

FAST LIDAR DATA VIEWER STREAMLINES WORK OF LOCAL GOVERNMENTS

Warsaw City Office is an institution, which streamlines work with **LiDAR** data using **LiMON Viewer** and **LiMON Server solution**. The application is used in many departments of the City Office, but most of the licenses have been implemented in Architecture and Construction Departments of respective districts. The software significantly facilitates performing spatial analysis and preparation of documents. Warsaw City Office is the first organization, where the latest version (2.0) of the **LiMON Server** has been installed. The new version speeds up work with large **LiDAR** datasets. The application allows fast and accurate acquisition of data about height of buildings, spatial relationships between objects and roof pitches without the need for field measurements. A huge advantage is easy-to-use option of instant generation of documents based on cross-sections. **LiMON Viewer** is an advanced 3D viewer of the **LiDAR** data. **LiMON Server** enables simple and convenient work with point clouds. www.limon.eu

OAK RIDGE NATIONAL LABORATORY SELECTS ESRI TO IMPROVE ACCESS FOR FEDERAL USERS

Esri announced an enterprise agreement with the **Department of Energy's Oak Ridge National Laboratory (ORNL)**. This agreement gives ORNL access to the full set of spatial analysis tools in the **ArcGIS** platform. Under the agreement, ORNL can add licenses as needed to support the many federal research and development projects it undertakes. "This is the first major enterprise agreement between Esri and a Department of Energy laboratory," said ORNL's **Budhendra Bhaduri**, who leads the **Geographic Information Science and Technology group**. "Because ORNL provides support to many federal agencies, including the Department of Energy, Department of Homeland Security, and the Department of Defense, extra capacity to generate spatial analysis applications is critical." For industries that use location-based data in numerous capacities, spatial analysis technology is particularly advantageous on the enterprise level, as it unifies all the platform's capabilities under one agreement for a fixed annual fee. www.esri.com



VSTEP AND SMR LINKS TEAM UP TO BRING SIMULATOR SOLUTIONS TO UAE

An official partnership agreement has been signed by **SMR Links Consultants** and **VSTEP** making SMR Links the exclusive partner of the **NAUTIS maritime simulators** and **RescueSim Incident Command Simulator** in the **UAE Region**. Through SMR Links, VSTEP has officially made available its simulator solutions to major stakeholders in the UAE market. Given their singular thrust to provide the very best in maritime and incident command simulation solutions to their

customers, the two international companies have partnered to effectively cater to the UAE maritime, safety and security industries with focus on the education and training sector. **Pjotr van Schothorst, VSTEP's CEO** said, "SMR Links has already provided us with several projects from high-profile clients; the UAE Navy and the UAE Naval College. They have proven to be a very useful and trustworthy partner, with a big focus on our products." www.vstepsimulation.com

SCOTTISH / UK POST BREXIT MAPS NOW AVAILABLE ON AVENZA MAPS

Avenza Systems Inc. is delighted to announce that updated political maps of the **European Union (EU)** are now available on the **Avenza Map Store**. After a sensational launch in Europe of the printed versions, map publisher **XYZ Maps**, is making the digital maps available through Avenza's market-leading, award-winning mobile mapping app, **Avenza Maps**. Recently featured in the Scottish newspaper, *The National*, the standard EU 2019 - Post Brexit map shows the UK out of the EU. However, the map attracting widespread attention is the alternative Scottish EU

2019 - Post Brexit map as it shows an independent Scotland still a member of the EU, while the reduced UK of England, Wales and Northern Ireland are out. **Ted**

Florence, President of Avenza Systems Inc. said, "We continuously support all of our map publishers who strive to improve maps for everyone." www.avenzamaps.com



WÄRTSILÄ LAUNCHES SMARTPREDICT TO PROVIDE SAFER SHIP MANOEUVRING GUIDANCE

Wärtsilä launches its latest innovation **SmartPredict** at this year's **Seatrade Cruise Global** exhibition in Fort Lauderdale, Florida. **SmartPredict** is designed to provide safer and more efficient vessel operations by reducing the risks associated with manoeuvring. The system displays the vessel's predicted future position and heading, and uses proven dynamic positioning (DP) analysis algorithms to evaluate forces affecting the vessel, thereby providing advanced motion prediction. **SmartPredict** also

features a configurable prediction time display. Most conventional prediction systems are able to utilise only basic input parameters, and thus offer limited usability. **Wärtsilä's SmartPredict** software module, however, utilises all of the parameters used for automated control by the DP and adjusts them for the motion characteristics of the specific vessel. Such inputs include the vessel's current position and heading, as well as its velocity and rate of turn and all associated accelerations. www.wartsila.com

RIEGL VZ-400i

Ultra High Performance 3D Laser Scanner



1 operator – 8 hours



500+ scan positions



high-accuracy scan data

Historic Downtown Vienna
preserved with RIEGL VZ-400i



Farther, Faster, Better: The RIEGL VZ-400i is Redefining Productivity!

