

**Interview: Phil Shaw, Chief Executive, Lockheed Martin India**

## **‘MH-60R Expertise that Sikorsky/ Lockheed Martin Offer is Unmatched’**

Lockheed Martin has established a strong foothold in India based on the performance of the C-130 Super Hercules, is offering more Variants as well as other world-class products and capabilities to the Indian Defence Forces like the F-16 Block 70 & MH-60R. Lockheed Martin provides the Fire Control Solution for the Apache Attack Helicopters, the ability to fly day & night, extremely low-level nap of the earth flying and also the Hellfire Anti-Tank Guided Weapon System. For Indian Army & Navy, it offers the Javelin Anti-Tank Guided Missile, which has unique features like ‘Full Fire & Forget’ mode, soft-launch operations & Superior Armour Penetration capability. In an Interview to *Chanakya*, PHIL SHAW, Chief Executive, Lockheed Martin India, outlines programmes of interest in India, including the F-16 Block 70 Fighter, the MH-60R, the Tata-Lockheed Martin JV, FSTC and other Partnerships with Indian companies.

**Q. With the MoD announcing a new MMRCA competition, how do you see the F-16 ‘Make-in-India’ programme, when compared to the new competitors?**

**A.** The F-16 is the only aircraft programme in this competition with the proven performance and industrial scale to meet India's operational needs and ‘Make-in-India’ priorities. No competing aircraft comes close to matching the F-16's operational effectiveness and industrial success. The success of the F-16 - 3,000 F-16s flying today with 25 leading Air Forces - is a testament to the cost-effective, combat-proven capabilities the F-16 delivers. That combination of cost and capabilities is why F-16 production opportunities today total more than 400 aircraft, including India.

We intend to create far more than an F-16 “Assembly Line” in India. We plan to introduce two new words into the lexicon of international fighter aircraft manufacturing: “India” and “Exclusive.” F-16 Production in India will be exclusive - something that has never before been presented by any other fighter aircraft manufacturer, past or present. The F-16 gives Indian Industry a unique opportunity to become a part of the world's largest Fighter Aircraft Eco-system.

**Q. With the IAF's Apache Attack Helicopters contract been signed, elaborate on the Lockheed Martin Weapon Systems - Cockpit/Avionics Systems, Sensors, Launchers and Missiles like Hellfire, and their integration on the Apache?**

**A.** The Indian Air Force will receive the AGM-114R HELLFIRE-II Missile and the M299 HELLFIRE Launcher. The HELLFIRE Romeo is an extremely lethal, accurate and reliable missile. The Precision-Strike AGM-114R Multi-Purpose HELLFIRE-II consolidates the capabilities of all previous HELLFIRE-II Variants equipped with Semi-Active Laser (SAL) Seekers into a single missile that defeats a broad range of targets.



**Phil Shaw, Chief Executive, Lockheed Martin India**

It can be launched from multiple platforms, autonomously or with remote designation.

A new Multi-Purpose Warhead enables the AGM-114R HELLFIRE-II to neutralise a broad target set previously requiring multiple HELLFIRE Warhead Variants - from Armour and Air Defence Systems to Patrol Boats and enemy combatants in buildings, open areas, vehicles and caves. The missile can be employed by Lock-on-before-launch (LOBL), Lock-on-after-launch (LOAL) for increased platform survivability. Multi-Mission, Multi-target capability with Precision-Strike lethality provides Field Commanders maximum operational flexibility.

The Multi-Purpose HELLFIRE-II supports integration with a HELLFIRE-II-compatible platform

including Rotary- and Fixed-Wing Aircraft, Ground-based Tripods, Ground Vehicles and Boats. Its new Inertial Measurement Unit (IMU) provides a wide engagement zone to properly equip platforms, enabling them to fire upon targets to the side and behind them.

**Q. Tell us about the Lockheed Martin Systems on the Sikorsky S-70B SEAHAWK & MH-60R, and which of them are on offer to the Indian Navy for the MRHs and for the NMRHs?**

**A.** Now that India's procurement options have been opened up to include the MH-60R, we are looking for ways to leverage that active Production Line to expedite delivery to the Indian Navy. The MH-60R provides a vital capability for the Indian Navy in the Indo-Pacific Region. The significant investments made in the MH-60R by the U.S. Navy and Industry provide the unique assurance that it has undertaken the most rigorous testing.

The U.S. Navy has a robust roadmap to add capabilities





## Lockheed Martin-Raytheon JV's Javelin ATGM

individual opportunities and missions needs relative to our extensive portfolio and competitive position in the market.

**Q. Is there still any proposal or recent talks with the Indian Navy for the F-35 Carrier Variant been offered to India to participate in the Carrier-borne Fighter competition (besides for the IAF's 5th Gen. requirement) to fulfill the Indian Navy's Sea Harrier replacement programme?**

**A.** Any discussions regarding potential new F-35 customers begin at the Government-to-Government level. It is not our place to speak on behalf of the U.S. Government or the Government of India.

