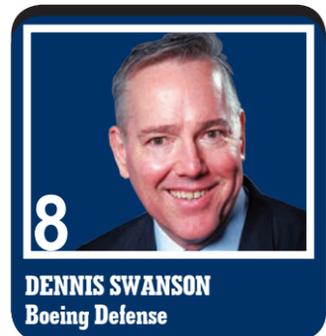


geopolitics

DEFENCE ■ DIPLOMACY ■ SECURITY

MONDAY 28, MARCH 2016

GEO INTERACTS



EXHIBITING CHANGE

The ninth edition of DefExpo India 2016 will see a larger participation signifying the importance that India holds in the eyes of the world. Apart from talks of increasing JVs, 'Make in India' and local defence production, stakeholders are hoping that the critical issues will be addressed by the policy makers

There is no doubt that the footfall at this four-day DefExpo 2016 is expected to rise in terms numbers of industry participants. India continues to offer good business opportunities, despite all the uncertainties surrounding policy and procedures related to defence production and acquisitions. The eighth edition of DefExpo India, held in February 2014, recorded an unprecedented growth in foreign as well as domestic companies participation over its previous editions. An impressive 232 foreign companies from 32 countries participated in the show along with 15 country pavilions. With a growth of 12.64 per cent in terms of space booking, DefExpo 2014 was attended by the largest number of official delegations with 63 delegations from 58 countries gracing the occasion.

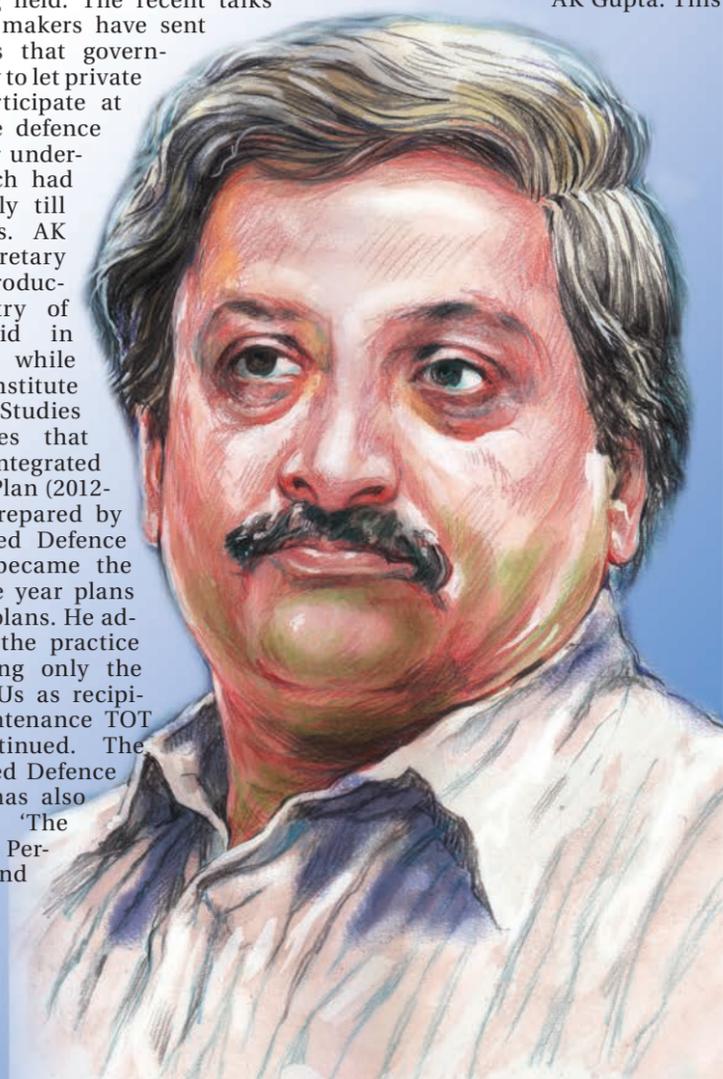
DefExpo 2016 embarks on a new high with the 1001 companies exhibiting from 47 countries as per the DefExpo website. But, the business community has come up with questions related to the policy issues which, hope, this time will be fulfilled in the form of announcement or assurances coming from the top echelons of the Ministry of Defence thus helping both the potential exhibitors and the potential visitors to be informed, and to develop their future participation strategy for the event. Every corporate in touch with GEOPOLITICS has admitted that a lot of good is happening but they have feedbacks to improve it further. Talking to GEOPOLITICS an international defence manufacturer said, "There are several incidents where we have not only had businesses approaching us but states approaching us saying that we should facilitate discussions between these businesses and states for them to take advantage of what the states are offering as business incentives." Another US defence manufacturer said, "When I took over, I went to meet all the businesses across my company and they said the productiv-

