

Provide A Platform For Defence And Security Companies

ESD Spotlight spoke with the President and CEO of the Canadian Association of Defence and Security Industries (CADSI), Christyn Cianfarani. Subjects addressed include their next trade show, the future of defence industry especially in the eye of new challenges arising from the Arctic or new industry cooperation. The questions were asked by Bo Leimand.

ESD Spotlight: What are CADSI's visions and what is the overall aim with CANSEC 2019?

Cianfarani: CANSEC takes place every year in the spring, and it is considered the largest tri-service defence and security trade show in North America. The show is organised and delivered by us (CADSI) as Canada's defence industry association.

The overall aim of CANSEC is to provide a platform for defence and security companies operating in Canada to showcase what they do in front of key decision-makers from military and government, both national and international. We create a platform to display Canada's leading-edge technology, products and services that can be used by our Canadian military and security services.

The reason we limit CANSEC to Canadian industry is to stay true to CADSI's overall mandate: which is to promote and represent the Canadian defence and security sector. We welcome many international delegations to CANSEC each year to view



Canada's Global Defence and Security Trade Show is organized between May 29 - 30, 2019 at Ey Centre in Ottawa, Ontario Canada.

what Canada has to offer, but foreign companies do not exhibit at the show.

CANSEC facts are: over 11,000 registrants, more than 330 exhibitors from across Canada, 40-plus senior level foreign delegations from allied and partner nations' national media.

ESD Spotlight: How does CADSI envisage the Arctic market?

Cianfarani: The Arctic is an increasingly important region for the Canadian defence and security sector. Our Arctic waters are opening up due to climate change, providing economic opportunity but also leading to potential threats to our northern sovereignty as other countries may try to stake a claim to Arctic waters and land.

The Canadian Government's latest defence policy (Strong Secure Engaged), aims to increase our military presence in the Arctic over the long-term, which will mean acquiring surveillance aircraft, new Arctic offshore patrol ships, new all-terrain vehicles, snowmobiles and other vehicles optimised for use in the Arctic, remotely piloted systems (commonly referred to as "drones") and space-based surveillance systems (satellites, etc) to improve communications in the North.

Canadian companies are highly innovative and well-equipped to help provide much of this equipment. They can also contribute to the supply chains for the larger items (ships, surveillance aircraft).

ESD Spotlight:

How does CADSI see the EU market evolve in the future – especially in the defence area?

Cianfarani: The EU defence market is evolving as the Union decides what capabilities

it wants to develop and acquire in a manner complimentary to NATO or national governments. There are many established national champions, and there are limited opportunities for non-EU allies to compete and win work in the EU. It is quite a protected market.

ESD Spotlight: Is CADSI in the future interested in closer relationship with industry organisations in Europe, e.g. organisations like the Danish Center for Defence, Space and Security CenSec?

Cianfarani: CADSI is always looking for opportunities to expand the opportunities for Canadian defence companies internationally. Approximately 60% of the Canadian defence industry's sales come from exports, so international connections are essential to the long-term health of our sector.

We regularly meet with counterpart associations and organisations involved in the defence and security sector in Europe, through NATO and elsewhere around the globe.



Technology

Skorpion II Presented

(koe) The CEO of OTOKAR Serdar Görgüç from Turkey presented his latest achievement, the AKREP II (Skorpion II) as E-AV (electric armoured vehicle). This should be



(Photos: OTOKAR)

a new generation of AV with new features and mindsets.

In the future the company will be a pioneer in electric, hybrid and autonomous vehicles. AKREP-II, because of its agility and speed, also brings the characteristics of silence and silhouette, furthermore the driver's cockpit consists with monitors and these brings many advantages on the digital battlefield. The six batteries can be recharged in three hours and have a range of 250 km. AKREP II is designed for three



crew members – driver, weapon operator and commander – and will be delivered to the first customers in one year.

www.otokar.com

Bacteria Identification

(df) Under the DARPA Friend or Foe program, Raytheon is developing a portable device to evaluate bacteria and their potential to cause harm. Since current biosurveillance strategies are not effective on undiscovered bacterial strains or on bacteria engineered to evade detection, the DARPA programme "Friend or Foe" aims to characterise bacteria quickly by examining its behaviour.

