



2018 TECHNOLOGY SHOWCASE PARTICIPANTS

Technology will once again play an indispensable part in the upcoming Best Defence Conference. The event, which is organized by Pilot Hill Ltd, will bring together local and international companies to showcase their technologies that are relevant to the defence and security industry. Companies chosen for this part of the conference will highlight their novel innovations at their respective display booths, and each will have the opportunity to make a short presentation to the general audience.

“The Technology Showcase will highlight some innovative companies in Canada,” said Heather Pilot, President, Pilot Hill Ltd. “We are looking to open it up to companies from other countries as well, such as Techmodal from the UK.”

Pilot went on to explain that this special session will help startups and SMBs to connect with “primes to bring their products to market and hopefully have their technology adopted and manufactured in Canada.”

Those attending can expect to hear from companies about next-generation

X-ray imaging detectors, rugged robots with high-precision spatial awareness for use in outdoor terrains, real-time networked imaging applications, software for marine surveillance applications and a disruptive new alternative to traditional satellites and drones.

“Presentations are also geared toward providing SMBs with the insight on how to approach primes to get into their supply chains, about opportunities and future technology,” Pilot added. The conference will also cover sessions around Land Projects and Engineering Projects.

“Best Defence offers a unique occasion and value of networking in an informal atmosphere, and for relatively inexpensive cost, companies have the opportunity to form partnerships and build business relationships within the Canadian defence sector and meet key people in the industry,” said Pilot.

The following companies will participate in the Technology Showcase at Best Defence 2018, which will be held at the London Convention Centre in London, Ontario on November 5-6. ■

Battlefield International

WHAT: An aerospace-grade land system and marine quick connect expert.

WHERE: Cayuga, ON

WHY: Battlefield International has systematically and experimentally transformed the world standard Aerospace-grade quick disconnect couplings into new products with the specific features required to meet shared technical requirements of the global land systems and marine industries. The company's quick connect and fluid power land systems specific designs begin with aerospace efficiencies including being exceptionally lightweight and as corrosion resistant as possible. Weight and space savings are assured in an extremely robust platform.



Expanse Microtechnologies

WHAT: Expanse Microtechnologies provides a unique suite of materials inspection services, unlocking mysteries for the developers of advanced materials.

WHERE: Waterloo, ON

WHY: The company provides customized 3D X-ray imaging to technology industries including defence & aerospace and medical device manufacturers. The goal of the company is to support the adoption of advanced manufacturing methods, in particular, additive manufacturing of engineering alloys, technical ceramics, and composites. Drawing from the experience of its technical staff, this support extends to the development of new materials and coatings as well as accurate non-destructive and non-contact measurement of small, complex-shaped parts.



Hybrid Power Solutions

WHAT: Provider of the revolutionary Batt Pack, a lightweight, portable lithium ion battery system designed to replace commercial and industrial grade generators.

WHERE: Mississauga, ON

WHY: Ideal for indoor and outdoor applications, the Batt Pack and Batt Pack XP are exceptionally easy to use and deliver up to 20A (@120VAC) or 4000W. The system is the perfect energy solution for a variety of applications in military, mining, public transit, railway and construction. It is designed to last an entire work shift and recharge quickly in three hours.



KA Imaging

WHAT: Next generation X-ray imaging detectors for improved visualization in defence, aerospace, energy, marine, automotive, life sciences and nuclear industries.

WHERE: Kitchener, ON

WHY: KA Imaging designs, manufactures and supports patented, high-resolution, high-speed, multi-spectral and phase contrast X-ray detectors and systems to achieve unprecedented material separation and visualization. The company offers a variety of bench-top micro-computed tomography (micro-CT) systems as well as fixed and portable multi-spectral (color) X-ray imaging detectors.





Korechi Robotics & Automation

WHAT: Korechi Innovations Inc. is a Canadian startup that specializes in design of rugged robots with high-precision spatial awareness for use in outdoor terrains.

