



A TOUR OF THE ASSOCIATION OF MARYLAND PILOTS' NEWEST LAUNCH BOATS

Story By STEVE C. D'ANTONIO

“**W**hat's the life expectancy of these boats?” It seemed like a valid question to ask as I stood hunched over the port engine of *Patuxent*, one of the Association of Maryland Pilots' two newest launches.

Cape Henry Pilot Station Manager Mike Hanna and Port Engineer Richard Peck responded in perfect unison. “Forever,” they pronounced, not missing a beat, making me wonder if their reply had been rehearsed.

Initially, their answer surprised me. But, after spending the day aboard *Patuxent* and *Patapsco*, the association's identical 52-1/2-foot pilot boats, I understood perfectly. These vessels are the epitome of intelligent design and are a model of rugged construction married to attention to detail and a peerless maintenance program. It's impossible to be anything but impressed by these vessels and the folks who design, build, maintain, and operate them. Although the mission of these boats and the Association of Maryland Pilots appears simple and straightforward—delivering and retrieving pilots to and from incoming and departing commercial ships with safety, speed, and efficiency—it's no easy task.

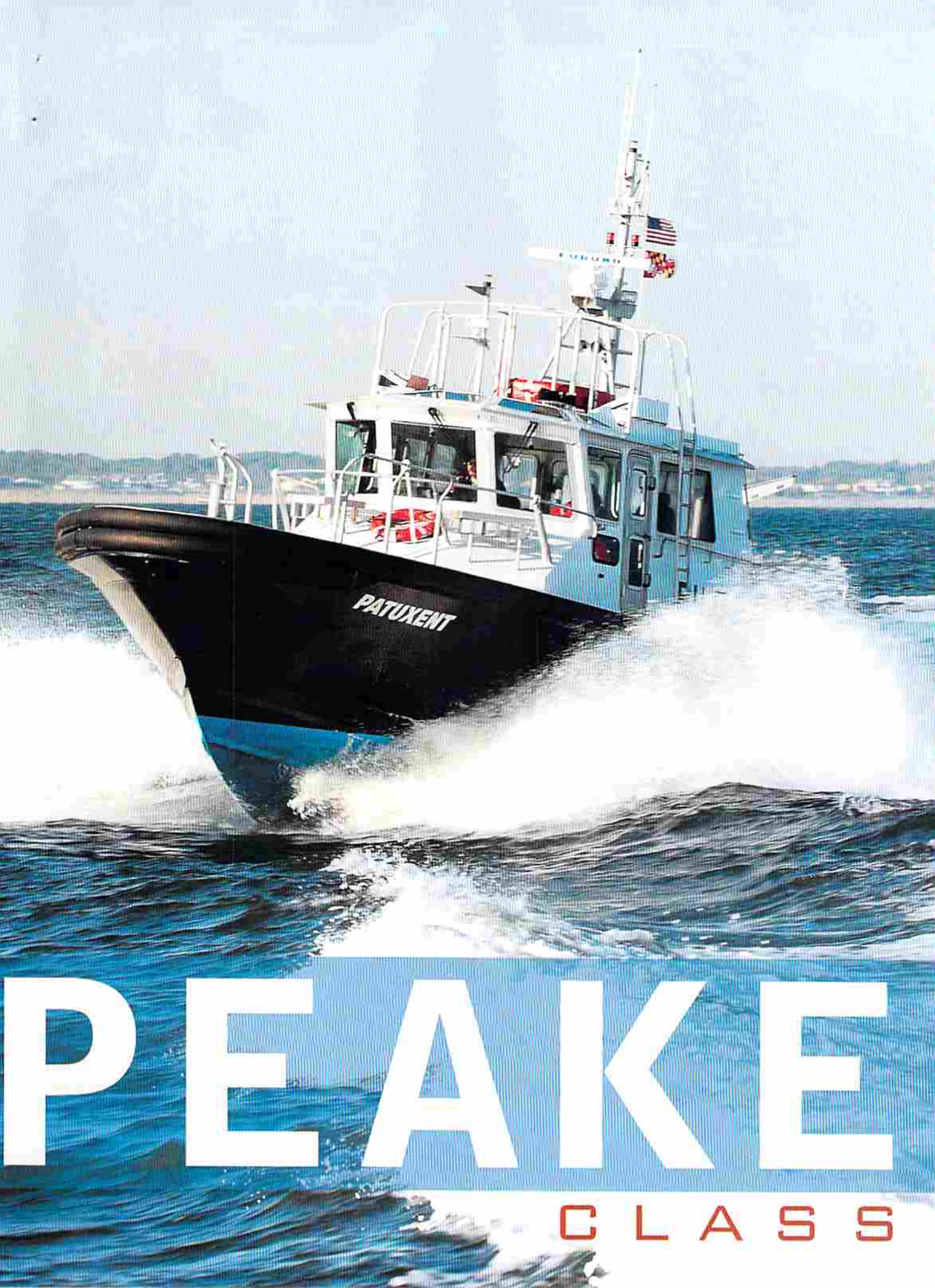
When I was presented the opportunity to hitch a ride with a Maryland pilot up Chesapeake Bay from Cape