ity rate is not more than 50 per cent and today they say its 95 per cent. That is a big achievement but without skill development there will be no Make in India." Both the persons did not want their name to be published. But, the government seems to have taken a few steps further to improve the defence manufacturing in the country.

Government has pronounced that corporates in defence sector will have level playing field. The recent talks from policy makers have sent right signals that government is ready to let private industry participate at par with the defence public sector undertakings which had the monopoly till recent times. AK Gupta, Secretary (Defence Production) Ministry of Defence said in December while speaking at Institute for Defence Studies and Analyses that Long Term Integrated Perspective Plan (2012-2027) was prepared by the Integrated Defence Staff. This became the basis for five year plans and annual plans. He admitted that the practice of nominating only the OFB or DPSUs as recipients of Maintenance TOT was discontinued. The HQ Integrated Defence Staff (IDS) has also published 'The Technology Perspective and Capability Roadmap (TPCR) — 2013'. It is expected to provide industry

with a detailed perspective of what the Armed Forces are looking for, so that they can undertake requisite R&D efforts and investments for infrastructure up-gradation.

At present the Indian Defence Industry is dominated by DPSUs and Ordnance Factories, which contribute about 90 percent of the total domestic defence manufacturing output. They employ close to 1,60,000 people." Said AK Gupta. This



TEXTRON

VISIT AT 3.2.2D

Textron Systems businesses are industry leading developers and integrators of unmanned systems, advanced marine craft, armoured vehicles, intelligent battlefield and surveillance systems, geospatial management and analysis systems, intelligence software solutions, precision weapons, piston engines, test and training systems, and total lifecycle sustainment and operational services

- 

SFW™
The Sensor-Fuzed Weapon (SFW™) is a smart air-to-ground area weapon designed to defeat multiple moving and fixed vehicular targets on land and at sea – including heavy armored battle tanks, missile launchers, armored personnel carriers and maritime threats.

- 

Spider™
Spider is a man-in-the-loop, networked munition system incorporating sensors, communications and munitions for small unit force protection. Capable of controlling both lethal and nonlethal effects and designed to prevent inadvertent harm to non-combatants while safeguarding warfighters, Spider meets U.S. land mine policies, as well as the intent of the Ottawa Convention.

- 

Scorpion™
Scorpion is a revolutionary networked munitions system that integrates sensors, munitions and networking technologies to detect, track, classify, report, engage and destroy targets including both light wheeled and heavy tracked vehicles.

- 

MicroObserver™
MicroObserver System is a next-generation Unattended Ground Sensor (UGS) solution that provides situational awareness for applications ranging from perimeter defense and force protection to border security and law enforcement. Easily networked with other surveillance systems, MicroObserver brings a new level of covertness, ease of use and performance reliability to ground sensor solutions.

Unmanned Systems Products

- 

Aerosonde™
Aerosonde is a small unmanned aircraft system (SUAS) that can be employed by a catapult system to take off from small, remote clearings, and also can launch from the roof of a fast-moving ground vehicle. The SUAS can be used for tactical land-based and shipboard missions, and is field-proven more than 100,000 flight hours in desert heat and arctic cold.

- 

One System™ Remote Video Terminal
The One System Remote Video Terminal (OSRVT) is an innovative, modular video and data system that enables warfighters to remotely downlink live surveillance images and critical geospatial data directly from joint operations tactical unmanned aircraft systems and manned platforms.

- 

Universal Ground Control Station
The next-generation Universal Ground Control Station (UGCS) incorporates features and technologies for joint services interoperability, mission flexibility, scalability and ease of use. Featuring net-centric design, the UGCS incorporates an all-digital Tactical Common Data Link for data transmission, increased bandwidth and data security.

