



MANUFACTURERS OF LOW FREQUENCY RADIOBEACONS AND ASSOCIATED PRODUCTS

## Customer Service Bulletin SD800010 SLP05104/SLP46900 PCB Issues in SE500 Rack Mount Transmitters

Continual Improvement is a cornerstone of the Southern Avionics Company Quality Management System. We issue Customer Service Bulletins to inform our valued customers of product upgrades and/or helpful technical information that may enhance the reliability of your equipment.

We have recently identified potential PCB issues that could affect proper operation of the SE 500 transmitters. Design modifications have been made to the SLP05104 Power Supply PCB and SLP46900 Battery Sense Power Control PCB to improve reliability and eliminate a potential failure mode. We determined that system damage can result from the following chain of events. If the transmitter is operating on DC power, and the unit switches to the alternate transmitter, and the transmitter Power Supply PCB has a shorted surge resistor bypass FET, a failure of the current sensor in the SLP46900 PCB will result. Failure of the SLP46900 can result in high system voltage conducted to the 12V rail and cause additional damage to transmitter components. Both PCBs have been modified to eliminate this scenario. The replacement PCB for SLP05104 is SLP05102.

**Application:** This bulletin applies to **SE500 Rack MountTransmitter SLF34002**, purchased prior to 12 December, 2012.

Identifying Transmitters affected by this bulletin:

Locate the serial tag on your transmitter enclosure. The prefix "SLF" plus the first five (5) characters of your serial number indicate the SAC Transmitter Part Number as detailed below. The specific transmitters affected are referenced by the last four (4) characters in your serial number, SLF34002 with serial number last four characters lower than 0010.





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Tools needed:

Phillips Head Screwdriver #2 Slotted Screwdriver #2

Time required:

2 Manhours per transmitter

Equipment needed:

- 1. X4-SLP05102, PCB, POWER SUPPLY 500W
- 2. X1-SLP46900, PCB, BATTERY SENSE POWER CONTROL SE500

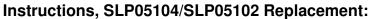
Please contact our Quality department at <a href="mailto:quality@southernavionics.com">quality@southernavionics.com</a> with desired shipping address, and Southern Avionics will furnish upgrade kits for your units.

Thank you for choosing Southern Avionics Company for your NDB needs. We appreciate your business.

This Customer Service Bulletin and others may be found at <a href="http://www.southernavionics.com/customer-service-bulletins/">http://www.southernavionics.com/customer-service-bulletins/</a>.



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- Remove the transmitter front panels and locate the SLE05050 Power Supply Assemblies, consisting of a SLP05104 Power Supply PCB attached to a SLP05200 Power Supply Capacitor Bank.
- 2. Disconnect and remove the SLE05050 Power Supply Assemblies. There are two (2) Power Supply Assemblies in TX1 (upper), and two (2) Power Supply Assemblies in TX2 (lower).
- 3. Unplug wire harneses from assemblies
- 4. Loosen Screws on capacitor clamps (2 places).
- 5. Lift assembly from clamps and remove from enclosure.

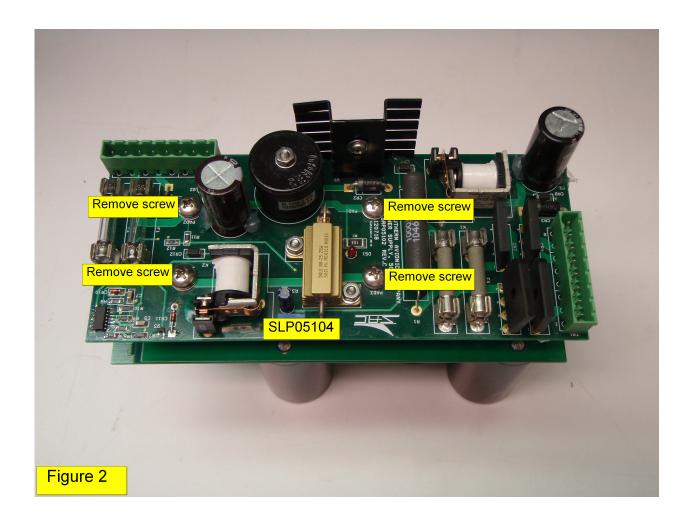
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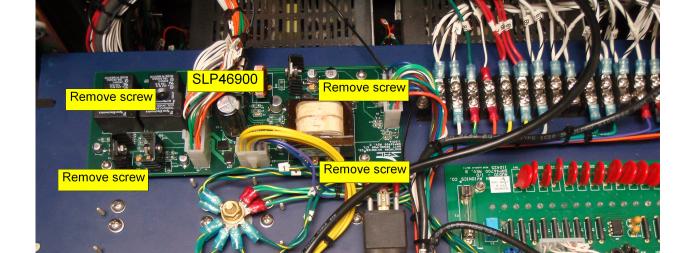
- 6. Remove the screws attaching the SLP05104 to the SLP05200 on all four (4) SLE05050 Power Control Assemblies. Install a replacement SLP05102 in each Power Control Assembly.
- 7. Install a replacement SLP05102 PCB in all four (4) SLE05050 assemblies.
- 8. Reinstall the SLE05050 assemblies in the SLE34003 Transmitter Chassis Assemblies.

Instructions, SLP46900 Replacement:

Figure 3



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1. Locate the SLE34013 Power Control Panel on the rear side of your transmitter.

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- 2. Remove the screws on the Power Control Panel and locate the SLP46900 Battery Sense Power Control PCB on the inside of the Power Control Panel.
- 3. Remove four (4) screws, unplug wire harnesses, and remove the SLP46900 PCB from the Power Control Panel.
- 4. Install the replacement SLP46900 PCB to the Power Control Panel and reattach the Power Control Panel to the transmitter.