Henry, Virginia, to Baltimore, Maryland (a distance of about 150 miles), I leapt at the chance. Two men made the trip possible: Bob Dubois, a retired Maryland pilot who is now the master of *Sea Flat* (an Ocean Alexander 50 that he and his wife, Jane, live and cruise aboard), and Bill Band, an active-duty Maryland pilot, fellow “Safety at Sea” presenter, and owner of *Brighter Days*, a Monk 36.

I traveled to the pilot station at Cape Henry early on a Sunday morning in February, intending to write a single article about Maryland pilots and the vital job they do. Pilots truly are the unsung heroes of Chesapeake Bay and other ports and coastal waterways around the United States. They quietly and professionally go about the business of safely guiding large ships through restricted channels in all weather and sea conditions. While a pilot is not officially in command of the vessel that he or she guides (the ship captain retains that responsibility), if a grounding or accident occurs, the pilot's actions are always closely scrutinized.

The ship we were to board was running late because of minor engine trouble. As we awaited departure, I was given a tour of the station's pride, *Patapsco* and *Patuxent*, which were added in 2002 and 2003, respectively, to the Maryland pilots' fleet of 10 seagoing craft. After spending

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Steve C. D'Antonio



William Band

Top: *Patuxent* has just landed a pilot (in the orange coat) aboard a relatively low-freeboard bulk carrier. Above: The author climbs *Ever Renown's* Jacob's ladder. The launch operator must maintain station directly beneath the ladder for as long as it takes the pilot to complete his or her ascent.

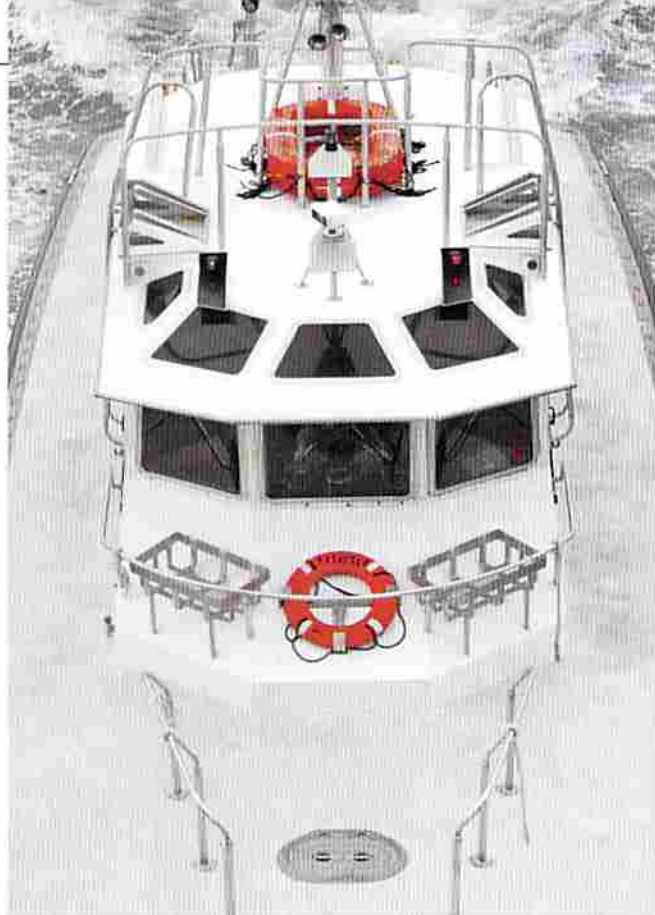
just a short time aboard *Patapsco*, I realized that I, and *PMM* readers, could learn a lot from these boats and that they clearly are a story unto themselves. These vessels typically see as much service in a month as the average cruiser sees in a year, making them an accelerated learning tool for recreational vessel owners and operators.

And so I shifted my focus to the remarkable boats that transport Maryland pilots: the Chesapeake Class pilot launches. (Pilots in Virginia and Tampa, Florida, have adopted the same boat design.) In a future article, I'll share with you the details of what the skilled group of mariners known as the Maryland pilots, as well as the pilot boat operators and other station personnel, do and how they do it so well.

