

# Best Workboats of 2017



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***Marine News showcases the best of North America's 2017 workboat deliveries. There is something for everyone.***

Notwithstanding the lingering offshore energy downturn, there were plenty of bright spots for North American shipyards in 2017. If a hull was delivered in 2017, we took a look at it, with several areas as a focus for inclusion into this edition. For starters, it is always exciting when a domestic yard delivers a vessel – or multiple vessels, for that matter – to foreign buyers. We can compete in a foreign arena; on price, quality and on-time delivery. This year was no different. No less important is the environmental footprint of a vessel, and there was plenty to report on from that angle in the past 12 months. The domestic waterfront is indeed getting greener and cleaner. Finally, innovation wasn't in short supply, either.

In the end, technology, the environment and replacement tonnage requirements were seen as the main drivers of shipyard output. Inland operations, Arctic requirements, liquefied natural gas (LNG) propulsion, dredging, government requirements, offshore wind, inland operations, harbor assist, shortsea shipping and a host of other needs were addressed and met in 2017 by North American builders. The best of those designs and deliveries are chronicled below:

## **Hornblower's Citywide Ferries**

The first six passenger vessels built by Louisiana-based shipbuilder Metal Shark for New York's new NYC Ferry were delivered in New York. Vessels one through six were all delivered on-time between April and June of 2017. The Incat Crowther-designed, 149-passenger, USCG Subchapter T passenger ferries were handed off to crews from HNY Ferry Fleet LLC (a Hornblower company), operator of the new passenger vessel service. Hornblower Co. is the parent company of Hornblower Cruises & Events, Alcatraz Cruises, Statue Cruises, Hornblower Niagara Cruises, Liberty Landing Ferry and HMS Global Maritime. Hornblower's newest operation, NYC Ferry by Hornblower is the newest way for New Yorkers and visitors to "Work Live and Play." Expected to service over 4.6 million passenger trips annually, NYC Ferry now provides critical transportation links for areas currently underserved by transit and connect them to job centers, tech hubs and schools in New York City. Designed by Incat Crowther, the option ferries are of the "River" class design and have an overall length of 85'-4" with a 26'-3" beam. The all-aluminum vessels achieve speeds of 25 knots.

### **Vigor Delivers Harvest ATB Tank Barge**

Vigor recently launched The Harvest, the first complex liquefied ammonia transport barge built in the United States for Jones Act trade since 1982. The vessel was constructed to support the operations of The Mosaic Company. The Harvest will be operated by a subsidiary of Savage Companies as part of an articulated tug and barge (ATB) unit. Leveraging one million labor hours at Vigor facilities in Oregon and Washington and subcontractors throughout the region, teams used 9,000 tons of American rolled steel to complete the 508' x 96' ATB tank barge. Careful integration of various complex systems was required to support the Harvest's state-of-the-art, onboard re-liquefaction plant that keeps cargo cooled to -27 degrees Fahrenheit. Built to the highest ABS and U.S. Coast Guard safety standards, the first-in-class Harvest was completed on an aggressive timeline.

### **ESG Delivers Freezer Processor Factory Trawler**

Eastern Shipbuilding Group delivered a DNV-Classified Factory Processor Fishing Trawler, the Araho, to the O'Hara Corporation of Rockland, Maine. Notably the first U.S. Flag Freezer Processor Factory Trawler constructed in over 25 years, the Araho is now in service in the waters of Alaska. This is the sixth fishing vessel Eastern has built for the O'Hara family over the last 20 years. This factory processor fishing trawler is far more sophisticated than the prior five vessels. The F/T Araho is a ST-115 design furnished by Skipsteknisk, AS of Aalesund, Norway. The main processing equipment, in the enclosed factory will consist of various types of fish heading machines and factory systems, consisting of [transport systems](#), fish grader, storage tanks, weighing graders, weighing system, packing tables, packing machine, automatic horizontal freezer system H1, block elevators, etc. The design intention of the process deck lay-out and selected equipment for transport and handling is to obtain a system with the largest amount of automation, assisting the employees working in the processing area. This arrangement is designed to achieve very high throughput with minimum fish damage, improve employee efficiency all in a clean and safe work area. O'Hara Corporation operates three catcher-processor vessels in the Bering Sea, Aleutian Islands and Gulf of Alaska.

