

HOW WE TESTED

Our three-day test mirrored well-established methods used to meet U.S. Coast Guard and/or the ISO standards. Testing took place on relatively calm water in the Chesapeake Bay with nippy, 50-degree weather. All but one of the rafts on hand were manually deployed by a single person who lifted the raft and launched it over a hypothetical 30-inch-high lifeline. The heaviest raft was slid into the water from its cradle mount, simulating a launch from a sternwell or sidedeck. All rafts remained afloat for 30 minutes before the painter was pulled to induce inflation.

The inflation time and the out-gassing period associated with over-pressurization were recorded. Tube pressure was checked, and all valves were inspected for leaks. Each raft was boarded from the deck height of a foundering vessel as well as from the water. Each raft was rated for ease of access, and its boarding aids were evaluated.

Testers followed a checklist of inspection criteria including inflatable floors, seating space, handholds (inside and out), rain-catchment systems, port closures, and painter-cutting proce-



Rafts were towed at 3 knots to evaluate resistance to drift and security of the painter setup.

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dures. Drogues, bailers, and paddles were operated and evaluated.

All rafts were capsized and either righted by a crew in the water or tested to check their self-righting ability. Crew in the water also evaluated raft visibility and the ease of climbing back into the raft after righting.

To gauge resistance to drift, rafts were towed by their painters, and a strain gauge was incorporated to measure their resistance while being pulled at 3 knots. The attachment point reinforcement for painters and drogues were also carefully checked.

Each raft's night visibility was evaluated under ambient light as well as with a bright light source.

On the third day of testing, the rafts were hauled out and surveyed. Structural quality and attention to detail were noted. Dimensions were recorded, and a caliper reading was made of buoyancy tube material thickness. Design attributes were compared and contrasted. The reflectivity of the different canopies was measured with an EV scale using both incident and reflective light readings.

Details closely scrutinized included ease of launching, inflation performance, security of tether, board-

ing ease, visibility, construction quality, closure mechanisms, ballast-bag function, inhabitability, handholds, webbing, and point-load reinforcement.