SEA TRIAL

During an ordinary recreational boat tour, I typically save the sea-trial description for last. Because the Chesapeake Class pilot launches are far from ordinary and anything but recreational, I'm going to break with convention by going straight to the on-water description.

I used to think I had the best job in the world: working on and writing about boats. After spending a morning under way aboard *Patapsco*, I'm not so certain anymore. Running one of these vessels looks like pure, unadulterated fun. These boats are designed to not only handle but thrive in the most tumultuous sea conditions. The Maryland pilots go out in virtually all weather short



Top: *Patapsco* enters Lynnhaven Inlet after disembarking a pilot. Five windows in the pilothouse cabin top enable the launch operator to see pilots ascending or descending a ship's ladder even when close aboard large vessels. Above: *Hampton* returns to her berth on Lynnhaven Inlet.

of an outright hurricane; officially, they will operate until the Coast Guard closes a port. So, one of the primary design criteria for the launch boats is superb heavy-weather handling. I didn't get to experience that side of the Chesapeake Class's abilities; on the February morning I rode aboard *Patapsco*, it was clear and bright with light winds and just a light chop. But I could quickly see that these boats respond to a helmsman's

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Photos by Steve C. D'Antonio

Above: Richard Peck, port engineer and longtime member of the Association of Maryland Pilots, demonstrates use of the Chesapeake Class's aft steering station and handheld searchlight. The station, adjacent to the transom ladder and crane, is intended for use only during a man-overboard rescue. Inset: A close-up view of the aft steering station. Every launch operator, deckhand, and pilot hopes to never see the station used other than during a drill.

commands like a well-trained bird dog retrieves downed waterfowl, with grace and speed.

Indeed, speed is a tradition among pilot boats that dates back hundreds of years and is another essential part of the Chesapeake Class's design criteria. Many years ago, fast pilot schooners and other small sailing craft would race each other in virtually any weather to meet arriving ships. The first boat that reached the ship would receive the contract for pilotage. Chesapeake Class pilot launches carry on this tradition of swiftness, with a top speed of 27 knots and a cruise speed of 23 knots, both of which I experienced aboard *Patapsco*.

While speed is no longer necessary to secure pilotage contracts, it is a valuable asset, reducing the time these vessels and their crews must spend at sea and enabling them to maneuver quickly around extremely large ships. Because these small vessels move

so rapidly, they can rendezvous with an incoming or departing ship at the mouth of Chesapeake Bay just 30 minutes after leaving the pilot station at Lynnhaven Inlet on the lower Chesapeake.

On the day that I traveled with the pilots, I was afforded a unique opportunity due to a rare confluence of events: an all-daylight passage from lower Chesapeake Bay to Baltimore aboard a fast container ship, near-perfect weather conditions, and two pilot boats running out to meet two ships simultaneously. Because of this last detail, I was able to observe *Patuxent* doing her thing: coming alongside a large bulk carrier to deliver a pilot. Offering herself up for my cameras, *Patuxent* launched herself through *Patapsco's* substantial wake on a few occasions, a confidence-inspiring maneuver. Like an Olympic ice-skater regaining composure after a minor misstep, the boat rolled and pitched as she



Photos by Steve C. D'Antonio

Top: The MOB retrieval crane is a custom solution that allows one person to bring a MOB back on board. Middle: Perforated stainless-steel tubes shower each windshield with an even spray of nonfreezing washer fluid. In rough weather, particularly during the winter, this system receives near-constant use. Above: From left to right, Association of Maryland Pilots members Marty Schlatter, Jimmy Crisher, Terry Jones, and Parks Atkinson.

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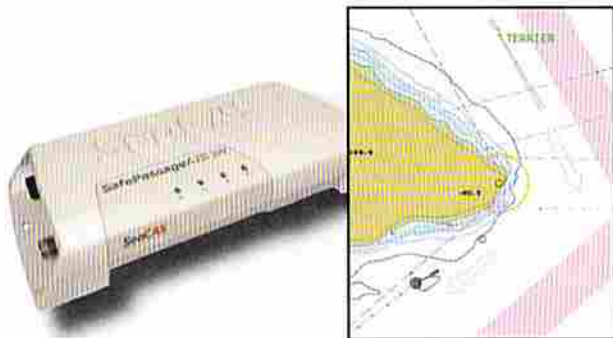
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Top: Mead Porter at the helm of *Patapsco*, with Bob Mitchell to starboard and Bill Band to port. Inset: The seats aboard the Chesapeake Class vessels, inspired by those used on naval Special Forces delivery craft, are unlike any other. Handles were installed at the end of each armrest for added security and comfort. Above: All critical controls must be easily viewable and reachable by the launch operator while minimally distracting him or her. The location of every gauge, lever, and dial was given a great deal of thought before its placement was finalized.



passed over a wave and then immediately returned to even-keeled running.