TEXTRON GROUP OFFERS A BOUQUET OF WEAPON SYSTEMS, SENSORS & UAS



VINCE LOGSDON
VP, Business Development for Textron Systems Weapon & Sensor Systems



MICHAEL LOEFFLER
VP, Supply Chain, Bell Helicopter



KEVIN KENNEDY
VP, International Business Development for Textron Systems



STEPHEN GREENE
VP, International Business Initiatives for Textron Systems, Unmanned Systems

One of your recent successes in India is the SFWs for India's Jaguars. Could you elaborate on this order's deliveries and integration? Do you hope to get more orders for similar weapons in the years to come?

Vince Logsdon: We highly value our partnership with the Indian Air Force and will remain fully committed to the future goals of the Indian military. The Jaguar integration program will deliver a significant capability to the Indian Air Force. Sensor Fuzed Weapon (SFW™) is a highly effective air-delivered area weapon designed to defeat an array of moving and fixed targets on land, at sea and in littoral environments. One SFW can neutralize many targets and do so nearly simultaneously, leaving an adversary no evasion time. First employed by the U.S. Air Force in combat operations during Operation Iraqi Freedom, SFW is the only weapon of its class that meets and exceeds all U.S. Department of Defense mandates for multiple warhead munitions (greater than 99 percent reliability). SFW defeats enemy threats and achieves its mission leaving behind a clean battlefield. As the Jaguar program concludes, we look forward to discussing emerging requirements with the Indian Air Force to help expand capabilities and enhance our relationship with the India Government.

You have a tie-up with Dynamics for Bell Helicopters air frame assemblies that was signed a couple of years ago. Could you tell our readers how has this partnership progressed and regarding your experience working with an Indian company?

Michael Loeffler: Through Dynamatic, Bell Helicopter sees a very energetic and knowledgeable industry that is learning how to safely build quality aerospace components, on time every time.

In 2015, Dynamatic delivered 17 major assemblies

for our Bell 407 model. In 2016 we are anticipating a larger volume of deliveries. Bell Helicopter, working through its Textron affiliate TIPL, looks forward to continue the momentum we have established with Dynamatic, and will continue to strengthen the aerospace industry in Bangalore.

Bell Helicopter has an established presence in India and continues to see a great deal of potential for both the civil and military market. Bell Helicopter remains committed to India and continues to look for opportunities that will strengthen our ties with the region.

Indian government's military procurement programmes are going the 'Make in India' way. Do you see the possibility of any of your products from across businesses being made in India for both the Indian and the foreign market?

Kevin Kennedy: We are glad to consider the "Make in India" approach within any of our product lines, as long as it makes sense for both the Indian and American teaming partners.

What has been the interests in India for your G-Claw and Fury precision guided weapon systems? Do you see business happening on this front anytime soon?

Vince Logsdon: Textron Systems Weapon & Sensor Systems anticipates future growth for the smaller precision weapon market. To meet this need, Textron Systems developed Fury™ and G-CLAW™, precision guided weapon systems, which are based off of our long lineage of weapons and platform development expertise with the U.S. government

The new Fury light-weight precision guided glide weapon is equipped with a mature and proven warhead, and is guided by a GPS-aided inertial navigation system with a semi-active laser seeker terminal guidance capability. The weapon's tri-mode fuzing

– impact, height of burst and delay – further enables a single Fury to address a broad target set, ranging from static and moving light armored vehicles to small boats and personnel. The weapon system is designed for carriage on platforms ranging from small unmanned aerial systems to light attack aircraft. Fury is the ideal weapon for enhancing the tactical unmanned aircraft system mission.

In addition, Textron Systems has enhanced its CLAW blast-fragmented unitary area munitions with guidance capability to create the G-CLAW for innovative delivery of precision effects against land and sea targets. The precision guided glide weapon system incorporates a height of burst sensor for optimal effects against a broad target set. In addition to its flexible, multiple warhead lethal capability, G-CLAW's modular design supports rapid incorporation of emerging technologies in guidance, seekers and effects. It can be adapted to changing mission requirements at minimum development cost. G-CLAW can be integrated onto an array of aircraft including class IV unmanned aerial systems, light attack aircraft, such as Textron Aviation's Beechcraft AT-6 and Textron AirLand's Scorpion™, or converted commercial aircraft, such as a Cessna Caravan, from standard rack dispensers.

How serious are the talks for supply of the Scorpion aircraft to India? There was a buzz in this regard sometime in the middle of 2015, but has died down as 2016 dawned. Could you clarify on the offer?

