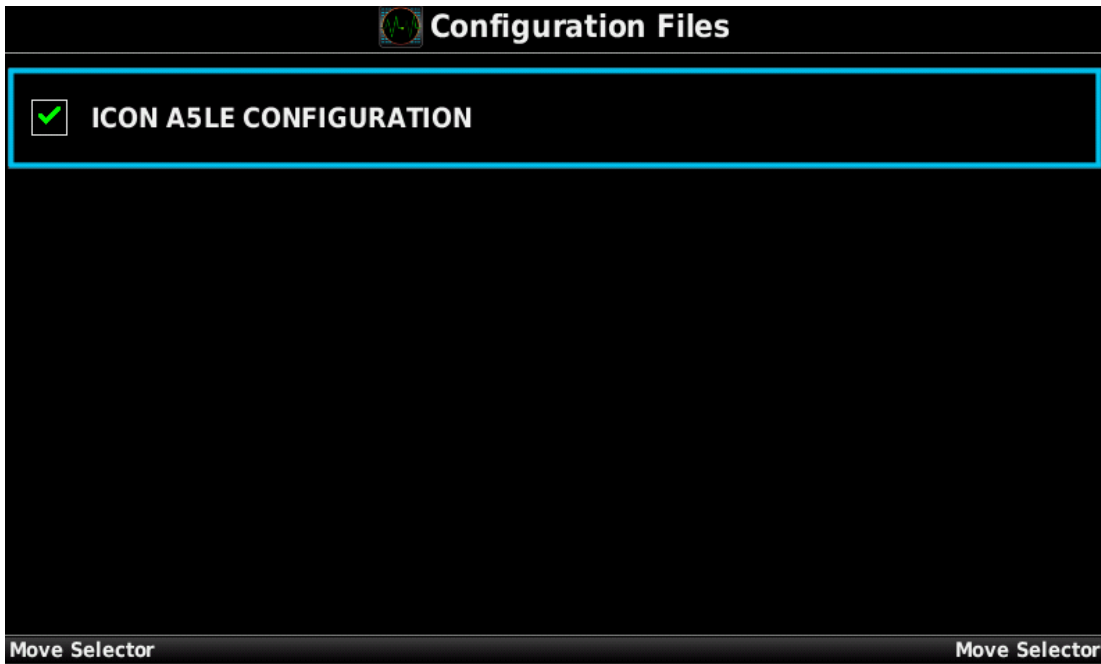
Figure 10 ICON Configuration Loaded

13. Press the BACK button on the G3X touch display
14. Select "System Information" to verify that the ICON 1.0 configuration file has been loaded
    a. See Figure 10

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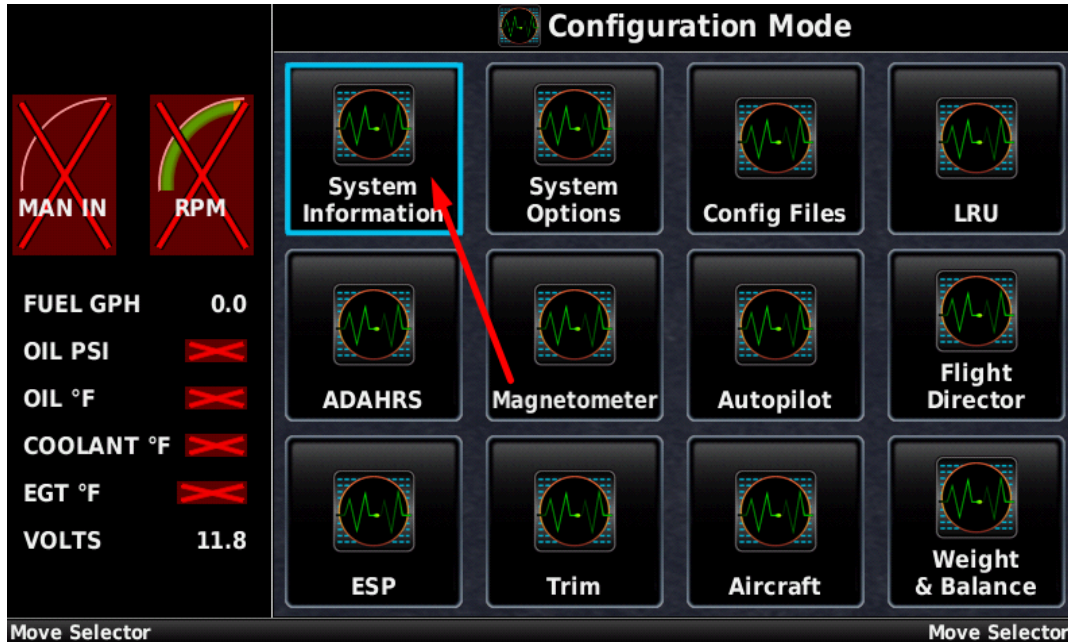
Figure 11 System Information

