Advanced International Fast Ferry Designs and Shipbuilding Technology

Project Title: Advanced International Fast Ferry Designs and Shipbuilding Technology

Primary Consortium Member: Gladding-Hearn Shipbuilding and Nichols Brothers Boat Builders

Additional Contractor/Consortium Members: Incat, Sydney, Australia, and the University of Washington

Project Objectives/Overview: These two small shipyards have been involved in three MARITECH projects. Two of the completed projects are described here. The third project is titled "International Competitive Fast Ferries and Composite Ship Technology" and will be described elsewhere.

The focus of the first two projects involved the implementation of Zone Outfit Logic Technology (ZOLT); computer integration of business and production processes; low wake catamaran research and design; the use of composites to reduce build-time, cost and weight of catamaran hulls and an assessment of the international fast-ferry market.

Project Status: The results from the first two completed projects include:

- 15% reduction in labor production hours on steel fabrication as a result of ZOLT at Nichols Brothers
- Utilization of 3D computer modeling and design for new vessel construction at Gladding-Hearn and Nichols Brothers
- 20% reduction in total vessel build time for composite hulled catamaran as compared to aluminum hull at Gladding Hearn
- First composite hulled high-speed catamaran designed and constructed at Gladding-Hearn
- Achieved a 25% reduction in wake height and energy compared with prior designs at Nichols Brothers
- 30% increase in shipyard output with only 15% increase in shipyard employment at Nichols Brothers
- Largest backlog of vessel orders in corporate history at both Gladding-Hearn and Nichols Brothers
- Achieved multi-million dollar shipyard modernization program including expanded facilities at Nichols Brothers

Project Contacts:

Gladding-Hearn Shipbuilding or Nichols Brothers Boat Builders

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