



Elliot SOLAS

The 2007 Safety All-Stars

Life rafts, harnesses top safety lineup.

This year saw numerous safety products put through the wringer—from survival gear to jacklines and tethers to doggie PFDs. Although safety gear lacks the pizzazz of, say, new electronics, *PS* editors consider testing it to be one of our most important tasks, and so we put substantial time, energy, and resources into making sure we back only the best products that will keep our readers and their families safe on the water. Among the most intensive tests of 2007 were the life raft and safety harness evaluations.

LIFE RAFTS

For our life raft test, we asked manufacturers to send six-man, SOLAS-grade life rafts they thought best suited a serious offshore sailor. After some tough deliberations, we gave the nod to the Elliot SOLAS-6 (pictured above). It cannot be over-emphasized that we found all of the test rafts to be very good. Each one would serve well on a cruising boat and deserves a buyer's consideration.

Elliot's rugged construction, superior inflation, and key details make it our Best Choice and Gear of the Year pick. When the painter was pulled during testing, the large gas cylinder caused

the extra weight is not a concern, this antenna could outlast the boat.

SNATCH BLOCKS

Harken's easy-to-operate, friction-free, front-loading snatch block took our Best Choice kudos for snatch blocks (August 2007). The



Harken 1609

Harken 1609, a one-hand operated, bottom-opening snatch block, is user-friendly, and its rugged construction promises years of heavy-duty use. The investment-cast stainless-steel

body is a chunky piece of metal that adds some extra weight, but it also stabilizes the load handling and provides a secure point to attach the rugged trunnion-action snap shackle. Harken topped the charts with its unique clam shell-like, push-button opening process. The thick rubber padding on the cheeks minimizes gelcoat chipping caused by light-air sheet slackening.

The Harken block was a top performer in testing, is quality constructed, and easy to use and maintain. We found the 1609 model online at www.defender.com for \$299.



GEAR OF THE YEAR

the Elliot to spring to life with the tubes and canopy fully inflated in 6 seconds. In the raft was a full SOLAS-A survival kit with water, flares, and food. Its downside is that at 167 pounds, it was the only raft we couldn't simply pick up and toss in the water. The heavy-duty nature of SOLAS rafts became clear as we measured tube-skin thickness, checked stitching and seams, and noted little extras like a mechanical joint on the arch tube to help it endure physical punishment and better isolate it from the main buoyancy tube's air supply. At \$3,650, the price is competitive: The most expensive raft tested was \$8,200, and two others were priced over \$6,000.



Mustang MD 3184

SAFETY HARNESSES

Sailors have drowned while tethered to their boats, so an inflatable PFD with an integrated harness is preferable to a basic harness. *PS* performed a rigorous series of tests on both types, including man-overboard drills and load tests (up to 900 pounds). *PS* also conducted interviews with professional crew from the grueling 2006 Volvo Ocean Race.

The automatically inflatable Mustang MD 3184 PFD, a state-of-the-art inflatable PFD with integrated harness, was tapped as Best Choice in its category. At \$230, it's expensive, but its thoughtful design makes it worth the money. Constructed of coated nylon, with a single back strap, a neoprene collar, a low-mounted front buckle, and two quarter-inch stainless D-rings (breaking strength 4,000 pounds), the MD 3184 was the most comfortable and the easiest to adjust of those tested. With the MD 3184 hydrostatic inflator, no premature or accidental inflation occurred during testing.

Testers found the West Marine basic harness to be simple, functional, and ultra-lightweight. The no-frills harness, priced at \$50, is easy to don and comfortable. The



West Marine Basic

WEATHER INSTRUMENTS

In our May 2007 review of a dozen weather tools, testers compared devices that ranged from the simple, those that deliver only wind information or wind and temperature, to the complex, those that also record humidity and barometric pressure. The instruments were rated after evaluating the available functions, the price, user-interface, ergonomics, accuracy, intuitiveness, and how useful the device is to sailors.