This evolution of laser scan engine technology is based on its new innovative processing architecture. Real-time data flow is enabled through dual processing platforms: a dedicated processing system for data acquisition, waveform processing and system operations, and a second processing platform to execute on-board data registration, geo-referencing, and analysis simultaneously. Thus, the new VZ-400i is an extremely fast field-to-office Terrestrial Laser Scanning Solution, setting the benchmark in 3D Laser Scanning, again!

Ultra High Speed Data Acquisition with **1.2 MHz laser pulse repetition rate** combined with up to **240 lines/sec scan speed** | up to **800 m range** | survey-grade **accuracy 5 mm** | highly informative scan data attributes | on-board registration with GPS and orientation sensors | Cloud Connectivity via Wi-Fi and LTE 4G/3G | user friendly touchscreen interface | pre-defined workflows for easy operation | advanced flexibility through support for external peripherals and accessories | high end camera option



Scan this QR code
to watch the RIEGL
VZ-400i video.

www.riegl.com



GEO
BUSINESS 2017

THE GEOSPATIAL EVENT
BUSINESS DESIGN CENTRE
LONDON • UK 23-24 MAY

Visit us at
booth N1



RIEGL[®]

CADCORP SIS SERVICE LATEST RELEASE SUPPORTS LATEST OS PRODUCTS EXTENSIVELY

Cadcorp has launched a new **Network Manager** application in the latest service release of **Cadcorp SIS 8.0**. The application loads **Ordnance Survey MasterMap Highways Network** data into a structured topological network that includes roads, paths, and asset management information. This complements the existing support for **OS ITN** data. Full support for the update to **OS MasterMap Topography Layer Schema 9** is also included, via **Cadcorp SIS MasterMap Manager**. The user has complete control over whether to apply Schema 9 styling rules, with the option to delay updating until ready to do so. When using the Topography Layer, the user can now choose from the very latest OS-supplied styles. There's Standard; Backdrop; Light; Outdoor and a Cadcorp-supplied Grayscale option, to provide flexibility and choice in display for a variety of use-cases. The release also incorporates a number of bug fixes, software updates and performance enhancements. www.cadcorp.com

ABPmer DEVELOPS NW EUROPE TIDE AND SURGE DATABASE

ABPmer has announced that it is now using an in-house **NW Europe** tide and surge model and related database across all its **SEASTATES** services. The company has been providing metocean information to the offshore and coastal sector for decades. In recent times this has included weather downtime statistics to inform operational planning, tender pricing and programme management. It has now developed a model to provide water level and flow parameters generated by both astronomic (tidal) and meteorological forces across the North West European Continental Shelf and North Sea. **Jamie Hernon, Metocean specialist at ABPmer** said: "We are pleased to have been able to respond to client requests and use our SEASTATES model to develop a database of tide and surge data stretching back to 1979. "The model has been validated against 72 locations around North West Europe and proves to be highly accurate." www.abpmer.co.uk



DRONES SAVE ALMOST ONE LIFE PER WEEK ON AVERAGE

DJI has released the first-ever survey of lifesaving drone activity, finding that drones have rescued at least 59 people from life-threatening conditions in 18 separate incidents around the globe. More than one-third of the people rescued were saved by drones operated by civilian bystanders and volunteers offering their services to help professional rescue personnel. As drones have become more widely used by public safety agencies as well as individuals, the

rate of lifesaving drone work now averages almost one per week. DJI's report is based on a survey of media reports collected from around the world, and almost surely undercounts the number of lifesaving activities undertaken with drones. It includes rescues made on land, on water and in flooded areas, as drones found missing people, brought them water and supplies, and in several cases brought them life jackets or rescue ropes. www.dji.com

