

SERVICE BULLETIN

NUMBER: 600870-000027
SUBJECT: BIT ADDITION, SQUITTER SUPPRESSION FIX, & STRATUS ESG GPS
IMPROVEMENT
COMPLIANCE LEVEL: OPTIONAL
DATE: 4/05/2018

1. Planning Information

A. Effectivity

(1) Unit Applicability

Model Description	Appareo Part Number	Revisions Affected	Serial Numbers Affected
Stratus ESG Transponder	153510-000017	501010-000109 R04 and earlier 501010-000113 R06 and earlier	075299 and earlier
Stratus ES Transponder	153510-000069	501010-000109 R04 and earlier 501010-000113 R06 and earlier	200799 and earlier

(2) Aircraft Affected

Models Affected
ALL

B. Reason

This software and embedded hardware release adds an additional built-in-test code to evaluate the transponder antenna connection, corrects a lockup condition related to squitter suppression, and improves WAAS GPS performance in Stratus ESG.

C. Description

This service bulletin describes how to download the Stratus ES/ESG Update Tool and apply the software update to Stratus ES/ESG.

D. Compliance Time

This update is optional and there is not a recommended compliance time.

E. Approval

This service bulletin contains no modification information that revises the approved configuration and therefore does not require governmental or other regulatory agency approval.

F. Manpower

Action	Estimated time (in minutes)
Download and install the Stratus ES/ESG Update Tool and software update file	3
Wire the transponder for the software update	5
Upload software update file onto Stratus ES/ESG	3
Verify software update was correctly installed	2
Update logbook for compliance to this service bulletin	5
Total elapsed time to perform service bulletin procedures	18

G. Weight Change

None

H. Electrical Load Change

None

2. Material Information

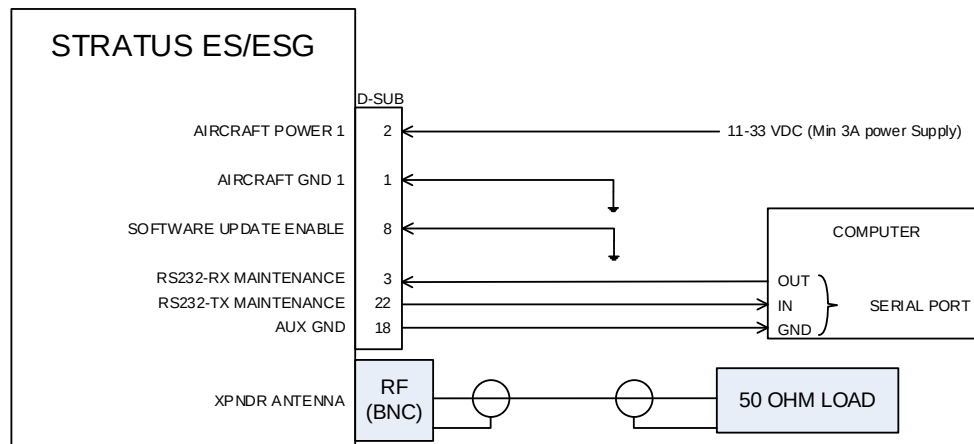
A. Materials Required

Appareo Part Number	Material Description	Note
n/a	Portable computer with Windows operating system	Used to download the Stratus ES/ESG Update Tool and software update file.
501010-000137	Stratus ES/ESG Software Update Tool desktop software	Used to apply the software update. Available for download from the Appareo Dealer Portal.
501010-000138	Stratus ESG software update	Available for download from the Appareo Dealer Portal.
n/a	3 amp power supply	Used to apply the software update to Stratus ES/ESG.
n/a	D-sub wiring harness	Used to connect Stratus ES/ESG to the portable computer.
n/a	Serial to USB adapter (optional)	Used to connect Stratus ES/ESG to the portable computer.

3. Accomplishment Instructions

To perform the software update, complete the following steps:

1. Use the following diagram to wire the transponder for a software update.



NOTES:

SOME DETAIL IS REMOVED FOR CLARITY
1 UNLESS OTHERWISE SPECIFIED, ALL WIRING TO BE DONE WITH 22 AWG WIRING

2. Plug the serial port connector into the computer. A serial to USB adapter may be required. If the adapter requires you to install drivers, install them.
3. Power on Stratus ES/ESG. It will enter into software update mode.

NOTE: The screen will be black, but the keypad will illuminate.

4. Apply the software/embedded hardware update.
 - a. Download the Stratus ES/ESG Update Tool (if you haven't already) and the update file.
 - i. Log in to the Appareo Dealer Portal, then navigate to appareo.com/dealer-portal/service-bulletins.
 - ii. Download the Stratus ES/ESG Update Tool and the update file for your transponder model. When prompted, install the file by following the on-screen prompts.
 - b. Open the Stratus ES/ESG Update Tool.
 - c. Click the box below "Update File" and navigate to the update file that was downloaded in Step 4.a.
 - d. Use the "Port" drop-down menu to select the computer port that is connected to Stratus ES/ESG.
 - e. Click **Update**. A pop-up box will appear when the update begins and completes.

5. Verify that the software update has applied correctly.
 - a. Remove the grounding pin (pin 8).
 - b. Turn off Stratus ES/ESG and enter into configuration mode (while holding the **FUNC** key, press and release the **PWR** key).
 - c. Press **FUNC** or the arrow keys to advance to the software versions diagnostic screens. Verify that the most recent programmed configuration shown in the table below appears.

Description	Part Number	Revision	CRC
Embedded Hardware (FPGA)	501010-000109	R05	0x200C3A5F
Software (DSC)	501010-000113	R07	0x3FD2

NOTE: Do not update the mod level label.

6. Update logbook for compliance to this service bulletin.