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leading provider of integrated homeland security solutions

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world's largest personal protective

equipment (PPE) provider

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innovative & reputable aérospace & defense

advanced control & mechatronics

## **BREAKING NEWS FROM...**

# XPLORE TECHNOLOGIES

A world class supplier of unmanned

ground vehicles

Image Courtesy of Honeywell

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(**T.** +44 (0) 1398 351606) (**E.** sales@militarysystems-tech.com) EDITION 14



**Explosive and Ordnance Demilitarisation** 

# SURPLUS AND SHELF LIFE EXPIRED SMALL ARMS AMMUNITION IN OPERATIONAL THEATRES

In any conflict there is a large amount of Small Arms Ammunition (SAA) issued to the troops on the ground which when unpacked cannot be returned to stock. Other issues such as climate and age render the ammunition unfit for front line use and in some cases unfit for training.

This SAA takes valuable resources and manpower to look after it until it is transported from theatre or destroyed. The TRADS 20 built and supplied by EOD Solutions Ltd and Caldo Engineering would solve these issues and be a cost effective way of destroying SAA as it became available.

Container or Trailer mounted the TRADS 20 which has been proven in Afghanistan can destroy up to one and a half tons per day and will need the minimum of resources as it is completely self contained and meets the EU Waste Incinerator Directive for emissions to atmosphere.

The TRADS 20 is totally self contained and requires only diesel to operate. Lime and Urea is supplied with the system and one 20 foot container can hold enough of these materials to work for up to one year. The trailer mounted version can be pulled to FOB and other outstations and camps so it also reduces the need to transport SAA in theatre. The TRADS 20 is ahead of its rivals as it requires only two personnel to work it with a small number of personnel for unpacking and searching the scrap to ensure all the ammunition is destroyed. The system is currently working in Afghanistan and has proven to have a good reliability and production record. Average cost per day is approximately £200 plus labour. Daily and routine maintenance is elementary and can be undertaken by anyone with a rudimentary knowledge of engineering. Full training and first site commissioning is included in the cost of the system and a company technician will remain for the first two weeks to ensure the personnel who work the system are completely at home with the system.

EOD Solutions Ltd in conjunction with CALDO Engineering have supplied machines to Bosnia, which was funded by the UK MoD, also in Albania, funded by US Dept. of State and now in Afghanistan with the British forces in Camp Bastion. A TRADS 20 is currently working in Camp Leatherneck with a US company and another is currently waiting installation in Bagram.

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## Welcome to this edition of the Military Systems & Technology newsletter.

As an established web portal for the International Defence & Aerospace Industry, we strive to provide a comprehensive and detailed listing of Military Equipment Suppliers, Products and Services. This newsletter is designed to keep you up-to-date with latest news and events within the Defence Industry's Governing Bodies, Organisations and Companies.

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#### Cobham Mission Equipment -**Unmanned Systems**



# **LEADING PROVIDER OF INTEGRATED** HOMELAND SECURITY **SOLUTIONS**

Telerob GmbH trading as Cobham Unmanned Systems is a leading provider of integrated homeland security solutions and unmanned platforms, utilizing over 30 years of expertise in this highly specialised field.

Cobham Unmanned System' mission is "To develop machines, equipment and systems that protect or replace human beings in situations where their presence would be either impossible or place them at great risk".

#### EOD / IEDD Equipment, EOD Robots and Service **Vehicles**

Whether the task at hand is disarming an Improvised Explosive Device (IED) with a remote controlled robot; investigating NBC hazards with an unmanned sensor platform; or deploying mobile. fully networked measurement, monitoring and intervention systems to ensure the safety and security of critical infrastructure, Cobham's top priority is always the protection of people and their surroundings.

Cobham Unmanned Systems' product range includes mobile unmanned sensor platforms



suspicious substances; vehicles equipped with state of the art robots for detecting and disarming of Improvised Explosive and Incendiary Devices (IED's); and integrated mobile systems for dealing with full spectrum of asymmetric threats.

#### Remote Controlled **Robotic Solutions**

More than 700 Cobham Unmanned systems are in service today, supporting bomb disposal officers and first responders in nations around the world.

Distance means safety; this basic rule with regard to disarming explosive devices means with manipulators for taking samples of that bomb disposal officers increasingly prefer

EOD Robots as their tool of choice.

Not only bomb disposal officers are exposed to a wide and varied range of hazards today; rescue forces and first responders increasingly get into situations that involve an extremely high level of personnel danger. Unmanned robotic systems have been developed to allow inspection and deal with hazards from a safe distance.

Building on this exceptional experience base, highly advanced solutions can be offered today; semiautonomous and remote controlled robots that can take samples of suspected biological or chemical warfare agents, plus reconnaissance platforms for CBRNE detection.



#### telemax Explosive Ordnance (EOD) Robot

The telemax robot is the most versatile EOD / Hazmat robot available on the market today. It packs up small enough to fit in the back of a small SUV but is able to reach over 2,4m tall.

A four-track running gear has been used for the first time in a vehicle of this size, which offers superior mobility compared to other forms of running gear. This means that it can handle gradients of 45° or 100% without difficulty. It can overcome obstacles of up to half a meter in height without problems and also trenches of 60 cm in width.

The basic principle of 'less is more' applies with special forces if the situation involves working in confined spaces; in all cases where the big EOD robot cannot be used its little brother provides that vital distance between the bomb disposal engineer and the explosive device (IED, EOD, Bomb) that can mean the difference between life and death: in aircraft, in subways, in buses or other means of public transport.

The telemax has a unique set of features making it highly mobile and suitable for operating in confined spaces; the four individually articulating tracks are controlled separately and can be moved individually in pairs or all together as desired. Additionally, an intelligent controller sets running gear configurations to cope with the relevant situation at the press of a button.

These features make it easier for the operator to control the vehicle, especially in tricky situations such as narrow stairways and high steps. Inclination sensors ensure that the robot always maintains its balance. If a travelling speed of 4 km/h is not enough, then the high speed version offers up to 10 km/h.

The operating concept of the telemax is almost revolutionary by comparison to other robots on the market. It is the only EOD robot in the world that has a so-called TCP controller. TCP stands here for Tool Center Point, the middle point of the tool, or more simply, the gripper or disruptor. This kind of manipulator control makes the telemax the best in class robot in manipulation.

telemax is the only robot in this class that has two tool magazines incorporated into the chassis. This means two additional tools / firing systems can be used on an operation without needing to go back to the starting point. The manipulator automatically takes out the additional tools at the simple press of a button.