I was equally impressed as I watched *Patuxent's* helmsman expertly bring her alongside a 650-foot bulk carrier as both moved along at 8 knots. *Patuxent*, dwarfed by the 36,000-ton vessel to which she was delivering a pilot, made what appeared to be a controlled collision with her charge and then stayed alongside as if secured by stout mooring lines, although no lines are used in such maneuvers. The boat operator's keen control of helm and engines kept the small black-and-white vessel planted firmly alongside the huge ship, much like a pilot fish moving in concert with a shark.

Although the boat operators and pilots aboard *Patapsco* and *Patuxent* made it look easy the day I rode along with them, transferring personnel and operating a small vessel in close quarters with extremely large ships while both are under way is deadly serious business. Earlier this year, a 57-foot pilot launch (slightly larger than the Chesapeake Class boats) belonging to the Galveston, Texas, pilots capsized immediately after retrieving a pilot from a 168-foot oil-support vessel in 5- to 7-foot seas and 25-knot winds. The pilot was trapped inside the overturned boat for nearly a half hour but was able to escape before the vessel sank. Regrettably, the boat operator was not so fortunate; his body was retrieved from the sunken pilot launch.

In order to minimize such risks, a great deal of thought and effort went into the design of the Chesapeake Class launches. Excellent visibility is a key component when it comes to making an inherently dangerous operation as safe as possible. The Chesapeake Class pilot boats are riddled with windows—24 of them, in the form of windshield panels, ports, and glazed hatches—providing the boat operator with nearly 360-degree visibility.

There's an old seagoing axiom about the crew giving out before the vessel. In the case of the Chesapeake Class pilot boats, this might be true if it weren't for the highly trained crew members and the support they are given, literally, in the pilothouse and on deck. Handholds, handrails, and grab bars abound. Hard as I tried, as I moved throughout the cabin and the working areas of the deck, I could find no place aboard these vessels where a handhold was not available.

Included in this commitment to security for the crew are the seats, which were custom designed for the boat operator, the embarked pilots, and the pilot launch's deckhand (every pilot boat crew includes a deckhand). In cooperation with Stidd, the well-known marine seat manufacturer, the Maryland pilots who provided input for the design of the Chesapeake Class identified specific features they wanted incorporated in the seating.



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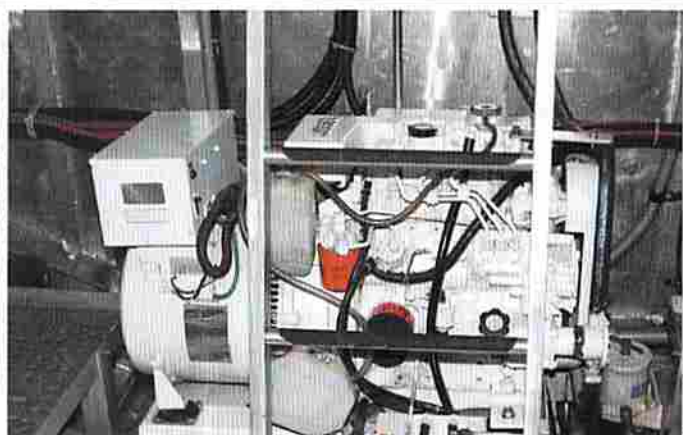
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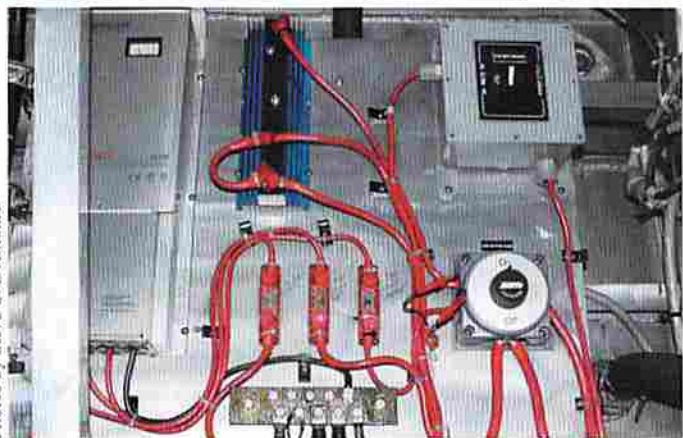
Photos by Steve C. D'Antonio

