NEWS & EMERGING TECHNOLOGY

PROSTAR JOINS TRIMBLE'S GIS BUSINESS PARTNER PROGRAM

Trimble announced that ProStar has joined Trimble's GIS Business Partner Program. As part of the program, ProStar has implemented the **Trimble Precision SDK** (Software Developer Kit) to integrate high-accuracy positioning capability in its PointMan mobile application running on smartphones and tablets using **Trimble GNSS receivers**. ProStar provides field crews with an easy-to-use mobile data collection solution designed to capture, record and provide **real-time visualization** of the **precise locations of subsurface infrastructure**, while utilizing a centralized database to permanently and securely store and share utility location records in the cloud. By adding the Trimble R Series and Trimble Catalyst receivers to the ProStar workflow, users can confidently access high-quality data and identify potential conflicts to avoid accidents, disruption of services and costly delays to infrastructure projects impacted by not knowing the precise locations of buried utilities. **www.trimble.com**



SIMACTIVE SOFTWARE USED FOR OIL AND GAS SEISMIC EXPLORATION

SimActive, a developer of photogrammetry software, announced that its Correlator3D product is being used by Texas-based company **Dawson Geophysical** for oil and gas seismic exploration. Orthomosaics and elevation models are generated from aerial imagery to aid in planning of seismic surveys. Dawson uses a medium format camera from Phase One to fly over areas of between 20 and 200+ square miles. The collected images are then processed by **SimActive software** to derive highly accurate geospatial data and identify points of interest. Finally, mappers use the imagery to spot hazards and plan routes in advance. **www.simactive.com**



RIEGL USA CONSTRUCTION UPDATE WEBSITE, ULTIMATELIDAR.COM, IS LIVE

latest RIEGL LiDAR equipment on-site of the building. The RIEGL technologies saving deliverables for the field. On this website, visitors will find out how RIEGL's state-of-the-art-instruments can aid the construction process, video and photo updates from the site, videos of kev milestones, and much more. Over time Riegl will be adding more content such as wide area mapping / overview of the surrounding areas of the construction site using RIEGL high altitude airborne LiDAR, data fusion of terrestrial, mobiles, unmanned, and airborne laser scan data sets for an extremely comprehensive acquisition platform. www.riegl.com

HEXAGON TO SUPORT EAU DE PARIS IN AGRICULTURAL AID PROJECT

Hexagon's Safety & Infrastructure division announced Eau de Paris, France's public water company, has selected Hexagon geographic information system (GIS) technologies to support its new agricultural aid project. Designed to enhance resource protection in the catchment areas of Paris, the project is expected to financially support nearly 200 farms in the adoption of more sustainable agricultural systems. Hexagon's M.App Enterprise system from its Geospatial division will enable farmers, Eau de Paris and the Seine Normandy Water Agency to collaborate throughout the life cycle of the project with maps, dashboards, smart forms and specific workflows. The solution will integrate farmers' requests from the field, including alphanumeric and graphic information, with validation and monitoring capabilities. The platform will enable Eau de Paris to guide farmers through the process, from grant request to transition completion. www.hexagon.com





Terrestrial Laser Scanning with the RIEGL VZ-i Series unrivalled level of detail

- single tree, stem and branch segmentation
- convex hull of crown
- · crown volume, tree metrics, tree height, crown coverage



UAV-based Laser Scanning with the RIEGL VUX-240, VUX-1 and miniVUX-Series unrivalled views and flexibility

- segmented point clouds for display of single trees
- volume models for biomass measurements
- 3D piped model of tree stem

Airborne Laser Scanning with the RIEGL VQ-1560i-DW, VQ-480 II, VQ-580 II unrivalled area efficiency

- growth monitoring by vegetation masks, canopy models, crown coverage, etc.
- underwood and deadfall visualization and calculation
- detailed terrain models



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VIRTUAL SURVEYOR DRONE SURVEYING SOFTWARE UPDATE

Virtual Surveyor has introduced new functionality in Version 7.3 of its popular drone surveying software to create a **simplified workflow** for monitoring earthworks progress at construction sites. The productive workflow enables construction managers to quickly calculate cut-and-fill changes over time for comparison with the Earthworks design plan. Virtual Surveyor software is a powerful **construction monitoring tool** because it bridges the gap between Unmanned Aerial Vehicle (UAV) photogrammetric processing applications and engineering design packages. The software generates an interactive onscreen environment with drone orthophotos/DSMs and/or LiDAR point clouds where the user can compare multiple drone surveys in a matter of seconds.