#### NBCmax CBRNE Service Robot

The NBCmax service robot is a universal mobile sensor platform that can be equipped with a broad palette of sensors to detect and investigate chemical, biological, explosive or toxic substances (CBRNE).

Not only bomb disposal engineers are exposed to a wide and varied range of hazards today. Rescue forces and first responders such as the fire service, technical rescue specialists or international aid forces increasingly find themselves in situations that involve an extremely high level of personal danger. This includes operations that involve hazardous materials, toxic substances or even biologically harmful materials such as viruses or bacteria. Once such substances have been released-whether through accidents or intentionally-the rescue forces are exposed to maximum danger if working manually.

The NBCmax has been developed to allow the response forces to inspect, and if applicable deal with hazards from a safe distance. The data collected, ranging from gas concentration and

gamma radiation through to evidence of explosives, is transmitted back to the control panel of the robot to be processed by the operator.

#### tEODor Explosive Ordnance (EOD) Robot

tEODor is an Explosive Ordnance Disposal (EOD) and observation robot that sets the standard worldwide.

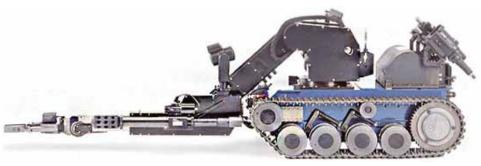
Distance means safety; robust, reliable and flexible in use, the innovative bomb disposal system provides a maximum degree of safety and protection. The basic model is designed as a twin-track vehicle with extremely good manoeuvrability and good properties on open ground; the running gear, equipped with sprung rollers, is characterised by the ability to climb at angles of up to 45°. The individual links of the robust steel track can be easily replaced if they become worn or damaged.

The high-torque drive units work with continuous four-quadrant control, both backwards and forwards. Both the vehicle and the manipulator can be operated with extreme delicacy. When the vehicle stops on slopes or gradients the safety brakes operate automatically to hold the vehicle in place.

#### EOD - IEDD TEL600 Service Vehicles

The TEL600 series is a family of vehicles which deal with the demanding tasks associated with the location, identification and removal of explosive and incendiary devices, especially in the event that there is suspicion of a dirty bomb. The range encompasses a compact Rapid Response (S) vehicle based on a fast four wheel drive (4X4) vehicle to take immediate action at the crime scene; medium-sized (M) search and detection vehicles for location and identification operations; and fully equipped IED / NBC response systems (L) weighing up to 8 tons.

The XL and XXL systems, based on medium-sized and heavy trucks, represent the highest standard in Bomb Disposal vehicles, providing security personnel with the optimum amount of equipment to cover every eventuality. Kit ranges from a simple hook and line set through to various EOD robots and unmanned reconnaissance platforms, all the way up to a NBC robot with a fully automatic system to take samples and investigate hazardous biological materials. Systems are made-to-order based on individual customer specifications.



## Honeywell

# WORLD'S LARGEST PERSONAL PROTECTIVE EQUIPMENT (PPE) PROVIDER

#### Honeywell

Honeywell Safety Products has become the world's largest personal protective equipment (PPE) provider, with annual revenues of more than \$2 billion. We are backed by the powerful global resources of Honeywell International and its \$1.5 billion corporate R&D budget. Honeywell Safety Products draws on the corporation's exceptional technology and innovation capabilities to develop new materials, electronics, sensors, and communication systems.

#### QUIETPRO® Intelligent Hearing Protection and Communication Systems

QUIETPRO® QP400 is an intelligent digital communication headset and high-level hearing protector for military use. QUIETPRO® significantly improves communications and situational awareness in noisy surroundings while protecting the users' hearing. It adds no weight to the head and is fully compatible with all military ground, vehicle and ballistic helmets and CBRN protection gear.

This unique combination of features is targeted

to enhancing the capability of the soldier performing his duty in harsh and dangerous environments, and to allow for the use of one system only for all combat scenarios.

QUIETPRO® QP400 from Honeywell Safety Products is an advanced Intelligent Hearing System that provides high-levels of 'verifiable' hearing protection. Hearing protection that adapts to the noise environment to permit the user to hear sounds around them — when safe to do so.

#### Mission Safety Critical - Two-way Military Communications

QP400 ensures mission (safety) critical two-way communications are received clearly and accurately, first time in all noise scenarios.

QP400 connects to multiple two-way radio, platform intercom, soldier navigation solutions, sniper or gunshot detection systems, smart cell phones or personal music devices. With automatic configuration of the interface to the device connected, the correct equalization (matching) of the interface is assured without any user intervention.



QP400 is designed using the core processing architecture and algorithms developed for the successful QUIETPRO and QUIETPRO+ systems. More than 63,500 of these original QUIETPRO systems have entered service with a variety of Government user groups in 15 countries worldwide.

QP400 allows the user to enhance their natural hearing so that they can hear sounds that cannot be heard with their ears alone. It also enables the user hear sounds around them ensuring that retain their localized situational awareness. Vital for their personal safety and security.

QP400 continuously adapts to the noise environment, always providing the correct level of protection, but never over protecting. The QUIETPRO® is developed to only attenuate what is absolutely necessary and only for as



long as the protection is needed. When the dangerous noise is no longer present, QUIETPRO® immediately restores full hearing capability.

QUIETPRO® is designed to allow for intelligible communication in high noise environments up to 110-115dB. QUIETPRO® attenuation > 40 dB for Impulsive noise protection. Overall passive attenuation of the foam tips - SNR 34dB (EN352-

QP400 incorporates digital Active Noise Reduction (ANR) that provides further attenuation for low frequency noises in additional to that provided by the foam ear tips. This highly stable digital ANR system automatically activates (only when required) and cancels out the rumbling of the low frequency noise from sources such as armoured vehicles (tracked and wheeled), large engines, boats, fixed wing aircraft and helicopters.

QUIETPRO® has undergone many extensive and rigorous evaluation and assessment programs independent test and validation organizations in Europe, Australia and the United States. With the exception of impulse noise testing above 160dB (explosions), testing has been conducted on human beings to assure accurate and realistically reliably results.

