

CONRAD DELIVERS NORTH AMERICA'S FIRST LNG BUNKER BARGE



The Clean Jacksonville, the first Liquefied Natural Gas (LNG) bunker barge built in the U.S. has been officially delivered by Conrad Industries, according to the Morgan City, LA-based shipbuilder.

Designed and engineered by Bristol Harbor Group (BHGI), Bristol, RI, and built in Orange, TX, at Conrad Orange Shipyard, a subsidiary of Conrad Industries, the Clean Jacksonville has a single GTT membrane tank with a capacity of 2,200 m³. BHGI was responsible for the design and engineering of the barge. The barge was built at Conrad Orange Shipyard in Orange, Texas. BHGI's sister company The Shearer Group, Inc. provided technical/shipyard support during the construction. BHGI served as the regulatory lead and liaison between the regulatory bodies. During the early stages of the design, BHGI participated in a HAZID/HAZOP workshop as well as a Waterway Suitability Study and a Waterway Suitability Risk Assessment which were the first steps towards obtaining USCG approval. Being a first of its kind vessel, BHGI worked with all parties involved throughout the entire process to obtain ABS and USCG approvals.

"Bristol Harbor Group, Inc. was an invaluable partner with Conrad to bring this project from inception to reality," said Brett Wolbrink, Vice President of Conrad LNG, LLC. "Not only did they perform the vessel design development and naval architectural work, they took on the overall responsibility of managing and spearheading the risk assessments and regulatory review process for our entire engineering efforts comprised of both domestic and international based teams. Their leadership in this area and working relationship with ABS and USCG was a critical component of successfully completing the project."

As we reported on August 17, the bunker barge conducted the safe and successful gas trial execution at Harvey Gulf International Marine's LNG bunkering facility in Port Fourchon, LA.

The 232 ft x 49 ft vessel will enter service for TOTE Maritime Puerto Rico in the Port of Jacksonville, FL, where it will be used to bunker two Marlin Class containerships, the Isla Bella and Perla Del Caribe, operating on LNG fuel between Jacksonville and San Juan, Puerto Rico. The barge features one tank equipped with MARK III Flex cargo containment technology, from the French engineering and technology company GTT (Gaztransport & Technigaz).

Those 764.4 ft x 105.6 ft Marlin Class boxships were built by GD NASSCO, San Diego, and designed by DSEC, a subsidiary of Daewoo Shipbuilding & Marine Engineering (DSME). Each is equipped with DSME's patented LNG fuel-gas system and an MAN ME-GI dual fuel slow speed engine.

"The use of LNG as a maritime fuel results in tremendous environmental benefits – including air and water quality improvements – and this barge is the final critical component of our LNG program in Jacksonville" noted TOTE President and CEO Tim Nolan.

"The successful completion and delivery of the Clean Jacksonville is both a proud and humbling moment for Conrad," said Wollbrink "I am proud of our team's tenacious dedication to the completion of this project and unwavering adherence to our commitments. At the same time, we are humbled and grateful to be a part of an unparalleled international partnership comprised of the owner, our engineering groups, vendors and manufacturers who made this vessel a reality," said Wolbrink.

Wolbrink also cited the "good working relationship" with regulators the U.S. Coast Guard and class society ABS "throughout the design, engineering and construction of the LNG bunker barge."

The LNG bunker barge is not only a first for the North America, noted Johnny Conrad, President and CEO of Conrad Industries, Inc. but it also is the first time the GTT membrane system had been installed in a non-self-propelled barge in the U.S. and the first time an LNG bunker mast of this type has been built."

Philippe Berterottière, Chairman and CEO of GTT, added: "GTT has been honored to play a key role in the successful delivery of this first U.S. LNG bunker barge by Conrad. The broad collaboration between TOTE, Conrad, the myriad project stakeholders, and U.S. regulators led to the successful design, construction, and commissioning of this unique and groundbreaking project. Beyond our traditional role of designing the cargo containment and other cryogenic elements, such as the innovative REACH4 bunker mast, GTT adapted and expanded its support services to ensure the effective training of the barge crew and the safe and satisfactory execution of the barge commissioning activities and gas trials. Adapting to meet the requirements and fill the gaps within this growing industry is essential to continue to develop LNG as the preferred and cleaner marine fuel of the future. GTT remains committed to that vision."

Johnny Conrad concluded, "While it has been a challenge and true learning experience, the Clean Jacksonville is a triumph for the U.S. Maritime industry. I am proud of Conrad's commitment, investment and foresight in shepherding the advancement of LNG as a marine fuel. We welcome the opportunity to work with customers as they explore and pursue the use of LNG in their vessels."