

“C-130J SeaHerc is a Perfect Platform for Maritime Patrol & Reconnaissance”

- Phil Shaw, Chief Executive, Lockheed Martin India

Lockheed Martin has a lot going for it in India. With opportunities galore for the C-130J, for the Maritime Patrol Role, Weather probe or for supporting the BSF, Lockheed Martin is optimistic about satisfying future requirements of the Armed Forces, as is evident from this Interview with PHIL SHAW, Chief Executive, Lockheed Martin India.



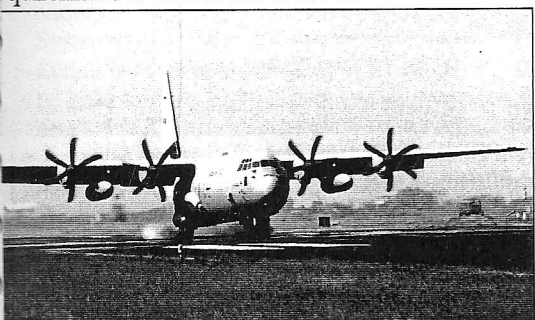
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Q. With a second batch of six more C-130Js sanctioned for the Indian Air Force, and the 300th C-130J Super Hercules just delivered, what's next for the programme in India?

A. Lockheed Martin is delighted that the Indian Air Force and Government of India have shown faith in us and the C-130J by placing this new order for an additional six aircraft. The aircraft has performed brilliantly at the hands of the Indian Air Force since it entered service in 2011 and has been utilised in extremely austere operating environments during humanitarian relief efforts in Sikkim following the earthquake, Uttarakhand following the floods in

2013 and was used late last year to support Typhoon relief efforts in the Philippines. In addition to its operational role, the aircraft also created a new world record last year with the Indian Air Force by landing at 16,641 feet at the Daulat Beg Oldie Airstrip. Moving forward, we believe that the C-130J is suitable to satisfy many of the Indian Armed Forces' requirements as well as the needs of other Government agencies beyond

its current Special Forces role. It would be a perfect platform for Maritime Patrol/Reconnaissance, weather probe and forecast or in supporting the Border Security Force with its proven cap-



IAF's Lockheed Martin C-130J Super Hercules capability to operate well in the Himalayan region. We continue to have a dialogue with all Government agencies with a potential need for this kind of capability.

Q. Please elaborate on the Indian Navy's MRMR programme, for which Lockheed Martin is also a contender? What will Lockheed Martin offer for the MRMR competition?

A. Lockheed Martin is evaluating the tender for MRMR, which is looking for a Medium Range Maritime Patrol capability. We have developed the C-130J Sea Hercules for such a mission; providing the benefits of being a propeller driven aircraft, which is much more efficient than a jet aircraft in operating at the required low-levels over the sea to conduct the mission. The C-130J also provides the benefit of already being in operation in India, which would lend itself to significant cost reductions on training and support if it were selected. Additionally, the C-130J is an extremely versatile platform as has been well demonstrated

by the Indian Air Force over the last year, or so, of operations, which would enable the Indian Navy to support humanitarian or disaster relief operations with the aircraft due to its large payload capacity and its ability to operate in remote and austere environments. However, the Lockheed Martin team has yet to make a final decision whether we think the Sea Hercules would match the Indian Navy specific requirements before we make a determination on whether to bid or not.

Q. What is the progress for a New-Generation Javelin ATGM to be produced in India, and the negotiations taking place for the current Javelin for the Indian Army requirements?

A. There is a continued dialogue between Governments on the Javelin Missile System which we support as needed with our partners, Raytheon. Javelin is the most capable, versatile and operationally proven Anti-Tank Guided Missile System in the world. The full system is available to India now as soon as it is required and as we heard during Ashton Carter's visit to New Delhi, the system is offered by the U.S. Government to India for co-production and future system co-development. This is an unprecedented offer and an exciting prospect if India chooses to become a partner with the U.S. in this Weapon System. However, Lockheed Martin is not really in a position to be able to comment very much on this programme as the dialogue really is between the two Governments at this stage to determine if Javelin will meet Indian requirements.