www.virtual-surveyor.com

FUGRO WINS INNOVATE UK 'FIRST OF A KIND' FUNDING TO SUPPORT RAIL INDUSTRY INNOVATION

Fugro is one of the successful companies to win innovation funding from Innovate UK's 'First of a Kind' (FOAK2020) competition under the theme of optimised and cost-effective rail maintenance. The FOAK2020 award will fund nine months of development of Fugro's **Innotamp project** in collaboration with Network Rail. A world-first for track maintenance, the funded project will demonstrate how track alignments generated using Geo-data from **Fugro's Raildata Solution** can be directly uploaded to a tamper's computer to optimise tamping of railway lines. The FOAK2020 innovation programme, funded by the **Department for Transport** (DfT) and managed by **Innovate UK**, aims to demonstrate how proven technologies can be

UK, aims to demonstrate how proven technologies can be integrated into a railway environment for the first time ('first of a kind' demonstrations). It encourages innovation in the rail industry using novel technologies such as RILA and new ways of applying data. **www.fugro.com**



THURAYA AND TELESPAZIO SIGN PARTNERSHIP AGREEMENT FOR GLOBAL DISTRIBUTION

Thuraya, the mobile satellite services subsidiary of the UAE's Al Yah Satellite Communications Company (Yahsat), has signed a partnership agreement with Telespazio, a joint venture between **Leonardo** (67%) and **Thales** (33%), to distribute its products and services worldwide. Telespazio customers in critical sectors such as government, maritime, energy and relief can now effectively integrate **Thuraya's mobile solutions** with their own platforms to enable a wide range of **commson-the-move** and **comms-on-the-pause applications**. Thuraya's mobile satellite network enables seamless voice, data and broadband services on land, at sea and in the air, covering over 160 countries across Europe, Africa, Asia and Australasia. In the UAE, Telespazio's main shareholder Leonardo has a long history of collaboration based on the supply of naval technologies, trainer aircraft and new generation helicopters. In the country, Leonardo and Telespazio are also engaged in Earth Observation, satellite navigation, telecommunications and geo-information activities. **www.thuraya.com**



SBG SYSTEMS RENEWS ITS POPULAR LINE OF MINIATURE INERTIAL SENSORS SBG Systems announced the third sensors called the Ellipse Series. The line is generating of its popular line of miniature compared of four models the Ellipse A is

generation of its popular line of miniature inertial sensors called the Ellipse Series.

This renewed product line benefits from a 64bit architecture allowing high precision signal processing. All the INS/GNSS now embed a dual-frequency, quad

constellations GNSS receiver for centimetric position and higher orientation accuracy. The company is proud to present the third generation of its popular range of miniature inertial

sensors called the **Ellipse Series**. The line is composed of four models: the **Ellipse-A** is a motion sensor, the **Ellipse-E** provides navigation with an external GNSS receiver, the **Ellipse-N** is a single antenna RTK GNSS/INS and the **Ellipse-D** is a dual-antenna RTK GNSS/INS. With its new 64-bit architecture, the Ellipse Series 3rd generation enables the use of high precision algorithms and technology used in high-end inertial systems such as rejection filters, FIR filtering, etcetera. **www.sbg-systems.com**

MAXAR TECHNOLOGIES ANNOUNCED ITS INTENTION TO ACQUIRE VRICON

Intelligence and Space Infrastructure, announced its intent to exercise its call option to take full ownership of **3D data and analytics firm Vricon**, for approximately \$140 million, or approximately \$115 million net of estimated cash at closing. To fund the transaction, Maxar intends to issue \$150 million in aggregate principal amount of new senior secured notes. Maxar has also agreed to repurchase \$150 million in aggregate principal amount of existing notes using the proceeds of the recent sale of its MDA business. Vricon is a global provider of **satellite-derived 3D data for defence and intelligence markets**, with software and products that enhance 3D mapping, Earth intelligence data, military simulation and training and precision-guided munitions. The company was formed as a joint venture between Maxar and Saab in 2015 to combine patented Saab IP with Maxar commercial satellite imagery to build highly accurate, immersive 3D products at scale. **www.maxar.com**



