

## Consolidated Grain and Barge (CGB) White Paper on Barge Safety

This whitepaper is a short summary on barge safety and how the Sea Marshall man over board alarm system can reduce risk of a man overboard incident. The barge application is only one application that we install and encourage you to call or e-mail if you have any questions on this application or any other.

CGB has been a customer since 2004 and we can provide a few internal references. ***“Eric Horton at Consolidated reports EXTREME pleasure with the new CG121. It works perfectly. No remote antennae or auto dialer’s are required.” (memo from Randy Kramer, 4/2007).*** Cost over 5 years is less than \$.20 a day per man.



Henderson, Kentucky

The Henderson facility used to require two crew to load a barge (buddy system) and now with the Sea Marshall alarm system is used....then only one man is required. (It looks like Sea Marshall system saves 50% labor charges for this function.

### Basic Description of the system

There are two components, an alert or transmitter that is worn by the employee while on or near the water. The alert is water activated. The second component is a base unit. The base unit can be alarm only or have an alarm functionality plus precision direction back to the man overboard. The direction finder version is often used on rescue boats, tugs, pilots or fast rescue vessels.



The base units all have standard a dry contact or relay to turn on a horn or siren when activated.

## Sample Configurations – Barge & Dock Safety



Base unit alarm only with exterior antenna and exterior siren hooked to alarm dry contact.

Each employee would be wearing an alert integrated into their work vest.

Anderson Ferry, Cincinnati, OH



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CGB – Jeffersonville, IN

### Designing a system

1. We need to know how many will be working on the waterside at any one time
2. Type of work vest used. We recommend the alert integrated into the work vest for one step process. The alert would be fastened on with a pouch or industrial Velcro and the antenna positioned with Velcro or electrical ties.
3. Distance from the barge or loading area to the base unit. If the distance is significant or there is no visual line of sight we will recommend either an exterior high gain antenna, an extended range alert (500mW's versus 100mW's) or an auto dialer that would automatically dial a remote office or landline or cell number when the base unit is activated
4. We would also recommend CGB to consider rescue (emergency) ladders or MOB rescue cradles to retrieve the man out the water

