

Hamilton Jet Model HM 461
 Application Review

Quadruple HM Jets For New England Aquarium Ferry



A new 34 metre INCAT designed Hamilton Jet powered catamaran ferry has been delivered to the New England Aquarium. Quadruple Hamilton Model HM461 jets driven by Detroit diesel engines provide “Voyager III” with propulsive thrust to carry up to 325 passengers from the Aquarium’s base in down-town Boston on whale-watch excursions out into Massachusetts Bay. Built at Gladding-Hearn Shipbuilding in Somerset, MA, the aluminium vessel met or exceeded contract specifications in all aspects of the performance and operation.

The jets were supplied as an integrated package with intake and transition duct, hydraulic power supply and electronic control system. The four jets deliver thrust for a maximum fully laden speed of 31 knots. Total redundancy provided by the quad jets ensures acceptable speed and manoeuvring characteristics are maintained during extended periods of slow speed loitering with one or more engines shut down or in the event of machinery failure.

A 3-station HamiltonJet CMU Electronic Control

System provides thrust vectoring control for steering and ahead/astern functions. Interfaced with the Detroit engine system, the CMU System features joystick steering at the main and flybridge stations and a hand held Remote Roving Controller for close quarters manoeuvring and docking. Single Throttle/Reverse levers each control one pair of jets and full backup is incorporated in the system.

The CMU System gives total control of thrust vectoring throughout the vessel’s entire speed range.

▶ Brief Specifications

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| NAME: M.V.Voyager III | WATERJET CONTROLS: HamiltonJet type CMU |
| SERVICE: Whale Watch Excursion Ferry | ENGINES: Quadruple Detroit diesels, Model 12V 2000, each 720bkW (965bhp) @ 2100rpm |
| TYPE: INCAT Catamaran | GEARBOXES: Quadruple Twin Disc MG5202 |
| LENGTH: 34.07 metres [LOA] | DRIVELINES: GWB 687.65.02 Cardan Type |
| BEAM: 9.22 metres | DESIGNER: International Catamaran Designs, Lane Cove, N.S.W., Australia |
| DRAUGHT: 1.62 metres [static] | BUILDER: Gladding Hearn Shipbuilding, Somerset, MA, U.S.A. |
| CONSTRUCTION: Aluminium | OPERATOR: New England Aquarium, Boston, MA, U.S.A. |
| DEADWEIGHT: 34.93 tonnes (325 pax.) | Hamilton Jet DISTRIBUTOR: Atlantis Marine Gear Supply, Inc. Topsfield, MA, U.S.A. |
| SPEED: 35 knots (lightship) 31 knots (laden) | |
| WATERJETS: Quadruple Hamilton Jet Model HM461 | |