Top: The Chesapeake Class engine room layout is designed to provide adequate if not ample access to every critical component. No vital equipment is covered or concealed and the only insulation is on the overhead, making visual inspections and cleaning easy. Above left: The stainless-steel and aluminum manifold directs a high-capacity engine/belt-driven bilge pump whose pickups are plumbed into each watertight compartment. Above right: Chesapeake Class pilot launches are equipped with a 10kW Northern Lights genset. This provides AC power for air conditioning and, if necessary, battery charging in the event that shorepower is unavailable. The genset remains unenclosed for easier access, inspections, cleaning, and maintainability.

While riding aboard the pilot boats of other East Coast pilot associations, they determined that smooth, vinyl-like seat covers, although attractive and easy to clean, were too slippery for heavy-weather use. The occupants had to expend a great deal of energy just to keep from sliding out of the seats. The seat covers specified by the Maryland pilots are made from a textured material that affords more gripping power. Additionally, the four crew/pilot seats include armrests that have been augmented with a vertical bolster and grab bars, as well as foot rests with heel cutouts for extra support. The only possible way that

more security could be added to these seats would be to install seatbelts.

The boat operator sits in a conventional Stidd seat (although it, too, utilizes the high-traction fabric) that's high and on the vessel centerline. Thanks to this optimal positioning and the abundance of windows and ports, his view is commanding, to say the least. Shift, throttle, and other essential controls are all ergonomically laid out and within easy reach. Instrumentation is nearly perpendicular to the operator's viewing position, allowing quick and easy glances at engine gauges and other instruments. An important feature of the



Photos by Steve C. D'Antonio

Top: Access to vital components like fuel filters and raw-water strainers is unencumbered. All components are symmetrically located inboard of the engines. Above left: Attention to detail is critical for any marine electrical system, but particularly so for aluminum vessels. Any contact between an energized conductor and the vessel's metallic hull will result in either a catastrophic short circuit or severe stray current corrosion, so all wiring is well secured and chafe protected. The main battery disconnect switches are located in the engine room. Note the corrosion inhibitor applied to the grounding bus at lower left. Above right: Hydraulic steering components are located within the lazarette and are easily accessed through an on-deck watertight hatch.

Chesapeake Class is the reverse-raked windshield, a primary benefit of which is the reduction of glare from instruments and electronics. This feature has been used with great success aboard commercial, military, and recreational vessels alike, including the Coast Guard's 47-foot motor lifeboats, and it makes sense. The Maryland pilots have, however, identified one drawback. In freezing conditions, the windshield wipers can become weighed down by accumulated ice and fall forward, away from the window. Boat operators overcome this problem with regular use of the custom-designed windshield washer system, which has a 13-gallon reservoir.

DESIGNING THE BOATS

The origins of the superior design of the Chesapeake Class boats predate the first sketch or CAD file. Long before even a preliminary drawing was made, a committee was formed to research design and construction with the goal of creating the ideal pilot launch. The panel consisted of two of the Association of Maryland Pilots' most experienced pilots, Roger Hall and Mike Hanna, as well as Richard Peck, the port engineer (a.k.a. the chief gearhead for all of the Maryland pilots' operations, in Baltimore, Cape Henry, and Solomons, Maryland). At the time, Roger was the Maryland pilots'



Two of the Maryland association's most experienced pilots, Roger Hall (the Chesapeake Class design team leader), left, and Bill Band, in *Patuxent's* engine room.

marine superintendent, a position that gave him the final say on all things pertaining to the pilot launch boats, and Mike is the current Cape Henry Pilot Station manager. This maritime brain trust encompassed more than 50 years of piloting, small-boat operating, and building experience. The committee's research included visiting and cruising aboard other East Coast pilot boats. As the leader, Roger had specifically lobbied to keep the panel small. His belief was that too many pilots would spoil the boat (too many people insisting on too many disparate features would compromise the vessel's design). This bold stroke seems to have been successful, because everyone I interviewed agreed that the boat's design is as close to flawless as one can get.

