

# **DEMONSTRATION: Use of MARINESKIMMER boats to clean up the environment in near-shore coastal waters**

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Today, the City of Baltimore's Inner Harbor is recognized internationally as a world-class model waterfront. In 1989, the City purchased its first MARINESKIMMER (TM) boat from UMI, specifically designed to pick up and remove floating trash and debris from their Inner Harbor waterways. The City's Marine Operations Division of the Department of Public Works has since acquired a total of 5 trash skimmers of varied size and capacities to meet their goal of maintaining a clean harbor, a vital ingredient in Baltimore's tourist-oriented waterfront.

All UMI MARINESKIMMERS are built on twin pontoon catamaran-type hulls, which allow the water to flow through the hull. The largest model MS16-12000B, utilizing a unique combination of hydraulically controlled conveyer systems, is able to capture, contain and retrieve a wide variety of floating material up to four and one-half feet in diameter. Typical harbor and river debris retrieved by this marine apparatus includes: elusive styrofoam, garbage, vehicle tires, floating wood and logs, paper and plastic products, bottles, oil absorbent materials, etc. The skimmer's main pickup conveyer captures trash within the 16-foot wide maximum span of its conveyerized sweeper "wings", which channel the floatables to and up the skimmer's main pickup conveyer into the vessels large on-board storage containment area, which has a capacity of 12,000 lbs. or 700 cubic feet. The debris can be stacked and offloaded by indexing the open-mesh storage bag conveyors back and forth. While working in confined areas or where debris is packed in tight, the MARINESKIMMERS' wings can hydraulically close to grab and capture material while concurrently picking up and loading.

Once fully loaded, the Diesel-powered skimmer boat, propelled by hydrostatic, hydraulically-driven, over-the-rear twin propellers, return to a shore offloading site where it mates with a mobile Pier Conveyer to transfer the trash load to dump trucks or dumpsters for ultimate disposal.

UMI MARINESKIMMERS are available in scaled-down models: the NS12-3000B, with a storage capacity of 5000 lbs or 300 cubic feet and a conveyerized wing span of 12 feet; and the MSS-1500A with a storage capacity of 1500 lbs or 120 cubic feet and a span of 8 feet. All auxiliary support equipment, including Pier Conveyors, Tilt-Deck Trailers and portable hydraulic Power Packs are sized compatibly to comprise a complete system, and are designed for over-road mobility.