**Q. Do update us on any progress been made on the offer of Sniper Targeting Pods for the IAF's Fighter? What Electronics Warfare (EW) Capabilities does Lockheed Martin offer to the Indian Defence Forces?**

**A.** It would be inappropriate for us to speak on behalf of the Government of India, but the combat-proven Sniper Advanced Targeting Pod (ATP) provides critical long-range, positive identification of targets and possesses a Video Down-Link (VDL) to the widely used Rover Ground Receiver. The VDL relays high resolution streaming video to forward-deployed forces for Non-Traditional Intelligence, Surveillance and Reconnaissance (NTISR) and rapid target coordination.

**Q. Kindly give us an update on the Tata Lockheed Martin Aerostructures Ltd. JV at Hyderabad, which already manufactures C-130 empennage products and also C-130 centre wing box spares? Are there any new products on the anvil to support your future Offsets and meet the 'Make-in-India' requirements, and any new Partnerships or JVs planned in India?**

**A.** Tata Lockheed Martin Aerostructures Limited (TLMAL) in Hyderabad, India, began producing C-130J Super Hercules Airframe Components in late 2011. TLMAL not only exemplifies the Government of India's 'Make-in-India' objectives, but it has the distinction of being the single global source of C-130J Empennage Assemblies included on all new Super Hercules Aircraft produced in Marietta, Georgia, in the U.S. Empennage Assemblies produced by TLMAL, include the aircraft's horizontal and vertical stabilizers, along with leading-edges and tip assemblies. To date, TLMAL has manufactured more than 55 C-130J Empennages.

**Q. Tell us about the Tata-Sikorsky JV at Hyderabad making S-92 Cabins for export, and when do you see the S-92 helicopter being built in India? Further, how do you see India as a market for the M28 STOL aircraft, especially with the**

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### new UDAN-II Regional Connectivity policy?

**A.** A decade ago, Sikorsky selected Tata Advanced Systems Limited (TASL) in Hyderabad, India, as the manufacturing base for its global supply of Cabin Aero Structures for the S-92 Helicopter. Since production began in 2010, TASL has delivered 120 Cabins to Sikorsky's S-92 Assembly Plant in the United States. Today, production of more than 5,000 precision components that compose each S-92 cabin is 100 percent indigenous to India - supplied by a Joint Venture Company called Tata Sikorsky Aerospace Ltd., also located in Hyderabad. We look forward to expand our supplier base as we continue to strengthen and grow our relationships in India.

The M28 is renowned for its ease of flying into Unprepared Airstrips, maneuverability, reliability and safety. This proven platform is a solid candidate for India's Regional Airlines. M28 pilots around the world have demonstrated that the M28 is easy to handle and has exceptional range, payload capacity and Multi-Role flexibility. The M28 is a proven platform that requires minimal support to sustain.

**Q. With India planning to induct large number of UAS/ UAVs of all types, do elaborate on the range offered by Lockheed Martin in the Unmanned domain - Air, Land & Sea, which could be of interest to the Indian Forces?**

**A.** Lockheed Martin is ready to support India's Unmanned Systems needs and will assess individual opportunities and missions needs relative to our extensive portfolio and competitive position in the market.

**Q. Elaborate on the Flight Simulation Training Centre (FSTC). Are there any plans to extend this facility to other cities? And briefly outline Lockheed Martin's other activities undertaken with Private Industry and Institutes in India, supporting future programmes and innovation and success achieved in India?**

**A.** There are currently no active plans for Lockheed Martin to open an additional Simulator Training Center in India. However, we stand ready to expand training capability to support India's C-130J Fleet. Lockheed Martin continues to actively support numerous initiatives, alongside Government of India, promoting innovation and growth in India, including 'Make-in-India', Skill India, Start-up India and the India Innovation Growth Programme (IIGP). We have been a proud sponsor and supporter of the IIGP since 2007 and the IIGP continues to prove itself as a hallmark model of Government and Industry working hand-in-hand to unleash the power and potential of Indian Innovators. The 2018 edition of the IIGP 2.0 was launched on March 21st has already met with early success. Five of the 2017 winners have begun to market their products in India and overseas. Two others have conducted field trials, while three have successfully created a proof of concept and product validation.

**Q. What is Lockheed Martin's major focus at Defexpo 2018 and what exhibits will be on display?**

**A.** We are excited to participate in DefExpo 2018. At this year's DefExpo, we plan to highlight our current programmes and proposed Partnerships with India, including the F-16 Block 70, MH-60R and S-92 Helicopters, C-130J, and Javelin Anti-Tank Guided Missile (ATGM) just to name a few.