"Population growth, global travel, climate change—all of these factors increase the

risk of exposure to unfamiliar bacteria," said Aaron Adler, Ph.D. and principal investigator for the Friend or Foe program at Raytheon BBN Technologies. "Most of those bacteria are harmless or even beneficial, but our goal is to develop a system that lets people know quickly when they are not as a cue to take mitigating action." The screening process begins with collecting and isolating a single bacterium in a tiny cube with a porous membrane. Sensor arrays in the cube make initial measurements on respiration, consumption of

specific nutrients and metabolite production. Suspect bacteria is then extracted and exposed to synthetic substances that mimic human tissues.

"To get a reliable risk assessment, we need to understand not just the bacteria's genetic makeup, or genotype, but how it functions – its phenotype," said Adler. "We are looking at ways to subject the bacteria to a gauntlet of behaviour screenings so we can determine its ability to cause disease."

www.darpa.mil

www.raytheon.com

AK-12 At Victory Parade

(df) According to news from Rostec the new AK-12 was noticed at the rehearsal of Victory Parade. Therefore it will be presented along with other new weapon systems at Red Square on May 9.

"This model belongs to a totally new level, it is reliable and has improved ergonomics, advanced combat qualities and is already being delivered to the military forces," Rostec, to which the Kalashnikov concern belongs, stated. This model was developed within the framework of the Ratnik programme, that originally sought new tactical and combat equipment for Russian special forces, as an element of modernised version of weapon system for the Russian military troops and should gra-



(Photo: RIA Novosti)

dually replace the AK-74M in the military forces.

The first batch of 2,500 AK-12 was delivered at the end of December 2018 to the Russian Ministry of Defence. In the next three years, the Russian Army will receive 150,000 AK-12 and AK-15 assault rifles. Both assault rifles, the 5.45mm AK-12 and 7.62mm AK-15, were officially approved

and recommended by the Russian Ministry of Defence for use in infantry, airborne and naval infantry troops of the Russian armed forces in January this year.

Both rifles have modern ergonomics, increased hit probability and capabilities to effectively use all modern accessories, from red dot, night and IR sights to under-barrel grenade launchers, forward grips, lasers and flashlights, sound suppressors and more. AK-12 and AK-15 rifles share most of their assemblies, with key differences being in the ammunition used. AK-12 is chambered for Russian Army standard issue 5.45x39 ammunition, while AK-15 is chambered for older, but still very popular 7.62x39 ammunition.

www.kalashnikov.com

Tests Of The DeepStrike Missile Rocket Motor

(df) Raytheon announced a successful static test of the new DeepStrike missile rocket motor, which moved the advanced surface-to-surface weapon closer to its maiden flight test later this year. The rocket motor test at Allegany Ballistics Laboratory in West Virginia is the latest in a series of milestones for the DeepStrike missile. Raytheon recently concluded a successful preliminary design review for the weapon. Raytheon is offering the DeepStrike missile for the U.S. Army's Precision Strike Missile (PrSM) program to replace the aging Army



(Photo: Raytheon)

Tactical Missile System that is approaching the end of its service life. The DeepStrike missile will be able to defeat fixed land targets 60 to 499 kilometers away, and get there faster than current systems, Raytheon said.

"Testing shows us how initial data assessments line up and validates them for the

next phase in development," said Dr. Thomas Bussing, Raytheon Advanced Missile Systems Vice President. "This test confirms our design for the DeepStrike propulsion system is solid and moves us one step closer to extending the Army's reach and doubling the load-out of long-range fires."

www.raytheon.com

Vehicle Protection Suite

(df) BAE Systems unveiled its 360 Multi-function Vehicle Protection (MVP) sensor as part of the company's integrated vehicle protection system (VPS) suite. This solution provides improved visibility, situational awareness, threat warning, and countermeasures to protect armoured vehicles and crews.

The 360 MVP Sensor combines four high-definition, extended-view multifunction cameras that serve as the eyes of the VPS, providing crews with sharp images of the battlespace around them and quickly detecting and tracking threats – from ground troops and small arms fire to aerial systems, improvised explosive devices, and missiles. The sensors provide 360-de-

gree visibility and threat warning capabilities during the day, at night, in adverse weather, and despite challenging natural and manmade battlefield conditions including fog, dust, and smoke. Due to this the sensor provides early threat warning that helps crews quickly detect, recognise, identify, and track potential threats.