15. Confirm the Primary Flight Display Config Module indicates "Valid" with a green check mark and Config Version indicates "ICON 1.0"
    a. See Figure 11
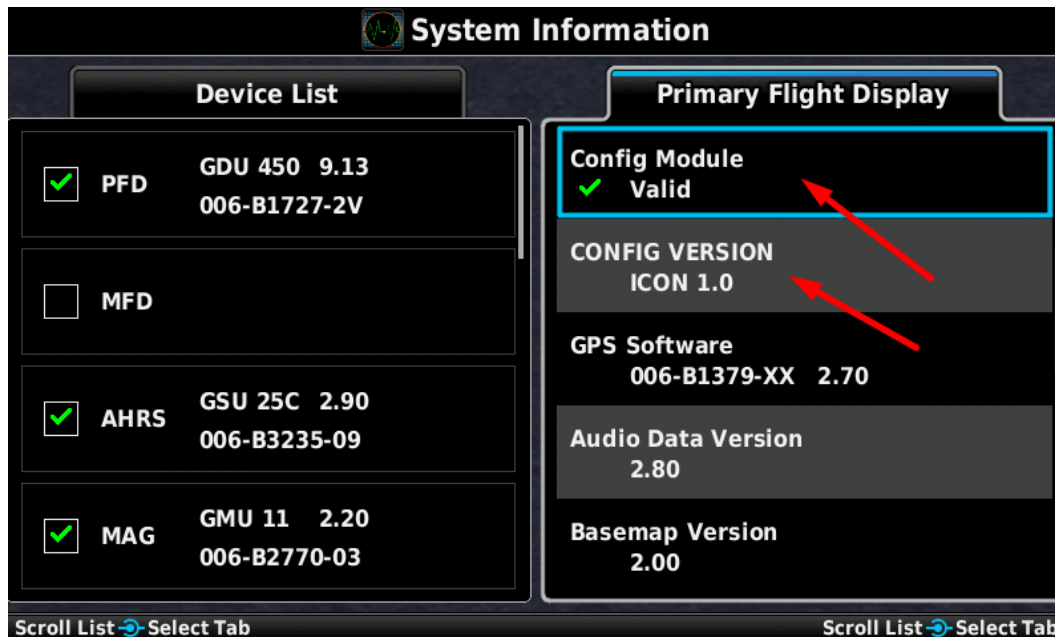
Figure 12 Confirmation of the ICON 1.0 File

16. Press the BACK button to return to the Configuration Mode page

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17. Select "Transponder" to go to Transponder Configuration page
    a. See Figure 12
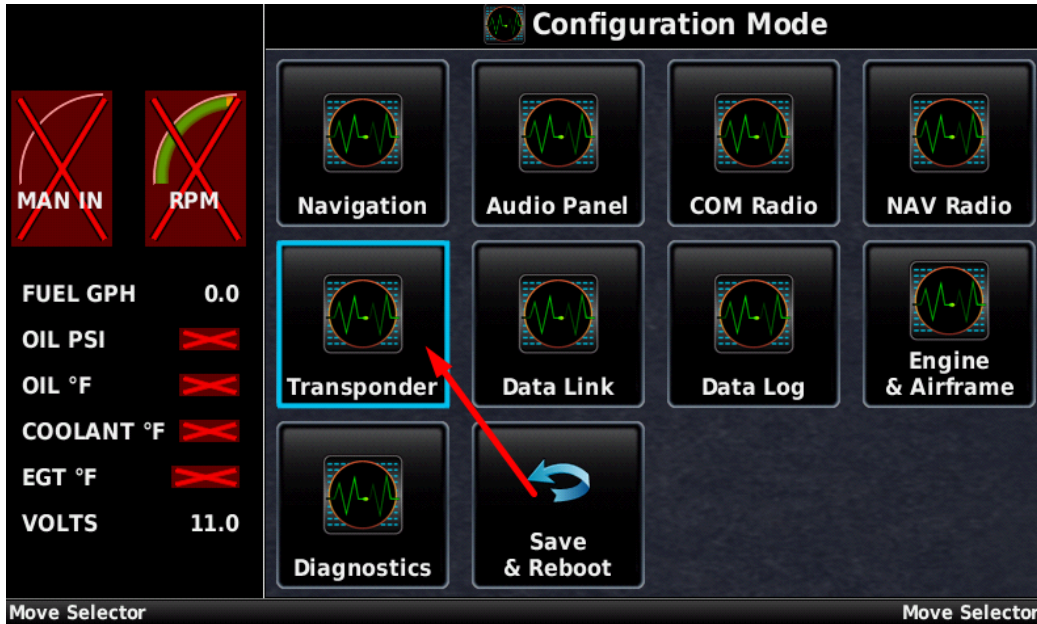
Figure 13 Transponder Configuration