A GAME CHANGER FOR THE EUROPEAN **RAILWAY TRAFFIC MANAGEMENT SYSTEM** A Work Plan for the European Railway Traffic Management System (ERTMS), published by the European Commission in May this year, lists **satellite positioning** as one of the game changing technologies underpinning future evolutions of the system and a key element to be included in future Technological **Specifications for Interoperability** (TSI). The ERTMS is a major industrial project that aims to make rail transport in Europe safer and more competitive. As a safety system, the ERTMS enforces train compliance with speed restrictions and signalling and consists of equipment installed both on trains and along the railway tracks. According to the latest Work Plan, the ERTMS will become the backbone of railway digitalisation in Europe, allowing for the introduction of new technologies, including but not limited to automatic train operation, satellite positioning and other technologies capable of optimising rail performance and capacity. www.gsa.europa.eu

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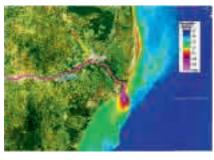
Or call **1.800.696.2584** for more information.



www.geoconnexion.com 9

LACTEC AND EOMAP SIGN AN UNPRECEDENTED PARTNERSHIP IN BRAZIL

Lactec - a reference centre in innovation and technological research - and the German company Eomap - specialized in remote sensing for environmental services - signed a partnership to carry out projects in the



area of **monitoring aquatic environments**, using geospatial intelligence technologies in Brazil. Researchers and specialists from the two companies have already worked together to investigate environmental damage in the **Doce River Basin** and the adjacent coastal region, following the rupture of the ore tailings dam in Mariana (MG) in 2015. Combining Lactec and Eomap's expertise, it was possible to generate a complete picture of **Mariana's environmental disaster.** The experts applied analysis of satellite images, modelling of collected field data, which allowed to identify how the tailings mud spread through the river until reaching the ocean, compromising the water quality and the biota. This work will continue, now, in the assessment of the reflections of the floods registered in the state of Minas Gerais, earlier this year. **www.eomap.com**

PARROT PARTNERS WITH AIRT'S DRONES

Parrot, a European drone group, announced a new partnership with the Miami, Florida-based **Airborne International Response Team** (AIRT). AIRT is the 501(c)3 non-profit organisation supporting Drones For Good and the official home of **Droneresponders**, a fast-growing program supporting the use of UAS by public safety and emergency services organisations around the globe. Parrot will support the **disaster response** and **humanitarian missions** of AIRT and the public safety testing conducted by Droneresponders with donations of both financial support as well as Parrot's most advanced drone technology. Available in August 2020, the Parrot ANAFI USA features an industry-first 32x zoom, 4K HDR video and thermal imaging capabilities. ANAFI USA is an ultraportable, secure and durable aerial camera platform. **www.parrot.com**



AIRBUS SIGNS CONTRACT WITH OPTUS FOR ONESAT

Airbus Defence and Space has won a contract for a fully reconfigurable telecommunications satellite from Australia's second largest telecommunications company and satellite operator Optus. The satellite will be based on Airbus' new standard **OneSat product line** and is Airbus' first contract from the Australian operator. Airbus will deliver an **end-to-end solution**, including design and manufacture of the Optus 11 spacecraft, as well as an **advanced digital suite** to manage the digital payload and operate the end-to-end satellite resources, providing Optus with a turnkey system and the ability to add **hosted payloads** such as SBAS. What sets Optus 11 apart is its ability to adjust its coverage, capacity and frequency, through on board processing and active antennas with beam forming capability. **www.airbus.com**