Q. How are the discussions progressing on the PAC-3 MSE for Patriot Air Defence in India, along with the THAAD, Long-Range High-Altitude Artillery Rockets to fill gaps in Indian Air Defence?

A. Strategic Missile and Air Defence Systems such as these tend to get discussed between Governments, and so I can not elaborate on the progress of these programmes.

Q. Has the Diamond Shield Air Defence System been presented to Indian Defence Forces?

A. Lockheed Martin has not presented the Diamond Shield System to the Indian Armed Forces, but would welcome the opportunity to do so. Diamond Shield was developed to help customers respond to the increasingly complex national and multi-national requirements for Integrated Air & Missile Defence. Based on our more than 10 years of success in developing and delivering advanced missile C2 Systems for the U.S. DoD, Diamond Shield joins Ground-Based Missile Systems & Sensors with Air-Based Theatre operations to deliver one unprecedented system that provides new levels of performance to manage evolving threats.

Q. With the upcoming Apache Attack Helicopter programme for IAF, kindly elaborate on the Lockheed Martin Weapon Systems - Sensors, Launchers and Missiles for the Apache?

A. As part of the Apache Weapon System acquisition, Lockheed Martin Missiles and Fire Control will provide the Indian Air Force with the world's most advanced targeting and pilotage system, the Modernised Target Acquisition Designation Sight and Pilot Night Vision Sensor (M-TADS/PNVS), on their 22 AH-64E Apache aircraft. Apache pilots use M-TADS/PNVS for targeting and pilotage in day, night and/or adverse-weather missions. The ability that this system provides to engage at greater stand-off distances, results in enhanced aircraft survivability,

THE CHANAKYA Aerospace

Defexpo Supplement (Day - 2)

7 February 2014



Apache Longbow Attack Helicopter

proven system that has consistently averaged above 96% availability rates under the harshest operational conditions and in the most remote locations. In August 2013, Lockheed Martin and the U.S. Army celebrated 10,00,000 flight hours for M-TADS/PNVS.

Another system provided by the Longbow LLC JV between Lockheed and Northrop Grumman is the Longbow Fire Control Radar (FCR). The Indian Air Force will receive 11 LONGBOW FCRs as part of their delivery. The FCR automatically searches, detects, locates, classifies and prioritises multiple moving or stationary targets on Land or in the Air, in clear or adverse weather, and in obscured battlefields giving commanders the precision engagement capabilities necessary to win the battle. LONGBOW FCR enhances Apache's lethality four-fold and survivability sevenfold.

India has asked for an initial quantity of Lockheed Martin's HELLFIRE Missiles: 2/3 LONGBOW Radar Frequency (RF) and the remaining 1/3 new HELLFIRE Romeo Semi-Active Laser (SAL). HELLFIRE Romeo has improved target tracking in presence of backscatter, dust, water vapour, smoke and sea spray. It also has automatic target reacquisition after loss of track in low clouds. HELLFIRE II has a mission success rate exceeding 96%, & over 8,000 successful combat engagements.

Q. In Anti-Missile Technology, has the latest 0.6m Mini Kinetic Energy Anti-Missile been offered yet to India?

A. As Lockheed Martin continues to develop EAPS, with the primary role of defeating rocket, artillery and mortar threats and a secondary role against targets of opportunity such as Unmanned Aerial Systems and Cruise Missiles, we have seen a great deal of interest from a number of potential customers. We have personnel at Defexpo that will be able to discuss the system with Indian Government officials and determine if there are any levels of interest to further any dialogue.

Q. How far have talks progressed with the Indian Navy for the MH-60R, and has the F-35 Carrier Variant been offered to India and shall it participate in the next Carrier (IAC-II) Fighter competition?