Textron Airland: Textron does not speculate on potential future military sales. We are engaged in many sales discussions with U.S. partner nations, though we are not at liberty to reveal the status of those competitions.

Continued on Page 23

Continued from Page 22

What is the prospect for your Shadow UAS as a tactical battlefield system for the Indian armed forces? Would you be participating in the Indian Army's programme for a mini UAVs procurement?

Stephen Greene: Based on its experience and advanced multi-mission ca-



pability, we believe that the Shadow™ Tactical Unmanned Aircraft System (TUAS) is the ideal platform for any tactical UAS need. Shadow is the only TUAS in the world to have achieved nearly one million flight hours. Building upon this unmatched record of success, today's Shadow Version 2 (RQ-7B V2) is an all-digital, modern system featuring increased endurance and payload capacity over previous versions, as well as an expanded data pipeline for greater information assurance and real-time dissemination. It is utilized by the U.S. military for intelli-

gence, surveillance, reconnaissance, battle damage assessment, target designation, communications relay and most recently, for manned/unmanned teaming with Apache helicopters.

In addition, Textron Systems also offers a smaller, expeditionary UAS (Group 2 category) – the Aerosonde™ Small Unmanned Aircraft System (SUAS). The Aerosonde SUAS offers proven multi-mission performance in both military and commercial, land-and-sea based applications. With more than 100,000 flight hours of experience, the Aerosonde SUAS incorporates Lycoming's EL-005 engine – the only system in its class with a propulsion system completely supported by a manned aviation engine expert. The Aerosonde aircraft is equipped for real-time, full-motion video and communications relay within a single flight, and offers dedicated space and power to integrate additional capabilities based on customer requirements. In addition, the Aerosonde SUAS is designed with a small footprint for efficient maritime operations without ship alterations.

IAI UNVEILS "DRONE GUARD": DRONE DETECTION AND DISRUPTION COUNTER UAV SYSTEMS

VISIT AT 1.1.3A

Israel Aerospace Industries (IAI) reveals the Drone Guard- new systems for drone detection, identification and flight disruption.

The use of small drones has increased dramatically over the years, making them a potential threat to critical infrastructures, other aircraft and homeland security (HLS), due to their small size, low speed and low flight altitude. These drones may be used for a number of reasons, including hostile purposes such as intelligence gathering, smuggling, or as weaponised platforms. In addition, they are difficult to detect or disrupt due to their low visibility and low Radar Cross Section (RCS).

To meet this emerging challenge, IAI's Subsidiary and Group, ELTA Systems Ltd., offers specially adapted 3-Dimensional (3D) radars and Electro-Optical (EO) sensors for detection and identification, as well as dedicated Electronic Attack (EA) jamming systems for disrupting drone flight.

To detect low signature, low-level and low-speed airborne targets, ELTA has adapted to this specific mission its 3D radars, which include the ELM-2026D, ELM-2026B and ELM-2026BF for short (10km), medium (15km) and long (20



km) ranges, respectively, with special drone detection and tracking algorithms, as well as adapting them with EO sensors for visual identification of the target.

In order to disrupt the hostile UAV, ELTA has developed advanced adaptive jamming systems which can be used in concert with its detection and identification sensors, or as a continuously operated stand-alone system. The jamming disrupts the drone's flight and can either cause it to return to its point-of-origin ('Return Home' function) or to shut down

and make a crash landing.

Drone Guard systems have been extensively and successfully tested against a variety of different drones and scenarios, including simultaneous multiple drone penetrations or attacks.

Nissim Hadas, IAI Executive VP and ELTA President said: "We have begun demonstrating these novel capabilities to potential customers, in response to this new threat. We believe that in the near future every critical asset and public site will require these safety measures for protection against hostile drones".

YOUR PARTNER

In

MAKE IN INDIA

KALYANI
DRIVING INNOVATION

28-31 MARCH

Def 2016 Expo

INDIA

Segments:

- Artillery Systems
- Protected Vehicles
- Defence Electronics
- Digital Manufacturing
- Armoured Fighting Vehicles
- Tactical Systems
- Aerospace components

Visit us at:

Hall No- 1

Stall No-1.2.4

For more details please contact: mohitsingh@bharatforge.com | leeni.srivastava@bharatforge.com