TECH SOFT 3D HELPS FIELDWIRE RAPIDLY BRING BIM VIEWING TO ITS CONSTRUCTION MANAGEMENT PLATFORM

Tech Soft 3D, the provider of engineering software development toolkits, announced that HOOPS Platform is being used to power the Fieldwire BIM viewer. Fieldwire is changing the future of construction with its **productivity tools** for the construction field. The company's field management platform - which is accessible via browser, tablet, or smartphone - gives customers access to critical project-related **information** while they're on the job. Fieldwire had always offered robust 2D plan viewing capabilities, but sought to evolve the product with new features around **3D model viewing,** to better support its customer base. Additionally, it was important for Fieldwire to support BIM viewing on both web and mobile, while providing offline capabilities for those mobile users as a lot of

construction project sites that are just getting

started up don't have a Wi-Fi connection, and there might not even be LTE or 3G in those areas. That made offline support a need-to-have. **www.techsoft3d.com**



www.pluraview.com

THE UAVOS COMPANY HAS SUCCESSFULLY TESTED HIGH-ALTITUDE FLIGHT OF THE UVH-170 UNMANNED HELICOPTER

The UVH - 170 unmanned helicopter of UAVOS continues to prove its value to mountainous areas operations by flying surveillance missions at an altitude of 16,400ft (5000m). The UVH-170 has successfully conducted its first high altitude flight reaching out to the height of 16,400ft (5000m). The rotarywing platform was carrying the Gyro-

stabilized two-axis gimbal with integrated Radio data link. The payload was of **8,800lb** (**4kg**) weight. The flight time was two hours and the climb rate over 1m/s was from 13,120ft to 16,400ft (4000m to 5000m). The UAV high altitude capability has been achieved through modifying the fuel injection system of the 4-stroke gasoline propulsion system. The enhancements of the fuel injection system enable the practical ceiling to be increased significantly. It can be very precisely tuned depending on the operating conditions. The UAV engine improved fuel injection technology significantly increases fuel-efficiency of rotary-wing UAV.

www.uavos.com

TDI-BROOKS PURCHASES FIRST US-BASED **WINGHEAD SYSTEM FROM SEAHORSE GEOMATICS** TDI-Brooks added to their toolbox the first US-based Norbit Winghead system supplied and supported by Seahorse Geomatics. This is the first dual head Winghead sold in North America. Adding the Winghead to our array of survey services will allow TDI Brooks to offer professional seabed surveys in a more efficient manner. Norbit raises the bar of innovation in the marketplace with is Winghead system, adding it to the small list of high resolution multibeam echo sounders on the market. This new tightly integrated 1024 beams, 0.5 x 0.9 degrees of resolution, frequency agile 200-700kHz echo sounder, with a software conceived to make the hydrographer's work more productive, and with its distinctive Norbit curved receiver array, represents a radical departure from any other sonar in this category. www.tdi-bi.com



info@schneider-digital.com

D-83714 Miesbach

SATELLITE FOR US AIR FORCE SUCCESSFULLY LAUNCHES AS PART OF L3HARRIS' RESPONSIVE CONSTELLATION CONTRACT

L3Harris Technologies launched the latest in a demonstration series of end-to-end small satellites as part of a U.S. Air Force constellation the company is responsible for developing. As the prime contractor for the firm fixed-price development space mission, L3Harris is designing, developing, building, testing and deploying the satellites. The company will task, command and control the satellite system, as well as perform **on-board processing of data** to deliver imagery products directly to war fighters on tactical timelines. The Evolved Expendable Launch Vehicles Secondary Payload Adapter, or ESPA-class, satellite system will use **L3Harris' fully reprogrammable payload platform** — allowing operators to reconfigure smallsat payloads on orbit to changing missions. The company's High Compaction Ratio unfurlable X-band reflector is also on board to enable high-speed data communication. **www.l3harris.com**

BRANDT COMPLETES SOKKIA CANADA ACQUISITION

The Brandt Group of Companies announced that, effective July 2, they have successfully acquired the assets of Ontario-based Sokkia Canada. This acquisition, which directly affects the Ontario and Quebec markets, makes Brandt the **exclusive dealer** for Sokkia optical survey instruments, accessories and parts for the entire Canadian market.

