

EPIRB BASICS

Garry Schneider, 29 Feb 2008

The following are some basic EPIRB operating rules drawn from US Coast Guard, NOAA and manufacturer information:

- For Maritime operation, buy a [406 full size EPIRB](#) with a bulletin GPS receiver or one that links to your on board GPS: Cat I (Self releasing) is more expensive to buy and maintain. Cat II must be manually released if stored in a bracket or kept below decks.
- Register the new unit directly with the NOAA using the form provided with your purchase as **required**. Web registration at <http://www.sarsat.noaa.gov/beacon.html> is quicker and allows web updating as needed. Filling in all of the information relevant to your vessel can mean that a search will start for you several hours earlier than for a n unregistered EPIRB
- Test the unit according to the manufacturer's recommended schedule and procedure. DO NOT activate the unit to test it.
- In the event of an accidental activation, immediately shut off the unit, if possible, then call the local Coast Guard and tell them of the accidental activation, or call the National CG SAR command center number: 1800-323-7233. Even a very short period of EPIRB operation can be enough for a satellite to receive an initial burst of information and begin a search.
- Have the batteries replaced at a manufacturer approved facility every five years or at the manufacturer's recommended interval, or immediately upon return to shore should the unit have been activated.
- Once the unit is turned on leave it on until rescued.
- If the vessel carries more than one 406 EPIRB, do not activate more than one in the first 72 hours unless you have good reason to believe that the batteries or transmitter in the first unit are out of date or damaged.
- While a [Personal Locator Beacon, PLB](#), is an excellent safety item for each crew member to carry, it is not a substitute for a self releasing, water activated, Cat I 406 EPIRB or a Cat II 406 Manually activated EPIRB. The PLB units have only half of the battery life of an EPIRB, [no flashing locator light](#), may not float upright, and can only be activated manually. They are also registered to the owner and thus their activation does not supply a number that brings up the vessels description and equipment information.
- The new "Spot" units have not been as extensively proven in rescue situations as the 406 EPIRBs. They have neither a 121.5 locator signal nor a strobe light. They report your emergency to a private company which may not have all of the assets available that the CG can immediately call on. Perhaps the "Spot" system might best be carried as a back up until the SAR community has further experience with it.
- As of DEC 2006 Inmarsat EPIRB service is no longer provided.
- As of Feb 2007 it is illegal to activate either a Class A, 121.5, or Class B, 2443 EPRIB. Not only will their signal not result in a search and rescue activation but the 121.5 signal is different from, and will interfere with the 121.5 locator beacon on the 406.

How the COSPAS- SARSAT System Works



Around the world...around the clock...NOAA proudly stands watch. As an integral part of worldwide search and rescue, NOAA operates the Search And Rescue Satellite Aided Tracking (SARSAT) system to detect and locate 406 MHz distress beacons from mariners, aviators and recreational enthusiasts in distress anywhere in the world.

The SARSAT system uses a combination of geostationary and low-earth orbiting NOAA weather satellites to detect and locate the beacons. The Satellites relay the distress signals from the emergency beacons to a network of ground stations and ultimately to the U.S. Mission Control Center (USMCC) in Suitland, Maryland. The USMCC processes the distress signal and alerts the appropriate search and rescue authorities to who is in distress and, more importantly, where they are located. Truly, SARSAT takes the "search" out of search and rescue!

NOAA_SARSAT is part of the international COSPAS-SARSAT Program to which 38 nations and two independent SAR organizations belong to. To find out more about SARSAT please feel free to explore our website, www.sarsat.gov We hope you enjoy your visit!

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