The sensor can be integrated with and cue non-kinetic countermeasures – including BAE Systems' RAVEN – and kinetic countermeasures to defeat threats, shortening the response chain and reducing the cognitive load on crews, improving mobility, lethality, survivability, and overall mission effectiveness.

"Our approach is different. We are using mature, integrated components to pro-



(Graphic: BAE Systems)

vide a modular and affordable system for protecting armoured vehicles that is tailorable to the platform, mission, and budget," said Ryan Edwards, BAE Systems' business development manager for Soldier and Vehicle Electronics. "Our vehicle protection system lets crews see first and act first, helping them complete their missions."

www.baesystems.com

Modernisation Of The NBC Reconnaissance Vehicle

(gwh) The U.S. Army is modernising the equipment of its Nuclear, Biological, Che-



(Photo: FLIR)

mical Reconnaissance Vehicle (NBCRV). The Joint Program Executive Office for Chemical, Biological, Radiological and Nuclear Defense (JPEO-CBRND) has commissioned FLIR Systems to manage the update of the sensor suite.

The NBCRV is a reconnaissance vehicle based on the protected Stryker, which is used as an infantry combat vehicle in the Brigade Combat teams. In addition, the sensor suite will be installed on unmanned Squad Multipurpose Equipment Transport (SMET) platforms. The sensor

package will integrate a new set of sensors from FLIR and other partner companies.

Under the agreement, FLIR will develop a platform-independent modular mission payload that integrates multiple chemical, biological and radiological sensors into a flexible command and control system (C2). The C2 system and automation enable collaboration between manned Stryker vehicles, unmanned land vehicles (UGVs) and sensor-integrated drone platforms.

www.flir.com

Inflatable Walls Training System

(df) Survitec has introduced its Inflatable Walls Training System (IWTS) to the European military and law enforcement communities for the first time following a significant uptake in the United States. The flatpack design and easy storage and transport of the walls makes IWTS suited to military and law enforcement use as it can be deployed wherever a unit is based and reconfigured to create different layouts. According to the company, IWTS is the only inflatable

shoot house system to be approved for use with General Dynamics Simunition marking and non-marking ammunition, for force-on-force short range training.

Every room, corridor, entrance, exit and window can be recreated so that when operators face the actual structure, they already have the appropriate knowledge to make the correct tactical decisions.

IWTS's walls are currently in use in the British Army and Royal Air Force, Australian Army and Austrian Army. Civil applications



(Photo: Survitec)

include police forces in Switzerland, Germany, Italy and Hong Kong.

www.survitecgroup.com

Piranha 5 And Eagle V Handed Over In Denmark

(gwh) The Danish Defence Acquisition and Logistics Organisation (DALO) ordered 309 Piranha 5 from General Dynamics European Land Systems (GDELS) in 2015 and a first series of 36 Eagle V patrol vehicles in 2017. Now the first vehicles were officially handed over to the user in front of a high-ranking audience. The ceremony marked the transition to operational use.



(Photo: GDELS)

mines, improvised explosive devices and ballistic threats. The core of the mobility is MTU's 430 kW diesel engine, whose power is transmitted via an automatic ZF transmission to eight steered wheels with height-adjustable McPherson chassis technology.

The protection and chassis components are produced in Kreuzlingen, Switzerland, with a high vertical range of manufacture. The production of the hull with protection elements made of high-strength armored steel will be carried out on a newly constructed road, largely with automatic welding machines. For final assembly, a cycle

line with twelve stations was set up in a new building. Since the final assembly lines do not require any special equipment, they can also be used for other vehicles, such as the Eagle V, for further series production.

Eagle V

The 4x4 Eagle V, introduced for the first time in 2010, is protected against mines, improvised explosive devices and ballistic threats, as is the Piranha 5. The vehicle in the ten-ton class offers space for five equipped soldiers. The 180 kW Cummins diesel engine accelerates the vehicle to a maximum of 110 km/h via an Allison 2500 automatic transmission. A remote-controlled weapon station can be mounted on the roof.

Further versions include vehicles for logistical support, electronic warfare and reconnaissance (open and closed), the procurement of which has not yet been decided.

www.gdels.com

Piranha 5

The 8x8 Piranha 5 is the latest version of the vehicle, which is used in over 11,000 vehicles worldwide. Denmark has ordered six different versions (Infantry, Command, Pioneer, Ambulance, Repair and Mortar). Deliveries are expected to be completed in 2023.