Once the preliminary design features had been settled on, a well-established builder of steel and aluminum commercial, military, and pilot boats was chosen to carry out the construction. This is a very specialized field, and only a handful of builders worldwide are capable of constructing pilot launches to the standards required by the Maryland pilots and other piloting associations. Ultimately, after receiving bids from four builders, the association selected a New England yard: Gladding-Hearn of Somerset, Massachusetts, an internationally recognized family-operated shipyard with a stellar reputation for sound engineering and construction. (The

shipyard's designs are developed in close cooperation with another well-known New England firm, C. Raymond Hunt Associates, the originator of the deep-V hull concept.) Gladding-Hearn has built, among many other vessels, scores of successful, well-regarded pilot launches and has a long list of achievements. The yard has been building "extreme service" vessels for more than 50 years, the first of which, a 47-foot steel fishing boat, remains in service to this day.

If repeat customers are the best measure of a business's success, then the folks at Gladding-Hearn are extremely good at what they do. They've repeatedly built pilot launches for pilot associations in Virginia, Delaware, New York, New Jersey, Florida, and Massachusetts, as well as for a number of international customers. Gladding-Hearn is also the largest supplier of vessels to the New York Police Department's Marine Unit, having supplied 13 boats ranging from 33 to 55 feet. I've seen these boats in action on several occasions and can attest to the demanding nature of their work.

During my interviews with Maryland pilots and other personnel employed by the association, I heard nothing



Above: A heat exchanger transfers heat from the engine's coolant to a separate fluid circuit that circulates heated liquid through the on-deck handrails to prevent ice accumulation.

Photos by Steve C. D'Antonio



but praise for the builder. The company is operated by two brothers, Peter and John Duclos, the sons of one of the three original founders. The Duclos brothers have been known to fly to company-built boats, including those of the Maryland association, at a moment's notice to investigate or resolve a technical or design problem. The Association of Maryland Pilots holds Gladding-Hearn in such high esteem, I believe it's safe to say that the company has found a customer for life. The catch is, the Maryland pilots take such good care of *Patuxent* and *Patapsco*, the vessels are unlikely to ever need replacing!

CONSTRUCTION DETAILS AND PERFORMANCE

Not unlike semi-custom yachts of similar proportions and complexity, the Chesapeake Class vessels require between six and eight months to build and today would cost approximately \$1 million. (The exact price paid by the Association of Maryland Pilots is confidential; however, the estimated replacement cost is approximately \$1 million.)

On the Chesapeake Class vessels, the hull, deck, and pilothouse are constructed entirely of 5086 series aluminum of varying thicknesses, between 0.25 and 0.50 inch, and the boat is equipped with four watertight bulkheads. Gladding-Hearn gave the Maryland pilots the choice of taking delivery of their vessels with either a bare aluminum finish or Awlgripp, the latter at greater expense (the aforementioned Coast Guard 47-foot motor lifeboats are unpainted). Although the design committee of three recommended against paint for technical and maintenance reasons (a decision with which I concur, from a technical standpoint, because aluminum and paint rarely form a long-term union), the pilots voted overwhelmingly for Awlgrip in the traditional black-and-white pilot boat color scheme. The vessels look extremely sharp in their painted trim, and from an aesthetic viewpoint, I clearly understand why they chose this.

Select high-traffic areas on the deck and in the cabin remain intentionally unpainted. The toerail and all handrails, bollards, hatches, ladders, and hatch thresholds also are in their naked state. Once the boats were delivered, the appearance of these areas was further improved by buffing and polishing them to an attractive shine. All engineering, bilge, and interior spaces that are not covered with sound proofing remain, wisely, in bare aluminum. (The pilothouse and forward cabin are insulated to keep noise levels below 80dB, loud by yacht standards but more than acceptable for the short passages these vessels routinely make.) While it may not look pretty to some, aluminum is most durable and corrosion resistant when left in its natural state.

From a gearhead's point of view, the Chesapeake's

PATAPSCO AND PATUXENT

LOA	52' 6"
BEAM	17'
DRAFT	4' 8"
FUEL CAPACITY	690 U.S. gal.
POWER	Twin 600hp Series 60 Detroit Diesels
GENERATOR	10kW Northern Lights
MAXIMUM SPEED	27 knots
CRUISE SPEED	23 knots
RANGE	300nm

engine room is a sight to behold. Every space I was able to access aboard both *Patuxent* and *Patapsco*, from the anchor locker to the lazarette, was gleaming and operating-room clean. The power plants are twin Detroit 60 Series engines that deliver 600hp each at 2100 rpm through Twin Disc MG 1.92:1 gears and 3-inch shafts that turn 30-by-35 five-blade nibril propellers. The engines are as clean as the day they left the factory, maybe cleaner. Maximum speed is 27 knots, and the boats cruise comfortably at 23 knots. The fuel capacity is 690 gallons, stored in a single centerline, integral aluminum tank, giving the Chesapeake Class vessels more range than they would normally need. At top speed they consume 50gph, providing a range of approximately 300 nautical miles, enough for the boats to safely run up to the maintenance station in Solomons with an ample reserve.