The Kestrel 4000 was tapped as the *PS* Best Choice. Testers found it easy to use and not hampered by complicated extras. We particularly liked

Photo by Ralph Naranjo



Mustang Integrity

2-inch nylon webbing is supple and strong (breaking strength 5,000 pounds). The tether attachment point is a single quarter-inch D-ring (breaking strength 2,000 pounds). It also has a back patch to keep the straps from twisting. It got our pick for basic harness Best Choice.

FLOAT COATS

When you go overboard without meaning to, you'll want as much protection as possible. Float coats can provide the protection you need to keep from drowning and some offer defense against hypothermia. PS tested six models of coats in February 2007, including two inflatable coats and four foam coats. The Mustang Integrity Jacket was tapped as our Best Choice among foam-flotation jackets.

It offers more protection from cold weather than the wind-breaker style inflatable jackets. This \$260 coat is a waist-length jacket made of water-resistant nylon that uses closed-cell foam to provide insulation and buoyancy. The jacket has 17 pounds of buoyancy provided by six foam panels in the front, back, sleeves, and collar. The front zipper is protected by a 3-inch flap of reinforced nylon that seals over the zipper with Velcro closures. The jacket's cut makes it form fitting and comfortable both in and out of the water, and it does not ride up when worn in the water. The fleece-lined collar has a detachable hood with a reflective patch.

SURVIVAL SUITS

In July 2007, PS tested six survival suits, insulated "dry suits" that seal heat in and keep water out in extreme man-overboard situa-

tions. Testers did a thorough comparative analysis of the suits on land and in the water, paying particularly close attention to the details: weight, material, seam construction, zipper, reflective surface, boot and glove configuration, and air-purge valves. Testers donned the suits in simulated emergency conditions and spent more than 30 minutes in frigid water.

All six of the suits will prolong your life in cold water. The difference in the suits came down to the details. The Mustang Ocean Commander OC8001 edged out the other five suits to rate our Best Choice. It is a well-constructed suit that fulfilled its primary mission: keeping our testers warm and dry. The suit is made from a polyurethane-coated fabric with seams that are heat-impulse welded rather than stitched. The closed-cell foam lining seemed to compress less and provide better insulation around the legs than materials used in some other suits.

The suit has removable mittens along with deck gripping, neoprene-lined boots that work well in and out of the water. At \$595, the suit is not cheap and qualifies as a classic case of you get what you pay for. Of all of the suits tested, the Mustang was the only one that incorporated a well thought-out buddy tether with a wrist loop that answered the problem of how to disengage from a sinking ship or a delirious victim who's putting you at risk. A simple loop could be slipped from the wrist to make a timely escape ▲



Mustang Ocean Commander

CONTACTS

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the graphic records for barometer and temperature. The Kestrel's dedicated on/off switch and LCD backlight are other nice details. The sequence of screens is logical and can be accessed in two directions.

With an optional PC interface, the 4000 has added value for the serious weather tracker. It has a tripod mount in the docking station, allowing techies to set it up as a weather station and feed data to the PC. With a \$329 price tag (www.nkhome.com), it's a good product for the sailor unconcerned about cost who wants a reliable product that offers valuable info.

For those with strong eyes who don't mind the challenge of tiny screen characters, we recommend the \$171 Speedtech Skymaster (www.landfallnavigation.com). The Skymaster has a barometer and a wet bulb and measures humidity, dew point, and heat stress index. It's handy and

rugged, and most of the information is easy to read (with the exception of the aforementioned under-sized LCD characters). The barometer and temperature screens show bar graphs of past trends, and the unit has an interesting severe-weather alarm.



Speedtech Skymaster

Kestrel 4000

12-VOLT REFRIGERATORS

Compressor-driven portable refrigerators and freezers on the market now are quiet, efficient and effective. They've proven to be long lasting and low-maintenance. They are expensive, but if you need the capabilities of one of