



**PHIL SHAW**, Head of Lockheed Martin India Pvt. Ltd, talks to GEOPOLITICS about Indian Navy's MRMR RFP and the company's offering for the maritime helicopter requirements

Lockheed Martin and the US Government have been in discussion with the Indian Navy for a number of years regarding the Aegis combat management system. Through its life, Aegis has benefitted from billions of dollars of investment in research and development to provide a continuous stream of upgrades and as such, is the world leading system for anti-air warfare at sea. Combined with standard missiles, there is little that can penetrate its protective shield and so it is a significant force multiplier for the navies that oper-

**"We hope to grow our presence by bringing more capability to India"**

**On Indian Navy's Medium Range Maritime Reconnaissance (MRMR) RFP**

Lockheed Martin is evaluating the Indian Navy's Request for Proposals to determine if there is an offering that we might be able to provide to meet the requirements.

We are considering offering the Sea Hercules to several markets around the world that currently operate the C130J platform as this provides commonality of training and spares and provides significant cost saving to customers through the life of the platform. As has been witnessed in India this year, the C130J is a very versatile platform that has been able to respond to humanitarian missions in high altitude domains and in hostile environments where many aircraft cannot operate — the lift capacity of the aircraft provides a significant advantage in these roles. This capability would also be available to the Indian Navy if their requirements are such that a four-engine aircraft would satisfy their needs and that they would have the need to support humanitarian missions with the platform.

Lockheed Martin has significant experience in producing maritime patrol aircraft with the very successful P3 Orion which is still in service and being upgraded and retrofitted with the latest tech-

nologies throughout the world. Propeller driven aircraft are much more efficient operating at low level over the sea, which is often a requirement of maritime patrol, particularly in anti-surface or search and rescue operational missions. Lockheed Martin has updated the architecture of the P3 mission system to bring it completely up to date and modern with the latest processing and open architecture systems which enable it to be a roll-on, roll-off capability where desired. This system is mature and is proven having derived from the P3 mission system and is fitted to US Coast Guard maritime patrol platforms in operation today. When fitted to a platform such as the C-130J in a roll-on, roll-off configuration, which would be determined by the customer, it provides significant flexibility to the platform and would be a perfect solution to meet India's needs. In addition, the Joint Venture between Lockheed Martin and Tata Advanced Systems Limited in Hyderabad produces major structures for the world-wide C-130J fleet, and so the selection of C130J provides a substantial number of jobs in India.

**On Shipboard Missile Defence System for Navy and future of Aegis System**

ate it around the world. The company is supportive of making the Aegis system available to the Indian Navy should they request it through the US Government. As the Indian Navy continues its fleet modernisation programme and builds more capital ships, such as carriers, there will be a need to provide comprehensive force protection, which the Aegis system is specifically designed for. So we believe that Aegis is a perfect fit for the future of the Indian Navy and we are in discussion with potential partners to enable us to make this a reality in India as we have done in several other countries, if the Navy wishes to pursue this capability. Lockheed Martin has a family of Naval Combat Systems that use the Aegis baseline architecture, so we can provide the Indian Navy a flexible architecture that would suit the needs of the Navy.

**On Navy's Multi-role Helicopter RFP and its prospects**

We are continually monitoring maritime helicopter requirements throughout the world to determine if the platforms that we support for the US Navy, the MH-60R and MH-60S, would meet the needs set out in Requests For Proposals (RFP). We are confident that when the Indian Navy's

Request for Proposal for the Navy's Multi-Role Helicopter (NMRH) programme is issued, the MH-60R and MH-60S will meet all the qualitative requirements.