The news signals Brandt's entry into **Central Canada's geopositioning technology market** and is the latest in a growing list of acquisitions and dealer agreements made by the Regina, SK-based company since their purchase of Ontario/Quebec/Newfoundland and Labrador John Deere Construction & Forestry dealer **Nortrax** in late 2019. The Sokkia product line-up will be distributed and supported through the company's Brandt Positioning Technology division and includes total stations, Global Navigation Satellite System (GNSS) receivers, data collectors, digital levels, and a full complement of field accessories. **www.brandt.ca**



PCI GEOMATICS ANNOUNCES PARTNERSHIP WITH GEOCLOUD

PCI Geomatics, a developer of remote sensing and photogrammetry software, announced that Geomatica Cloud will now offer a new **pay-as-you-go option**, available on the GeoCloud marketplace. With this announcement, PCI Geomatics is expanding the **Geomatica Cloud offering** to include a new pay-as-you-go option, in addition to the already available monthly and annual subscriptions. GeoCloud's intuitive user interface provides immediate access to the rich features of Geomatica for processing satellite, SAR, aerial, and UAV imagery. **www.pcigeomatics.com**

SOLITA AND UNIFLY JOIN FORCES TO SECURE AND ADVANCE INTERNATIONAL DRONE AIRSPACE

Solita, a North European provider of data-driven digital transformation and business design and Unifly, a global provider of Unmanned Traffic Management, have announced their partnership. By joining forces, the partners are able to create impact by combining data for operational use and UTM technologies, to further streamline the safe integration of drones into the airspace and support operators and enterprises to advance their operational use of drones.





GENEQ ANNOUNCES F100 THE NEW HIGHLY INTEGRATED GNSS RECEIVER

Geneg announced the F100, a multiconstellation GNSS receiver with very high level of technology integration. The F100 device is an evolution of the well-known F90 with new features that will fulfil the surveyor's demands in terms of field performance, flexibility and cost-effectiveness. F100 tracks multi-constellations (GPS, GLONASS, Galileo, Beidou) and can maximize the acquisition and tracking process with all-in-view **GNSS frequencies**. Providing maximum performance for accuracy and real-time measurements, F100 also supports RTK correction service, including RTX service that can get cm level accuracy without a base station. The F100, with its advanced technology, ensures a high performance even in harsh environment such as under heavy canopy. The F100 has an excellent combination of GNSS, 4G, Bluetooth and Wi-Fi antenna. With this highly integrated communication features, this innovative GNSS Receiver F100 has a built-in 5watt radio that is enabling effective baseline of 10km. www.geneq.com

SCHNEIDER ELECTRIC ANNOUNCES THE NEW GEODATABASE MANAGER XI

Schneider Electric, a provider of Geographic Information System (GIS) solutions for utilities and communication providers, announced the launch of the new Geodatabase Manager XI (GDBM XI). GDBM XI automates the tasks for maintaining a continuously up-to-date **Utility Network**, managing both the database and network for completeness and accuracy. Through use of automation, GDBM XI can free up the end-user time by 12%. Built exclusively for **Esri's Utility Network**, GDBM XI gives utility field crews confidence that they are working from the most current customer data. GDBM XI is part of the **ArcFM Solution XI Series**, an ecosystem of applications that streamline the design and construction workflow, enabling utilities to get work done more efficiently. **www.se.com**



ATLANTIC PURCHASES FIRST PHASE ONE INDUSTRIAL LARGE-FORMAT CAMERA IN THE USA

Atlantic recently purchased a new Phase One Industrial 280MP large-format Aerial Solution to better serve its clients. The upgrade substantially increases Atlantic's ability to efficiently **capture a large area with extreme accuracy and quality.** The Phase One Industrial 280MP Aerial Solution is a large format camera system

that easily integrates with smaller gyrostabilized mounts creating a compact and lightweight system for use in a wide range of aircraft. At its heart, the iXM-RS 280F is a **dual lens**

280F is a dual lens metric camera,

with 90mm lenses for capturing RGB information, adding a near infrared (NIR) camera generates a 4-band configuration, useful in agriculture & forestry and pipeline monitoring missions.

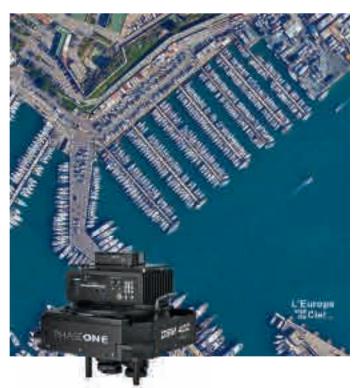
www.industrial. phaseone.com





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