The modular protection system in combination with energy-absorbing seat and restraint systems provides protection against

Shooting In Zero Visibility Conditions

(df) Shvabe Holding has presented an improved SWIR camera for shooting in

zero visibility conditions to public. The new camera features a new enlarged matrix format and durable aircraft-grade composition case.

"The SWIR camera can see hidden objects in fog and smoke, detect camouflaged objects and people at zero visibility. Such device is suitable for operation in maritime navigation, control and monitoring of facilities, security and research activities," the Russian company Rostec, to which Shvabe

Holding belongs, announced. "Also the camera has IP67 protection from damage, dust and water. It can be submerged up to a depth of one metre without risk for further working efficiency."

The portable camera visualises the IR image in the range of 0.9-1.7 μm . According to Rostec serial production of the short-wave IR band camera has already started.

www.rostec.ru

www.shvabe.com



(Photo: Shvabe)

Piranha 5 With Elbit Tower Qualified For Romania

(gwh) In dynamic firing tests, GDELS verified the performance of its modern multi-role vehicle Piranha 5 overall system with the Elbit UTR30 Mk 2 turret in the presence of representatives of the Romanian procurement authority and exceeded the requirements of the armed forces. The qualification at the Camp Arena shooting range in Norway is an important milestone in the Romanian programme to equip the troops with highly protected combat vehicles.

In 2018, GDELS signed a contract with the Romanian armed forces for the supply of 227 protected Piranha 5 8x8 wheeled vehicles in six different versions. The vehicles will be produced in Romania as part of a strategic cooperation and technology transfer between GDELS - Mowag and the Romanian company Uzina Mecanică București (UMB). The preparatory work in Romania, including the training of the employees, has been completed. After the delivery of the first five Piranhas in the third quarter of 2018, the delivery of the total of 36 vehicles to be delivered by



(Photo: GDELS)

GDELS/Kreuzlingen increased. According to reports, the qualification could not take place due to the lack of Elbit towers. This now seems to have been cleared up.

www.gdels.com

Dry Support Bridge On Armoured Vehicle

(df) WFEL shows its Dry Support Bridge (DSB) at IDEF. The Dry Support Bridge is a technically-advanced, rapidly-deployable military 46m bridge that can be constructed by a crew of 8 in under 90 minutes, the company stated.

In response to the increasing threats faced by armed forces in today's ever more complex military scenarios, the DSB launching



(Photo: WFEL)

system is now available on RMMV Rheinmetall MAN 10 x 10 fully-armoured military

vehicles, as well as a number of other military vehicles.

WFEL's rapidly-deployable bridging systems – both the DSB Dry Support Bridge and the modular MGB Medium Girder Bridge – provide temporary infrastructure, greatly enhancing an army's capability to quickly manoeuvre across physical terrain as complex as rivers, ravines and man-made gaps.

www.wfel.com

Remote Control For The Leguan

(gwh) The Bundeswehr has ordered seven Leguan rapid armoured vehicle launch bridges, which will be available until 2021. One of the features is the laying of the bridge under protection. The installation is carried out by remote control, to which ATM supplies the screen. The Bridge Operator Level (BOP) developed for this purpose is connected to the system via cable or radio. The operator can control the

functions either in the vehicle under tank protection or outside the vehicle – protec-



ted with a view of the installation site. The portable BOP offers function buttons that are controlled according to the situation. The screen can be adjusted to the dimmed light conditions in the tank as well as to the bright surroundings during outdoor use. The BOP was, along with the VistaMaster-17 S and the VistaMaster-17 MFD, one of the three screen innovations presented by ATM at the AFCEA exhibition.

www.atm-computer.com

New UAS Engines

(df) At AUVSI Xponential 2019 in Chicago UAS engine manufacturer Sky Power presented for the first time a series of new engines in different performance classes to the



public. The shown portfolio ranges from small single-cylinder engines based on carburetor technology to 2-cylinder engines with carburetor or injection system.