NCTECH COLOURCLOUD PROCESSING NOW HOSTED ON GOOGLE CLOUD PLATFORM

NCTech announced that its **ColourCloud®** software is being hosted on Google Cloud Platform. This development provides powerful support for the capture and processing of 3D imaging. With ColourCloud now hosted on **Google Cloud Platform**, NCTech is able to provide a secure, end-to-end capture, process, and delivery workflow for its customers. "With the upcoming launch of our new range of VR cameras we've migrated our 3D visualizing software ColourCloud to Google Cloud

Platform, said **Neil Tocher, CTO at NCTech**. "This allows us to leverage Google Compute Engine to process vast amounts of high-resolution depth and image data, making VR capture and delivery a speedy process for professionals and consumers." **Jonathan Ballon, VP of IoT at Intel** said, "We are thrilled that NCTech has adopted Intel with Google Cloud as the foundation to launch their new VR and IoT solutions, including 3D cameras for Google StreetView. www.nctechimaging.com



CABLES AND SEWERS: CROSS-SECTOR LINE MANAGEMENT WITH BASYS

Going forward, sewer network operators are obligated to take the **DigiNetzG** into account during planning and operation. The sewer management software that is used must be able to map and manage the changes. In its current version, the **BaSYS** network information system already constitutes a cross-sector solution for planners and operators. **BARTHAUER** provides solutions for multidisciplinary line management with the BaSYS network and infrastructure information system. It offers modules for planning, data collection, administration and documentation, operations management and maintenance, rehabilitation design and asset management



for infrastructure assets. The joint administration of control, broadband, fibre optics and energy cables in conjunction with networks in other sectors, such as sewer networks, has been realised by implementing a dedicated cable module. Here the routing of lines is possible through the conduits of the sewer sections in the sewer module. www.barthauer.de

HOUSE OF LORDS HEEDS RAZORSECURE WARNING ON FUTURE OF SELF-DRIVE CARS

The **Science and Technology Select Committee** of the **House of Lords** released "**Connected and Autonomous Vehicles: The future?**", a report that investigates the opportunities and challenges facing the implementation of autonomous cars in the UK. The Committee recognised that "Connected and Autonomous Vehicles (CAVs) could be susceptible to hacking and used for malicious purposes". Numerous witnesses testified to the need for the Government to perform a strong coordinating role with regard to Cybersecurity and that partnerships with the right stakeholders and industry experts will be key to keeping CAVs safe from attack. One such expert is **Alex Cowan**,



CEO of transport Cybersecurity firm, RazorSecure. Alex was a key player in the development of RazorSecure Delta, a product that recognises the limitations of traditional firewalls and understands that once breached, hackers can have free reign within vital transport systems. www.razorsecure.com

THE GETECH GROUP DELIVERS INSIGHTS INTO AFRICAN LAKES FROM SPACE

Getech has recently developed a new gravity data product that will enhance explorationists' understanding of the East African Rift. Potential fields data have proved particularly successful within this environment and numerous oil companies have cited how the use of this type of information has had direct positive impacts on their exploration campaigns. Getech experts have used a technically innovative method to create these new datasets by converting lake surface satellite altimeter measurements to gravity. The raw data was obtained from latest measurements collected by the **Cryosat-2** and **Jason-1** satellites, which were then combined with previously acquired GEOSAT data. This unique combination of data and expertise – the Getech team had to work out how to process a different satellite mode from Cryosat-2 – has created information that is of a sufficient density to produce real insight for explorationists. www.getech.com



ARROW SERIES

HIGH PRECISION GNSS RECEIVERS

for every mobile device

ARROW GOLD



1 cm RTK with SafeRTK™ & Atlas

ARROW 200



1 cm RTK

ARROW 100



Submeter & Subfoot GNSS

ARROW LITE



Submeter GPS

40-60cm with EGNOS and all SBAS
1cm real-time RTK accuracy
iOS/Android/Windows compatibility
GPS/GLONASS/BeiDou/Galileo/QZSS

HIGHWAYS ENGLAND RENEWS TRIMBLE VRS NOW LICENSE FOR SECOND THREE YEAR PERIOD

KOREC announced that it will provide **Highways England** with the real-time RTK correction service that it uses for the police for a second three year period. This resource will be delivered via **Trimble VRS Now** licenses and will be used by the police primarily for collision scene investigation where the reliability of Trimble VRS Now enables them to quickly and efficiently survey incidents and minimise road closures. **Andy Beckerson, KOREC Director of Business Development**, said "Trimble VRS Now delivers centimetre accuracy on demand, anywhere in the UK, and is renowned for its reliability. These requirements are key to the police completing timely traffic collision investigation surveys. We have worked closely with most of the UK's forces over the years and are therefore pleased to build on this relationship with Highways England and continue our work with the UK's police forces." www.korecgroup.com