### **Harvey Gulf's Large Capacity Jones Act Compliant MPSV**

Harvey Gulf International Marine this year took delivery of two, large capacity Multi Purpose Support Vessels (MPSV), significantly enhancing the domestic Jones Act Fleet. Built by the Eastern Shipbuilding Group, the M/V Harvey Sub-Sea, and Blue-Sea are "best in class" Jones Act-qualified vessel that has the technical capabilities to efficiently, effectively and safely perform high quality field development activities that are currently being performed by a foreign fleet. Contrary to claims from foreign operators that U.S. vessels lack the capability to perform foreign-flag vessels for subsea construction, inspection and maintenance activities, the delivery of the M/V Harvey Sub-Sea clearly demonstrates the capacity and capability of Jones Act qualified vessels to immediately perform the necessary work.

### **First US-built Rotortug Enters Service**

The first U.S.-built Rotortug, ART Trident, has undergone trials and is now in service. Designed by Robert Allan Ltd., and designated as an ART 80-98US, she was built by Master Boat Builders in Bayou La Batre, Ala., and is the first in a series of three being constructed for Seabulk Towing of Ft. Lauderdale, Fla. The ART (Advanced Rotortug) designation applies to Robert Allan Ltd. designed tugs featuring the triple Z-drive

configuration, originally conceived and developed by Rotortug (KST) B.V. of the Netherlands. Offering exceptional omni-directional maneuverability and control, with a redundant propulsion machinery configuration, the ART series offers enhanced performance for ship-handling, terminal support and escort towing. The vessel has been arranged and outfitted to a high standard with six crew berths in total. The Master's and Chief Engineer's cabins are located in the deckhouse with two double crew cabins located on the lower accommodation deck. A fully appointed mess/lounge and a modern, fully equipped galley are also located in the deckhouse.

### **Seaspan Celebrates Two New LNG Fueled Vessels**

Seaspan Ferries Corporation (SFC) welcomed two new, state-of-the-art dual-fuelled/hybrid (liquefied natural gas, diesel and battery) vessels to its fleet this year during a double commissioning ceremony held at SFC's Tilbury Terminal. The Seaspan Swift and Seaspan Reliant, the first eco-ferries of their kind in North America, were built at Sedef Shipyard in Istanbul, Turkey. The 148.9 meter ferries, which can accommodate up to 59, 53-foot trailers, mark the first new vessels added to SFC's fleet since 2002.

### **Great Lakes Shipyard Builds Nation's First SubM Compliant, ABS Tug**

Great Lakes Shipyard has built the first of 10 Damen [Stan Tugs 1907 ICE](#). Delivered in March, this milestone marks the beginning of a new construction program to introduce two new harbor tugs per year for the next five years at the Shipyard's facility in Cleveland, Ohio. Built to ABS Class, GLS Hull Numbers 6501–6510 are the first tugs built to meet the new USCG Subchapter M Regulations. The Great Lakes Towing Company & Great Lakes Shipyard entered into a partnership with Damen, who provided engineering for its proven designs and Great Lakes Shipyard will receive full construction, design and engineering support from Damen.

### **ESG Delivers Four ABS Class Inland River Towboats**

Eastern Shipbuilding Group recently delivered four ABS Class Inland River Towboats IWL River. This series of CT Marine designed 134 foot ABS Classed Inland River Service Towboats are Triple Screw with Retractable Pilothouses. All four towboats were constructed, outfitted and delivered at Eastern's Allanton Facility. IWL River is one of Eastern's newest clients. These towboats will service the inland waterways of Latin America for Impala Terminals. Impala owns and operates a network of terminals that facilitate global trade flows, specializing in warehousing, multi-modal logistics and related port services for essential commodities worldwide.

### **Leland, Michigan Takes Dredging into Own Hands**

Leland, Michigan, on the shores of Lake Michigan, is one of the jewel communities of the state's Northern Lower Peninsula. For many decades, the harbor contracted dredging services to keep the marina clear at permitted depths, often with funding from the U.S. Army Corps of Engineers (ACOE). In fact, Leland Harbor has had to dredge its harbor mouth and channel 49 times in the last 53 years. With federal funding for the job drying up, the community took matters into their own hands and purchased a new 10-inch Wolverine Class cutter suction hydraulic dredge, manufactured at DSC Dredge's Greenbush, Michigan, facility. Taking delivery of its Wolverine Dredge in mid-April 2017, a crew of Leland township employees received full training over the next week, so that they can now rely upon their own resources – at a minimal annual cost – to keep the harbor cleared.