The entire engine portfolio can be used for hybrid operations. All engines can be provided with

a system carrier, on which the ignition electronics are mounted. As a result, the engine can be integrated with the most important subsystems in an aircraft to save space. The individual engines are bundled in engine families with different versions, including a Heavy Fuel (HF) variant soon.

www.skypower.online

Spain Gets Five F-110 Frigates

(df) The Spanish Ministry of Defence has signed the contract for the construction of five F-110 frigates for the Spanish Navy with Navantia. This new generation of F-110 frigates, construction of which will begin shortly in Ferrol, stands out for having its own Spanish design and a high degree of industrial and technological sovereignty. About 80% of purchases and supplies will be made to Spanish companies.

“The design of this new frigate will incorporate remarkable technological advances, such as the new integrated mast configured



(Graphic: Navantia)

with different solutions of sensors and antennas, the incorporation of a multi-space mission that expands the capabilities of the ship in all the segments of defence and a new hybrid propellant plant more efficient and silent endowing the ship with great versatility,” Navantia stated. “In addition, it will integrate unmanned vehicles on board

and will have the capacity for the future installation of directed energy weapons.”

The frigates will be equipped with a Spanish combat system, SCOMBA, developed by Navantia. This system acts as the vessel’s brain and integrates all the frigate’s sensors and weapons, such as surface sensors, EW and IFF supplied by Indra, S band radar and Lockheed Martin vertical launcher, AAW – SM-2 from Raytheon, the antisubmarine warfare systems and SAES sonars and the navigation and communications systems from Navantia Sistemas.

www.navantia.es

Anti-Torpedo-Torpedo SeaSpider Successfully Tested

(gwh) ATLAS Elektronik, a subsidiary of thyssenKrupp Marine Systems, has successfully tested the SeaSpider torpedo defence system in sea trials in cooperation with the Bundeswehr Technical Center for Ships and Naval Weapons (WTD 71). On the test boat HELMSAND of the WTD 71, the complete “Sensor to Shooter” function chain with Torpedo Detection, Classification and Localisation (TDCL) and the SeaSpider Anti-Torpedo-Torpedo (ATT) had to prove itself under operating conditions.

The test setup with active and passive sensors, the TDCL and the surface launcher for the SeaSpider was installed on the decks



(Graphic: ATLAS Elektronik)

of the helmet sand. For the tests ATT SeaSpider prototypes of the third generation were used.

To simulate the threat, the WTD 71 used an AUV derived from an Mk37 torpedo and DM2A3 torpedoes. Both were detected and localised with passive and active TDCL. The corresponding data were used for the launch of the SeaSpider. The SeaSpider has captured the threats and focused on the Closest Point of Approach

(CPA). Successful intercept equivalents of CPA were verified by acoustic and optical means.

Following the full evaluation of the study results in 2018, information and images from the studies have now been released for release.

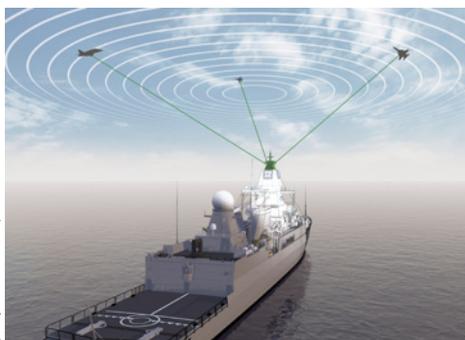
Independent of the joint trials with the WTD 71, ATLAS Elektronik is carrying out a self-financed development of the SeaSpider ATT to production readiness. This includes the “Surface Ship Torpedo Defence Suite” for reconnaissance and fire control, including the SeaSpider, which is continuously adapted to the state of development of the defence torpedo.

www.atlas-elektronik.com

New Generation IFF Systems For Ships

(gwh) For military friend-or-foe (IFF) systems, Hensoldt has developed NESIS 4000, a new generation product. Thanks to state-of-the-art AESA radar technology with Active Electronically Scanned Array (AESA), NESIS 4000 is more powerful than conventional systems.

Because the radar beam is electronically scanned, a mechanically rotating antenna on the highest point of the ship’s mast is no longer required. The non-rotating antenna with annularly arranged fields can



(Graphic: Hensoldt)

be placed at a lower point of the integrated ship’s mast. This significantly reduces the radar reflective surface and infrared signature of the vessel. Thus, the new technology not only contributes to the higher

survivability of the ships, but also provides greater flexibility and thus cost savings in their design.

In addition, AESA technology enhances radar performance while improving the update rate. Compared to conventional systems, targets and threats can be identified much faster, while the range of the radar is increased to 200 nautical miles around the ship.