## Soldier Hearing Protection

QP400 automatically performs a FIT TEST of the in-ear headset to ensure that a good level of hearing protection and clear two-way communications are obtained. This feature provides the user with confidence that a high level of protection is being achieved.

QP400 can be configured to connect multiple radio and communication systems. Up to 4 separate communication channels.

QP400 can connect a variety of headset types, • including; the QUIETPRO in-ear high noise headset, circumaural 'muff' headset, on-ear / single sided headset and less overt headsets. The user is able to choose the headset and

adapt the QP400 to meet their requirements or personal preference.

QP400 provides the user with an intuitive MENU function with voice feedback provided through the headset. This enables the user to control the modes and operation of the QUIETPRO system to meet their requirements and preferences. This voice feedback can be provided in different languages.

The QP400 has been designed to facilitate rapid mount-dismount transitions with mobility platforms, while maintaining continuous connectivity to the communications network.

#### **OUIETPRO In-ear** Military Headset

The new QUIETPRO in-ear headset is now available with a custom moulded ear tip or the comfort improved ear tip PROTIP. The PROTIP • provides a very high level of attenuation of noise (independently tested), with a significant improvement in user comfort. Consequentially, the headset can be worn continuously for extended periods of time.

The QP400 has been designed with the capacity to introduce new features and capability enhancements through software modifications only.

#### Overview of the QP400

The QP400 retains the core processing architecture and mathematical algorithms of the battle proven QUIETPRO® and QUIETPRO+ products. In excess of 63,500 of these original products have been delivered to customers worldwide.

The feedback and experience gained from this extensive base of installed products has driven the fundament redesign of the product to achieve the QP400.

- Redesigned the Control (processing) Unit. More tactile and simplified user controls.
- Intuitive Menu system to control functions and modes of the system. Spoken voice feedback is provided to user through the headset – greatly reduces the time required to train on the operation of the system.
- Comfort improved ear tips.
- Placement of all cables and connectors on one side of the Control Unit to allow greater mounting options on the vest or load carriage system to suit the user.



- Interchangeable headsets user selectable depending upon mission or personal preference.
- Compatibility with legacy in-service headsets using QP400 adapter cables.
- User configurable Control Unit mounting options.
- Increased number of communication channels from 2 to 4 (independent channels)
- Automatic Configuration of system to communication device(s) connected.
- Dedicated tactical radio and platform / mobility connection points, with high reliability, rapid disconnect connectors.
- Reduced weight
- Quick release connectors for easy connection/disconnect
- Replaceable mounting brackets to provide full flexibility of mounting options

#### **QUIETPRO System Components**

- Headset with two lightweight in-ear earpieces.
- Control Unit with 3 PTT buttons (primary controls) and menu, confirm and volume buttons (secondary controls)
- Interface cables for other audio devices such as vehicle intercoms and alternative tactical radios.
- Optional wireless 'dual' PTT.
- Optional wired one button chest PTT or one button finger PTT
- Optional headset adapter cable to connect end customer legacy headsets to the QP400.
- Y splitter cable to enable two separate radios to be connected to the radio communication connector

#### Redler Mechatronics Ltd



# INNOVATIVE & REPUTABLE **AEROSPACE & DEFENSE ADVANCED CONTRO & MECHATRONICS**

Redler Mechatronics Ltd has been an innovative & reputable aerospace and defense advanced control and mechatronics company since 1994, located in Israel.

Redler develops and manufactures motion control and GPS INS products, as well as clients' support services such as project integration, sensor calibration and modifications.

Redlers accurate MIL STD drivers and motion Redlers developed innovative MEMS based controllers are equipped with the latest that advanced technology has to offer. We specialize accuracy, allowing more sensitivity and reliability

in making cost effective, digital servo drivers and advanced multi and single axis motion control systems for PGM (Precise Guided Munitions), UAV (Unmanned Avionic Vehicles), UGV (Unmanned Ground Vehicles), gimbaled stabilized system, heavy duty sensor-less controller driver and many other applications that demand robustness and exceptional reliability.

navigation systems that attained unmatched

to platforms while maintaining a competitive price. Amongst its products Redler Computers provide an accurate avionic flex valve system, for UAV GPS Less navigating capabilities, Near to FOG MEMS based GPS-INS and many other navigation and stabilization sensors integrated for cost effective accurate operational systems. The GPS INS products have anti spoofing and anti-jamming capabilities.

The company's embedded systems, based on MEMS sensors, FPGA, DSP microcontrollers and unique motion control solutions, designed to operate under extreme environmental conditions and suited to low power consumption. We meet our clients' needs by a one stop shop strategy. Redler Computers provides its customers with a cost effective product, as well as full support with navigation - stabilization GPS INS platform calibration and mission adaptation.



#### Precise Guided **Munitions Servo**

Full servo and power distribution system solution for missiles or smart munitions. The design is made specifically for the munition diameter and the required torque.

The most resilient servo system designed to meet more than 10,000G and has been fired numerous times.



Includes 4 DC or BLDC motors, high efficiency zero backlash gear system, smart control board will allow high frequency response and batteries that can be stored for 15 years.

The power distribution system correlates between electric motors' current demands and the power sources capabilities.

A precise coulomb counter enables the usage of lithium primary batteries as power sources. The single chip servo system is based on our MAMC (multi axes motors controller) technology, which combines high speed Position, Speed and Current loops per wing to achieve high degrees/Second rate response

#### High Accuracy MEMS Based INS-GPS Systems

This standalone device contains inertial MEMS based IMU combined with 3 GPS receivers.

The sensors are mounted according to customer's geometry. 3 Accelerometers, 3 Rate-Gyros and 3 magnetometer and barometer sensors which form 10 degrees of freedom (10 DOF).

More information about the INS-GPS System can be seen here 3 GPS receivers create an ellipsoid of 3 measurement points to increase GPS reliability, accuracy and mitigation of jamming, spoofing and electromagnetic shadowing.

Our support includes full adjustment to the customer's applications including adjustment of hard and soft iron cancellation, Navigation circle, Simulations and Calibration on Rockets, Smart munitions vehicle or UAV.

In addition we can offer test equipment and full support services.

#### D-4 - 4 Axis Motor Controller - Drivers

D-4 Redler's Quad motor controller is a compact and feature-rich 4 motors controller

The D-4 manages the current, torque, speed and position for up to four independent or synchronized motors at high speed response. Each motor can be powered independently by up to 15A@ 6-80VDC. (Total power 1.2kW per motor).

