

Indonesia's New Fast-Attack Trimaran Combines Speed and Stealth



The Indonesian navy's first stealth trimaran fast-attack craft, KRI Golok. *PT LUNDIN*

INDONESIA – The Indonesian navy commissioned its first stealth trimaran fast attack craft, KRI Golok (688), at Surabaya on the island of Java on Jan. 14. The ship was built by PT Lundin at Banyuwangi, on Java's eastern tip, from composite fiber materials.

The commissioning ceremony took place at the naval base in Surabaya, East Java. Also commissioned at the ceremony was the lead ship in a new class of hospital ships KRI dr. Wahidin Sudirohusodo (991),

Speaking at the ceremony, Adm. Yudo Morgono, chief of the Indonesian navy, said, "This type of ship is not only important to support naval operations as part of the task force and the navy fleet, but is a tangible manifestation of the navy's commitment to modernizing defense equipment in humanitarian operations."

The term "golok" refers to a cutting tool, similar to a machete, which can serve as a tool or weapon. During the naming ceremony last August, Margono said the composite material offers high strength, light weight, excellent fatigue resistance and is virtually corrosion free. The Indonesian navy sees the trimaran design and material as a prototype development purposes.

"With its high speed and high destructive power, it is hoped that this ship will be able to carry out the hit and run fast missile boat tactic," Margono said.

The ship has not yet been fitted with weapons, but is able to mount a gun up to 76mm and can carry up to eight antiship missiles, such as the RBS 15, Naval Strike Missile, Harpoon or Exocet.

According to a video prepared by PT Lundin, the ship has greatly reduced radar, infrared, acoustic and magnetic signatures. The weapons and RHIB are concealed inside the structure or discretely shaped to maintain stealth.

PT Lundin said the composite and carbon fiber foam-sandwich material – fabricated with fire-resistant vinyl ester resin – creates a structure that is much lighter than steel or aluminum, resin but has similar fire-resistance and ballistics protection properties and superior protection from blast and underwater explosions.

According to an Indonesian navy statement, the fast attack craft has an overall length of 205 feet (62.53 meters); a 52.5-foot (16 meter) beam; a 61-foot mast height (18.7 meters), and a current displacement of 245 tons. The ship will be heavier after the installation of weapons. The trimaran can achieve speeds up to 30 knots, and can cruise at 16 knots for 2,000 nautical miles. The ship and its 25-person crew will have an endurance of 40 days. Additional personnel, such as special forces or a humanitarian assistance landing party can also be carried.

The wave-piercing trimaran can cut through waves instead of ride over them, maintain higher speeds and heavier sea states. An enclosed hangar on the stern can carry a 12-meter RHIB.

The trimaran, with four water jets, is well suited for Indonesia's archipelagic operations. The FAC is extremely maneuverable, has a shallow draft and can literally back up onto a beach – where its radar signature becomes indistinguishable from the land – waiting for targets to

engage.

Golok is powered by four 1800 HP MAN V12 diesel engines, each connected to a Marine Jet Power 550 waterjets. In a company video, PT Lundin refers to the trimaran as the “ultimate in high-speed missile boats.”