GLOBAL MAPPER SDK AND LIDAR MODULE SDK V18.1 RELEASED

Blue Marble Geographics is pleased to announce the immediate availability of version 18.1 of the **Global Mapper Software Development Kit (SDK)** along with the **Global Mapper LiDAR Module SDK**. The latest upgrade to this powerful developer's toolkit incorporates many of the functional enhancements and performance improvements that were introduced with the recent release of the desktop version of Global Mapper. In tandem with the desktop version, the SDK introduces several new tools for optimizing the display and analysis of 3D data, support for several new formats and online data sources, and for LiDAR Module SDK users, a powerful new QC for adjusting point cloud elevations to match surveyed ground control points. The Global Mapper SDK and LiDAR Module SDK provide software developers with a toolkit for accessing much of this functionality from within an existing or custom-built application. www.bluemarblegeo.com



CENTRIK MOVES INTO SOUTH AFRICA WITH PREMIER AVIATION

Centrik has expanded into **South Africa**, one of the world's most highly regulated aviation markets. An industry first, it has solved both the manned and unmanned operational management challenges for **Premier Aviation (PA)**, an aerial survey company based near Pretoria. Premier Aviation adopted Centrik after recognising that it could manage both its Air Operator Certificate (AOC) and Remote Operator Certificate (ROC) simultaneously -making Centrik the world's

first aviation management system to manage both manned and unmanned operations in one package. Centrally managing all its Air Operations has simplified a huge administrative burden for PA and has taken them way beyond basic compliance. Centrik is also enabling them to evidence process and procedural excellence to both the Regulator and the highly safety-conscious clients of the mining, engineering and construction sector. www.centrik.net

BLUESKY ACQUIRES US AERIAL SURVEY COMPANY COL-EAST

Bluesky International is expanding its business into North America following the acquisition of **Col-East Inc**, a Massachusetts based aerial survey company. Col-East has been mapping the Northeast United States for 65 years and will continue as **Col-East International Ltd**, forming the US arm of Bluesky. Founded in 1952, Col-East has a long established reputation for very high quality topographic mapping, with particular expertise in specialist aerial surveys such as high precision aeronautical mapping, requiring highly skilled analysis. Bluesky has seen an increase in the demand for specialist large scale mapping, 3D modelling and feature extraction in recent years in the European market, and now intends to apply these



skills to the expanding US market. As well as topographical mapping and aeronautical work, Col-East offers a range of aerial imaging services, offering cost-effective mapping solutions from estates to development sites and complex transportation corridors. www.bluesky-world.com www.col-east.com

FOUR INSTRUMENT PARTNERS TO ACCELERATE AUTONOMOUS VEHICLE DEVELOPMENT

Four national instruments alliance partners pursue a collaborative strategy to develop **Advanced Driver Assistance Systems (ADAS)** test solutions - further accelerating development programs for fully autonomous vehicles. Companies **Konrad Technologies GmbH, SET GmbH, S.E.A. Datentechnik GmbH, measX GmbH & Co. KG** form a collaboration - **ADAS IIT-Innovation In Test** - leveraging their expertise in the field of ADAS, sensor fusion, Hardware in the Loop (HiL), V2X communication, GNSS simulation and data management to provide

a one stop solution for fully autonomous vehicles. With the ADAS IIT collaboration, the four technological innovative companies offer a unique approach for ADAS testing, joining their knowledge and skills to develop highly scalable future-proof ADAS test solutions based on the standardized National Instruments (NI) platforms. This unique NI platform based concept will help bring autonomous vehicles to the market safer and faster than expected. www.konrad-technologies.com www.measx.com www.sea-gmbh.com www.smart-e-tech.de

