Award OCE-0612607. Shipboard Scientific Equipment
Louisiana University Marine Consortium (LUMCON)

The following is an interim report regarding the installation and function of the Man Overboard System (or "the MOB system"), specifically the SARfinder 1003 built by Sea Marshall, under an NSF grant dated 14 September 2006, The MOB system was purchased in February 2007 and delivered to participating institutions by March 2007 as part of a pilot program to test the efficacy of an electronic man overboard system. The project originated from a RVOC meeting in 2006 regarding the loss of a crewmember from a UNOLS vessel. The MOB system was purchased by LUMCON to be installed onboard "R/V Pelican", "R/V Revelle" (from SCRIPPS), "R/V Wecoma" (of OSU) and "R/V Oceanus" (of WHOI) for $29,500. The system has not performed as per specifications on any of the pilot program vessels.

The MOB system has not been successfully installed onboard any of the above vessels. Apparently, the manufacturer's supplied power cable is not wired correctly. "R/V Wecoma" is the only ship to have successfully turned the unit on, after contacting the manufacturer's representative, Sea Marshall-U.S., for a new receiver and power cable. Sea Marshall-U.S. is currently sending new units to each of the above vessels, which will alleviate the problems of powering the MOB system. "R/V Wecoma" is also unable to achieve the advertised range of 3 to 5 nautical miles from the system; Sea Marshall-U.S. identified interference as the most likely culprit, and has recommended raising the MOB system's antenna height. Given the tendency to have a large "antenna farm", the other vessels in the pilot program are likely to have similar issues once they can turn their units on.

The vendor, Dockside Marine Electronics, is currently refusing to sell anything else from Sea Marshall until our issues are resolved. The manufacturer's representative is committed to getting the MOB system functioning properly.

Given the minimally manned crews and the potentially harsh conditions faced by our vessels, an electronic, self-activating person overboard system could literally be a lifesaver for UNOLS personnel. Search and rescue personnel teach that finding a person in the water is an almost impossible task; it is easy to overlook someone in the water from even a short distance away. If no one observes the person going over immediately, search efforts are often unsuccessful. So, the SARfinder system is a good idea, especially since the system broadcasts on an internationally recognized search and rescue frequency, 121.5 Mhz. If the MOB system's technical problems can be overcome, we will still need to establish sound doctrine about the use of the man-overboard devices; it will take a significant culture change to induce crewmembers to wear the bulky device (the MOB system requires that each crewmember wear a transmitter). The long-term benefits of this system have yet to be realized.