

MOBI: New Device Will Revolution

By JO2 Ryan Hicks,
USS Abraham Lincoln (CVN 72)

During recent deployments, the USS *Abraham Lincoln* and *George Washington* battle groups evaluated a new, three-piece system designed to eliminate the guesswork from man-overboard situations.

Known as the man-overboard indicator, or MOBI, the system consists of a small transmitter worn in a float coat's lower right, dye-marker pouches; a bridge receiver the size of an answering machine and connected to a whip antenna mounted on the top of the ship's superstructure; and a direction-finder. The direction-finder is an indicator near the captain's chair and shows the signal's relative bearing. The signal is transmitted from the wearer's float-coat pouch. Seawater activates the transmitter, and the signal can be detected up to 18 nautical miles away.

Each transmitter's signal also is coded so it can be determined to whom the transmitter is assigned, and thus, who has fallen overboard. During the battle-group evaluations, 1,500 transmitters were passed out, but, because of their cost, they were issued only to Sailors working in areas with a high risk of falling overboard.

MOBI significantly will speed up the identification and location of a Sailor who has fallen overboard, according to William Dull, a representative from the company that, two years ago, won the MOBI production bid for the Navy.

According to Chuck Collins, the director of operations for the

company, the MOBI system will be the first to use active technology for man-overboard situations. It will replace the passive mode of manual detection through the exclusive use of lookouts. To date, the *George Washington* and *Abraham Lincoln* battle groups are the only ones to use MOBI, but the



The master receiver is mounted on the bridge near the helmsman and receives the MOBI signal from the float-coat transmitter. It relays the signal to directional indicators by the captain's chair and on the RHIB. (Photos by PH2 Lori Steenstra, USS Abraham Lincoln)

ize Man-Overboard Responses



This is the transmitter, worn in a float coat's lower right, dye marker pouch. The device is activated when it comes into contact with saltwater.



This is the portable MOB direction indicator which could be taken aboard a RHIB if one is launched to retrieve a Sailor from the sea.

Navy plans to have it fleetwide in 2003, said Collins. The recent evaluations determined possible improvements before Navywide MOBI implementation. The eventual price tag will be about \$250 per Sailor. "That's not bad when you consider that every float coat costs \$350," said Collins.

How does the system work? When a Sailor falls overboard, the transmitter activates upon contact with saltwater, then sends a signal. The bridge-mounted receiver receives the signal and an alarm will sound by the boatswain's-mate-of-the-watch station. The serial number of the transmitter in the water will be displayed on the receiver screen, and the receiver also displays the number of transmitters in the water in the event more than one Sailor has fallen overboard.

When the signal is received, an antenna also picks up the direction of the signal and displays it on the direction-finder by the captain's bridge chair. MOBI also comes with a separate, portable direction finder that can be attached to a rigid-hull inflatable boat to facilitate recovery when the RHIB is deployed.

Abraham Lincoln crew member BM2 Ken Crowther, who stands underway duty as boatswain's-mate-of-the-watch, said MOBI is definitely a good thing, but it should not change the focus or function of lookouts. He feels that, in the event of equipment failure, there still must be eyes looking into the water at all times.

Lt. Tom Baker, an officer-of-the-deck, was very positive about MOBI's effects on the bridge team. "It's definitely a great advance in technology toward a safer working environment," he said. "And it will make life a lot easier up on the bridge, because the system tells the direction of the man overboard, and that will help the OOD decide what kind of turn the ship needs to make for the recovery." 🌀