From our discussions with the Indian Navy over the last couple of years, it is readily apparent that the MH-60R and MH-60S ideally meets the need of the Indian Navy. Sikorsky Aircraft Corporation builds the helicopter platform and Lockheed Martin provides the cockpit, avionics and mission system package for both the platforms and the mission systems and cockpit integration for the MH-60R. The multi-role mission systems on these helicopters soon to be operated by three Navies in the world are the most sophisticated, state of the art and most importantly, the most capable and operationally proven platforms today. Complex multi-mission fully integrated maritime helicopters take years to mature and iron out the wrinkles. The MH-60R mission system has benefited from billions of dollars of investment and a significant development programme to ensure its reliability and maturity before it was fielded in the US Navy. As a result, it is the most mature and capable multi-role mission system available anywhere in the world. There are already more than 160 MH-60Rs and 250 MH-60Ss delivered to the US Navy and fielded. Also the Royal Australian Navy will take delivery of its first two of their 24 MH-60Rs before the end of this year, which replaces its aging S70B helicopters. Denmark has also selected the MH-60R platform for delivery in the next few years. We believe the MH-60R platform provides the most capable and mature system available anywhere in the world. If this platform does meet the needs of the Indian Navy and is selected, India will benefit from the billions of dollars of investment made in the platform, a through life capability plan put in place by the US Navy and an extremely mature, tested and proven supply chain for the product which is providing in excess of 85 per cent availability. With the support of the US Government, Lockheed Martin will also transfer this technology to India and meet all the requirements of the applicable Defence Procurement Procedures. Additionally,

We will continue alongside the US Government to offer the capabilities that we have developed in all domains

Lockheed Martin will team with the very capable Indian Production Agencies to build industrial capability in India, with a plan that enables the platforms to be supported in India. Lockheed Martin has a well-documented track record transferring our system integration technologies to our partner countries who are now very capable system integrators supporting domestic as well as international programmes. Systems integration is a unique skill which takes decades to develop. Acquiring the MH-60R and MH-60S under the NMRH programme will bring this capability, state of the art technology, a planned technology insertion that keeps or outpaces the threat and most importantly, the most capable, fully integrated and proven multi-mission maritime helicopter in the world today.

In 2010, you had responded to an Indian Navy RFI for carrier-based combat jets with the F35B and F35C. Do you still see the prospects for your platforms in the future Indian indigenous aircraft carriers projects, which may be a CATOBAR configuration? What would be the USP on which you would base your sales pitch?

Joint Strike Fighter (JSF) is an extremely capable maritime platform, and is the future of Short Take-Off and vertical landing aircraft (STOVL) or vertical and/or short take-off and landing (VSTOL) in many navies around the world. As a company we would be delighted to support any requests from the Indian Navy, should they wish to examine the possibility of introducing F35 into the navy for the future carriers, and we believe that it would be an extremely valuable addition to the Indian Navy's air defence and strike capabilities. However, these requests would normally go from the Indian Navy through the US Government for such a capability, and we are not currently fielding any queries.

#### On India Innovation Growth Programme and business presence in India

The India Innovation Growth Programme (IIGP) is an extremely popular, with over 1000 applications this year. Partnered with the Department of Science and Technology, Texas IC2 and Stanford Uni-

versity, according to an Ernst & Young report since its inception 7 years ago, this programme has generated over \$300M for the entrepreneurs who have joined the programme. We look to improve the programme every year and consider it the flagship programme for innovation in India. We hope to have begun to create an eco-system which encourages and supports inventors with bright ideas to take their product to the market. While Lockheed Martin does not benefit directly from the programme, we are always looking out for that bright idea that we can help nurture in partnership with its creator and jointly benefit as we take it to the market.

#### On increasing market share in India

Lockheed Martin is committed to India. We have been here for more than 20 years and hope to grow our presence by bringing more capability and support to the country. Through our performance on the C-130J programme, where we delivered the aircraft ahead of time and under the agreed budget; and through the reliability and achievements of the IAF with our platform, we hope that we are seen as a company that delivers what it promises. We take pride in working alongside our customers to deliver much needed capabilities to their satisfaction. We will continue alongside the US Government to offer the capabilities that we have developed in all domains, but including the maritime environment where in addition to Aegis and MH-60R we have many more capabilities that we can offer. We are in dialogue with a number of potential partners for some of these more advanced programmes already, in order to determine if we can migrate some industrial capability to India for any of our solutions. We wish to be in a position to respond positively not only to the Indian Forces' requirements, but also to the defence production imperative of building capacity in India during any of these deals by the time that Requests for Proposals are issued. But we are also looking outside of defence to grow our presence, to see if there are other capabilities that we can provide in homeland security, border protection, civil aviation, cyber security, space technology, alternative energy, healthcare management systems for example, where we also have significant capability at home.