PHASEONE INDUSTRIAL

iXU-RS 1000 Aerial Camera Precision With Reliability and Speed



The 100MP Aerial Camera with exceptional performance and advanced capabilities

- 100MP: More coverage during flight whilst maintaining GSD
- Innovative electromagnetic central leaf shutter
- Enhanced exposure speed: 1/2500s
- Unprecedented reliable shutter life span, 500,000 exposure warranty
- CMOS Technology: capture high quality images up to 6400 ISO
- Capture rate of 0.6 seconds per frame



industrial.phaseone.com

ROC FRIESE POORT OPENS INLAND SIMULATOR CENTRE IN URK

ROC Friese Poort has opened an **Inland Simulator Centre in Urk** for inland navigation training in the region. The official opening ceremony was inaugurated by the regional commissioner **Mr. Leen Verbeek**. He took the helm, coached by a student from ROC Friese Poort and maneuvered a vessel through Rotterdam, experiencing sudden weather conditions and other traffic vessels. The Inland Simulator Centre features two **NAUTIS Simulators** from **VSTEP**, one with a 240° field of view and one with 120°. Also included are an Instructor Station and a Debriefing Room for after action review. The two inland simulators are named after an inland ship and icebreaker of Urk owners, Hinte and Jelly Auke. "In the area of inland shipping this is the haute couture. There are no nicer developed inland simulators than these ones from VSTEP", states **Mr. Harold Munsterman, Instructor at ROC Friese Poort**. www.vstepsimulation.com

THE GETECH GROUP WINS OGA 21CXR CONTRACT

Getech has been awarded a contract by the **Oil and Gas Authority (OGA)**, in collaboration with the **21CXR Technical Advisory Committee**, for a petroleum system related study of the **United Kingdom Continental Shelf (UKCS) South West Approaches** region. A key finding of the Wood Report was that the Government and the oil and gas industry should have a current and easily accessible digital record of the geology and prospectively of the UKCS. To support this objective, the **21st Century Roadmap Technical Advisory Committee** was set-up to support technical assurance in mature areas and promote investment into frontier regions. The committee is led by the OGA and includes industry representation from Azinor Catalyst, BayernGas, BP, Chevron, DONG, ENGIE, Hurricane Energy, Maersk Oil, Shell and Siccar Point Energy. Their role is to award contracts and develop a collaborative framework to enable the UK exploration and production community to meet the Wood Report's recommendations. www.getech.com



PARAGON'S WAYPOINT MAPPING ENSURES DRIVERS FOLLOW OPTIMISED TRANSPORT ROUTES

Paragon is helping road transport and logistics operations to ensure drivers follow approved routes with the launch of **Waypoint Mapping**. This latest innovation will enable fleet operations to benefit from higher levels of efficiency, customer service and safety by ensuring that actual journeys keep to the expected plan. **Microlise** has become the first Paragon telematics partner to take advantage of the advanced feature, which feeds optimised

instructions straight into the driver's cab via a Sat Nav device. Providing drivers with guidance in the cab will help ensure that optimised routes are more closely followed, with the transport office able to review any diversions during the driver debrief back in the depot. This ultimately reduces the number of discrepancies between planned and actual routes, so companies can refine schedules and ensure that real costs mirror the optimised plan. www.paragonrouting.com

PRESSURE MOUNTS ON AUSTRALIAN GOVERNMENT TO LAUNCH SPACE AGENCY

AUSTRALIA'S space industry has launched a campaign calling on its Federal Government to establish a national space program and an Australian Space Agency. Despite having a long history in the industry, including test ranges in South Australia, the country remains one of the few OECD nations without a national space program or agency. The Australian space sector currently produces annual revenues of up to 4 billion and employs between 9,500 and 11,500 people from its 0.8 per cent share of the global space economy, which was estimated to be worth US\$330 billion in 2014. The **Space Industry Association of Australia (SIAA)** says there



is an opportunity to double in size within five years – if the Australian Government is prepared to commit to the establishment of an Australian Space Agency to lead a cohesive national space strategy. www.spaceindustry.com.au

EARTHSENSE SYSTEMS COMPUTER MODELS IMPACT OF TREES ON URBAN AIR POLLUTION

Software developed by **EarthSense Systems** has been used to assess how trees impact on urban air quality on one of London's most polluted streets. Called **FluidAir**, the state of the art solution uses **Computational Fluid Dynamics (CFD)** to simulate the flow and dispersion of pollutants within complex 3D surroundings, such as city streets. Scientists at EarthSense Systems integrated road, building and tree data to create an accurate 3D model of the Marylebone area of London. Combining traffic flow data with meteorological information, EarthSense scientists concluded that trees may exacerbate pollution trapping for wind directions perpendicular to the street

canyon orientation, and additional planting would not improve air pollution in this situation. The effect of trees on pedestrians was also investigated, and it was found that the introduction of trees in the street slightly changes the distribution of concentrations. www.earthsense.co.uk