WHERE: Hamilton, ON

WHY: The company's RoamIO series of robots comes in tracks or wheels, have a placement precision of up to 10cm, a payload capacity of up to 300kg, a tugging capacity of up to 1500kg, an endurance of up to 8 hours on batteries and up to 32 hours in hybrid mode. The RoamIO platform is scalable and offers simple integration with additional sensor packages. Some of the intended use for the RoamIO platform in the defence industry are as robotic pack mules, medevac, landmine detection, construction and maintenance assistance and last-mile logistics fulfillment.



Pleora Technologies Inc.

WHAT: A leading supplier of video interface solutions for real-time networked imaging applications in the security and defense, medical, and industrial automation markets.

WHERE: Kanata, ON

WHY: Global military manufacturers rely on the company's products, systems insight, and standards expertise to support a cost-effective and SWaP-optimized approach to implementing real-time video in LSA and C4ISR systems. Pleora Technologies Inc. products convert images from new or existing image sources into a digitized stream that is transmitted with low, predictable latency over Gigabit Ethernet. With all sensor data from multiple image sources converted to a common format, information can be efficiently delivered and shared with multiple endpoints without changing cables or configuring software. Pleora Technologies Inc. products have been designed into high-performance imaging systems for vehicles, vessels, airframes, and standalone applications.



Techmodal

WHAT: A provider of financial, software and project management consulting to numerous high profile programs within the public and private sector.

WHERE: Bristol, UK

WHY: Techmodal creates elegant, customer focused solutions to complex problems; making the chaotic easier to understand and enabling intelligent decision making. Their consultants work closely with their clients to understand challenges and develop bespoke solutions for them. Using the latest technology, the company delivers advanced analysis, intelligent business modelling and real-time data visualization, supported by robust business processes, training, and advice.



Uncharted Research & Development Incorporated (URND)

WHAT: Provider of software for marine surveillance applications.

WHERE: Stratford, ON

WHY: Unique top mounted payload location is ideal to perform ship hull inspections, perform damage assessment, study bioaccumulation, or to investigate advanced ship hull technology in ports and harbors. URND units allow you to perform anchor inspection to ensure that your ship stays put while anchored or to perform underwater exploration up to 400 meters in depth, mine clearing operations, obstacle avoidance, electronic warfare system installation, and ship wreck exploration.



VanWyn Aerospace Logistics

WHAT: Developing the "Sitallite": A geo-synchronize high-altitude payload platform which is a disruptive new alternative to traditional satellites and drones.

WHERE: Hamilton, ON

WHY: The "Sitallite" will dramatically lower cost, complexity and risk by providing the equivalent of a geo-synchronize service, but from the stratosphere, rather than from space orbit. This will result in greater resolution, data security, real-time video borders, rapid deployment and recovery, autonomy from foreign satellites and persistent surveillance over the long-term. The craft will also provide more power, payload weight carrying capacity, cone of service coverage, and mission duration which are the common bottlenecks of many other traditional platforms.



Zenyatta Graphene Solutions Inc.

WHAT: A Canadian firm focused on bringing Graphene products and solutions to the mass market via a wholly owned unique hydrothermal graphite deposit located in Ontario Canada.

WHERE: Toronto, ON

WHY: The widespread use of Graphene in defence, and other applications, is hindered by supply, quality and innovation constraints. Zenyatta is uniquely positioned to overcome these constraints because it has the potential to deliver true industrial scale quantities given the size and validation work completed on its deposit. The company's collaboration with Canadian and international universities has proven that it can produce true graphene at the mono layer quality level and in a variety of industrial applications to bring quantity, quality and chemical functionalization of Graphene to market. This will help in the production of lightweight ceramic armour, lightweight composite materials, solid state batteries/capacitors, fuel cells, sensors, water filtration, 2-D/3-D printed/integrated circuitry, anti-corrosion and smart camouflage systems.