

TOTAL PERFORMANCE **VAN'S AIRCRAFT**

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NOTIFICATION 14-09-10

Date Released: September 10, 2014

Date Effective: September 10, 2014

Subject: GPS Data to ELT

Affected Models: RV-12 All SkyView Avionics Kits

Required Action: Check ELT data wire for continuity to ground. If wire is grounded, connect ELT data wire coming from the EFIS to the control module with the ELT data wire going from the control module to the ELT. This action will bypass the control module.

Time of Compliance:

Artex ME406 ELT's which do not have the optional ME-183 GPS Module will not benefit from this notification.

All ACK E-04 ELT's or Artex ELT's with ME-183 installed should complete this notification if GPS data to the ELT is desired.

Supersedes Notice: None

Labor Required / SLSA Warranty Allowance: 1.75 Hours / \$140 (if ground fault is detected)

Level of Certification: For ELSA: Owner or Repairman
For SLSA: LSA Repairman Maintenance, A&P

Synopsis:

Some AV-50000A printed circuit boards may cause the GPS data from the EFIS connector pin 10 going to the FUSELAGE connector pin 21 to be shorted to ground.

Method of Compliance:

References: Section 31B, KAI Section 42E or 42F and installation instructions supplied with your ELT

Step 1: Identify the "RS 232 Data In" terminal on the ELT plug using the installation instructions supplied with your ELT. Wire WH-F395 (white – not gray/purple).

Check for continuity between this terminal and airframe ground. Ensure that continuity is not caused by a connection to the shield on the data wire by visual inspection of the shield on the ELT plug connection at the "RS 232 Data In" terminal.

Continuity to ground indicates a short to ground inside the AV50000 control module. The control module will need to be bypassed. Proceed to Step 2.

If there is no continuity, proceed to Step 12.

Step 2: Remove the EFIS screen from the left side of the instrument panel.

Step 3: Remove the “EFIS” and “FUSELAGE” connectors from the control module. Remove the backshells from both harnesses.

Step 4: Extract wire F395 from pin 21 position on the “FUSELAGE” connector. Leave the ‘male’ pin connector attached to this wire. Cut the green shield ground wire associated with wire F-395 leaving as much of the green wire as possible connected to F395. Take care not to damage the adjacent shield connection at pin 26.

Step 5: Extract wire F739 from pin 10 position on the “EFIS” connector, and pull it back through the heat shrink around the harness bundle. Leave the female pin connector attached to this wire. This wire will become part of the FUSELAGE wire harness. Ensure that it is free from the EFIS harness for at least 9 inches.

Step 6: Slip wire F739 through the heat shrink on the “FUSELAGE” connector (pulling the wire toward the connector). A thin piece of stiff wire may be inserted through the heat shrink as a tool. Use thin tape to attach the F739 to the “tool” and pull four to five inches through the heat shrink.

Step 7: Strip back the exposed shield on wire F739. Twist this shield into a short wire.

Step 8: Slip a two inch long piece of 1/8 diameter heat shrink over wire F395 leaving the green shield wire free. Insert the male pin on wire F395 into the female pin on wire F739. Slide the heat shrink over the connection and activate the heat shrink.

Step 9: Solder the green shield wire attached to wire F-395 to the twisted shield wire on F-739.

Step 10: Visually verify that the pin connection is completely insulated from the shields of both wires.

Step 11: Pull the excess wire from Step 6 back into the heat shrink on the “FUSELAGE” harness. This will place the heat shrink covered connection and associated shields underneath the heat shrink on the “FUSLAGE” harness. Reinstall backshells onto the harnesses and reinstall connectors onto the AV-50000 Control Module. Make a logbook entry that this notification was complied with.

Step 12: Verify inside the SkyView setup menu that serial port 1 is transmitting 9600 Baud NEMA GPS data. Check using the verification procedure/tools indicated in the installation manual supplied with the ELT that the ELT is receiving NEMA 9600 baud GPS data from the SkyView EFIS.

PART NUMBER

ES HST-1/8X