While battery switches reside *inside* the engine compartment, the main fuel tank supply valve can be turned off from *outside* this space. An unenclosed Northern Lights 10kW generator is installed amidships in the engine room, aft of the main engines. It provides power for air conditioning and heating compressors as well as AC lighting and battery charging, should that ever be necessary. A single 50-amp, 240-volt cord supplies shorepower through an isolation transformer. Each engine has two of its own 760CCA cranking batteries, and house needs are supplied by twin 8Ds. All DC systems (starting, charging, lighting, etc.) are 24 volt.

EXTREME MAINTENANCE

Because these boats see so much action (*Patapsco* has over 8,000 hours on her meter, and *Patuxent* over 4,000) and because they have much in common with cruising vessels' systems (fuel, electrical, running gear, and so on),



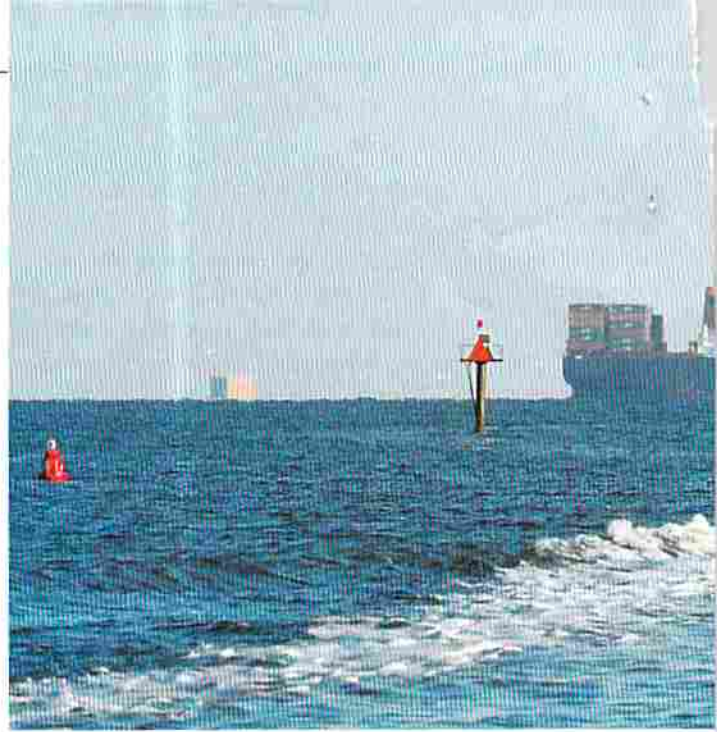
they offer, as previously mentioned, an accelerated view of a cruising vessel's maintenance needs and procedures. On average, each of the two pilot boats accumulates approximately 200 hours *per month*. For better or worse, that's roughly equal to or more than the amount many recreational vessels cruise seasonally.

It's important to keep in mind that one aim of the Maryland pilots is to have zero down time for these critical mission vessels. While that's not always possible, the group strives mightily to achieve this lofty goal. The ships keep arriving and departing, an average of nine per day at the entrance to Chesapeake Bay, regardless of whether the pilot boats are running. Therefore, Chesapeake Class maintenance is carried out with religious regularity. The weekly preventive maintenance checklist that is completed on each vessel resembles what most recreational cruisers do, or should do, on a seasonal basis. It covers everything from checking oil and the fuel fill cap gasket to inspecting raw-water pump weep holes and examining wiring for chafe or loose connections.

Engine crankcase oil is changed and analyzed monthly, while gear lube is replaced and analyzed every 1,000 hours of running time (with the rapid accumulation of hours, that's about twice a year). Fuel is drawn from the tank and sent to a lab for analysis twice a year. All maintenance tasks are thoroughly recorded. Every failure is meticulously documented and frequently photographed for posterity and analysis so that similar events can be prevented in the future.

While the average cruiser may be willing to live with an oil leak or two, provided it's minor, Maryland pilots feel no such compunction. Engines are wiped and inspected for leaks *daily*, and any leak, no matter how minute, is simply not tolerated. I confirmed this; the engines and the pans beneath them are, as you might guess, extremely clean, like everything else on these boats. The Detroit Diesel primary tandem fuel filters are inspected daily and replaced approximately monthly or more often if needed. Per Detroit Diesel's instructions, the Chesapeake Class launches use 30-micron primary filters.