### **Research Vessel, W.T. Hogarth Launched**

The R/V W.T. Hogarth — designed and engineered by Boksa Marine Design — was christened and launched on May 23, 2017. The 78' coastal class research vessel is the newest addition to the Florida Institute of Oceanography (FIO) fleet and will help continue the efforts of scientific education and discovery of FIO and its member institutions. The \$6 million dollar vessel was a necessary upgrade and replaces the nearly 50-year-old R/V Bellows which had served as a floating laboratory for 35 years. The new vessel will be both longer and wider than its predecessor. It will offer more working space, including separated wet and dry labs, a larger work deck, separate galley and more comfortable arrangements for berthing. Anticipated missions for the new vessel will include a variety of over-the-side operations including study of marine life, affects of pollution, water sampling, bioacoustics, sediment coring, fisheries research and more.

### **First Tier IV Tug on US East Coast Arrives in NYC**

McAllister Towing this year announced the arrival in NY of the tug CAPT. Brian A. McAllister, the first in a series of new builds that will enhance shipdocking on the East Coast for years to come. The vessel, built by Horizon Shipbuilding, is notably the first EPA Tier IV tug on the U.S. East Coast. She is powered by 3516E Tier IV Caterpillar engines with twin Schottel SRP4000FP units. Packed into her 100' x 40' hull is 6,770 horsepower and over 80 metric tons of bollard pull. Combining that power with a Markey class III escort winch on the bow and a Markey 2 1/4" wire winch on the stern puts the tug in a class of her own. State of the art remote controlled fire monitors and deluge systems (ABS FiFi certified) complete the package, making the tug a total Escort /Shipdocking/Rescue vessel unique to any East Coast port, let alone New York Harbor. The tug is named after the company's Chairman. She is the 31st and most powerful tractor tug in McAllister's fleet.

### **Harley Marine's First U.S. EPA Tier 4 Tractor Tug**

Harley Marine Services this accepted delivery of its newest tractor tug, Earl W Redd. The first-of-its-kind, the Earl W Redd is equipped with Caterpillar's Tier 4 emissions technology and enters the fleet as one of the most efficient and environmentally conscious vessels in the world. The Earl W Redd will not only meet but exceed the toughest marine EPA standards. The vessel is a true testament to Harley Marine's commitment to a cleaner tomorrow. Harley Marine Services is an environmentally conscious leader within the maritime industry and consistently raises the bar in an effort to practice ever stronger "green" business practices. Built at Diversified Marine of Portland, Oregon, the Earl W Redd measures 120 feet by 35 feet, with a loaded draft of 19 feet 3 inches. The tug features twin Cat 3516 Tier 4 Final main engines that will each produce 2,675 horsepower at 1,600 rpm. Each of the engines is paired with a selective catalytic reduction (SCR) after treatment system. SCR uses a urea-based solution to reduce NOx contained in diesel exhaust down to nitrogen and water vapor. The main engines will be paired with Rolls Royce US 255-P30-FP azimuth thrusters delivering an expected bollard pull capability of 75 tons.

### **MBTA's Gladding-Hearn Built Fast Ferries**

The Massachusetts Bay Transportation Authority (MBTA) has received the first of two new 150-passenger, high-speed catamarans from Gladding-Hearn Shipbuilding, Duclos Corporation. Funded by a grant from the Federal Transit Administration (FTA), the

vessels will operate year-round commuter service in Boston Harbor. Designed by Incat Crowther, the all-aluminum ferry is 90 feet LOA, 28.8 feet abeam, and draws approximately four feet loaded. The vessel is powered by twin Caterpillar C-32, 12-cylinder, EPA-rated Tier 3 diesel engines, each delivering 1450 Bhp at 2100 rpm. The engines turn a pair of Hamilton HM 571 water-jets through ZF 3050 gearboxes. The ferry's top speed is 29 knots with a fully-loaded deadweight of more than 19 tonnes. The two engine rooms each house an RA Mitchell 47kW generator. Compliant with the United States Access Board's accessibility guidelines for passenger vessels (PVAG), the boat is designed for boarding passengers from the bow at integrated MBTA facilities.

