

Lockheed Martin MH-60R: changing the game



MH-60R and Littoral Combat Ship USS Freedom

in the maritime domain

To combat advanced threats at-sea and in coastal waters, the MH-60R submarine hunter and anti-surface warfare helicopter provides “unparalleled maritime security for United States and international navies.”

The MH-60R anti-submarine (ASW) and anti-surface warfare (ASuW) weapons system shifts the advantage from the submarine to the helicopter. Deployed on carriers, cruisers, destroyers, frigates, logistics support ships and the new littoral combat ship, the complete package of sensors and weapons aboard the helicopter were chosen and certified to address today’s maritime defense needs.

Manufactured by Sikorsky Aircraft Corp and provided with advanced mission systems and sensors by Lockheed Martin, the MH-60R is already operational and deployed as the primary U.S. Navy ASW and ASuW system for both open-ocean and littoral zones.

The MH-60R’s capabilities are provided by its advanced mission sensor suite that hosts the proven ASW ‘kill chain’. The suite presents a complete package featuring a multi-mode radar that includes Inverse Synthetic Aperture Radar; an Airborne Low Frequency Dipping Sonar (ALFS) subsystem and sonobuoys; electronic support measures with an integrated helo threat warning capability; a forward looking infrared electro-optical device; integrated self-defence, and a weapons suite including MK.46 or MK.54 torpedoes, anti-ship missiles and crew served weapons. Advances in “fully integrated” mission systems coupled with Lockheed Martin’s dominance in combat systems integration have proven to be the most sophisticated capabilities across maritime operations worldwide.

Lockheed Martin and Tata Advanced Systems have formed a joint venture company in India, Tata Lockheed Martin Aerostructures, for manufacturing airframe components for the C-130J. A partnership on the MH-60R would bring jobs and technology to the country. In accordance with the Defence Procurement Policy, the Indian Navy would receive advanced MH-60R capabilities with the ability to sustain the platforms indigenously throughout the life of the platform.

Aboard the MH-60R, sensor data is integrated into actionable information for the three-member crew. The mission systems compile data from onboard and offboard sensors to create an integrated picture that allows the helicopter to identify, locate, track and prosecute threats.

With its modular design, the MH-60R can adapt its weapon systems to match specific mission requirements. It possesses the agility to provide greater surveillance and flexibility capabilities, as well as more options for multiple mission requirements. While ASW and ASuW are the MH-60R’s primary missions, it also has the capability for secondary missions such as search and rescue, vertical replenishment, naval surface fire support, logistics support, personnel transport, medical evacuation, and VHF/UHF/link communication relay.

The first international MH-60R partner is the Royal Australian Navy. At the end of 2013, two MH-60R helicopters were delivered to the Royal Australian Navy as first delivery in the partnership between the United States and Australia. “International MH-60R partners can share in the U.S. Navy’s ongoing technical insertion roadmap, mitigating obsolescence and keeping pace and ahead of the maritime threats for the next 30 plus years.”

(courtesy: LM)