



DOWNEAST DAZZLER



THE LUXURIOUSLY COMFORTABLE MJM 40z IS DESIGNED TO BE FASTER,
LIGHTER, AND STRONGER THAN MOST BOATS IN ITS CLASS

STORY BY JOHN WOOLDRIDGE
PHOTOGRAPHY BY BILLY BLACK

On a fine fall day last year, I found myself aboard the MJM 40z with Bob Johnstone, founder of the company that gives name to the boat, and Mary Johnstone, Bob's wife and the source of the MJM acronym ("Mary Johnstone's Motorboat"). Also on board was Ken Comerford of North Point Yacht Sales in Annapolis, our local MJM and J/Boats dealer.

Bob was at the helm, navigating us out the mouth of the Choptank, having left Oxford, Maryland, where they had overnighted, and bound for Annapolis in advance of the U.S. Powerboat Show.

Sunlight slanted in through the rolled-down Strataglass windows that formed the side and rear walls of the pilothouse, and we were having a pleasant conversation as the 40z made short work of the 1-foot chop stirred up by a light northwesterly. The aft door was rolled up for ventilation, but we weren't shouting—rather, we were talking in fairly normal tones, even as the twin Volvo Penta IPS drives pulled us on at about 17 knots.

I turned on my sound meter, walked forward, and read 71dBA at the helm and about 73dBA in the seating area where we lounged, aft of the helm. Mary noted this and told me that one of the things she enjoys about running the 40z is that the engines are located well aft. In combination with the engine compartment sound-attenuation features and the underwater exhaust of the IPS drive system, this helps keep transferred motor noise to a minimum.

“Instead of conventional building methods, he wanted a superior build, using materials above the norm, which proved to be a driving force behind the selection of the builder.”

Not long after they finalized the profile, arrangement, and specs, Zurn and Johnstone traveled from Canada to North Carolina to interview six yards, most of which were custom sailboat builders well known for building yachts using the latest technology to produce high quality vessels. In the end, Bob selected Boston BoatWorks, founded by Mark Lindsay and Scott Smith. Mark Lindsay had a reputation as a builder who looks at things from a different perspective and finds solutions to create a better build.

Starting at the transom, the deadrise is 18.5 degrees, hinting at a typical modified V that will stand up to rough water running at higher cruising speeds. The



Left: Doug Zurn's MJM 40z hull design cruises efficiently at speeds from 9 to 30 knots, across a wide range of conditions. Right: Bob and Mary Johnstone cruised the Volvo Penta IPS-drive-equipped 40z from Florida to the Chesapeake last year.

THE DESIGN

Zurn Yacht Design has always been known for boats that stand out in a crowd, visually as well as under way. All of the MJM designs share Zurn's distinctive Downeast look, with a nice reversed sheer, tumblehome sides aft, and a hard top that derives from workboats throughout Maine. There is an express version of each model, with side windows that extend from the outside front windshield pillars in a downward-sloping curve, reminiscent of Downeast bass boats.

“From the beginning, Bob wanted a better powerboat than what was already on the market,” said Zurn.

bottom shape maintains a constant deadrise for the aft third of the hull, then forms a keel, with deadrise increasing going forward in an inverted bell shape to a sharp, deep forefoot. There is plenty of flare and volume forward for reserve buoyancy and spacious interior accommodations. Each side has a lifting strake for efficiency and a chine that is of moderate width and flat aft, with a bit of reverse forward to help deflect spray.

CUTTING-EDGE CONSTRUCTION

Drawing from high-tech, high quality building techniques that have been used to build boats as exotic as



Above: With its Strataglass windows rolled up, the pilothouse is a wide-open platform for entertaining, with seating for a crowd.

an America's Cup racer, Boston BoatWorks employs a "wet pre-preg" technique that helps ensure a precise fiberglass-to-resin ratio in the layup of the hull and deck. It also means that the finished boat will be lighter and more fuel efficient than a similar design produced with conventional techniques. And it allows the finished boat to be strong enough to attain the ISO CE mark rating of Ocean Category A, capable of withstanding 45-knot winds and 21-foot seas.

All 40z hulls and decks are molded with a Cook Composites off-white gelcoat, with an option of a final coating of Awlcraft 2000 paint to suit the customer's requirements. Biaxial E-glass/Kevlar cloth is passed through the steel rollers of a pre-impregnation device and thoroughly saturated under pressure with Gougeon slow-set epoxy resin, which can be as much as 25 percent stronger than polyester or vinyl ester resins. The material is cut to specific shapes and hand-transferred into the mold, layered to specific thicknesses in areas of high stress. Impermeable Core-Cell closed-cell foam, 1 inch thick, is laid in while the resin is still wet, followed by another application of biaxial E-glass/Kevlar to complete the cored construction.

