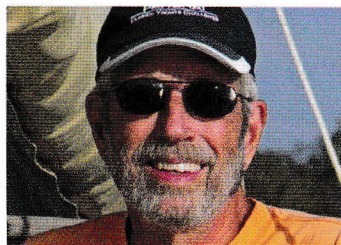
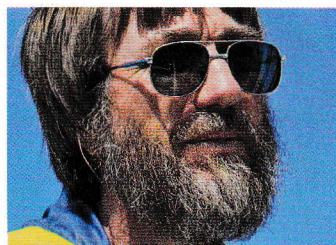


GORDON WEST IS AN ELECTRONICS EXPERT WHO SPECIALIZES IN RADIO COMMUNICATIONS



DON CASEY HAS WRITTEN MANY BOOKS AND ARTICLES ON MARINE MAINTENANCE AND REPAIRS



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A QUESTION OF MOB TECHNOLOGY

Q: I am confused by all the new kinds of man-overboard beacons now on the market. Which ones do what?

— R. Hutchinson, Seattle, WA



GORDON WEST REPLIES

A Maritime Survivor Locating Device (MSLD) is a manually activated digital beacon that sends a local distress message of “man overboard” or “sinking” via the marine VHF AIS channels, which allows all boats with a turned-on AIS receiver in the area to begin their search.

Another type of MSLD could be manually activated to send a distress alert over marine VHF DSC channel 70, similar to a VHF submersible handheld with GPS and the DSC distress red button. In either case you need to hope that the mother ship and any other ships in the area have their marine VHF/AIS turned on.

Note that an MSLD is very different from a personal locator beacon (PLB) that uses the International EPIRB system to uplink, from anywhere in the worldwide, to the COSPAS/SARSAT satellite service. Nor is it an Iridium or SPOT private satellite sender.

Another type of MOB locating system that has been around for some years is a “proximity automatic alert beacon,” a system specifically tied into a man overboard receiver aboard your boat.

The water-activated Alert418 beacon, for example, works by transmitting a low-power signal on a non-marine UHF channel back to a dedicated receiver aboard the mother ship. This small 12-volt UHF receiver can then place a mark on the boat’s chartplotter (assuming the two systems have been correctly integrated), disengage the autopilot and/or activate an alarm to alert everyone else on board know that someone fell into the drink.



The Alert 418 MOB alarm uses both a transmitter and receiver

PFD SAFE PRACTICES

Q: In the aftermath of the tragic fatality in last year’s Chicago-Mackinac race, I want to know how to inspect, test and certify the operational

integrity of an inflatable life vest like that worn by the lost sailor in Lake Michigan. As has been reported, his did not deploy. Many of us use them, and this accident calls their reliability into question. You may have previously looked into this question, but it bears repeating.

— Mono D’Angelo, Grosse Ile,



DON CASEY REPLIES

How reliable are auto-inflate life vests? Very. However, the only quantitative assessment we can state with certainty is that they are not 100 percent reliable. Safety experts report occasional (maybe rare is a better word) failures during PFD demonstrations. However, even a single failure can spell disaster, as this fatality you cite tragically illustrates. You have reason to be concerned.

We do not know even the brand of vest that failed Jon Santarelli (the sailor who died shortly after the start of the Mac Race), but that may actually be a blessing. It avoids the unwarranted confidence that you or I might have in a different brand. In fact, nearly all automatic inflatable PFDs use similar or identical inflating mechanisms.

Anyone depending on an inflatable vest, automatic or not, to provide adequate buoyancy in an emergency should give more attention to that vest than I suspect most receive. That means a thorough examination every time before donning, which includes, but is not limited to, checking the service indicator to be sure it is green. Not less often than once a season you should also unpack the vest and inflate the bladder, giving it time to demonstrate that it is leak-free before you deflate and repack. Along these same lines, disarming and rearming the inflator seasonally and inspecting the bobbin if your vest uses one are also good ideas. The bobbin should have a ribbed surface: if smooth, replace it. All vest manufacturers have YouTube videos online that will instruct you on correct arming and packing.

Beyond that, the best way to confirm the reliability of a vest is to put it on and jump into the water. The result should be both instructive and reassuring. Rearm kits are not cheap, but not expensive either in light of what you expect from them. If you have seen your vest function perfectly and then you personally rearm and repack it, that will go a long way toward providing the assurance you are seeking, and justifiably so. (Kind of like packing your own parachute.) Manufacturers typically recommend rearming every third year, but adopting a shorter calendar that includes an activation test can only improve peace of mind.

Inflatable PFDs are popular because they are comfortable enough to wear at all times. That means they provide far greater real protection