Engine coolant pH is tested weekly and sent out for analysis every six months, and the cooling system is flushed and coolant replaced every 4,000 hours. The raw-water side of the heat exchanger is inspected and cleaned every 1,000 hours (again, this equates to roughly every five months). On a weekly basis, bilges are vacuumed, which is critically important in preventing corrosion, and *all* bare aluminum vessel-wide, from bilges to overhead, is corrosion treated (many of these surfaces are slippery as a result). In addition, the seacocks are exercised once a week.



While I was in the engine room poring over the numerous design and construction details, I heard a strange whirring noise. I eventually tracked it down to the starboard propeller shaft; it was spinning freely in spite of the fact that the vessel was stationary and the engine was not running. The current was spinning the shaft. As the operator of a boatyard whose specialties include extremely accurate shaft alignment, I was impressed by this phenomenon. In order for a propeller to spin its shaft as a result of a 2- or 3-knot current, its alignment must be nearly perfect: a result of the Maryland pilots' near-fanatical maintenance program, no doubt.

The propellers on *Patuxent* and *Patapsco* are swapped annually with a spare set that is available on standby at all times should an unscheduled replacement become necessary. At the Cape Henry station, a Travelift that's owned by the Virginia pilots, who share the station, is available for use by Maryland pilot boats for this type of maintenance.

After every run, the boats are refueled and washed from stem to stern. Hatches and ports are opened to allow the boats to breathe when the weather permits. This prevents incipient corrosion and mildew while reducing the stuffiness from which many metal and otherwise airtight vessels suffer.

DETAILS, DETAILS

I spent an entire day crawling around these boats, and still I wasn't satiated. I simply couldn't get enough of the myriad large and small details that make these vessels tick. It seemed that every 10 minutes or so I'd find myself muttering, "Hmm, that's interesting" or "What a fabulous idea."

Patuxent and *Patapsco* are intentionally identical in



Steve C. D'Antonio

Patuxent races toward a container ship to retrieve the pilot who has safely guided the cargo vessel from Baltimore to the mouth of Chesapeake Bay.

every detail. The pilots want the boat operators to be able to move from boat to boat without having to remember subtle changes in detail or operating characteristics. In extreme conditions, this can help prevent mistakes and accidents.

Here are a few of the noteworthy details I found on *Patuxent* and *Patapsco*, some of them obvious, others more subtle.

- A 13-gallon windshield washer fluid reservoir that sprays washer fluid on all three windshield panels through custom-designed stainless-steel capillary tubes.
- Heated front windows.
- Heated handrails and decks. Heat is drawn from engine coolant and then is sent through a heat exchanger, so a failure in the handrail/deck system would not compromise engine cooling. Initially, the system worked so well that the rails were too hot to touch. A control valve solved the problem.
- Both engines are equipped with manual air shutter shutdowns that can be actuated from the helm or directly in the engine room.
- *Patapsco* and *Patuxent* are equipped with built-in, pre-rigged towing hawsers and anchors, both of which are stowed neatly below decks so as not to suffer wear, cause wear, or freeze.
- The starboard engine operates a clutch-controlled, belt-driven, high-capacity bilge pumping system that is controlled through a selector manifold.
- The bollards and other deck gear all reside inboard, away from the toerail, to minimize trip hazards for pilots while embarking and disembarking.
- The mast-mounted search and navigation lights are

equipped with shades to prevent foredeck glare that could distract or impair the night vision of the person operating the boat.

- A custom-designed man-overboard retrieval crane with a self-tailing winch, located on the aft deck adjacent to the aft steering station, enables a single crewmember to retrieve a person from the water. A man-overboard rescue noose is also located on the aft deck. A "swim step" and ladder built into the transom makes MOB retrieval easier.

- Each vessel is equipped with a full set of first-aid gear, including an AED (automatic external defibrillator), oxygen, thermal blankets, and first-aid kit. Each vessel also is equipped with six immersion suits. Pilots, boat operators, and deckhands must demonstrate the ability to quickly don an immersion suit monthly.

LESSONS LEARNED

As I mentioned earlier, these boats have a great deal in common with our own recreational cruisers, and there's much we can learn from the way they've been designed and built. Their maintenance procedures are second to none, and it shows. Even after conducting a thorough inspection, I still find it hard to believe that *Patapsco* and *Patuxent* have accumulated over 12,000 collective engine hours. After searching all day, I was able to find only one small area of minor corrosion.

It's inspiring, to be sure, and it sends a clear message to all recreational cruisers: take care of your boat, and she will take care of you. The Association of Maryland Pilots and its Chesapeake Class pilot launches benefit from just such a relationship. 