The transom corners, stem, and keel are all solid, not cored. The deck is molded in exactly the same fashion, with the exception that the core material is an Alcan Airex C70 cross-linked, closed-cell PVC, also 1 inch thick. The gelcoat has sand-textured nonskid areas, with the option of a contrasting color.

The mold is then vacuum-bagged and drawn down to 14.7psi (2,117 lb. per sq. ft.) to compress and bond the laminate while drawing the proper amount of resin into the structure, a technique that minimizes air voids. Next, the mold is heated in an oven at 145° for 48 hours to help ensure complete curing of the epoxy resin permeating the laminate. A molded structural grid made with unidirectional E-glass and epoxy is bonded into the hull for stiffness and strength to minimize impact damage. Areas of through-hull and hardware attachment are either solid fiberglass laminate or are reinforced with Baltec Airex PXC, a high-density, glass-reinforced urethane foam panel that replaces plywood where it would be used in more traditional applications. Mooring cleats and stanchions are backed with G-10 pressure-laminated composites.



Top left: The portside navigation console is equipped with an optional wide Stidd chair facing a large chart flat and VHF radio. Top right: The helm features a Raymarine C120 wide-screen MFD, electronic engine controls, and a joystick for the IPS drives. Above: The well-ventilated main saloon has a full galley to port and a settee to starboard that converts to Pullman-style berths.



The 40z's master cabin features excellent storage, traditional woodwork, and a custom island berth.

Finally, the bilges are painted with a smooth, gloss-white finish to make them easier to maintain and to help the owner spot the occasional engine oil or fluid leak. When the hull and deck are finally joined, they are permanently sealed along their mating surfaces with methacrylate adhesive that has a sheer strength of 3,000psi, then fastened mechanically through the gunwale guard molding prior to installation of the sacrificial rubbing strip.

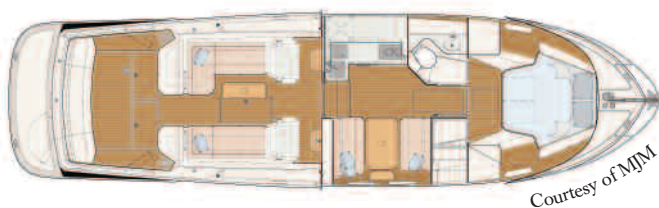
ON DECK

Boarding the MJM 40z is accomplished either by way of the swim platform and a transom door, or much more elegantly through opening side doors port and starboard. With the 29-inch-high, custom 316L stainless steel handrails atop the doors and gunwales extending around the transom, stepping in or out of a dinghy is made that much safer. (All rails on the boat are made of 316L stainless.) To secure stepping up to the modest side decks and going forward, there are vertical handrails

MJM 40z

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| LOA | 43' 1" |
| LWL | 37' |
| BEAM | 12' |
| DRAFT | 3' 3" |
| DISPLACEMENT | 18,908 lb. (half load) |
| BRIDGE CLEARANCE | 10' |
| FUEL | 350 U.S. gal. |
| WATER | 100 U.S. gal. |
| HOLDING TANK | 30 U.S. gal. |
| GENERATOR | 6kW Northern Lights (optional) |
| ENGINES | 370hp Volvo Penta D6s with IPS (optional) |
| MAXIMUM SPEED | 37 knots (as tested) |
| CRUISE SPEED | 9-30 knots |
| RANGE AT CRUISE SPEED | 428nm at 9 knots |
| DESIGNER | Doug Zurn |
| BUILDER | MJM Yachts |
| BASE PRICE | \$786,500 |
| PRICE AS TESTED | \$914,000 |

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Courtesy of MJM

on the aft edges of the hardtop supports in the cockpit; long handrails along the top and vertical handrails on the outside of the hardtop supports forward help with the transition from a point just forward of the midship spring cleats to the upward-curving bow rail protecting the foredeck.

Natural ventilation is well considered in this design. There are five Lewmar opening hatches on top of the cabin trunk (all equipped with Oceanair combination



Courtesy of MJM

Access to the twin Volvo Penta engines, through three separate aft deck hatches, is excellent for routine checks.

screens/shades), plus two over the helm chairs in the pilothouse. Additionally, all three forward windshield panels tilt open outward. Two opening portholes in the hull forward and six more in the sides of the cabin trunk, with Oceanair pull shades as appropriate, add cross-ventilation to the living spaces below. Roll-up Strataglass side and aft curtains complete the inventory, giving you many options to ventilate or protect the living environment.