D-4 can drive BLDC, PMSM or DC motors or any combination of them.

The D-4 main fields are military robots, unmanned vehicles and heavy rockets.

The single chip servo system based on our MAMC (multi axes motors controller) technology increases reliability, reduces parts count and enables customers to add application specific software.



Available interfaces: Full speed USB2, RS232/485-422, Ethernet LAN and SPI.

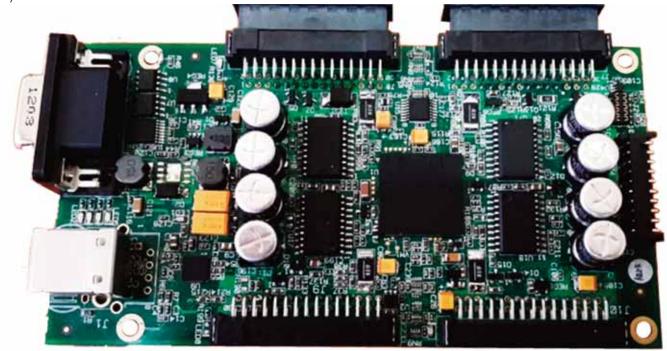
#### Rayon High Power -FAN Controller Driver

Rayon High Power Controller Driver for heavy vehicle fan applications such as NBC systems. Capable of driving a 60A 60V, low inductance **BLDC** Motor.

Unique feature allows the unit to perform on a BEMF rotor position feedback with low SNR. 4 communication methods are implemented: RS422, RS232, CAN, Analog signal.

#### **Our Advantages:**

- MIL STD + IDF approved
- ACV brushless motors design
- Sensor-less-Only 3 wires to Motor
  - High current
- Cost effective product





#### **Xplore Technologies**

recognized pioneer in the rugged mobile computing industry with more than 15 years of dedicated focus on developing and deploying fully-rugged wireless tablet systems. Our products have been engineered to meet our customers' demands for reliable, fully-rugged mobility solutions that deliver superior performance and functionality, and can withstand the most extreme operating environments. We deliver the most comprehensive and rugged tablet computing solutions in the industry. Headquartered in the "Silicon Hills" of Austin, Texas, Xplore Technologies has spent more than a decade on research, development and product generation improvements culminating in the 2011 launch of

Xplore Technologies is a global leader and the 5th generation system in the iX104C5" product family.

> The daily challenges faced by our clients in the field and on the front lines were the driving force behind Xplore's "Voice of the Customer" product development methodology, which drives the engineering, testing and production of critical wireless, performance and expansion capabilities. Since inception, the company has sold approximately one hundred thousand systems globally across a breadth of industries and is a recognized leader and trusted source in the rugged tablet computing industry.

Xplore Technologies Corp. is a publicly-traded company (NASDAQ:XPLR).

# Innovative Rugged Mobility Tablet PC

As demand for the tablet PC has surged, so too has the need for rugged mobility solutions with technology advances that allow greater reach into extreme environments. Xplore customers need mobile computing tools that match tough on-the-job requirements, whether those jobs take them deep underground, high above power lines or to the front line.

Driving rain, blowing sand and dust, temperature extremes, constant vibration, accidental system drops onto hard surfaces – Xplore tablets can



go wherever users need to be, providing scalable performance, enhanced connectivity, flexible input methods, true portability and product lifecycles that match program and performance needs.

Xplore's iX104C5 family of fully-rugged tablet PCs, vehicle/situational docking stations, enabling accessories, and peripherals deliver comprehensive solutions to meet the exacting needs of industrial, commercial and government customers.

## XPLORE: Proven Rugged In The Real World

#### Industry's most rugged tablet PC

- Independently-tested to MIL-STD-810G, IEC IP67 ingress rating (10-cell battery), and Hazloc standards
- High-density, hardened magnesium alloy chassis with contoured bumper protection system
- Integrated piston gaskets on all useraccessible doors
- 3H hardened display protects against breakage and scratching
- 3rd party tested: 4' drop to concrete with system on; 7' operating drop to non-yielding surface
- Xplore's Cool Touch thermal system, inclusive of multiple thermistors, regulate heating and cooling in extreme temperatures
- Exceptional data protection Solid State Drive (SSD) storage, with dual SSD RAID (0,1) option

Military, public safety, field service and other front-line workers depend on their mobile computing systems to complete job tasks, execute mission plans and, in some cases, save lives. System uptime, continued deployed operation and data protection is paramount. Xplore's iX104C5 is the gold standard in rugged tablet computing, delivering the highest degree of ruggedness in its class. Inspired by first-hand experience and input from utility and telecomm field service workers, military personnel, and law enforcement agencies, the iX104C5 can adapt to changing mission requirements and withstand harsh conditions.

#### Key Rugged Features Include:

A drop specification that is more in line with real-life use conditions: 4', operating to



concrete (a hard surface) 26x; 7' operating to plywood over concrete

- A unique piston sealing technology enables a higher level of ingress protection (IP-67 with 10-cell battery) from driving rain/snow, blowing dust/sand, and potential immersion in water
- An innovative data protection system utilizes a custom-engineered drive carrier, Solid State drive storage with dual SSD drive option, RAID (0,1) and JBOD array configurations which include advanced high-performance and durable solid state

#### XPLORE: Xtreme Performance

#### Industry's Best Performance Platform for **Today and Tomorrow**

- Intel® Core™ i7-620UE mobile processor, HD integrated Intel® graphics with dynamic frequency
- Intel® Turbo Boost Technology
- Up to 8 GB of fast DDR3 memory (Windows® 7, 64-bit OS)
- Multi-modal wireless options, including Intel® Centrino® Wi-Fi, Bluetooth, Gobi® 3000 Broadband

- Solid State Drive (SSD) for enhanced performance and durability
- Dedicated Fast Track GPS II 2m and sub-1m models (optional)

The iX104C5 raises the bar for performance in the fully-rugged computing market by providing the most advanced performance platform in its

The iX104C5 is equipped with Intel®'s latest Core™ i7-620UE mobile processor, featuring the Intel® QM57 Express chipset, Turbo Boost Technology and integrated high-definition graphics with dynamic frequency.

