YACHTS INTERNATIONAL

GALILEO G AND THE NORTH WEST PASSAGE

The 183-foot (55.7-meter) Picchiotti-Vitruvius *Galileo G*, the second yacht of the Vitruvius series, is headed for the road less traveled: Her owners plan to cruise the earth's most extreme regions and explore the Northwest Passage. Famous explorer John Cabot made the earliest recorded attempt to sail through a northwest passage from the Atlantic Ocean to the Pacific in 1497.

Others soon followed, including Hernán Cortés, Sir Francis Drake and James Cook. But it was Roald Amundsen who first succeeded in navigating the entire Northwest Passage sea-to-sea between 1903 and 1906. Until just a few years ago, the Arctic's ice prevented most ships from navigating through the area during the better part of the year. That is changing rapidly. Melting ice is making the waterways more navigable for longer periods of time throughout the year.

Even with the melting ice, it is still a treacherous journey. In order to prepare for such contingencies, *Galileo G* was built in accordance with the American Bureau of Shipping's guidelines for Ice Class 1B and the strict Finnish-Swedish Ice Class Rules. She also complies with International Maritime Organization (IMO) and Arctic Waters Pollution Prevention Act (AWPPA) rules. To fulfill the so-called winterization criteria, all equipment is designed and engineered to operate at very low temperatures (below -22 °F). The hull was built with extra-thick steel plates, additional scantlings, girders and beams, plus an "ice belt" around the waterline able to withstand loads of up to 55 tons per 10 square feet (or 50 metric tons per square meter). Reinforcements are also used in all appendage rudders, nibral (nickel-bronze-aluminum) Detra propeller blades, propeller arms and stabilizers. The yacht has an extra-large bowthruster so as to be able to maneuver in rough sea and wind conditions. All external sea bays are heated to prevent ice buildup, and the yacht features two sea chests for seawater intake, according to ice-class regulations.

The navigation and communication system uses the Sea Tel 9797 antenna, which can pick up the kind of weak satellite signals prevalent above the 70-degree parallel. A longitudinal FarSounder sonar system with a telescopic retractable ice-detection device, able to detect obstacles as far as about one mile away, transmits 3-D images to a monitor in the pilothouse.

The Vitruvius 55m features the Briand Optimized Stretched Hull, designed for maximum hydrodynamic efficiency. Optimized volume and weight distribution means lower fuel consumption and therefore a more environmentally friendly long-range yacht. Galileo G is a true bluewater yacht with a very low center of gravity, which reduces rolling and pitching. During our sea trial in July, we found her to be efficient—so much so that it took us a while to realize we were underway, and then only after looking through the salon windows. The yacht's excellent noise and vibration insulation and her hull's extraordinary seakeeping ability allow a comfortable and silent navigation, even without stabilizers.