### **Metal Shark Expands International Reach with Latin American, Caribbean Deliveries**

Louisiana-based boatbuilder Metal Shark announced several new contracts with Latin American and Caribbean operators, further expanding the company's presence in the region. At a recent ceremony in San Juan, the Puerto Rico Police Department (PRPD) officially commissioned its first three Metal Shark 36-foot Fearless-class center console patrol boats. The welded-aluminum offshore center console vessels have been designed to operate at speed in the large ocean swells prevalent off the Puerto Rican coastline. Featuring high performance ventilated stepped-bottom running surfaces and powered by triple 300-horsepower Mercury Verado engines, the PRPD's new patrol boats achieve speeds up to 55 knots. Additional vessels for the PRPD are currently in production at Metal Shark's Jeanerette, Louisiana production facility. Metal Shark has also announced the Colombian National Police (CNP) as a new customer. After working closely with the agency through an extensive standardization process earlier this year, Metal Shark recently delivered the CNP its first new 33-foot Relentless-class patrol boat. Special features of this welded aluminum center console vessel include a urethane-sheathed closed-cell foam Wing collar, Shockwave S2-Corbin high-backed shock-mitigating seating for five, and additional fold-away crew seating in the bow. The highly maneuverable patrol craft is powered by twin 300-horsepower Evinrude E-TEC G2 engines, which propel it to speeds in excess of 50 knots. In addition, Metal Shark announced that it has been awarded a contract to produce twelve 38-foot Defiant-class pilothouse patrol boats for the Dutch Caribbean Coast Guard. The production of these vessels will begin in early 2017, with deliveries commencing later in the year.

### **Gladding-Hearn Delivers for Michigan Pilots**

The Lake Pilots Association in Port Huron, MI, this year accepted delivery of a new Chesapeake Class pilot boat from Gladding-Hearn Shipbuilding, Duclos Corporation. The all-aluminum pilot boat features the C. Raymond Hunt-designed Deep V hull. It is powered by twin Cummins QSM11 diesel engines, each delivering 602 Bhp at 2300 rpm and a top speed of 25 knots. A Humphree interceptor, with automatic trim optimization, is installed at the transom. Diesel capacity is 690 gallons, which, shipyard officials say, will provide a range of at least 350 miles at an economical speed of about 20 knots. The wheelhouse, flush-mounted to the deck amidships and with forward-leaning front windows, is outfitted with Llebroc seats and a settee and is heated by two Heatercraft 40,000 Btu units. The forecabin also includes a 40,000 Btu heater, along with a settee, portable head, and built-in storage cabinets. Outside of the wheelhouse, the handrails and foredeck are heated by a 120,000 Btu diesel-fired heater. There are boarding platforms on the roof and port and starboard on the foredeck. At the transom are throttle and steering controls, and a winch-operated, rotating davit over a recessed platform for rescue operations.

### **Double Hull Asphalt Barge Delivered to Vane Brothers**

Bristol Harbor Group (BHGI) announced in 2017 that the Vane Brothers Company had taken delivery of a BHGI designed 361' x 62' x 24.5', 55,000 barrel double hull asphalt barge. BHGI was contracted by Conrad Industries to develop the design based on a previous proven hull design that BHGI had completed for Conrad in 2014. The construction of the barge took place at Conrad Deepwater South in Amelia, Louisiana and is certified by the American Bureau of Shipping (ABS) and the United States Coast Guard (USCG) for oceans-fully manned trade. The barge's primary purpose is to transport asphalt and other heavy oils. It is equipped with a complete loading and discharging system in 10 tank compartments and includes a cargo thermal heating system with over 8 miles of heating coil pipe. A thermal stress analysis, in accordance with ABS requirements, was developed to ensure hull structural stresses were acceptable.

### **Gladding-Hearn Delivers Fifth Vessel to Circle Line**

Gladding-Hearn Shipbuilding, Duclos Corporation, has delivered the second of three new sightseeing vessels for Circle Line Sightseeing Cruises, Inc., in New York City. This follows the shipyard's delivery of three sister ships to the company in 2009. Like the earlier vessels, the new 599-passenger all-steel vessel, designed by DeJong and Lebet, N.A., in Jacksonville, Fla., measures 165 feet in length and features a 34-foot beam. With a top speed of 14 knots, the vessel is powered by twin Cummins QSK-38M1 diesel engines, delivering a total of 2600 hp and connected to ZF W3355 gear boxes, spinning 60-inch, 5-bladed bronze propellers. For dockside maneuvering, the vessel is equipped with a 125 hp Wesmar bow thruster, powered by an electric motor. Two 140 kW generators supply the ship's service power. The vessel carries 8,200 gallons of fuel and 4,000 gallons of potable water. Heating and air-conditioning are supplied by a 278,000 Btu diesel-fired boiler and four 15-ton water-cooled chillers.