This powerful mobile dual-core, hyperthreading processor with 4 MB of Smart L2 cache and up to 8 GB2

(Windows® 7, 64-bit OS) of DDR3 system memory supports higher-end applications like GIS mapping and mission planning that require real-time capabilities, fast processing and superior graphics performance to render images. Multi-modal, integrated wireless options provide communications when and where customers need it.

# Ansell introduces hands-free lighting system for TRELLCHEM® Level A Suits

Ansell, a global leader in protection solutions, announces the launch of the TRELLCHEM Hands-Free Visor Light System, US patent System adds true value pending. The system offers Hazmat responders in encapsulating Trellchem suits a built-in hands-free LED lighting solution with a panoramic view with no risk of blinding reflections.

Access to light and good visibility plays a vital role in creating a safe environment for mos kinds of work. Trellchem encapsulating gastight suits are used by a variety of responders in emergency situations where the environment can be both very dangerous and most often very demanding in terms of access to daylight or any other light sources. Typical situations include visibility limited by smoke from the off-gassing of chemicals to the dark, non-lit space of an industrial building where lights are out. The responder must also normally carry a wide range of tools to be able to complete the mission. A solution that offers hands-free operation of a light source therefor contributes both to safety and efficiency for the entire response team.

#### ight System **Hands-Free Visor**

"The Trellchem Hands-Free working in demanding and nas Draskovics, environments" President and General Manager Ansell By adding an integrated lighting solution into our suits we are convinced that we will help create a safer environment for responders working in these sometimes life-threatening operations".

is a "short throw" illumination system based on a LED panel mounted along the top inside of the visor. It is connected to a standard 9V battery giving the user an expected duration of more than one hour. The wide beam of the LED panel creates a panoramic view in poorly illuminated environments. It helps the responder with better orientation as well as safer and more rapid performance since it frees up both hands. The design of the system eliminates any risk of reflection back into the new and existing suits without the need of

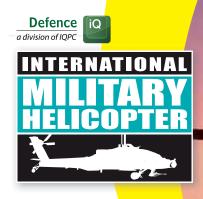
any special tools. The LED panel is powered sor Light by standard batteries to eliminate the need of any recharging management.

The system fulfils EMC (Electro Magnetic Compatibility) requirements and does not interfere with any radio communication devices. Further, it does not influence or interfere with any regulatory certification regarding the Trellchem suit. decontamination and cleaning purposes, The Trellchem Hands-Free Visor Light System once the battery pack is dismounted, the system will remain unaffected inside the suit when being washed. More information on the Trellchem Hands-Free Visor Light System can be found at:-

> http://protective.ansell.com/en/Products /Trellchem/Accessories/.

Trellchem® is a registered trademark owned by Trelleborg AB.

eyes of the user and mounts easily in both Information on Ansell and its products can be found at www.ansell.com



#### **Keynote Speaker Faculty Involves**



William N. Phillips Dante Arévalo Abate
Military Deputy/Director, Chief of Air Force Army Acquisition Corps.
Office of the Assistant ecretary of the Army cquisition, Logistics & Technology)



Peruvian Air Force



The premier forum for the global military helicopter community



iation, French Army



Talkoradi, Ghanaian Air Force



Hungarian Air Force



Programs Office,





## Newfor 201

- G-6 Industry Panel Discussion-Debate with leading OEM Industry Executives regarding the future of the military helicopter market, supply chain opportunities and the strategies they are implementing to maximise their market share now and for the future
- New Rotary Strike Focus Day-Immerse yourself in cutting-edge international rotary strike acquisitions policies, operational tactics and technological developments to gain a comprehensive understanding of the developing role of military helicopters in 21st Century warfare
- New International insights-Hear presentations from officers from US, Europe, Middle East, Asia, Africa and South America to discover how other militaries are solving your daily challenges

## 13th Annual International Military

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> Quote: MST-AD to claim your 20% discount when you register













# James Bond Gadgets for Winter Shoppers

A new retail website is enabling winter that are being used by Armed Forces around shoppers to snap up gadgets which James Bond would be proud of.

Some of the recent products developed by UK based survival gear specialists, BCB International Ltd, like ballistic protective underwear dubbed 'Blast Boxers' and tiny surveillance drones bring to mind the derring-do exploits of James Bond. Now for the first time, the company is making available to the public some of the military gadgets the world through its online retail service bcbadventure.com.

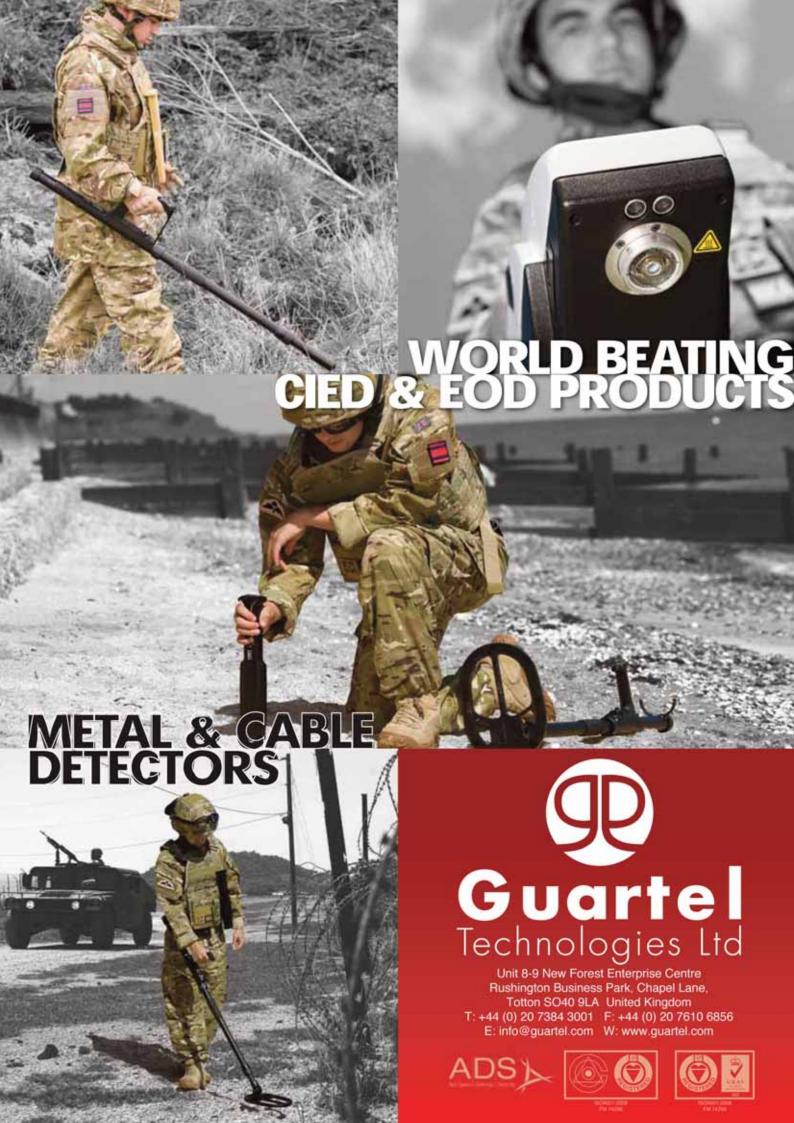
BCB International's spokesperson, Philippe Minchin, said: "Since 1854, BCB International Ltd has built up unique knowledge and experience in developing pioneering lifesaving equipment for those operating hundreds and thousands of miles away in often challenging environments.