18. On the right-side menu "Configuration", scroll using swipe gestures to move the menu down. Continue until the option "Position Integrity" is shown
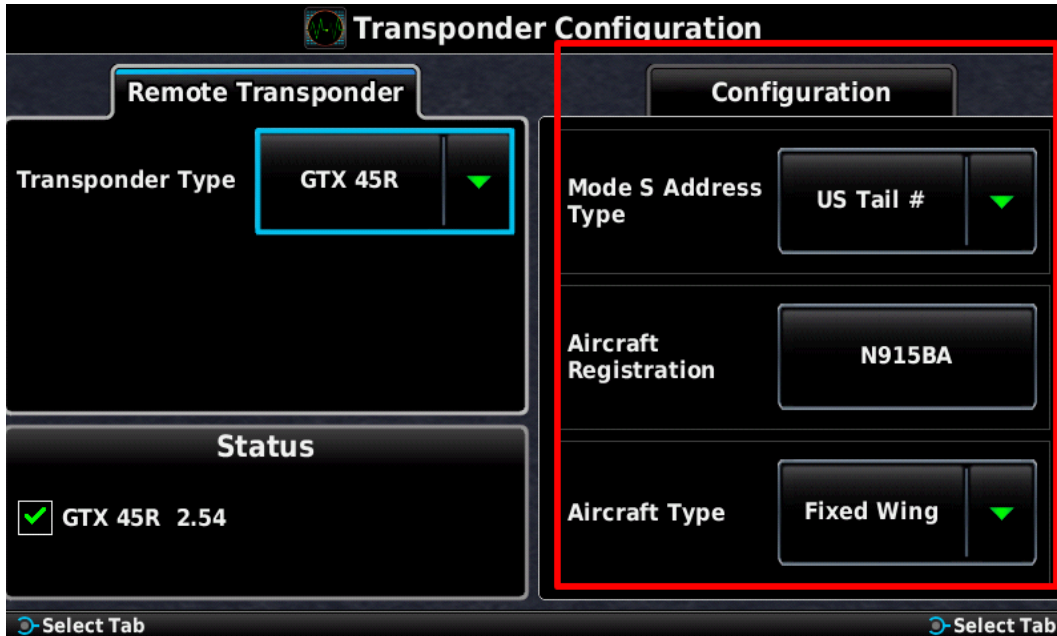   a. See Figures 13 and 14
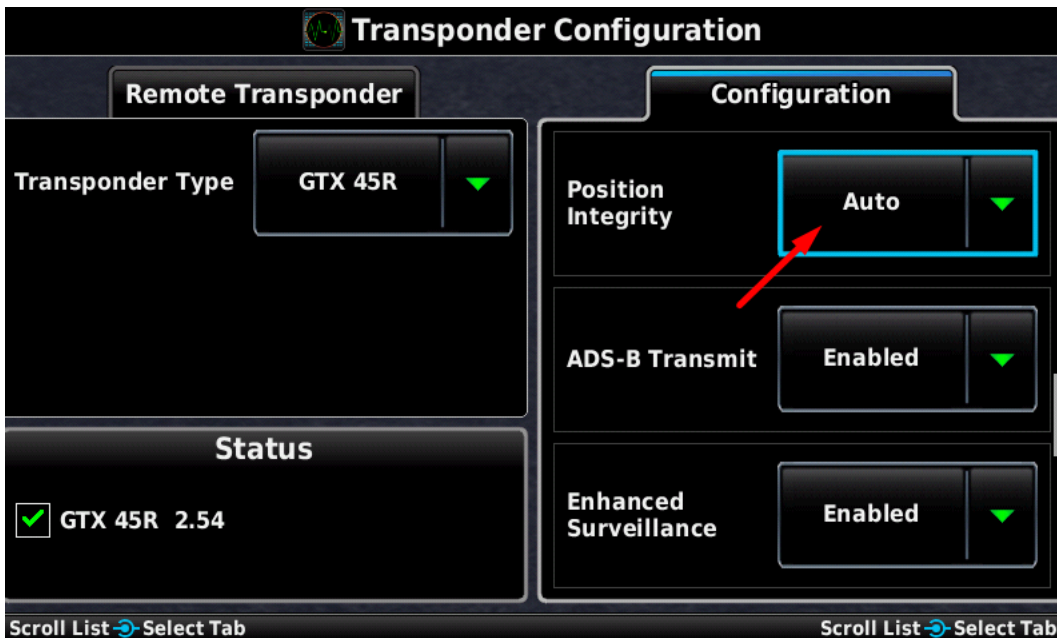
Figure 14 Set Position Integrity

