

The

Security Escort Vessel



Gladding-Hearn's 64 SEV on demonstration in New York Harbor.

Below, inset: Gladding-Hearn's Tim McAuliffe recounts some of the achievements of these waterjet systems, much to the satisfaction of the Coast Guard personnel who might someday run them. (Photo Don Sutherland)



The suicide attack on the USS Cole in Aden, Yemen in 2000 became a poster event for a new kind of warfare. Its searing lesson was that small boats can fatally damage large warships. One immediate solution for the ships is to use small boats as escorts, but deploying them comes with a catch. "Constitutionally," said Peter Duclos, president of Gladding-Hearn Shipbuilding, "the U.S. military cannot operate against its own citizens." In other words, the U.S. Navy can blow you out of the water if you're the enemy, but it can't arrest you if you're a citizen. It takes a law-enforcement agency to do that. "Under a memorandum of understanding with the U.S. Navy," said Duclos, "the U.S. Coast Guard operates the boats," designated 64-ft Security Escort Vessels (64 SEVs). "The Coast Guard provides the crew who man and operate them, but the maintenance is done by the Navy, which continues to own them." Standard crew would be ten to twelve, including a boarding team.

Propulsion is supplied by a pair of MTU marine diesels, driving Hamilton waterjets. The vessel's designers, Hunt Design, of New Bedford Mass., have been long-standing advocates of waterjets, and use the Hunt deep-V hull to optimize performance with waterjet systems. "Waterjet boats are extremely maneuverable," according to the company. "They can spin on a dime, but controlling their maneuverability can be frustrating for first-time users. Because you

are directing 100% of the thrust, a small adjustment to the helm can mean a big change in direction, and so it is harder to keep a nice straight course. Deep-V hulls are the best match for jets. The deep-V's combination of a long, deep afterbody and shallow, cut-away forefoot give it inherent directional stability, whereas flatter-bottomed hulls with sharp bows tend to skid around or dig the forefoot in and broach."

"To go a step further, we have developed our own special trim tabs for jets that add directional stability and counteract the tendency of jets to suck the stern down both at slower speeds and in the transition from displacement speeds to planing. A Hunt deep-V with waterjets can be driven hands-off and she will hold course upwind and down, and with seas on a stern quarter."

Praise for the Government

The Gladding-Hearn and Hunt Design team who demonstrated the 64 SEV in New York on January 21, praised the General Services Administration (GSA), describing it as a principal reason they and the government could execute an order for one dozen of these vessels. "It's a way for the government to streamline their purchasing, which used to be extremely cumbersome — it took forever, it was expensive, you just threw-up your hands and said, 'not for us.'" Large yards building large warships may have



Peter Duclos steers the fifth 64 SEV in a brief demonstration in New York Harbor. (Photo Don Sutherland)

clerical superiority for all the paperwork, but "I think there's a trend in the government to be buying small boats," said Duclos, "and small yards are better at small boats." The GSA "uses essentially a pre-negotiated contract that has a list of standard products that you offer to any government agency. If you're selling pencils, they look up the price they pay for pencils and you accept it or not. There has to be leeway in things like boats, there's a lot of different equipment you can put in them. Ours is treated as a modified standard product. But basically, they're looking for off-the-shelf products." The 64 SEVs pattern began with a pilot boat, a 69-footer called the Texas, for the Galveston pilots. Texas was also a Hunt-Gladding-Hearn collaboration. Gladding-Hearn reported that the Galveston pilots placed an order for another of these boats. Is this a standard in the making? Maybe. But "a pilot boat spends its life banging against ships at sea," said Duclos, "and the 64-footer was that much lighter, and we could lighten it further to optimize for speed." Top speed of the new boat has not been announced, but 30-knot speeds have been attributed to the heavier 69-footer.

The 64 SEV demonstrated in New York was the fifth of the 12-boat order. The first four are already deployed: two on the West Coast and two in the South. Boat No. 5 was destined for the West Coast as well. "They will only be used in places where there are Navy bases. As high-value Naval assets come in and out of U.S. ports, this vessel will provide the screening protection for many kinds of assets."

With Duclos at the helm, the demonstration began with the boat crabbing off the dock and turning 180-degrees in the close confines of Liberty Marina. From there it headed into the Upper Bay, and the southern reaches of the North River where various aspects of its maneuverability were displayed. A Coast Guard patrol noticed the exhibition and steered a course in the SEV's direction. Maybe they'd heard about this new boat, or maybe they saw a boat like no other, in Coast Guard livery, starting, stopping, turning, within a stone's throw of the Statue of Liberty. Their RIB followed the 64 SEV to its dock, and by the time it was tied-up, introductions were made. Gladding-Hearn's Tim McAuliffe conducted Coast Guard crewmembers on a tour below decks. Five bunks altogether, a commodious galley, the comforts of the boat were received well. The preview suggested that crews will take to their new off-the-shelf workplace like it was a custom fit.