"Behind each product are many years of attention to quality and care. In recent years, members of the public have been telling us that they would love to be able to directly purchase some of our gadgets. We have listened and I am pleased to say that through this online store, they will now be able to buy our outdoor living and survival products including eye-catching winter stocking fillers like our Blast Boxers and our compact survival kits which are typically used by soldiers for escape and evasion purposes. "









# Cellebrite Extends its Line of Mobile Forensics Solutions with PC-Based UFED Software, Turnkey Hardware



Cellebrite the first and only mobile forensics vendor to provide a full range of flexible platform options for lab and field personnel Cellebrite, the leading developer and provider of mobile data forensic solutions, today announced the launch of the UFED 4PC and UFED TK. Together with the UFED Touch,

UFED 4PC and UFED TK constitute the first and only complete series of mobile forensic solutions across dedicated single purpose and general purpose PC-based hardware platforms to accommodate the broadest range of lab and field use cases.

UFED 4PC is designed for customers who require a convenient, cost-effective way to extract and analyze mobile forensic data on a single PC of their choosing. UFED TK supports users who seek to extract and analyze mobile forensic data on a preconfigured PC hardware platform. UFED 4PC may be installed on any Windows®-based PC, while UFED TK features the UFED 4PC software pre-installed and configured on a rugged PC hardware platform available directly from Cellebrite.

UFED 4PC and UFED TK enable customers to run the entire suite of UFED Series applications (UFED Phone Detective, UFED 4PC, UFED Physical Analyzer / Logical Analyzer and UFED Link Analysis) on the same hardware. As a result, customers can now perform mobile device identification, extraction, decoding, analysis and reporting in a unified, general purpose hardware environment. The two new additions to UFED Series join Cellebrite's flagship UFED Touch, which supports users who require extraction from a dedicated single purpose device.

"Having tested UFED 4PC on more than 50 devices over the past four weeks, we're impressed by the software's speed, stability and efficiency," said Sergeant Tom Nelson, a digital forensics specialist with the Deschutes County (Oregon) Sheriff's Office. "We have found it to be an excellent complement to the UFED Touch devices already deployed in our lab, and believe that it would be just as effective deployed in the field as would the UFED Touch."

"The launch of the UFED 4PC and UFED TK extends the reach of our industry standard

technology across multiple platforms," said Ron Serber, Cellebrite Corporate co-CEO. "This means customers have the best possible flexibility in choosing a mobile forensic solution in the right form factor to meet their investigative needs, and that UFED classic customers have multiple options to migrate to our next-generation mobile forensic solutions. UFED Touch, UFED 4PC and UFED TK each have strengths to bring to the lab or the field depending on customer need, but regardless of which platform they choose, customers will have access to the most robust extraction, decoding, and analysis capabilities of any solution available in the market today."

Cellebrite's UFED Series assists legally authorized investigative bodies such as law enforcement officials, military intelligence organizations, corporate security officers and e-discovery professionals working on criminal or civil investigations. The UFED 4PC and UFED TK enable these professionals to standardize on a seamless mobile forensic process using a single platform, helping them meet the growing demand for fast, effective and forensically sound mobile investigations.

Based on UFED technology which government and private sector personnel have trusted since 2007, the UFED 4PC and UFED TK solutions incorporate the most comprehensive extraction and decoding support for the widest range of devices. As with the UFED Touch, logical and physical extraction methods support more than 10,800 profiles for mobile devices including BlackBerry®, iOS, Android operating systems and smartphones from Samsung, Motorola, Microsoft, Palm, and Nokia. The UFED 4PC and UFED TK also support forensic data extraction and decoding on legacy phones, portable GPS devices, (e. g. TomTom and Garmin), handheld tablets such as the iPad



The UFED 4PC and UFED TK are available in two versions each: UFED 4PC Logical and UFED TK Logical, for logical data and password extractions; and the UFED 4PC Ultimate and UFED TK Ultimate, for in depth, physical, logical, file system and password data extraction.

#### **About the UFED Series:**

Cellebrite's UFED Series stands as the industry standard in mobile forensics. The UFED 4PC, UFED TK and UFE D Touch advance Cellebrite's already ground-breaking logical and physical extraction capabilities for thousands of mobile phones, smartphones and GPS devices. These capabilities include decoding, decryption and device password protection defeat for many of the world's most popular mobile platforms, including BlackBerry, iOS, Android, Nokia BB5 and more. Cellebrite's UFED CHINEX deploys automatic pin-out recognition and proprietary boot loaders to extract and decode existing, hidden and deleted data and passwords from devices manufactured with Chinese chipsets.

that immediately identifies and visualizes the connections and communication methods used between multiple mobile devices based on data extraction reports.

The extraction, decoding and analysis of vital evidential data includes call logs, phonebook, text messages (SMS), pictures, videos, audio files, unique phone identifier information and more.

For more information about Cellebrite and it's products, please visit our website Cellebrite.com









## Save Test & Integration Time with AFDX®/ARINC 664 Switches & PMC Interface Card!



Bohemia, New York (December 2013) Data Device Corporation introduces AFDX®/ARINC 664 Switches, in lab and rugged versions, to complement its AFDX®/ARINC 664 PMC Interface Card providing a complete solution for all network and/or end system test and integration tasks saving development, validation, and integration costs.