Figure 15 Set Position Integrity 2

19. Select the drop-down menu for Position Integrity and select "IFR GPS 1e-7"
    a. See Figure 15

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Figure 16 Set IFR GPS 1e-7

20. Press the BACK button on the G3X Touch display to return to the Configuration Mode page
21. Select "Save & Reboot"
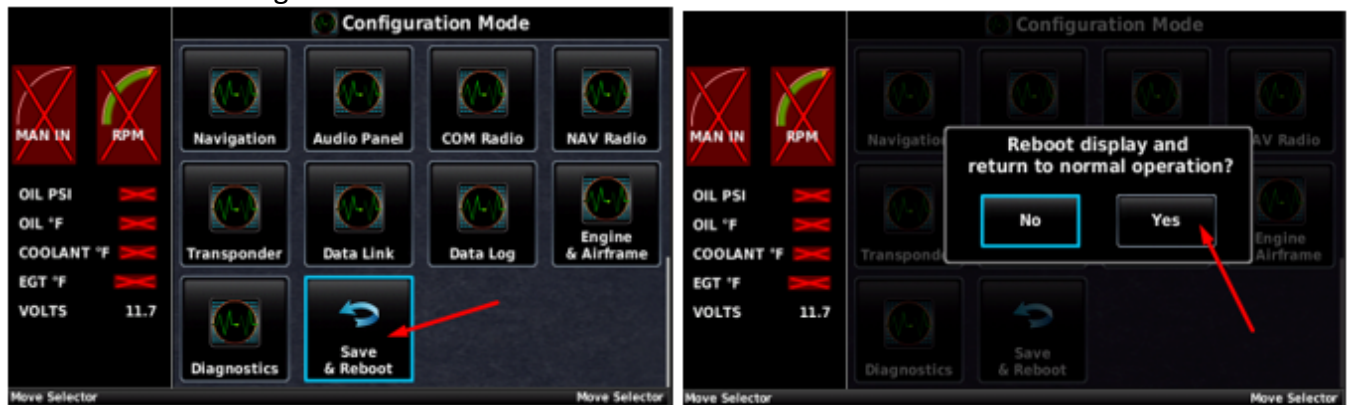22. A prompt will appear; Select "Yes"
    a. See Figure 16

Figure 17 Reboot Display Page

23. The system will reboot
    a. Wait for the G3X system to return to the home page
    b. While rebooting, regard the bottom of the screen and ensure "Software Version 9.13" is displayed
        i. This will occur quickly and only display for a few seconds
24. Turn off aircraft master power and remove the SD card from the G3X Touch display
25. Insert the autopilot fuse into the autopilot slot on the fuse panel
26. If installed, remove the "INOP" label from the face of the autopilot controller

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Make the following logbook entry:

"I hereby certify that the Garmin G3X has been updated to software version 9.13 and the ICON 1.0 configuration file has been installed in accordance with this Service Bulletin. Potentially unclear instructions have been clarified with the Aircraft OEM. No issues were observed that might hinder return to service.

The corrective action of Service Bulletin (SB-120722-A) has been complied with (ref. FAA Exemption 10829B)".

If you have questions, comments, or concerns about this Service Bulletin and/or if you are no longer owner/operator of this aircraft, please forward this information to the present owner/operator and notify ICON Aircraft at:

ICON Aircraft
2141 ICON Way, Suite 100
Vacaville, CA 95688
(855) FLY-ICON or (707) 564-4000
support@iconaircraft.com

Please include the aircraft registration number, serial number, your name, and if known the contact information of the new owner/operator.