### **RIBCRAFT's 41' 12.5 Model**

RIBCRAFT recently introduced the all new 41' RIBCRAFT 12.5 with the recent delivery of a specialized USCG Sub Chapter T Certified tour boat to a customer in New England. At 41', the RIBCRAFT 12.5 is the newest and largest model in the RIBCRAFT model line. The ultimate offshore platform for tour operators, security and patrol operations, military applications, and discerning recreational boaters, the 12.5 combines RIBCRAFT's signature deep V hull and bow sheer with an extended waterline and generous beam. Designed for offshore passages and operations requiring large crew and payload capacities, this flagship model offers incredible flexibility to meet the specialized needs of every customer. The most recent 12.5, configured for passenger-for-hire operations, was built to United States Coast Guard Sub Chapter T standards for passenger vessels. Delivered to a tour company in New England, the boat will run whale watching expeditions, sightseeing tours and thrill rides. The new 41' USCG certified vessel can accommodate up to 34 guests through the combination of 29 jockey-style pod seats and a large aft bench. Outfitted for adventure tours, this RIBCRAFT 12.5 features an eye catching heavy duty yellow Hypalon tube, extended canopy top with an integrated swim ladder, bow thruster, and a marine head. Powered by triple 350HP Mercury Verado outboards, the RIBCRAFT 12.5 reaches speeds in excess of 50 mph while still providing responsive and agile handling that customers expect. The 12.5 is also available with twin inboard diesel I/O or water jets. With an optional thruster, the 12.5 delivers tight quarter maneuverability. The all new RIBCRAFT 12.5 is available in

multiple configurations to suit both commercial and recreational customers. Whether as a USCG Inspected vessel with passenger seating, an open center console layout for commercial diving and sailing support, or a fully enclosed cabin for all weather protection and overnight accommodations, the all new RIBCRAFT 12.5 performs well in any role. In other words – the ideal multi-missioned workboat.

### **Final of Three Foss Ice Class Ocean Tugs Christened**

The final of three state-of-the-art Arctic Class tugs, the Nicole Foss, was christened earlier this summer at the Foss Waterway Seaport in Tacoma, WA. Built at the Foss Rainier, OR. Shipyard, the Nicole is designed to operate in the extreme conditions of the far north. The Nicole Foss is ice class D0, meaning the hulls are designed specifically for polar waters and are reinforced to maneuver in ice. The first of the three Arctic tugs, the Michele Foss debut in 2015, and in her first year of operation lead the way in safely pioneering a new route across the North Slope, while operating in extreme conditions of first year ice a meter thick. The Denise also returned to the far north this summer. The Nicole Foss complies with the requirements in [the ABS Guide](#) for Building and Classing Vessels Intended to Operate in Polar Waters, including ABS A1 standards, SOLAS and Green Passport. She includes two environmentally responsible Caterpillar C280-8 main engines; a Nautican nozzle and rudder system to provide superior bollard pull and maneuverability; and Reintjes reduction gears. Markey Machinery supplied the tow winch. The tug has a bollard pull of 221,000 pounds. The vessel incorporates several environmentally focused designs and structural and technological upgrades, including:

- Elimination of ballast tanks, so there is no chance of transporting invasive species
- Holding tanks for black and gray water to permit operations in no-discharge zones
- Hydraulic oil systems compatible with biodegradable oil
- Energy efficient LED lighting
- High-energy absorption Schuyler fendering

### **WETA 400 Passenger Ferries**

Hydrus & Cetus are two of four first-in-class 400 passenger catamarans that Vigor has built for the Water Emergency Transportation Authority (WETA). They are the cleanest 27 knot 400 passenger ferries operating in the U.S., setting the standard for low emissions and environmental responsibility. They operate with Tier III diesel engines with selective catalytic reduction (SCR) after treatment systems that achieve Tier 4 standards without using diesel particulate filters. The ferries also provide a very quiet, comfortable ride for passengers thanks to the innovative floating house design. The superstructure has 180 isolation mounts which provide a vibration free ride.

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