Available with up to 24-ports and advanced health and diagnostic functionality, these fully compliant AFDX® switches and interfaces are ideal for system integration labs, product test stands, and simulators, as well as for supporting software development and system troubleshooting.

"The addition of these time-saving, easy-touse AFDX®/ARINC 664 switches serve as an extension of DDC's partnership with TechSAT, and reflect DDC's commitment to providing highly integrated hardware, software, and support for high-speed data bus connectivity", stated Mike Hegarty, DDC's Principal Marketing Engineer.



Data Device Corporation (DDC) is the world automation applications. For nearly 50 years, leader in the design and manufacture of high-reliability data bus, motion control, and solid-state power controller products for aerospace, defense, and

DDC has continuously advanced the state of high-reliability data communications and control technology for MIL-STD-1553, ARINC industrial 429, AFDX®, Synchro/Resolver interface, and Solid-State Power Controllers innovations that have minimized component size and weight while increasing performance. DDC headquarters, design and manufacturing operations are located in Bohemia, NY. Visit www.ddc-web.com.

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Benefits include:		
Feature	DDC's AFDX®	COTS Ethernet Switches
<ul> <li>Full AFDX® Compliance</li> </ul>	Yes	No
<ul> <li>Easy to Configure</li> </ul>	Yes	No
<ul> <li>Integrated Traffic Echoing</li> </ul>	Yes	Difficult to Configure
<ul> <li>Automated Workflow Integration</li> </ul>	n Yes	No
<ul><li>Error &amp; Health Monitoring</li></ul>	Yes	No



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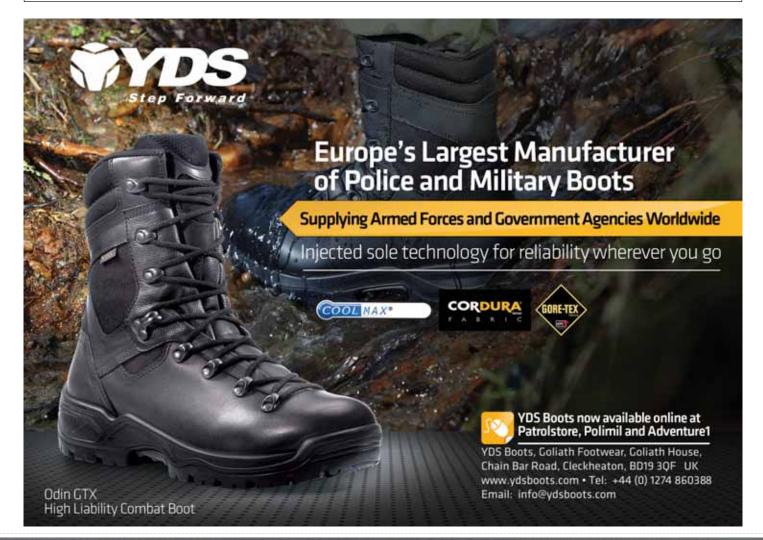












# First Trakkers delivered to the Dutch Army's fire department

Iveco Defence Vehicles announces delivery of the first 8x8 Trakker Hi-Land vehicles to the fire departments of the Dutch army's Infantry and Artillery firing

#### Rotterdam, November 21st, 2013

On November 21st 2013, the first Iveco configuration. The contract also includes Iveco Defence Vehicles Benelux to the fire brigades of the Dutch army's infantry (ISK) and artillery (ASK) firing ranges. The handover ceremony was held at the NIDV Symposium in Rotterdam and was attended Each of the two Trakker Hi-Lands is equipped equipment, this contract was awarded in 2012 and comprises the supply of two Iveco

Trakker Hi-Land 410T45W in 8x8 axle-Trakker Hi-Land 8x8 was handed over from superstructure and vehicle engineering services, project management maintenance contracting supported by Iveco DV Benelux's commercial premises.

by military representatives and industrial with a loading crane incorporating a winch, a partners. Intended to replace aging 17 ton capacity container handling system and a newly designed 6m long open multipurpose container.



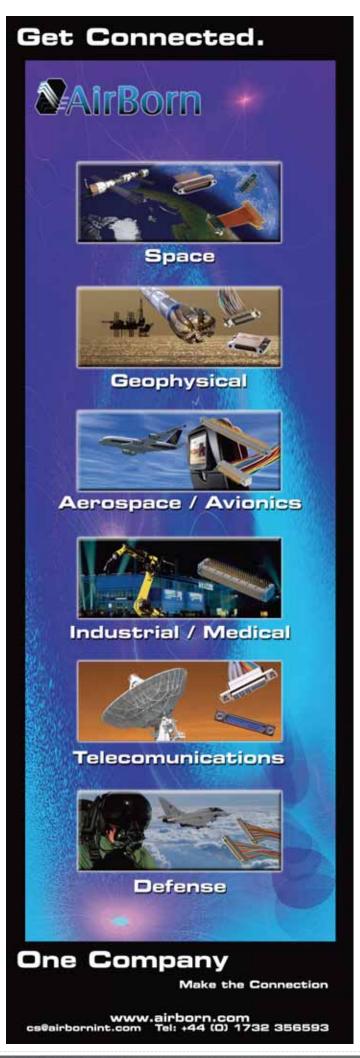
All vehicles are fully EEV emission compliant, featuring economical and environmentally friendly FPT Industrial Cursor engines coupled with automated EuroTronic transmissions. The innovative use of this technology enables the fleet to be one of the most environmentally friendly in Europe.

At the ceremony, the vehicles were exhibited in a static display. They had already undergone demanding dynamic tests performed by the users, demonstrating their outstanding performance over demanding terrain.

Iveco, a CNH Industrial company, designs, manufactures and markets a wide range of light, medium and heavy commercial vehicles, offroad trucks, city and intercity buses and coaches as well as special vehicles for applications such as firefighting, off-road missions, defence and civil protection. Iveco employs over 26,000 individuals globally. It

manages production sites in 11 countries throughout Europe, Asia, Africa, Oceania and Latin America where it produces vehicles featuring the latest advanced technologies. 5,000 sales and service outlets in over 160 countries guarantee technical support wherever an Iveco vehicle is at work.