Hensoldt intends to deliver the first device to the first customer before the end of the year.

www.hensoldt.net

Upgraded Command And Control Network

(df) The Finnish Defence Forces (FDF) have chosen Systematic's latest SitaWare software to upgrade their command-and-control (C2) network. The SitaWare suite including SitaWare Headquarters, SitaWare Frontline, and SitaWare Edge is already employed by the FDF as part of the network and the service's plan to upgrade to the latest versions brings a host of capability enhancements.

The now planned upgrade provides a range of new features, including a map mode with 3D functionality in SitaWare Headquarters. This enables users to

switch from the standard plan view into a 3D format whilst maintaining the same information and planning overlays. Further improvements include a declutter tool, better search functionality via a new tagging feature, and an enhanced record and replay capability that will offer improved debriefings and after-action reviews.

"SitaWare has been in service with the FDF for more than five years," explains Colonel Eero Valkola, Inspector of Signals. "As part of the C2 capability it has supported units operating around the world on UN and EU missions, among others."

In FDF service SitaWare operates via satellite communications, enabling the picture



(Photo: Systematic)

on the ground to be accessible across all command levels – higher echelons based in Finland, for example, are able to see the disposition of all elements, down even to the individual dismount deployed in theatre.

www.systematic.com

TARANIS For Swiss Mortars

(gwh) For the "8.1 cm mortar 19"-project, Switzerland has chosen the TARANIS Swiss Mortar System (TSMS) solution developed by ESG Elektronik System und Logistik GmbH as the future fire control system. TSMS is based on the German artillery's ADLER III command and weapon control system (FüWES), which has proven its worth in the Bundeswehr for decades. TSMS ensures effective digital networking



between observation, fire control, command and control and the "8.1-cm mortar 19" weapon system. The system integrates various sensors, such as thermal imaging

and laser range finders, whether wireless or wired, as well as various means of communication.

According to the armament programme 2019, armasuisse intends to procure the mortar system "8.1 cm mortar 19" between 2021 and 2023. Components are 81 cm mortars from EXPAL, ammunition from Sabb Bofors Dynamics and the TSMS fire control system from ESG described above.

www.esg.de

Autonomy And AI

(df) BAE Systems has sponsored a cross-university competition bringing together four teams of university students in a game of offence and defence. The scenario those teams had to master was developed to protect urban spaces, airfields and airport from real and emerging threats from

UAV's. Increasingly capable UAV's are becoming more affordable and easy to source, so there is a need to counter these systems in a robust and affordable manner. since attacks could cause catastrophic damage to infrastructure. Professor Nick Colosimo, Principal Technologist at BAE Systems, said: "With autonomy and AI being a vital part of

what we do, this challenge offered the perfect blend of exploring the art of the possible whilst testing the student's abilities in this important field. In essence, we need to understand what swarming means as a threat and to very carefully consider where it might have appropriate uses."

www.baesystems.com

Satellite-Based Laser Communication

(gwh) Laser links enable data exchange at high data rates. In the Airbus network, Tesat-Spacecom is the specialist for the development, manufacture and implementation of laser communication terminals (LCT). The LCT 135 used in Airbus' SpaceDataHighway enables data to be trans-

mitted at speeds of up to 1.8 gigabits per second over distances of up to 80,000 kilometers. This allows data to be transmitted almost in real time to any point on earth in a secure and completely interference-free manner.

The technology supports time-critical and data-intensive applications such as those required for the operation of RPAS in de-

fence operations or disaster management. Tesat showed mockups of used LCT at AFCEA exhibition, some of which have been used in space for years.

www.tesat.de



Industry & Trade

Russian Helicopters' Mexican Footprint

(df) In cooperation with Russian Helicopters the Mexican company Craft Avia Center is planning to open a technical maintenance centre for Ansat type civilian helicopters in the city of Guadalajara. "The creation of a maintenance centre for Ansat type helicopters in the Mexican city of Guadalajara is in active stage. The project is being implemented by Craft Avia Center in close cooperation with Russian Helicopters. The centre will start its operation in 2020," said the Deputy Director General for Aftersales Services of Russian Helicopters, Igor Chechikov. "We have long and successful relations of cooperation in the field of helicopter construction with our Mexican partners.

