



**UNITED STATES COAST GUARD**  
U.S. Department of Homeland Security

## **MARINE SAFETY ALERT**

**Assistant Commandant for Marine Safety, Security and Stewardship**

November 30, 2009  
Washington, DC

Alert 08-09

### **UNAPPROVED EPIRB BATTERY REPLACEMENTS**

Fishing vessel safety staff in the Coast Guard's Seventh District has received at least three reports in the past few months regarding unapproved replacements of 406 EPIRB batteries by servicing companies having no association with the EPIRB manufacturer. These unauthorized battery installations would likely result in a failure of this critical item of lifesaving equipment, and as such are not in compliance with the operational readiness requirements of 46 CFR.

The following is a typical excerpt from an EPIRB manufacturer report:

"The unit was opened and a foreign battery was found inside. The battery was built up using (manufacturer) fuses and wiring salvaged from the original (manufacturer) battery. They then covered their battery with the original (manufacturer) yellow heat shrink, (manufacturer) labels and taped it together. This was then covered with a black heat shrink wrap. The connections were soldered and not spot welded, as is required by the design and is performed in (manufacturer) production. The battery measured 8.7 volts. Our batteries read 9+ volts when they are new. This battery was installed one week prior to it being brought into (manufacturer).

There was also evidence of water intrusion due to the crack in the top cap, which (servicing company) did not recognize as they are not trained in these matters.

The EPIRB was condemned by (manufacturer) and the customer was notified when he came to pick the unit up."

Every approved (i.e., accepted by the FCC) EPIRB is tested during its approval process using a battery, or batteries, specified by the manufacturer. Approved EPIRBs come with a user's manual which describes battery maintenance and replacement procedures. In order for the EPIRB to remain within the conditions of its approval, the manufacturer's instructions in the user's manual must be adhered to. To ensure that replacement batteries are of the same type with which the EPIRB was approved, and are correctly installed, manufacturers typically specify that battery replacements only be done by the manufacturer or a manufacturer-approved shop.

Any modification or changes to an EPIRB must be made in accordance with the manufacturer. The use of alternative replacement parts or batteries is prohibited and may prevent the device from meeting lifesaving requirements. The Coast Guard **strongly reminds** EPIRB owners and servicing facilities to be aware of the compliance implications and potential for equipment failure stemming from any EPIRB modification or unauthorized battery replacement.

This safety alert is provided for informational purposes only and does not relieve any domestic or international safety, operational or material requirement. Questions regarding the information presented in this alert may be addressed to LCDR Vince Gamma of the U.S. Coast Guard Headquarters Lifesaving & Fire Safety Standards Division at 202.372.1396 or [Vincent.A.Gamma@uscg.mil](mailto:Vincent.A.Gamma@uscg.mil).

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