# Peli ProGear<sup>TM</sup>il 065 HardBack<sup>TM</sup> Case with Integrated Frame Protects & Displays iPads

Some in the media are calling 2013 the Year Peli ProGear™ i1065 HardBack™ Case of the Tablet. With that in mind, Peli Products has introduced the Peli ProGear™ i1065 HardBack™ Case with integrated frame to offer an extremely rugged, yet versatile case to protect and display the iPad® (generations 2, 3, 4 and also the new iPad Air).

With a design produced from a partnership with BMW DesignWorks, this streamlined, crush-resistant case features the same attributes as Peli's classic case products (including a watertight o-ring seal with automatic pressure equalisation valve). Its

interior features a shockabsorbing plush foam liner with impact-protection cell cushions and an elastomeric frame (fits generations 2, 3, 4 and the new iPad Air) that secures the device in transit. The integrated frame also features an earphone / speaker port and can act as a four-position adjustable stand allowing the user to show presentations and watch films on the go. In addition, to reduce glare, the lid of the case can act as a shade.

Already a world-renowned brand in the emergency, industrial safety and tactical industries, the Peli ProGear line is comprised of a wide range of cases and lighting built especially for the digital protection and extreme performance needs of adventurous

For more information, visit:www.peliprogear.com







**Designed and Manufactured to:**MIL-PRF-44466D
NSF ANSI 4-2007

# An army can now march on its stomach in both the heat and the cold!

Suitable for any environment the world's first commercially available water ration heater that also provides cooled water on demand

The new portable RAK15H/C can provide cold or hot water for a five person crew of an armored vehicle. With the ability to provide cold and hot water for washing, drinks and ration packs (MRE) in 20 minutes (depending on power rating) and able to keep the contents warm for over four hours after switch-off.

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# ystematic Subsidiary in Germany

To expand its outreach in the German and Central European markets Systematic opens a subsidiary in Cologne, Germany. Systematic is an international IT company and one of the world's fastest growing providers of military interoperability solutions and command and control off the-shelf software products. This important extension of Systematic's global network optimizes customer support in the region and also enhances our understanding of the German Armed Forces operational processes.

"The opening of the subsidiary underlines our commitment towards our important customers in Germany and Central Europe and ensures that we are able to deliver the as we do for many other nations in the Systematic.

The subsidiary is headed by the newly product suite for future missions. appointed Vice President Business Located in Cologne, the office is European market and will add his valuable program.

permanently manned by German employees. operational experience to the Systematic

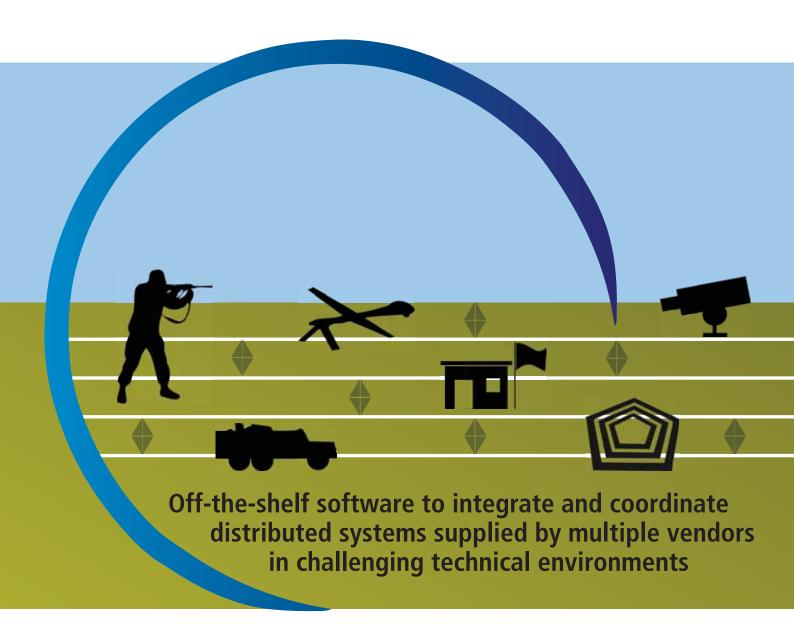
Development Central Europe, Sven Trusch. Systematic SitaWare Headquarters, the same reliable partner services in the region After his period of service as an officer in the modular and scalable software suite for German Army, including deployment in military operations, is already operational in mission-critical area of command & control several NATO missions, Sven gained the German 'Einsatzführungskommando' in solutions," says CEO Michael Holm, experience in the international defence & Potsdam and will also be part of the new security IT business. Sven is overall joint command & control system, which is responsible for the German and Central currently developed under the 'HaFIS'



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"The presentations were excellent, a lot of valuable information. It was very interesting to meet other attendees and talk about their areas of expertise."

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Mr Zaharin Penov, Director, Chief Directorate Border Police, Bulgaria

**John Vine CBE QPM**, Independent Chief Inspector of Borders and Immigration, **UK** 



Police Brigadier General Gábor Kovács, EU Twinning Project, Hungarian National Police



Captain Pierre Wuillemin, Head of Identification and Biometrics from BGC, Swiss Federal Customs Administration FCA, Border Guard Cops, Switzerland



Adriano Baptista, Head of Operations Division, European Union Satellite Centre



**Petrus Neacsu**, Head of Telecommunications Unit within Directorate for the Implementation of Integrated System for Border Security, **Romanian Border Police** 



**Peter Waldbauer-Hable**, Senior Detective Chief Inspector, **Bavarian Police** 

#### **EVENT'S HIGHLIGHTS INCLUDE:**

- Host nation address from Chief Commissioner Penov, Chief Directorate of Border Police, Bulgaria
- Hear about the case study from Haiti covering cross border criminal activity, and irregular migration
- Brazil's strategy for protection of port security, and preparations for the upcoming Olympics and World Cup
- Learn the new approaches of the Schengen border security evaluation mechanisms
- Discuss the 21st Century Challenges of Border security for developing countries

#### PLUS TWO HALF-DAY PRE-CONFERENCE WORKSHOPS

25th February 2014, Sheraton Sofia Hotel Balkan, Sofia, Bulgaria

#### **Inter Agency Intelligence Sharing**

Hosted by: Neil J Hall AFNI MIACP, Assistant Commissioner of Police (Retd) 08.30 - 13.00

#### Stabilisation Operations in Fragile States

Hosted by: Malcolm Kell, Stabilisation Advisor, UK
Government's Stabilisation Unit
13.30 - 17.30

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