(Photo: Russian Helicopters)



Around 50 Russian-made Mi-17 type helicopters are successfully operated here. Rostec is focused on both strengthening our cooperation with Mexico and developing long-term relations with the whole region of Latin America. Creating the maintenance center for Russian Ansat helicopter is a significant step forwards in this path," said Viktor Kladov, Director for International Cooperation and Regional Policy of Rostec. "I am confident that the maintenance

centre will both strengthen and expand our cooperation in the field of aviation, as well as make the light Ansat helicopter more attractive to potential customers in both Mexico and Latin America in general."

During 2014 - 2015, Russian Helicopters conducted successful overhauls of 19 helicopters operated by the Mexican Secretariat of National Defense. Currently the company is providing comprehensive after-sales support maintaining the whole fleet of Mi-17 helicopters operated in the territory of Mexico. The Ansat light multi-purpose helicopter is actively used by the Russian air medical services. This twin-engine helicopter has compact size and does not require a large landing area. The Mi-17-1V is one of the modifications of the Mi-17 type.

www.russianhelicopters.aero

MASTHEAD

ESD Spotlight

Email newsletter of the magazine "European Security & Defence" (ESD)

Editor-in-Chief: Dr. Peter Bossdorf

Managing Editor: Dorothee Frank (df)

Editors: Lieutenant Colonel ret. Gerhard Heiming (gwh), Christian Kanig (ck), Captain (German Navy) ret. Hans Uwe Mergener (hum), Korhan Özkilinc (koe)

Layout: Dorothee Frank



Published by
Mittler Report Verlag GmbH
A company of Tamm Media Group

Mittler Report Verlag GmbH
Baunscheidtstrasse 11
53113 Bonn, Germany
Phone: +49 228 350087-0
Telefax: +49 228 350087-1
Email: esd.spotlight@mittler-report.de
www.euro-sd.com

Managing Directors: Peter Tamm,
Dr. Peter Bossdorf and Thomas Bantle
The company is located in Bonn
District Court of Bonn – HRB 18658
Identification number DE 811 223 089

To subscribe or unsubscribe please send an email to: esd.spotlight@mittler-report.de

IDE And Raytheon Team For Patriot

(df) IDE announced the extension of its cooperation with Raytheon for the manufacturing of subsystems for the Patriot air defence system by signing new contracts. The new work allocated to IDE is worth \$61,5 million and scheduled to be com-

pleted by June 2021. A significant part of the project will be allocated by IDE to other Greek companies, thus positively contributing in the local industrial production and the financial strengthening of the country.

www.intracomdefense.com

www.raytheon.com

Shrikant Walgad New CVO Of BEL

(df) Shrikant Walgad has taken charge as the Chief Vigilance Officer (CVO) of Navratna Defence PSU Bharat Electronics Limited (BEL). Walgad completed his BE in Electronics & Communications from the Karnataka Regional Engineering College (now NITK Surathkal), Mangalore University, in 1986. He also holds a Post Graduate Degree in Public Policy and Management (PGPPM) from IIM-Bangalore.

On completion of his IAS training Walgad was posted as Sub Divisional Magistrate of Ellenabad/Bhiwani, Haryana. He subsequently worked in various capacities serving as Additional District Collector of



(Photo: BEL)

Sirsa/Sonepat and Jhajjar, Haryana; and District Collector of Jhajjar and Bhiwani, Haryana, and Kodagu, Karnataka. He also became Registrar Magistrate of Maharshi Dayanand University, Rohtak, Haryana.

Walgad also served in different areas of Haryana Urban Development administration, like Urban Development, Rural Development, Election management, Housing and Environment.

www.bel.co.in

IDEF'19 – 14th International Defence Industry Fair

The show authorities allocate meeting offices to meet the delegations and participants from national/international defence industry institutions during IDEF, establishing important commercial connections with them. Scheduled meetings and signature ceremonies are provided during the fair between the defence industry authorities and exhibitors from all around the world.

April 30 - May 3, Istanbul, Turkey

**Sea Air Space**

Sea Air Space was developed as a means to bring the U.S. defence industrial base, private-sector U.S. companies and key military decision makers together for an annual innovative, educational, professional and naval based event located in the heart of Washington, DC.