CRUISING COMFORT

The aft deck on the MJM 40z I toured had an optional bench seat across the transom, with a removable section to allow use of the transom door. Two aft-facing seats atop large lockers—the portside unit drained for dockline and fender storage and the starboard-side unit equipped with an ice maker—are standard. Large hatches in the sole with locks and gas-assist struts open to provide access to the engine compartment and to the space aft, usually fit for storage, but inhabited on our test boat by the IPS drives. Deep scuppers with drains leading to overboard discharges and thick gaskets are present.

Behind the helm chairs under the hard top are twin facing settees; the portside settee is L-shaped. Both are furnished with bolstered Ultraleather cushions for four to six guests. A glossy-finish, single-leaf teak table set to port on a removable stainless steel pylon is provided for dining or board games and can be moved into the aft deck area for al fresco dining. Underfoot, an optional teak deck that extends aft to the bench seat and tops the side deck steps has been beautifully installed.

The helm chairs on our test boat were the optional 36-inch-wide Stidds, in lieu of the standard 23-inch-wide 500N Admiral low-back models. With swiveling, telescoping bases, the chairs can be lowered and swung around when the boat is at rest to create a comfortable seating and entertainment area. Two overhead stainless steel rails provide handholds on both sides of the centerline walkway leading to the cabin companionway, up to the point where the hatches are installed. That works well, but a centerline overhead rail would carry the safety farther forward.

Visibility from the pilothouse helm chairs is virtually uninterrupted through 360 degrees, and the large forward windows are equipped with wipers/washers to help keep them clear. The helm has a 24-inch Edson destroyer wheel with a varnished teak rim mounted vertically for ease of use when standing. A dual binnacle for the throttles/shifters is set to starboard, and on this IPS-powered boat, a joystick module was set to port.

Corian countertops and cherry cabinetry grace the portside galley, which opens to the main saloon seating to starboard. The overhead handrail in the galley is a very good safety idea, one you don't see on many boats. All the components for efficient meal preparation are here, including an under-counter Vitrifrigo drawer-style refrigerator and freezer that will hold a week's worth of groceries. The convection/microwave oven has a five-way cooking feature to help take the work out of heating pre-prepared



Having the option of higher cruising speeds when desired is an important element of the MJM 40z's construction and propulsion.

meals under way. The custom-built hinge-out electrical panel is closed and fastened to ABYC standards, with breakers protected by stainless guards.

The saloon seating can be either a bench seat or a dinette with facing benches. The back cushion of the bench seat folds upward to create the upper berth of two Pullman-style bunks. The dinette has a drop-down feature to make up into a double. Counting the bench seats in the pilothouse, this brings the sleeping capacity to four—but not for long.

The master cabin has a 78-by-60-inch island double with storage drawers and a large storage bin underneath. The framed cherry wood forward bulkhead houses two small bookcases, and sturdy shelves above double as handrails and will hold glasses, that book you tried to read as you fell asleep, and your personal flashlight, among other things. There's a hanging locker to port, as well as private access to the combo head/shower compartment, which is also accessible from the saloon. A VacuFlush freshwater head with a 30-gallon holding tank is standard equipment.

The engine compartment offers overhead access to the engine and drives through separate hatches; routine maintenance is not difficult. There's plenty of room for the optional 6kW Northern Lights generator with dedicated start battery and fire-suppression system. You'll need the genset if you opt for the

16,000-Btu Marine Air air-conditioning system, which can cool or heat the pilothouse, the cabin, or both.

There are three Jabsco Rule 1100 automatic bilge pumps throughout the hull, Marelon through-hulls/seacocks with strainers and double-clamped hose connections, and Parker 221FR fire-resistant USCG Class 1 reinforced fuel hoses for the engine. The two Group 8D 245-AH house batteries and three Group 31 105-AH start batteries were well secured and easy to inspect, and all electrical system and underwater fittings were correctly bonded.

ON THE WATER

Economy under way is a key consideration, but so is usable speed for a variety of water conditions. At 9 knots, the twin Volvos burned an indicated 6.8gph, giving a range of 428 nautical miles at 1.36 nautical miles per gallon. Bump it to 20 knots and the burn rate is 17.2gph, with a range of 372 nautical miles. Top speed, when required, is 37 knots, burning 41.5gph. The IPS drive system is a pleasure to command—very responsive to the steering wheel—and the boat is wonderfully maneuverable at the dock with the joystick.

If a twin-diesel Downeast performance cruiser fits your lifestyle and your pocketbook, the MJM 40z offers the accommodations, fuel economy, and luxury touches that are sure to please. 