A. Lockheed Martin, the Mission Systems provider for the MH-60R, continue discussions supporting Sikorsky Aircraft, our nodal contact for NMRH and lead for this opportunity. Our meetings with the Indian Navy and both public and private defence sectors over the last few years have been very constructive and informative for us. We look forward to the opportunity to compete the MH-60R and its proven, fully integrated, and extremely capable Mission Systems Suite in NMRH.

Regarding the F-35 for the Navy, for a platform of that complexity the dialogue would normally commence between the two Governments. While I am not aware of any dialogue at present, that doesn't mean to say it isn't taking place and we would be delighted to support any interest in this wonderful new aircraft by the Indian Navy. We have delivered over a hundred aircraft to three Services in the US and several international customers also. The programme is progressing extremely well and the feedback we are getting from the pilots is very positive on the performance of the platform.

Q. Tell us about the Dragon Family of ISR?

A. Lockheed Martin's Family of Dragon ISR configurations offer a unique approach for customers to match mission requirements and budget to Sensor, Communications and Airframe needs. Dragon con-

pilot safety and mission success. M-TADS / PNVS is a combat

figurations can range from an Intelligence Processing Ground System, to a Podd Radar, to a large business jet equipped with a complete suite of Intelligence Systems. All Dragon configurations have open hardware and software architectures that enable new capabilities to be integrated rapidly and cost-effectively. Lockheed Martin also offers any configuration as a contracted service under the DragonNet option.

Q. Has the Unmanned K-MAX been offered to Indian Forces?

A. The Unmanned K-MAX helicopter is a System produced by Kaman Helicopters and Lockheed Martin and in service with the U.S. Forces in Afghanistan. It is able to autonomously deliver significant payloads and stores to remote areas and has seen enormous success during operations. The success of the platform has obviously been witnessed by many International Forces and has garnered significant interest through approaches to the U.S. Government. While we have not had any discussions with the Indian Forces about this particular capability, I am sure it would be of value, particularly in remote and hostile environments where Indian Forces operate at times.

Q. Have the LCS & Remote Minehunting System been offered to the Indian Navy?

A. We have not offered LCS and the RMS System to the Indian Navy at this time. We believe that both Systems would have utility in India: the LCS for its modular build, with rapid role change time, making it suited to support humanitarian and disaster relief as well as military operations; and the RMS as a rapidly deployable Mine-Hunting System able to be stationed in an area, where there is suspicion of mines being laid well ahead of the main task force getting there. While there has yet to be any discussion with the Indian Navy on either of these Systems, we would be happy to support those talks with our USG colleagues.

Q. Please comment on the Flight Simulation Technique Centre (FSTC). Are you planning to extend this facility to other states or countries in the region?

A. FSTC was established in Gurgaon about 18 months ago. This is a Joint Venture between our simulator company (Sim Industries) in the Netherlands and Fly Wings Aviation based out of Mumbai. The DGCA certified our Boeing 737 and Airbus A320 Simulators and have been providing training for several domestic Indian Airlines now for about a year. We have 2 simulators at the facility and will look to expand to 4 by the end of this year and will potentially introduce another aircraft type into the facility. Demand to use our facility is high with its proximity to Delhi International Airport and so we are looking at how we might expand the current capability at Delhi. As Civil Aviation grows in India, we will closely monitor the demand in all areas of the country and with a supportive business case, would look to establish similar centers in other parts. At the moment though, we believe that Delhi is the right place and are looking at bringing in international business from neighboring countries to Delhi, rather than set up more centers over the borders.

Q. What capabilities is Lockheed Martin offering to India in the Homeland Security domain?

A. We have significant capabilities in Homeland Security and remain interested in engaging in India if our services are required. Our depth and breadth of skills and experience across both Defence & Civil Sectors makes us uniquely positioned to operate in this sector, especially as the lines between Defence & Homeland Security are increasingly blurred with an increased terrorist threat. We have systems and technologies to offer in this sector, but we also play a major role as Systems Integrator. The value of a Systems Integrator managing a Homeland Security project is that we work with a customer to understand the requirements. Based on the customer's needs, we design a System with the most cost effective equipment, which is not necessarily ours.