May 6 - 8, Washington, DC, USA

**UDT**

Now in its 32nd year, Undersea Defence Technology (UDT) brings together professionals from military, industry and academia to focus on cutting edge technologies and developments within the underwater battle space. Held in Stockholm, the UDT 2019 conference will consider the key issues faced by countries as they address their needs in the global underwater defence and security environment. This multi-faceted event reflects this community's desire for continuous learning in dealing with one of the world's harshest environments.

May 13 - 15, Stockholm, Sweden

**EWE**

Over the past few years mature, offensive EW activity in Europe has demonstrated that in the electromagnetic domain, warfare is no longer theoretical. The AOC's 24th European event, taking place on May 13 - 15 in Stockholm, will consider the future of EW and EM Operations in the changing light of current and emerging threats including Hybrid Warfare, Information Operations/Warfare, the Multi-Domain Battle (MDB), Cyber and Anti Access/Area Denial (A2/AD) where some potential opponents are excelling.

May 13 - 15, Stockholm, Sweden

**ITEC**

Celebrating its 30th anniversary on May 13 - 15, 2019 in Stockholm, ITEC is held annually in different locations throughout Europe. Presenting a unique overview of the industry's latest innovations, the event provides visitors with a platform to discuss developments in this evolving market and exchange ideas about future requirements for military training, education and simulation.

May 13 - 15, Stockholm, Sweden

**NITEC19**

This year's conference is entitled NATO and the High North. Building on NATO's largest exercise, Trident Juncture, this conference will give industry leaders the chance to learn how they can support Alliance operations in the High North with their latest technology. NITEC19 will focus on advancing technological solutions and business practices to strengthen NATO operations from the South to the High North. The event is organised by the NCI Agency and AFCEA Europe, in partnership with the Norwegian Ministry of Defence.

May 20 - 22, Oslo, Norway



IDET 2019

At this year's IDET / PYROS / ISET security fairs, a comprehensive showcase of sectoral offer, from the Czech Republic as well as abroad is expected at the Brno Exhibition Centre. The trio of traditional international trade fairs are IDET (defence and security technology), PYROS (fire equipment and services) and ISET (police, crime investigation and security technology and services, commercial security).

May 29 – 31, Brno, Czech Republic



International Defence
and Security Technologies Fair

29 - 31 May, 2019 Brno - Czech Republic

**FEINDEF**

The International Defence Exhibition FEINDEF is organised by the Spanish defence industry sector's business organisations TEDAE and AESMIDE, with the support of the Ministry of Defence. It is the first fair of this format to be held in Spain. The main companies in the sector, both national and international, are expected to attend, together with the armed forces, the Security Corps and various delegations from all over the world.

May 29 - 31, Madrid, Spain

FEINDEF

INTERNATIONAL DEFENCE EXHIBITION
MAY 29-31ST 2019 · PAVILION 8 · IFEMA · MADRID · SPAIN

NCT Europe

This year will see the 8th edition of the amazing CBRNe, C-IED, and EOD event, NCT Europe 2019 in Vienna, Austria from June 25 - 27. The collaboration with the Austrian Ministry of Defense guarantees the presence of regional and international stakeholders: from the highest-level decision-makers to civil and military first responders. Whilst passing through the NCT industry exhibition showcasing of novel technologies, take part in the latest discussions on the newest ways to combat ever-evolving CBRNe threats.

June 25 - 27, Vienna, Austria

**DSEI Strategic Conference**

With DSEI 2019 marking 20 years since its first show, the international defence industry can look at not just how the sector has developed in this time, but also what to expect from the next 20 years. So, it is fitting that the RAF has announced the theme of its first DSEI Aerospace Capability Conference as, "Delivering the Next Generation Air Force".

September 9, London, UK

**DSEI**

This years DSEI will connect governments, national armed forces, industry thought leaders and the global defence & security supply chain. With a range of valuable opportunities for networking, a platform for business, access to relevant content & live-action demonstrations, the DSEI community can innovate, share knowledge, discover & experience the latest capabilities across the Aerospace, Land, Naval, Security & Joint domains.

September 10 - 13, London, UK

**Arms and Security**

The XVI international specialised exhibition "Arms and Security – 2019" will be held in Kyiv, Ukraine from October 8 - 11, 2019. The exhibition will have two main parts: weapons and equipment for army and law enforcement, and arms for civilians.

October 8 - 11, Kyiv, Ukraine

